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**COMPENDIUM
OF
VERBATIM STATEMENTS
ON VERIFICATION**

**VOLUME
3
OF
3**

**THE COMMITTEE ON DISARMAMENT
1979 - 1983
AND
THE CONFERENCE ON DISARMAMENT
1984**

**ARMS CONTROL AND DISARMAMENT DIVISION
DEPARTMENT OF EXTERNAL AFFAIRS
OTTAWA, CANADA**

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COMPENDIUM
OF
VERBATIM STATEMENTS ON VERIFICATION
VOLUME III
THE COMMITTEE ON DISARMAMENT 1979-1983
AND
THE CONFERENCE ON DISARMAMENT 1984

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Compendium of Verbatim Statements on Verification

Preface

This volume is compiled from the Provisional Verbata of the United Nations Committee on Disarmament (CD). In 1984 the Committee on Disarmament was reorganized and is now called the Conference on Disarmament (CD). This volume covers the sessions held in Geneva from 1979-1984. It contains the major statements made on the issue of verification of arms control and disarmament proposals. It is intended to be used as a resource volume to provide easy access to statements on national positions on verification and to aid those who wish to investigate the development of those positions over a period of time.

The statements are presented in chronological order. Two additional lists of statements are included to aid in the use of this volume. The List of Verbatim Statements by Issue organizes the statements according to the arms control issue being discussed. The major issues discussed in the CD include: a chemical weapons convention, a comprehensive test ban, the cutoff of production of fissionable material for weapons use, nuclear disarmament, a nuclear freeze, arms control in outer space, and a radiological weapons convention. The List of Verbatim Statements by Nation organizes the statements by nation. A coded reference is included in this list to indicate the issue being discussed in each statement.

The statements were originally compiled during a study on national positions on verification conducted in 1983 at the Centre for International Relations for the Department of External Affairs. The collection was expanded in 1984 during a period of research at the United Nations Institute for Disarma-

ment Research, Geneva, which was made possible by the Department of External Affairs. The assistance of Mrs. Mary Kerr, who diligently transcribed the statements and assisted in the proof-reading, has been invaluable in preparing these volumes.

Chronological List of Verbatim Statements

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CD/PV.195 p.48	Canada/McPhail	17.2.83	238
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CD/PV.197	pp.19-21	USSR/Timerbaev	24.2.83	246
CD/PV.199	p.10	Argentina/Carasales	1.3.83	248
CD/PV.199	p.14	Bulgaria/Tellalov	1.3.83	249
CD/PV.199	p.16	China/Li	1.3.83	249
CD/PV.200	pp.13-14	Spain/Laiglesia	3.3.83	250
CD/PV.200	pp.26-27	GDR/Herder	3.3.83	251
CD/PV.201	pp.10-11	Argentina/Carasales	8.3.83	253
CD/PV.201	pp.14-15	Sweden/Lidgard	8.3.83	253
CD/PV.202	pp.15-18	UK/Hurd	10.3.83	254
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CD/PV.43	pp.12-14	Finland/Rajakoski	19.7.79	25
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CD/PV.46	pp.26-29	USA, USSR/Issraelyan (CD/48)	31.7.79	34
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<u>Reference</u>		<u>Nation/Speaker</u>	<u>Date</u>	<u>Page</u>
CD/PV.263	pp.21-22	France/de la Gorce	12.6.84	389
CD/PV.274	p.8	Italy/Alessi	19.7.84	407
CD/PV.275	pp.10-13	Netherlands/van Schaik	24.7.84	412

Radiological Weapons

CD/PV.40	p.9	USSR/Issraelyan	10.7.79	22
CD/PV.40	p.13	USA/Fisher	10.7.79	22
CD/PV.41	p.18	FRG/Pfeiffer	12.7.79	22
CD/PV.42	pp.8-9	Italy/Cordero di Montezemolo	17.7.79	23
CD/PV.63	pp.13-14	Sweden/Lidgard	26.2.80	40
CD/PV.76	p.9	Netherlands/Fein	8.4.80	44
CD/PV.76	p.20	Belgium/Onkelinx	8.4.80	44
CD/PV.77	p.8	Egypt/El-Shafei	10.4.80	45
CD/PV.77	pp.15-16	Pakistan/Akrain	10.4.80	45
CD/PV.91	pp.22-24	India/Venkateswaran	10.7.80	48
CD/PV.98	p.38	India/Venkateswaran	7.8.80	60
CD/PV.137	p.21	Morocco/Arrassen	14.7.81	97
CD/PV.137	p.23	Indonesia/Darusman	14.7.81	98
CD/PV.221	pp.7-8	Australia/Sadleir	30.6.83	292
CD/PV.261	p.12	Sweden/Theorin	24.4.84	378
CD/PV.271	p.19	Czechoslovakia/Vejvoda	10.7.84	397

Verification in General

CD/PV.3	p.20	Italy/Radi	25.1.79	2
CD/PV.9	p.17	Hungary/Domokos	8.2.79	4

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Verification in General

<u>Reference</u>		<u>Nation/Speaker</u>	<u>Date</u>	<u>Page</u>
CD/PV.19	p.8	Belgium/Noterdaeme	15.3.79	9
CD/PV.29	pp.25-26	Italy/di Bernardo	24.4.79	15
CD/PV.80	pp.19-20	Sri Lanka/Naganathan	22.4.80	48
CD/PV.97	pp.37-38	UK/Summerhayes	5.8.80	56
CD/PV.119	pp.13-17	USSR/Issraelyan	31.3.81	75
CD/PV.128	pp.18-20	Canada/McPhail	11.6.81	93
CD/PV.138	p.9	Canada/McPhail	16.7.81	99
CD/PV.150	p.54	Czechoslovakia/Strucka	2.2.82	115
CD/PV.165	pp.8-12	GDR/Herder	23.3.82	136
CD/PV.173	p.13	Canada/McPhail	21.4.82	171
CD/PV.178	pp.14-15	Bulgaria/Tellalov	12.8.82	179
CD/PV.183	p.28	Ethiopia/Terrefe	31.8.82	210
CD/PV.188	p.12	USSR/Issraelyan	17.9.82	224
CD/PV.190	pp.11, 13-14	FRG/Genscher	3.2.83	225
CD/PV.192	pp.26-28	Australia/Sadleir	8.2.83	227
CD/PV.194	p.12	UN/SecGen Perez de Cuellar	15.2.83	230
CD/PV.194	p.35	France/de la Gorce	15.2.83	232
CD/PV.215	pp.19-23	Japan/Imai	26.4.83	282
CD/PV.259	pp.16-18	Japan/Imai	17.4.84	369
CD/PV.260	pp.16-18	USSR/Issraelyan	18.4.84	373
CD/PV.270	pp.24-25	Argentina/Carasales	5.7.84	396
CD/PV.272	p.22	Algeria/Ould-Rouis	12.7.84	406

List of Verbatim Statements by Nation

Explanation of Issue Codes

ASAT: Anti-Satellite Weapons
 C-O: Cutoff of Production of Fissionable Material
 CTB: Comprehensive Test Ban
 CW: Chemical Weapons
 FRZ: Nuclear Freeze
 ND: Nuclear Disarmament
 NFU: No-first-use of Nuclear Weapons
 NFZ: Nuclear Free Zones
 NPT: Non-Proliferation Treaty
 OS: Outer Space
 RW: Radiological Weapons
 VER: Verification in General

Algeria

<u>Reference</u>		<u>Speaker</u>	<u>Date</u>	<u>Issue</u>	<u>Page</u>
CD/PV.272	p.22	Ould-Rouis	12.7.84	VER	406

Argentina

CD/PV.139	pp.22-23	Carasales	21.7.81	CW	104
CD/PV.167	pp.15-18	Carasales	30.3.82	CW	155
CD/PV.199	p.10	Carasales	1.3.83	CW	248
CD/PV.201	pp.10-11	Carasales	8.3.83	NFZ	253
CD/PV.227	pp.24-25	Carasales	21.7.83	CW	308
CD/PV.257	pp.23-24	Carasales	10.4.84	CTB	368
CD/PV.270	pp.24-25	Carasales	5.7.84	VER	396

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Australia

<u>Reference</u>		<u>Speaker</u>	<u>Date</u>	<u>Issue</u>	<u>Page</u>
CD/PV.2	pp.35-36, 38	Peacock	24.1.79	CTB,C-O,CW	1
CD/PV.28	p.17	Thomson	19.4.79	C-O	10
CD/PV.47	pp.12-13	Plimsoll	2.8.79	CTB	36
CD/PV.65	p.10	Behm	4.3.80	CTB	41
CD/PV.80	pp.8-10	Behm	22.4.80	CTB	46
CD/PV.97	pp.29-30	Walker	5.8.80	CTB	54
CD/PV.120	pp.10-11	Walker	2.4.81	CW	79
CD/PV.141	pp.15-17	Steele	28.7.81	CW	109
CD/PV.157	pp.19-20	Sadleir	23.2.82	CTB	123
CD/PV.164	pp.12-14	Sadleir	18.3.82	CTB	131
CD/PV.168	pp.21-22	Sadleir	1.4.82	CW	164
CD/PV.181	pp.27-28	Steele	24.8.82	CTB	199
CD/PV.192	pp.26-28	Sadleir	8.2.83	VER,CTB,CW	227
CD/PV.209	pp.26-27	Sadleir	5.4.83	CTB	271
CD/PV.214	p.18	Sadleir	21.4.83	CW	281
CD/PV.221	pp.7-8	Sadleir	30.6.83	CTB,RW	292
CD/PV.225	pp.30-32	Sadleir	14.7.83	CW	300
CD/PV.228	pp.9-10	Sadleir	26.7.83	CTB	312
CD/PV.250	pp.42-43	Butler	15.3.84	CTB	357
CD/PV.260	p.26	Butler	18.4.84	CW	377
CD/PV.271	pp.21-23	Rowe	10.7.84	CW	397
CD/PV.279	pp.9-13	Hayden	7.8.84	CTB,CW	420

Belgium

CD/PV.19	p.8	Noterdaeme	15.3.79	CTB,VER	9
CD/PV.76	p.20	Onkelinx	8.4.80	RW	44
CD/PV.98	p.36	Onkelinx	7.8.80	CW	60

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Belgium

<u>Reference</u>		<u>Speaker</u>	<u>Date</u>	<u>Issue</u>	<u>Page</u>
CD/PV.120	p.32	Onkelinx	2.4.81	CW	83
CD/PV.167	pp.42-43	Onkelinx	30.3.82	CTB	163
CD/PV.177	pp.22-23	Onkelinx	10.8.82	CW	175
CD/PV.182	pp.15-18	Onkelinx	26.8.82	CTB	206
CD/PV.192	p.10	Onkelinx	8.2.83	CW	226
CD/PV.206	pp.10-12	Onkelinx	24.3.83	CW	263
CD/PV.244	pp.15-16	Depasse	23.2.84	CW	341
CD/PV.271	pp.26-27	Depasse	10.7.84	CW,CTB	399
CD/PV.283	p.39	Depasse	21.8.84	CTB	440

Brazil

CD/PV.118	p.28	de Souza e Silva	26.3.81	CW	74
CD/PV.202	pp.20-21	de Sousa e Silva	10.3.83	CW,CTB	256
CD/PV.276	pp.16-17	de Sousa e Silva	26.7.84	NPT	416

Bulgaria

CD/PV.93	pp.16-17	Voutov	17.7.80	CW	50
CD/PV.161	p.7	Tellalov	9.3.82	CTB	126
CD/PV.166	pp.31-32	Grinberg	25.3.82	CW	150
CD/PV.178	pp.14-15	Tellalov	12.8.82	VER	179
CD/PV.183	pp.10-11	Tellalov	31.8.82	CTB	209
CD/PV.199	p.14	Tellalov	1.3.83	CTB	249
CD/PV.204	pp.13-14	Tellalov	17.3.83	CW	262

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Burma

<u>Reference</u>		<u>Speaker</u>	<u>Date</u>	<u>Issue</u>	<u>Page</u>
CD/PV.139	p.33	U Saw Hlaing	21.7.81	CW	106
CD/PV.187	p.10	U Maung Maung Gyi	16.9.82	CTB	223
CD/PV.195	p.19	U Maung Maung Gyi	17.2.83	CTB	233

Canada

<u>Reference</u>		<u>Speaker</u>	<u>Date</u>	<u>Issue</u>	<u>Page</u>
CD/PV.4	p.16	Pearson	25.1.79	CTB	2
CD/PV.39	p.21	Harry Jay	5.7.79	C-O	21
CD/PV.45	pp.16-17	Simard	26.7.79	CW	28
CD/PV.47	p.7	Simard	2.8.79	CTB	36
CD/PV.65	p.9	McPhail	4.3.80	CTB	40
CD/PV.74	p.10	McPhail	1.4.80	CW	43
CD/PV.118	p.22	McPhail	26.3.81	CW	73
CD/PV.128	pp.18-20	McPhail	11.6.81	VER,CW,CTB	93
CD/PV.138	p.9	McPhail	16.7.81	VER	99
CD/PV.139	p.19	McPhail	21.7.81	CW	104
CD/PV.156	pp.10-11	McPhail	18.2.82	CTB	119
CD/PV.173	p.13	McPhail	21.4.82	VER	171
CD/PV.175	pp.16-17	McPhail	21.4.82	CW,CTB	173
CD/PV.189	p.21	MacEachen	1.2.83	CTB	224
CD/PV.195	p.48	McPhail	17.2.83	CW	238
CD/PV.216	p.10	McPhail	28.4.83	CTB,OS	285
CD/PV.243	p.33	Beesley	21.2.84	CW	340
CD/PV.262	pp.49-50	Beesley	26.4.84	CW	388

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China

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CD/PV.118	p.25	Yu Peiwen	26.3.81	CW	73
CD/PV.152	p.51	Tian Jin	9.2.82	CW	118
CD/PV.167	p.20	Tian Jin	30.3.82	CW	158
CD/PV.179	pp.27-28	Tian Jin	17.8.82	CW	191
CD/PV.199	p.16	Li	1.3.83	CW	249
CD/PV.227	p.19	Li	21.7.83	CW	308
CD/PV.248	p.19	Qian Jiadong	8.3.84	CW	347

Cuba

CD/PV.124	p.9-10	Sola Vila	14.4.81	CW	93
CD/PV.163	p.21	Sola Vila	16.3.82	CTB	130
CD/PV.168	p.16	Sola Vila	1.4.82	CW	163
CD/PV.180	pp.32,33	Sola Vila	19.8.82	CW,CTB	195
CD/PV.221	p.14	Nunez Mosquera	30.6.83	CTB	294
CD/PV.261	p.7	Lechuga Hevia	24.4.84	CTB	378

Czechoslovakia

CD/PV.44	p.17	Tylner	24.7.79	CW	28
CD/PV.150	p.54	Strucka	2.2.82	VER	115
CD/PV.167	pp.27, 28-29	Vejvoda	30.3.82	CTB,CW	159
CD/PV.176	p.10	Vejvoda	5.8.82	CTB	173
CD/PV.178	p.21	Vejvoda	12.8.82	CW	181
CD/PV.182	pp.7-8	Vejvoda	26.8.82	CTB	202
CD/PV.194	p.25	Vejvoda	15.2.83	CW	231
CD/PV.197	p.11	Vejvoda	24.2.83	CTB	243

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Czechoslovakia

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CD/PV.205	pp.23-24	Vejvoda	22.3.83	CTB	262
CD/PV.209	p.22	Vejvoda	5.4.83	CTB	271
CD/PV.229	pp.13-14	Vejvoda	28.7.83	CW	315
CD/PV.248	p.10	Vejvoda	8.3.84	CTB	346
CD/PV.262	pp.39-40	Vejvoda	26.4.84	CW	386
CD/PV.271	p.19	Vejvoda	10.7.84	RW	397

Denmark

CD/PV.117	p.25	Michaelson	24.3.81	CW	69
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Egypt

CD/PV.31	pp.14-16	El-Shafei	26.4.79	CW	18
CD/PV.77	p.8	El-Shafei	10.4.80	RW	45
CD/PV.195	p.44	El Reedy	17.2.83	CW	236
CD/PV.232	pp.19-21	El Reedy	9.8.83	CW	323

Ethiopia

CD/PV.183	p.28	Terrefe	31.8.82	VER,CW	210
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Federal Republic of Germany

<u>Reference</u>		<u>Speaker</u>	<u>Date</u>	<u>Issue</u>	<u>Page</u>
CD/PV.5	pp.34-35	Van Well	26.1.79	CW,CTB	3
CD/PV.29	pp.16-19	Pfeiffer	24.4.79	CW	13
CD/PV.41	p.18	Pfeiffer	12.7.79	RW	22
CD/PV.42	pp.9-10	Pfeiffer	17.7.79	CW	23
CD/PV.118	pp.8-9	Pfeiffer	26.3.81	CW	71
CD/PV.138	pp.17-18	Pfeiffer	16.7.81	CW	100
CD/PV.151	p.13	Wegener	4.2.82	CW	116
CD/PV.166	pp.9-11	Ruth	25.3.82	CW	145
CD/PV.171	pp.8-11	Wegener	15.4.82	CW,OS	168
CD/PV.182	pp.21-22	Wegener	26.8.82	CTB	208
CD/PV.185	pp.14-16	Wegener	7.9.82	CW	218
CD/PV.190	pp.11, 13-14	Genscher	3.2.83	VER,CW,CTB	225
CD/PV.197	pp.12-15	Wegener	24.2.83	CTB,CW	244
CD/PV.233	pp.28-30	Wegener	11.8.83	CW	325
CD/PV.245	pp.15-17	Wegener	28.2.84	CW	343
CD/PV.256	p.18	Wegener	5.4.84	CW	361
CD/PV.262	pp.36-37	Wegener	26.4.84	CW	384
CD/PV.274	pp.9-11	Wegener	19.7.84	CW	407

Finland

CD/PV.43	pp.12-14	Rajakoski	19.7.79	CW	25
CD/PV.117	pp.26-28	Miettineu	24.3.81	CW	69
CD/PV.138	pp.26-27	Keisalo	16.7.81	CW	103
CD/PV.195	pp.46-47	Rajakowski	17.2.83	CW	237
CD/PV.242	pp.15-16	Tornudd	16.2.84	CW,CTB	338
CD/PV.265	pp.7-8	Valtasaari	19.6.84	CW	390

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France

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CD/PV.43	pp.17-18	de la Gorce	19.7.79	CW	26
CD/PV.47	pp.22-23	de la Gorce	2.8.79	CW	38
CD/PV.120	pp.26-27	de la Gorce	2.4.81	CW	82
CD/PV.172	p.18	de la Gorce	20.4.82	CW	171
CD/PV.176	p.23	de la Gorce	5.8.82	CW	174
CD/PV.194	p.35	de la Gorce	15.2.83	VER	232
CD/PV.216	pp.32-34	de la Gorce	28.4.83	CW	287
CD/PV.256	pp.23-24	de la Gorce	5.4.84	CW	361
CD/PV.263	pp.21-22	de la Gorce	12.6.84	OS	389
CD/PV.280	pp.18-20	Montassier	9.8.84	CW	433

German Democratic Republic

CD/PV.108	p.22	Herder	19.2.81	CTB	63
CD/PV.134	p.15	Herder	2.7.81	CTB	96
CD/PV.140	p.35	Herder	23.7.81	CW	109
CD/PV.164	p.30	Herder	18.3.82	CTB	134
CD/PV.165	pp.8-12	Herder	23.3.82	CW,VER	136
CD/PV.179	p.22	Herder	17.8.82	CTB	190
CD/PV.183	pp.30-35	Herder	31.8.82	CTB	211
CD/PV.192	p.22	Herder	8.2.83	CW	227
CD/PV.196	pp.12-13	Herder	22.2.83	CW	239
CD/PV.200	pp.26-27	Herder	3.3.83	CTB	251
CD/PV.231	pp.7-8	Thielicke	4.8.83	CTB	318
CD/PV.245	p.24	Rose	28.2.84	CTB	346
CD/PV.257	pp.12-14	Thielicke	10.4.84	CTB	362
CD/PV.283	pp.37-38	Rose	21.8.84	CTB	440
CD/PV.287	p.19	Rose	31.8.84	CW	444

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Hungary

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CD/PV.9	p.17	Domokos	8.2.79	VER	4
CD/PV.17	p.14	Domokos	8.3.79	CTB	7
CD/PV.121	p.8	Komives	3.4.81	CW	84
CD/PV.250	pp.15-16	Meiszter	15.3.84	NFU	349

India

CD/PV.47	p.26	Gharekhan	2.8.79	CTB	39
CD/PV.91	p.9	Venkateswaran	10.7.80	RW	48
CD/PV.97	pp.43-44	Venkateswaran	5.8.80	CTB	57
CD/PV.98	p.38	Venkateswaran	7.8.80	RW	60
CD/PV.108	pp.10-11	Venkateswaran	19.2.81	CTB	62
CD/PV.132	pp.25-26	Venkateswaran	24.6.81	CTB	96
CD/PV.142	pp.30-31	Saran	30.7.81	CW	111
CD/PV.181	p.36	Saran	24.8.82	CTB	201
CD/PV.186	pp.7-8	Saran	14.9.82	CTB	220
CD/PV.209	p.37	Saran	5.4.83	CTB	273
CD/PV.214	p.14	Dubey	21.4.83	ND	281
CD/PV.232	pp.13-14	Dubey	9.8.83	CW	323
CD/PV.262	pp.45-46	Dubey	26.4.84	OS,ASAT	387

Indonesia

CD/PV.117	p.21	Darusman	24.3.81	CW	69
CD/PV.137	p.23	Darusman	14.7.81	RW	98
CD/PV.169	p.14	Sutresna	6.4.82	CW	165
CD/PV.180	p.42	Sutresna	19.8.82	CW	196

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Islamic Republic of Iran

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CD/PV.262	pp.9-10	Sheikholeslam	26.4.84	CW	378

Italy

CD/PV.3	p.20	Radi	25.1.79	VER	2
CD/PV.18	pp.10-11	di Bernardo	13.3.79	CTB	8
CD/PV.29	pp.25-26	di Bernardo	24.4.79	VER,CW	15
CD/PV.42	pp.8-9	di Montezemolo	17.7.79	RW	23
CD/PV.47	pp.16-17	di Montezemolo	2.8.79	CW	37
CD/PV.66	pp.24-25	di Montezemolo	6.3.80	CTB	42
CD/PV.167	p.35	Cabras	30.3.82	ASAT	161
CD/PV.179	pp.12-13	Alessi	17.8.82	CW	187
CD/PV.183	p.21	Alessi	31.8.82	ASAT	210
CD/PV.227	pp.9-10	Alessi	21.7.83	CW	305
CD/PV.274	p.8	Alessi	19.7.84	OS	407

Japan

CD/PV.16	pp.14-15	Ogiso	6.3.79	CTB	4
CD/PV.39	p.37	Ogiso	5.7.79	C-O	21
CD/PV.98	p.24	Okawa	7.8.80	CTB	59
CD/PV.109	p.7	Okawa	24.2.81	CTB	64
CD/PV.123	pp.11-13	Okawa	9.4.81	CW	91
CD/PV.157	pp.16-17	Okawa	23.2.82	CTB	121
CD/PV.163	pp.13-14	Okawa	16.3.82	CTB	129
CD/PV.176	p.13	Okawa	5.8.82	CW,CTB	174
CD/PV.181	p.26	Okawa	24.8.82	CTB	199

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Japan

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CD/PV.215	pp.19-23	Imai	26.4.83	VER	282
CD/PV.224	pp.24-25	Imai	12.7.83	CTB,CW	298
CD/PV.250	pp.30-31	Imai	15.3.84	CTB	353
CD/PV.259	pp.16-18	Imai	17.4.84	VER,CTB	369
CD/PV.263	p.11	Abe	12.6.84	CTB	388
CD/PV.276	pp.24-27	Imai	26.7.84	CTB	417

Kenya

CD/PV.112	p.16	Shitemi	5.3.81	CTB	65
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Mexico

CD/PV.150	p.14	Garcia Robles	2.2.82	CTB	113
CD/PV.175	p.14	Garcia Robles	3.8.82	CTB	172
CD/PV.181	p.23	Garcia Robles	24.8.82	CTB	197
CD/PV.234	p.17	Garcia Robles	16.8.83	FRZ	327
CD/PV.247	p.18	Garcia Robles	6.3.84	FRZ	346

Mongolia

CD/PV.44	p.9	Erdembileg	24.7.79	CW	27
CD/PV.216	p.26	Erdembileg	28.4.83	CTB	286
CD/PV.223	p.8	Erdembileg	7.7.83	FRZ	298
CD/PV.233	p.9	Erdembileg	11.8.83	OS	325
CD/PV.260	pp.21-23	Erdembileg	18.4.84	CTB,CW	375
CD/PV.262	pp.14-15	Erdembileg	26.4.84	CW	379

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Morocco

<u>Reference</u>		<u>Speaker</u>	<u>Date</u>	<u>Issue</u>	<u>Page</u>
CD/PV.137	p.21	Arrassen	14.7.81	RW	97
CD/PV.140	pp.27-30	Arrassen	23.7.81	CW	106

Netherlands

CD/PV.16	pp.16-18	Fein	6.3.79	CTB	5
CD/PV.28	pp.38-39	Fein	19.4.79	C-O,ND	11
CD/PV.30	p.8	Fein	25.4.79	CW	18
CD/PV.46	pp.8-9	Fein	31.7.79	CTB	29
CD/PV.76	p.9	Fein	8.4.80	RW	44
CD/PV.94	pp.14-15	Fein	24.7.80	CW	50
CD/PV.97	pp.12-13	Fein	5.8.80	CTB	52
CD/PV.120	pp.19-20	Fein	2.4.81	CW	81
CD/PV.150	pp.21-22	Fein	2.2.82	CTB,C-O,CW	113
CD/PV.169	p.19	van Dongen	6.4.82	CW	166
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CD/PV.179	pp.15-18	van Dongen	17.8.82	CTB	188
CD/PV.207	pp.12-13	van den Broek	29.3.83	C-O,CW	266
CD/PV.235	pp.28-30	Ramaker	18.8.83	CTB,CW	330
CD/PV.249	pp.15-16	Ramaker	13.3.84	CW	348
CD/PV.275	pp.10-13	van Schaik	24.7.84	CTB,ASAT	412
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CD/PV.179	p.10	Ijewere	17.8.82	CW	187

Norway

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CD/PV.160	pp.35-36	Berg	4.3.82	CTB,CW	125
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CD/PV.194	pp.19-21	Ahmad	15.2.83	CTB,CW	231
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Poland

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CD/PV.250	pp.25-26	Turbanski	15.3.84	CW	351
CD/PV.275	pp.15-16	Turbanski	24.7.84	CW	413
CD/PV.280	pp.16-17	Turbanski	9.8.84	CW	432

Romania

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CD/PV.180	pp.18-19	Datcu	19.8.82	CTB	194
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Senegal

CD/PV.181	p.42	Sene	24.8.82	CTB	202
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CD/PV.42	p.13	de Laiglesia	17.7.79	CW	24
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Sweden

CD/PV.2	p.45	Blix	24.1.79	CTB	1
CD/PV.29	pp.34-36	Lidgard	24.4.79	CW	16
CD/PV.46	pp.22-25	Lidgard	31.7.79	CTB	31
CD/PV.63	pp.13-14	Lidgard	26.2.80	RW	40
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CD/PV.97	pp.45-47	Norberg	5.8.80	CTB	58
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CD/PV.150	pp.31-32	Thorsson	2.2.82	CTB	115
CD/PV.161	pp.15-16	Lidgard	9.3.82	CTB	126
CD/PV.163	p.27	Lidgard	16.3.82	CW	131
CD/PV.167	pp.37-38	Lidgard	30.3.82	CW	161
CD/PV.182	pp.11-13	Hyltenius	26.8.82	CTB	204
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CD/PV.213	p.14	Hyltenius	19.4.83	OS	280
CD/PV.217	pp.19-22	Theorin	14.6.83	CTB	289
CD/PV.227	pp.26-27	Ekeus	21.7.83	CW	309
CD/PV.231	pp.10-11	Hyltenius	4.8.83	CTB	319
CD/PV.250	pp.18-19	Ekeus	15.3.84	CW	350
CD/PV.252	p.19	Ekeus	22.3.84	OS	358
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Switzerland

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Union of Soviet Socialist Republics

CD/PV.25	p.13	Issraelyan	5.4.79	ND	10
CD/PV.38	pp.14-15	Issraelyan	3.7.79	ND	20
CD/PV.40	p.9	Issraelyan	10.7.79	RW	22
CD/PV.110	p.40	Issraelyan	26.2.81	CTB	65
CD/PV.119	pp.13-17	Issraelyan	31.3.81	VER,CW	75
CD/PV.156	p.34	Issraelyan	18.2.82	CTB	120
CD/PV.166	pp.36-39	Issraelyan	25.3.82	CW	152
CD/PV.178	pp.26-29	Issraelyan	12.8.82	CW	182
CD/PV.181	p.17	Issraelyan	24.8.82	CTB	197
CD/PV.183	pp.40-42	Timerbaev	31.8.82	CTB	215
CD/PV.184	pp.17-18	Issraelyan	2.9.82	CW	217
CD/PV.188	p.12	Issraelyan	17.9.82	VER	224
CD/PV.195	pp.30-33	Issraelyan	17.2.83	CTB	233
CD/PV.196	pp.18-19, 21	Issraelyan	22.2.83	CW	241
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CD/PV.202	pp.27-28	Issraelyan	10.3.83	CW	257
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CD/PV.250	pp.27-28	Issraelyan	15.3.84	CTB	352
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CD/PV.275	pp.25-26	Issraelyan	24.7.84	CW	415
CD/PV.280	pp.7-11	Issraelyan	9.8.84	CW	425
CD/PV.283	pp.17-18	Issraelyan	21.8.84	CTB	438

United Kingdom

CD/PV.39	pp.16-17	Summerhayes	5.7.79	ND	21
CD/PV.46	p.10	Summerhayes	31.7.79	CTB	30
CD/PV.97	pp.37-38	Summerhayes	5.8.80	CW,VER	56
CD/PV.121	pp.13-16	Summerhayes	3.4.81	CW	86
CD/PV.138	pp.14-15	Summerhayes	16.7.81	CW	100
CD/PV.153	p.10	Summerhayes	11.2.82	CW	118
CD/PV.157	pp.18-19	Summerhayes	23.2.82	CW	122
CD/PV.162	pp.12-13	Summerhayes	11.3.82	CTB	128
CD/PV.165	pp.14-15	Summerhayes	23.3.82	CW	140
CD/PV.178	pp.35-37	Middleton	12.8.82	CW	184
CD/PV.186	pp.11-13	Summerhayes	14.9.82	CTB	221
CD/PV.202	pp.15-18	Hurd	10.3.83	CW,CTB	254
CD/PV.209	pp.43-44	Cromartie	5.4.83	CTB	274
CD/PV.219	pp.8-9	Cromartie	21.6.83	CTB	291
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CD/PV.236	pp.19-22	Cromartie	23.8.83	CW	333

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United Kingdom

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United States of America

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CD/PV.158	pp.13-14	Fields	25.2.82	CTB	124
CD/PV.162	p.9	Fields	11.3.82	CTB	127
CD/PV.162	p.20	Fields	11.3.82	CW	129
CD/PV.163	p.26	Busby	16.3.82	CW	130
CD/PV.164	p.33	Fields	18.3.82	CTB	136
CD/PV.166	pp.19-21	Fields	25.3.82	CW	147
CD/PV.170	p.10	Busby	8.4.82	CW	166
CD/PV.178	pp.8-11	Fields	12.8.82	CW	176
CD/PV.184	p.35	Fields	2.9.82	OS	218
CD/PV.191	p.13	Bush	4.2.83	CW	226
CD/PV.193	pp.34-35	Fields	10.2.83	CW	229
CD/PV.204	pp.8-10	Fields	17.3.83	CW	260
CD/PV.209	pp.8-9	Busby	5.4.83	CTB	269
CD/PV.211	pp.12-14	Fields	12.4.83	CW	274
CD/PV.222	pp.16-17	Fields	5.7.83	CW	295
CD/PV.236	pp.27-29	Busby	23.8.83	CW	336
CD/PV.244	pp.21-24	Fields	23.2.84	CW,CTB	342
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United States of America

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CD/PV.270	pp.19-20	Fields	5.7.84	CW	395
CD/PV.272	pp.12-15	Fields	12.7.84	CW	400
CD/PV.274	pp.13-15	Fields	19.7.84	CW	409
CD/PV.284	pp.13-16	Fields	23.8.84	CW	441

Venezuela

CD/PV.29	pp.9-10	Taylhardat	24.4.79	CW	12
CD/PV.66	p.9	Taylhardat	6.3.80	CTB	42
CD/PV.121	pp.11-12	Taylhardat	3.4.81	CW	85
CD/PV.167	p.23	Navarro	30.3.82	CW	159
CD/PV.180	pp.21, 22	Navarro	19.8.82	CW,CTB	194

Vietnam

CD/PV.213	p.10	Nguyen Thong	19.4.83	CW	280
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Yugoslavia

CD/PV.108	p.6	Vrhunec	19.2.81	CTB	62
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CD/PV.181	pp.28-29	Ericsson	24.8.82	CTB	200
CD/PV.196	pp.15-16	Lidgard	22.2.83	CTB	240
CD/PV.228	pp.8-9	Dahlman	26.7.83	CTB	311
CD/PV.250	pp.39-41	Dahlman	15.3.84	CTB	354

Ad Hoc Working Group on Nuclear Test Ban

CD/PV.236	p.7	Rose	23.8.83	CTB	333
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United Nations

CD/PV.194	p.12	Perez de Cuellar	15.2.83	VER	230
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Of the matters facing this Committee, the elaboration of a treaty prohibiting nuclear-weapon testing in all environments is of primary importance and deserves the earliest attention. The United Nations General Assembly expressed in December its sincere hope that the negotiating Powers would present a CTB agreement to the Committee by the time it began its deliberations. It is to be regretted that this has not been possible. The negotiating Powers should be urged to do their utmost to ensure that a CTB text is presented to the Committee during this first session.

Even before the agreement is presented here, Australia believes the Committee could begin addressing the technical and operational aspects of an international seismic detection network, the study of which was initiated by the Committee's predecessor. A full experimental exercise of the proposed network should proceed without delay. This is essential if there is to be any possibility that an international verification system is to be operational by the time the Committee has completed its work in the drafting of a multilateral CTB treaty.

A widely accepted CTB treaty will be a significant milestone in arms control and disarmament efforts. It will be a barrier to both the spread of nuclear weapons and the expansion of existing nuclear arsenals. It will contribute to a greater level of confidence among States in all regions of the world. It will also provide the opportunity for building further upon international verification procedures of the kind incorporated in the Nuclear Non-Proliferation Treaty.

Looking beyond the CTB, as part of the effort to enhance further the restraints on both the vertical and horizontal proliferation of nuclear weapons, the committee could profitably turn its attention to the proposal for an agreement halting the production of fissionable material for nuclear weapons purposes. Such an agreement would be a further barrier to the spread of nuclear weapons to additional countries by preventing the development of untested nuclear weapons. It would also place a limit on the quantity of fissionable material available to the nuclear-weapon States for weapons production and thus be an effective measure towards sealing down the nuclear arms race.

Australia does not underestimate the difficulties of implementing and verifying an international agreement of this kind. We acknowledge that it would involve the development of an adequate system of full-scope safeguards accepted by both nuclear-weapon States and non-nuclear-weapon States. Australia's own activities in the safeguards field are well known. They need no elaboration here except to say that a rigorous, comprehensive and universally applicable system of safeguards would make the non-proliferation régime even more effective. We believe that an agreement halting the production of fissionable material for nuclear weapons purposes would be a substantial achievement.

....We believe there would be merit in spelling out the time-frame in the convention. Nevertheless, such a convention will only be as good as the verification procedures written into it. It is essential, I believe, that these should involve an exchange of information about chemical weapons stocks and manufacture of substances, consultations and, above all, on-site inspection to certify not only the destruction of stocks, but also that proscribed chemicals are not being manufactured by units producing similar chemical substances.

The matter of verification of arms control agreements has been a stumbling block in disarmament negotiations for many years. This is true also of the ongoing negotiations. It is now widely recognized and accepted, however, that a 100 per cent assurance against covert violation of disarmament agreements is neither possible nor necessary.

What is necessary and possible is adequate verification — that is, a control system which makes the risks of discovery high enough to make it politically too risky to attempt any violations. We are convinced that, for instance, the seismic verification of a test ban can be made efficient enough to deter from clandestine violations of a CTB agreement. The CCD, and from now on the CD, Ad Hoc Group of Seismic Experts, has already made considerable progress. Its goal is the designing of a suitable network of seismic monitoring stations for the surveillance of a CTBT. A key role in such a network would be played by seismic data centres. I would like to take this opportunity to reiterate the offer made by the Swedish Government a year ago to establish, finance and operate a seismic data centre in Sweden. I would like to add in this context that in the course of this year Sweden intends to demonstrate the main functions to be performed by such a centre.

CD/PV.3 p.20 Italy/Radi 25.1.79 VER

However, the problem of disarmament cannot be isolated from that of verification. Indeed it would be neither correct nor realistic to promulgate disarmament measures without adequate, precise and formal guarantees that these measures will be universally implemented.

Italy is well aware of the difficulties — technical, economic and political — inherent in the verification of the disarmament agreements. Though the methods of control may vary according to the kind of measures to be controlled, it is evident by now that in most cases the national verification techniques need to be accompanied by forms of international co-operation, designed to ensure rapid, technically reliable and politically effective verification procedures.

It is in this spirit that, on various previous occasions, Italy has favoured the initiation of a study on the setting up of an international verification organ, designed to offer coherent and adequate solutions to this crucial problem from a technical as well as from a legal angle. In the same spirit, Italy has supported the French Government's initiative for the establishment of an International Satellite Agency, and is ready to co-operate in studies to be undertaken to this end.

Furthermore, it would be desirable for international verification to be accompanied by national controls exercised by public opinion in the different countries over the respective Governments so that, in practice, the latter will act in accordance with the engagements entered into.

CD/PV.4 p.16 Canada/Pearson 25.1.79 CTB

In this perspective, Canada believes that negotiations in this Committee on nuclear questions must be directed primarily towards the goal of achieving a comprehensive test ban treaty. We welcomed the start of the discussions in 1977, as it marked the first concerted attempt by nuclear-weapon States to reach such an agreement since the signing of the Partial Test Ban Treaty in 1963. We realized that the achievement of a comprehensive test ban would not be rapid, since we agreed that measures of verification must be such that all States could be reasonably certain that others were living up to the terms of the agreement. Yet we are disappointed by the rate of progress of the negotiations. The establishment of a fully-tested world data exchange system to which all of us can contribute could be one of the most effective methods available to the international community for setting up a comprehensive test ban regime. Let us be clear, however, that problems of verification are a matter of judgement, not of tech-

nical perfection.

Seen another way, a test ban could be achieved by unilateral declarations to that effect by the nuclear-weapon States themselves. We do not prefer that approach for two reasons. First, we believe that, to have any lasting effect, a test ban should be of such duration that it begins and continues to have a negative impact on development of new weapons. Such an achievement, however, could be called into question if a ban does not go beyond simply moving nuclear testing into an intermittent time frame. Secondly, if future steps, such as the comprehensive test ban, are to be more even-handed in both the vertical and horizontal dimensions of non-proliferation, the non-nuclear-weapon States should have a substantive input into the final treaty, so that it has a good chance of becoming universal, and all contracting parties understand their obligations under it.

CD/PV.5

pp.34-35

FRG/Van Well

26.1.79 CW,CTB

The Federal Republic of Germany has played an active part in the work of the CCD ever since it joined in 1975. It intends to intensify its participation in the Committee on Disarmament. We plan to make specific contributions in the following fields:

- verification of a worldwide prohibition of the development, production and stockpiling of chemical weapons;
- seismological verification of a comprehensive test-ban treaty;
- the development of confidence-building measures.

My Government is of the opinion that priority should be given to the conclusion of a convention on the prohibition of the development, production and stockpiling of chemical weapons and their destruction. It considers such a convention as a logical supplement to the Geneva Protocol of 1925 banning the use of chemical weapons.

In our view, a convention prohibiting chemical weapons calls for an adequate verification system commensurate with the military significance of these weapons of mass destruction. The willingness to agree to inspections is both proof and the basis of confidence in compliance with such a convention.

The Government of the Federal Republic of Germany is therefore convinced of the need for an international verification system including on-site inspections. It considers such a system to be both desirable and feasible without prejudice to the interests of industry and research. Our experience as a country which undertook as early as 1954 not to manufacture chemical weapons, and which agreed to international controls of production plants, demonstrates that such controls can be effective and at the same time economically acceptable.

It was for this reason that Chancellor Schmidt, at the special session on Disarmament, in agreement with our chemical industry, invited all interested countries to send experts to the Federal Republic of Germany to see for themselves that adequate verification of a ban on the production of chemical weapons is possible. On behalf of my Government, I wish to extend here our invitation to visit three chemical companies between 12 March and 14 March this year. The plants to be visited, which manufacture phosphorous compounds, are BASF in Ludwigshafen, Bayer in Dormagen, and Hoechst in Knapsack.

We welcome the announcement made by Lord Goronwy-Roberts two days ago that experts in this field will, following our demonstration, be invited to visit the United Kingdom to see a plant producing phosphorus compounds as well as a pilot plant for the manufacture of nerve gas which is being dismantled. We are convinced that these demonstrations by both countries will help to clarify questions concerning the verification of a chemical weapons ban.

The Federal Republic of Germany is following with great interest the negotiations on a comprehensive test ban and has long been advocating a treaty to this effect. It would like to see the results of these negotiations put before the Committee soon so that it can draft a convention.

In this connexion, too, the Federal Republic of Germany deems satisfactory verification to be essential. It will, therefore, continue to attach great significance to the work of the Ad Hoc Group of Seismological Experts for the detection, localization and identification of underground nuclear explosions and will participate in it as well. It has declared its willingness to make its seismic facilities available for the international monitoring of a comprehensive nuclear test ban.

CD/PV.9 pp.17-18 Hungary/Domokos 8.2.79 VER

In connexion with the negotiations in progress and the obstacles standing stubbornly in their way, I would like to dwell shortly on the issue of verification. It is generally known and recognized that verification forms an organic and essential part of a disarmament convention or treaty, and all existing international instruments in this field contain adequate provisions for verification measures. This practice of verification has proved its efficiency beyond doubt, no instance of violation of disarmament agreement has been discovered or reported. Nevertheless, there has been recently a growing trend pressing for excessive on-site inspection, or to establish international machinery for verification, which may easily start a life independent from the actual disarmament agreements. This excessive pressure for an absolute verification is good only to block the way of important negotiations. Pressing for excessive verification hails from suspicion and may raise suspicion on the other side. Methods of verification based on national means and supplemented by international arrangements in mutually acceptable form and attached to concrete disarmament instruments can become an efficient method of verification.

CD/PV.16 pp.14-15 Japan/Ogiso 6.3.79 CTB

With respect to the question of verification, there are two issues: (1) on-site inspections, and (2) seismic data exchange. As regards on-site inspection, the Japanese delegation considers that in addition to verification by seismological methods, which I will touch on shortly, and other national means, it will require on-site inspection as a supplementary means to ascertain verification when there is any doubt. Nevertheless, if detailed agreements are reached facilitating seismological means of detection and verification by other national means, the need for on-site inspection may be somewhat less than if there is no such agreement. In this respect, there may remain the possibility of considering the method of "verification by challenge" as proposed by Sweden.

As my delegation proposed at the CCD on 3 March 1977, the establishment of an international system of seismic data exchange through which all seismic data can be collected without delay will be necessary in order to detect and identify underground nuclear tests. In this connexion, I should like to pay tribute to the work of the Ad Hoc Group of Experts on seismic events which has been making positive contributions under the auspices of the CCD and the CD since August 1976. In particular, my delegation welcomes the close co-operation between the Group of Experts and the World Meteorological Organization which has been worked out by the participation of the representatives of WMO at the seventh session of the Ad Hoc Group this year.

The distinguished delegate of the United Kingdom in his progress report on 16 March

last year stated that "The USSR, the United Kingdom and the United States share the widely-held view that an international exchange of seismic data will play a major role in verification of compliance with the Treaty", and added that "They agree that the guidelines for setting up and running the international seismic exchange should be laid down in an annex to the treaty, and that the detailed organizational and procedural arrangements for implementing the international exchange should be worked out after the entry into force of the treaty, drawing on the recommendations contained in the report of the Ad Hoc Group". The experimental exercises of the seismic data exchange system, as was proposed by the Group, will contribute to the drawing up of the "guidelines" to be provided in an annex to the CTB treaty. It will also make the prompt implementation of the provisions of the CTB treaty possible after its entry into force, since the experimental exercises will facilitate the formulation of what the United Kingdom progress report called the "detailed organization and procedural arrangements" as soon as possible after the treaty enters into force or, as the case may be, they will make such arrangements come into effect concurrently with the entry into force of the treaty. From this point of view, it would be a significant contribution for progress towards the conclusion of the CTB treaty if the Committee, at an appropriate stage following the proposal of the Ad Hoc Group, decides to hold experimental exercises of the seismic data exchange system before the entry into force of the treaty.

It may also be necessary to consider the establishment of a standing committee of experts from which advice may be made available regarding the scientific and technical problems of verification, including the international data exchange system.

The verification system of the CTB treaty will be more effective and strengthened if, in addition to the international system of seismic data exchange, concrete agreements could be reached on facilitating verification by national means such as the setting up, on a reciprocal basis, of appropriate numbers of "black boxes" or tamper-proof automatic stations, and observation by satellites, as I stated on 17 August last year in the CCD.

CD/PV.16

pp.16-18

Netherlands/Fein

6.3.79

CTB

Today I wish to make some remarks on the following issues. I wish to introduce a technical working paper in the field of seismology. I intend to make some observations on the last meeting of the Ad Hoc Group of seismological experts, and I shall touch upon our work during the spring session.

Scientists in the field of seismology have developed several methods of identifying seismic events, that is to say, of distinguishing between earthquakes and underground explosions. Most of these methods have been described in one or more of the numerous working papers of the CCD as well as in the first report of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and to Identify Seismic Events. Although several acceptable seismic identification methods exist nowadays, the search for other methods and the testing of existing methods continues. It is desirable to have a wider choice of independent and verified seismic identification methods to reinforce confidence in the identification of a particular event.

One of the methods discussed in the past is to make use of the fact that an explosion and an earthquake behave differently at the source. An explosion can be characterized by a sudden outward motion in which energy is radiated equally in all directions. With an earthquake this is not the case, the energy radiation depending upon the position of the plane along which shear motion occurs in the earthquake source. Theoretically, it would therefore be possible to distinguish between an earthquake and an explosion by measuring the motions, and especially the initial motions of the direct waves

around the source of the seismic event.

The practical possibilities of using this particular identification method has now been studied by Netherlands experts, who came to the conclusion that the method can only be used under certain restricted circumstances. The study is described in working document CD/7 now being tabled. It is clear from the study that one cannot use the method altogether on its own with confidence for the identification of seismic events, but it can provide valuable additional support for the conclusions of other seismic identification methods. It is also shown that the effectiveness of the method depends very much on the location of the event with respect to the seismic stations of the monitoring network.

We in the Netherlands considered it worthwhile to present to you this study on an additional identification method which could be useful in a future international seismic network in the context of a comprehensive nuclear test ban.

During the last two weeks the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and to Identify Seismic Events held its seventh session. Quite some progress was made in the Group and in its sub-groups on a number of technical details of the international seismic system which will be needed in the context of a comprehensive test ban treaty. In its work, the Group based itself, of course, on the first report of the Group, CCD/558. As we can see in the latest progress report of the Group, a rather substantial delay is requested for the submission of its second report. Although there may be some valid technical reasons for this delay -- in particular to develop a number of technical annexes to the report -- my delegation wishes to express concern at the pace at which progress is being made. We are under the impression that other than technical reasons were also involved in requesting the delay.

My delegation would have hoped that the work of the Group could have been finished somewhat earlier, thus making it easier for countries to start the requested preparations and technical tests of element of the future system. Such small-scale tests could be very helpful in obtaining a better idea of which resources a country needs to participate in the final system. The second report of the seismic Group, which should describe quite a number of regulations and instructions, would have been very helpful in assessing these aspects. Considering the fact that a draft CTB treaty could be presented to the CD within a few months -- I hope -- it must be clear that my delegation can only reluctantly agree to a postponement of the presentation of a second report to the summer. I also hope that the report will contain clear-cut recommendations.

Several members of this Committee have proposed the holding of a so-called "experimental exercise", that is, a test of the whole future seismic system to be used in the context of a CTB. In fact, the first report of the seismic Group recommends such an experimental exercise. This would be a complete test-run of a duration of about one year of the necessary seismic network -- data gathering, communications, analysis in data centres and at the national level, etc. -- to see whether the system works well, to ascertain what the problems are and what capabilities the system has to deter underground nuclear explosions under test ban conditions.

Now, the practical problems of having such a complete exercise are rather substantial. The seismic network exists only partly at the moment. Moreover, experts from one nuclear-weapon State have maintained that such an experimental exercise can only be held after the CTB treaty has entered into force, otherwise one would not know which countries would participate in the final system and one could not make a final assessment of the system.

At first sight, there is some logic to that last argument; but only some. If one waits with an experimental exercise until the CTB treaty has entered into force, there will be no time for such an exercise. As soon as there is a treaty, one must possess the means

to verify compliance with it. Therefore, the seismic system must be established immediately after the entry into force of the treaty. There is then no time left for experiments.

It is therefore clear that such an exercise is only useful before the entry into force of a CTB treaty. My Government still hopes that a multilateral CTB will be concluded and signed this year. This leaves very little time for preparations. It is more difficult to predict when the treaty will enter into force.

We have now three options: (a) We start the exercise now; (b) A full scale experimental exercise will never be held; (c) The decision to hold an exercise is taken as soon as the multilateral CTB treaty shapes up.

In principle my delegation prefers option (a). However, apart from the technical problems inherent in starting such a project very soon, there does not seem to be agreement at present on such a line of action. Since, on the other hand, all seem to agree that an experimental exercise would be useful, to follow option (b) would be a pity. We should therefore consider the possibilities of option (c). I could imagine that, after the submission of a trilateral draft CTB treaty to the Committee, it will soon become clear which countries do seriously plan to join the multilateral test ban treaty. Between that time and the entry into force of the treaty, quite some time will be left. It would really be regrettable if that period were not used for an experimental exercise or, perhaps, smaller-scale experiments. Such experiments would clearly help in establishing the final seismic network at the time of the treaty's entry into force. My delegation would certainly be interested in hearing the views of other delegations on this matter.

CD/PV.17

p.14

Hungary/Domokos

8.3.79

CTB

I would like to take this opportunity to explain the position of my delegation concerning some ideas expressed in the Group and in the Committee by certain delegations to the effect that the experimental exercise of the seismic data exchange system might be held concurrently with or before the entry into force of the CTB treaty.

My delegation, like many others, is of the opinion that the seismic data exchange system as a means of verification is subordinated to the future CTB treaty, that it is to contribute to verification of the implementation of the treaty, and can by no means be considered a precondition to the conclusion of the treaty.

We all are aware of the fact that the seismic data exchange system consists of highly complicated machinery which will comprise not only particular seismic stations but specially-equipped international data centres and a sophisticated communication network. Therefore it can be used for an experimental exercise in its final, global form, when all its elements are functioning simultaneously in a complex way, otherwise it may easily show a false picture. This global network can be set up and tested only after the entry into force of the treaty.

Testing a system not properly constituted and consisting of differently equipped national seismic stations may produce deficient and disputable data. A possible defective final product of the experimental exercise may discourage certain States or give a pretext to others to keep away from the treaty, and that would by no means serve the cause of the nuclear disarmament.

It is well-founded reasoning also, that until the conclusion and entry into force of the CTBT we would not know which countries parties to the treaty would participate in the final system and how the network has to be completed.

The progress report of the Ad Hoc Group of Scientific Experts to consider International Co-operative Measures to Detect and to Identify Seismic Events which is now before the Committee calls for no more than a procedural decision on the timing of the next session of the Group. I shall express the view of my delegation on that question shortly.

In the meantime, however, please permit me to put in its proper context the work of the Ad Hoc Group of Experts. When the Group was set up almost three years ago, it was in realization of the vital importance which the technical aspects of the issue of verification would have in stimulating agreement on and in the operation of a CTBT. The Ad Hoc Group has in its previous reports and, in particular, the report contained in document CCD/558, clarified many aspects of the technicalities of an international data exchange network involving several stations located around the world. My delegation is grateful for and is appreciative of the valuable contribution which the Group of Experts has thereby made to the solution of one of the problems which ostensibly are quoted as holding up the conclusion of a CTBT. Such a network of seismological stations which will permit a truly international participation in the verification procedure of a CTBT will, we hope, be appropriately located in all hemispheres. We can already foresee the necessity for the experts to give attention in their recommendations to ways and means of diffusing technical knowledge for effective participation by areas where, by their own earlier observation in document CCD/558, there exists a gap which has to be filled for an efficient network.

The relationship between the work of the scientific experts and negotiations on a CTBT was aptly summarized by the spokesman for the three negotiating Powers when he informed the CCD last year that there was agreement among them that the guidelines for setting up and running the international seismic exchange should be laid down in an annex to the treaty and that the detailed organizational and procedural arrangements for implementing the international exchange should be worked out after the entry into force of the treaty, drawing of course on the recommendation of the Ad Hoc Group. Thus, the practical application of the data exchange network, through experimental exercises, was not immediately seen and cannot be seen now as providing a reason for holding up the conclusion of a CTBT, very useful though these exercises will be. Indeed, the whole issue of verification of which the work of the Ad Hoc Group of Experts is only a part, albeit an important part, has been -- in the view of my delegation -- considered to the point where we think it should no longer provide an excuse for further delay in the submission of the draft of the tripartite negotiators. A combination of the various means available -- national, international and on-site, when determined to be necessary for double assurance -- should have provided an adequately verifiable guarantee of compliance. What is lacking, we believe, is a will to conclude these negotiations. Technical solutions can be devised only for technical problems; a political decision is necessary for a political issue.

We are all keenly aware that one of the principal obstacles to the achievement of a CTBT is verification. In this respect it has already been demonstrated, during the extensive discussions which have taken place in the CCD, that effective monitoring of a CTBT could not be confined to so-called national means but should be based on a combination of national verification methods and international machinery and procedures.

It is the view of many delegations -- including my own -- that adequate verification

of a CTBT must embrace provisions for on-site inspection, to be carried out when a detected seismic event cannot satisfactorily be identified by other means.

At the same time, the Ad Hoc Group of seismic experts established in 1976 has clearly outlined the contribution that seismological methods and capabilities of detection, location and identification of earthquakes and explosions can make to the global monitoring of a CTBT. The Group has done good work in elucidating the possibilities of seismology and has made concrete proposals, advocating the establishment of a global network of seismological stations and of an international data collection and evaluation centre.

The Italian delegation has noted with appreciation the offer by Sweden to establish and to finance a temporary data centre, which could make it possible to plan an experimental exercise of a system of international co-operation in the exchange of data collected on seismic events, for the purpose of verifying a CTBT.

We feel that a decision on the carrying out of such exercise should not be delayed. The operative performance of the seismic identification capabilities should in fact be tested in practice before the entry into force of the treaty, thus permitting such a system of international verification to become immediately operative and to respond fully to its purposes as soon as the treaty takes effect.

Everybody realizes that there are problems of technical, legal, military and political requirements which cannot be easily solved and which need timely and accurate preparation, not only from the theoretical standpoint.

Bearing this in mind, my delegation would like to urge the Group of Experts to expedite its work under its present terms of reference, in order to submit to the Committee as soon as possible a final report which would enable us to adopt appropriate decisions on further steps leading to the establishment of an effective verification system for a CTBT.

CD/PV.19

p.8-9

Belgium/Noterdaeme

15.3.79

VER,CTB

The importance of organizing seminars in the field of chemical weapons and, moreover, of the work of the Ad Hoc Group of Scientific Experts to consider International Co-operative Measures to Detect and to Identify Seismic Events goes beyond their immediate objective. They should also enable us to envisage a more subtle and practical approach to the difficult question of verification. We know that this question is a particularly difficult hurdle to cross on the way to finalizing the treaties at present being negotiated. However, there is no way of dispensing with a valid system of verification and control under which the parties can be assured that the commitments entered into are being fulfilled. To deny this obvious fact is to run the risk of seeing the disarmament agreements turning into instruments of distrust rather than confidence and giving rise to the danger of destabilization diametrically opposed to the desired results.

This having been said, my delegation believes that the problem of the paramount need for a credible system of verification could be resolved more easily if the technical and political aspects of verification were considered in terms of complementarity. Different delegations have proposed various approaches to this thorny question. It seems to us that these approaches should be regarded no longer as mutually exclusive but as complementary. It might before be possible, at different stages and in a sequence to be defined, for verification to be based both on objective methods, that is to say, for example, scientific and seismic verification mechanisms, and other methods which would include in particular the possibility of on-the-spot verification, still vital to confidence, and possible verification by challenge, as recommended by the Swedish delegation.

With regard to the complete prohibition of nuclear tests, my delegation thinks it

extremely important that the experimental exercise envisaged by the Ad Hoc Group of Scientific Experts to consider International Co-operative Measures to Detect and to Identify Seismic Events should begin reasonably soon, without waiting for the completion of the tripartite negotiations between the Soviet Union, the United Kingdom and the United States. Belgium, for its part, is prepared, even now, to contribute fully to the organization of such an exercise.

CD/PV.23 pp.15-16 USA/Fisher 29.3.79 ND

Finally, there is little evidence that the sponsors of CD/4 have given much thought to the verifiability of their proposal. The cessation of production and the elimination of even the smallest nuclear weapons implies a pervasive verification mechanism which would far surpass anything contemplated so far in arms control agreements. Experience thus far does not lead us to believe that the world community would be ready to accept the kind of verification régime that full nuclear disarmament would entail unless the ground had been carefully prepared by the implementation of a series of agreements for staged reductions with appropriate verification régimes applied at each stage.

CD/PV.25 p.13 USSR/Issraelyan 5.4.79 ND

The United States delegation's third point concerning questions of verification is also, in our view, unfounded. Ambassador Fisher stated that "there is little evidence that the sponsors of CD/4 have given much thought to the verifiability of their proposal". The sponsors of the document had no intention of proposing any specific verification systems at the present stage, but simply indicated that "agreement should also be reached on the necessary verification measures". I should like to state once again that ending the production of nuclear weapons and completely destroying them will unquestionably call for an effective verification system. Questions of verification are an extremely important element of any agreement in the sphere of disarmament. Experience of negotiations on disarmament in recent years shows that obstacles connected with the verification of the fulfilment of obligations which previously appeared to be insurmountable can be overcome, given the goodwill of the participants in negotiations. Sufficient experience has been accumulated in this respect -- and here I cannot refrain from mentioning the Soviet-United States negotiations on various disarmament questions -- and there can be no doubt that it will be developed further.

CD/PV.28 p.17 Australia/Thomson 19.4.79 C-O

The Australian delegation does not believe that the Committee on Disarmament can undertake any serious consideration of item 2 of the 1979 agenda -- "cessation of the nuclear arms race and nuclear disarmament" -- without examining the possibility of an international convention halting the production of fissionable material for nuclear weapons purposes. The Australian delegation considers that "the cessation of the nuclear-arms race and nuclear disarmament" can only take place as the result of a step-by-step process of negotiation. It is quite unrealistic to consider the final goal of the Committee's work -- cessation of the nuclear-arms race and disarmament -- without first considering the means by which this goal is to be achieved. Such a step-by-step process would include a number of very important elements:

a continuing pattern of bilateral limitation and reduction of nuclear arsenals by the

super Powers under the umbrella of SALT;
 a Comprehensive Test-Ban Treaty;
 the strengthening of the Nuclear Non-Proliferation Treaty; and
 as an intrinsic aspect of controls on both horizontal and vertical proliferation, an international treaty on the prohibition of the production of fissionable materials for nuclear weapons purposes.

The Australian delegation is under no illusions concerning the sensitivity and complexity of an international convention to halt the production of fissionable material for nuclear-weapons purposes. Such a convention would clearly involve the development of a comprehensive system of full-scope safeguards to be administered by the IAEA, and the application of such a safeguards regime to all peaceful nuclear facilities in both non-nuclear weapon States and nuclear-weapon States. It would also entail the conversion to peaceful purposes or closing down of all military enrichment and reprocessing plants in nuclear-weapon States, together with adequate verification measures.

Verification procedures would be an integral part of such an international convention. The leader of the United Kingdom delegation at the opening meeting of this Committee, Lord Goronwy-Roberts, drew the Committee's attention to this aspect when he pointed out that an agreement prohibiting the production of fissionable materials for weapons purposes would require stringent inspection to ensure that States were not producing or diverting such materials for nuclear weapons. In this context, the Australian delegation particularly welcomes the intention of Canada, announced by Mr. G.A.H. Pearson during the inaugural meetings of the Committee on Disarmament, to explore various aspects and methods of verification, and we look forward to seeing the papers relating to these issues which Canada hopes to table here at an appropriate stage.

CD/PV.28

pp.38-39

Netherlands/Fein

19.4.79

C-O,ND

In particular with respect to the important verification question it is perhaps worthwhile, even at this early stage, to consider the implications of verifying a halt in the production of nuclear warheads and the destruction of stockpiles of nuclear weapons. A full-scope safeguards system is in any case necessary to ensure that no nuclear materials are diverted from peaceful uses. But that would not be enough. The matter is, of course, of such importance that one would have to make absolutely certain that no nuclear weapons are produced any more and that existing nuclear weapons are destroyed. This would mean, inter alia, that one would need to know where all nuclear-weapons production facilities are and that these are dismantled or in any case have stopped production. It would also mean that possibilities have to be created to trace all stockpiles of nuclear weapons, and this would require a rather intrusive kind of verification. Considering our discussions until now on the verification question, I do not entertain great hopes that all countries involved would accept such kind of verification.

A more indirect, but in the end probably effective, way of halting the production of nuclear weapons would be the cessation of the production of fissionable materials for weapons purposes. This proposal was made a long time ago and has always been supported by my Government. Canada has recently pursued this idea again. The great advantage of the proposal is that an internationally accepted system to verify the measure is already in existence: the nuclear safeguards system of the International Atomic Energy Agency. Indeed, application of this system to the whole peaceful nuclear fuel cycle of the nuclear-weapon States and transfer of all military enrichment and reprocessing plants to the peaceful cycle would make it possible to verify the halting of the production of fissionable materials for weapons purposes, at least in theory.

There are a number of practical problems, such as the question of military propulsion reactors, but these problems are, if the political will exists, probably solvable. An important advantage of the proposal is that all countries, nuclear-weapons States and non-nuclear-weapons States, would accept the same type of verification, removing a discriminatory feature of present safeguards application.

Unfortunately, document CD/4 does not give any hint of how to tackle the basic verification problem. The main sponsor has not given any practical indication that it is willing to accept nuclear safeguards on its peaceful nuclear facilities, safeguards which are applied all over the world. Perhaps I may mention that in the first NPT Review Conference some hope was raised that the Soviet Union was changing its mind: it accepted in the final document of that Conference the following sentence: "The Conference emphasises the necessity for the States party to the Treaty that have not yet done so to conclude as soon as possible safeguards agreements with the IAEA." You may note that no distinction is made between nuclear-weapon States and non-nuclear-weapon States in this sentence. Since that time, however, our expectations in this field have not been fulfilled, although in the meantime three other nuclear-weapon States have accepted IAEA safeguards.

Now, if one is not even willing to consider the application of well defined verification measures on peaceful nuclear activities, how can we undertake negotiations on disarmament measures which require even more intrusive verification? I would very much hope we can find a solution, but we would need some more information from the sponsors of CD/4 to create the necessary confidence that success in the end can be achieved.

CD/PV.29

pp.9-10

Venezuela/Taylorhardat

24.4.79

CW

The question of verification is undoubtedly the most complex and delicate one which arises in connexion with the prohibition of chemical weapons. In this respect, my delegation considers that the convention should make use of a combination of the various possible alternatives. National control methods alone are not sufficient, since they do not offer adequate guarantees of compliance with the prohibitions or against the breach of these prohibitions. As indicated in document CD/400 which I have cited, the purpose of the verification system is to give every party the assurance that the prohibition is being complied with, and this could be achieved only through a combination of national and international measures, which would complement and supplement each other. My delegation agrees with the statement in that document that at least the following elements should be included in the verification system: the self-control of States, national methods of verification, and international measures to supervise and monitor compliance with the contractual obligations.

Within the problem of verification, the most difficult question has been that relating to on-site inspections. Venezuela is not unaware of the importance of this kind of inspection and would like a system of on-site inspection to be devised at the earliest opportunity which, in addition to being adequately effective, does not impair the sovereign rights of the parties or lead to undue or unnecessary interference in the internal affairs of the countries. My delegation considers nevertheless that the work on the designing of an on-site control system should not delay or impede the multilateral negotiations on the other aspects of a convention on the prohibition of chemical weapons. Perhaps the same convention might refer to the desirability, advisability, necessity or obligation of establishing such a system and entrust to the international control body to be established the task of designing an on-site verification system whose purpose would be to ensure observance of the prohibitions laid down and avert violations

of the convention, subject always to due respect for the legitimate economic interests of States and adequate safeguards for progress in scientific research. This machinery might form the subject of an additional protocol to the convention.

CD/PV.29

pp.16-19

FRG/Pfeiffer

24.4.79

CW

A convention prohibiting the development, manufacture and stockpiling of chemical weapons and providing for the destruction of existing stocks requires above all a verification arrangement commensurate with the military significance of chemical weapons. Verification is the basis for confidence in complying with such a prohibition.

The Federal Republic of Germany has committed itself under the Brussels Treaty as revised on 23 October 1954, not to manufacture certain types of weapons, including chemical weapons, and to allow a special treaty agency to verify that this commitment is being complied with. Checks at chemical plants in our country are being carried out every year in the form of on-site inspections to verify that these plants are not manufacturing substances which are classified as chemical weapons.

The companies concerned are selected and advised in writing at six weeks notice by the Western European Union's Armaments Control Agency. The experience of over twenty years shows that it is in fact possible to verify adequately the observance of a chemical weapons production ban, and that this verification procedure is technically practicable without certain production techniques or other company-specific technologies having to be disclosed.

In past years several countries have submitted working papers in which they have stated their position on aspects of verification. The need for verification is generally accepted in principle, but views differ above all as to whether it should be implemented by national or international institutions. Moreover, different technical means have been proposed in the efforts to find suitable methods of verification. Valuable scientific contributions have been made on the basis, in particular, of efficient modern instrumental analysis.

These efforts continue to be hampered by the fact that no agreement has yet been reached on the question of defining the agents which would be subject to prohibition. Certainly, the character and scope of suitable verification measures also depend on the nature and the number of the prohibited agents. Obviously, the technical implications of verification measures become simpler if the number of agents, the non-manufacture of which has to be controlled, is reduced.

In its Working Paper of 22 July 1975 (CCD/458) the Federal Republic of Germany, therefore, drafted a definition of chemical warfare agents to the effect that a prohibition would cover only agents which, according to their character, are to be deemed militarily relevant warfare agents. The Federal Republic of Germany, together with a number of other countries, considers that such an objective definition would greatly facilitate on-site inspections.

On-site inspections as a means of verification have been objected to on the ground that they imply the danger of intellectual property rights being infringed which concern know-how regarding chemical processes to be kept secret. The Federal Republic of Germany attaches great importance to the protection of intellectual property as a fundamental principle of law and has therefore studied in depth the question whether verification of the non-production of chemical weapon agents is possible without violating such rights.

Since this involves matters which principally concern the owners of intellectual property rights, it launched an opinion survey among representative companies in the chemical industry, the detailed results of which will be made known in due course. But

even in the early stage of the survey it became apparent that, provided they are properly implemented, control measures can certainly be carried out in production establishments so as to verify to a degree of certainty not attainable by other means the non-production of warfare agents without the disclosure of production secrets.

In our opinion, effective verification of the compliance with a chemical weapons ban can only be accomplished by the application of international control measures. The representatives of the Federal Republic of Germany at the United Nations and the Geneva Committee on Disarmament have repeatedly emphasized this conviction. International measures can, of course, be supplemented by national ones.

As a result of our discussions with national and international experts, we are convinced that regular on-site inspections arranged by an international control agency should form an indispensable component of international control measures designed to ensure the contractually agreed non-production of chemical weapons.

Other international control measures, such as near-site inspections (emission analyses), satellite monitoring, statistical checks of production figures and of the consumption of raw materials and basic chemicals do not suffice by themselves to replace on-site inspections. Off-site inspections (remote environmental monitoring) and opto-electronic seals for shut-down factories are also inadequate by themselves to replace on-site inspections.

While fully acknowledging the need to protect production secrets, the Federal Republic of Germany feels that verification of the non-production of chemical warfare agents can be accomplished by way of on-site inspections without the disclosure of production procedures and data which need to be protected.

This type of verification procedure is based on technological features geared to specific properties of the warfare agents: chemical agents differ, on account of their toxicity, which is several orders of magnitude higher, from compounds used for peaceful purposes.

Consequently, safety measures are required for the manufacture of warfare agents, which are reflected in the design of the production plants. The absence of such safety measures can easily be detected during a tour of the plant and thus provide proof that highly toxic compounds are not being manufactured. Production secrets which require protection do not have to be disclosed by this type of verification procedure.

There is, however, a small number of chemical compounds which, though only of low acute toxicity, require extensive safety devices. This applies to substances where permanent exposure to only a very small concentration may cause chronic harm to the operating personnel.

In order to be able to operate efficiently, plants producing these substances require structural measures which adapt them to both the toxicological and chemical characteristics of the manufactured product as well as the production method used. Highly specialized plants of this type cannot, or can only with considerable efforts in terms of time and expense, be converted so as to manufacture other substances or substance ranges. Here, too, it will generally be possible for the manufacturer to provide convincing proof that the plant is unsuitable for the production of warfare agents.

In view of the large number of agents manufactured and processes used, not all aspects of the question of non-intrusive on-site inspections can be resolved by theoretical discussion. The examination of concrete examples by groups of experts is a more convincing means. The Federal Republic of Germany, therefore, invited all United Nations Member States to send experts to visit factories producing organic phosphorus compounds in order to demonstrate the non-intrusive control of such super toxic agents. The main objective of these tours of production plants was to show that it is possible to verify, even during a walk-about, whether such an establishment has the facilities for manufacturing super-toxic agents or not.

In response to this invitation to send experts to visit chemical factories, representatives of 25 nations took part in a Workshop in my country from 12 to 14 March 1979. In each case the experts toured a plant of three large chemical enterprises. The production facilities belonged to the three German companies BAYER AG, HOECHST AG, and BASF AG. During their visits the experts also had an opportunity to discuss verification possibilities with leading representatives of the industry.

We realize that it was not possible during the first Workshop of this kind to discuss all aspects of verification of the non-production of chemical weapons in civilian production plants. Nor would we suggest that these visits to factories could be regarded as a model for future on-site inspections. Nevertheless, we believe that this exercise justifies the hope that a system of on-site inspections can be found which will meet the security requirements of those implementing the controls without violating the legitimate interests of a plant subject to control.

We think it particularly useful that the Workshop in the Federal Republic of Germany was immediately followed by a meeting of experts in the United Kingdom with similar demonstrations. The Government of the Federal Republic of Germany hopes that these and other demonstrations which may be held in the future will have a positive effect which will make it easier for other countries to reappraise their position on the question of an adequate verification of a production ban.

CD/PV.29

pp.25-26

Italy/di Bernardo

24.4.79 · VER,CW

Another key issue — which is common to all disarmament agreements, because of its close relevance to vital national security interests — is verification.

The problem of verification is not simply a technical one. It is a problem presenting an evident political dimension and demanding a thorough understanding.

In this connexion, I would like to emphasize that, if in our "decatalogue" verification methods are listed under the same heading with confidence-building measures and collateral measures, the concept of verification goes far beyond the notions of confidence, or confidence-building. They are in fact different concepts and it is important to keep them separate.

Admittedly, verification can also have a confidence-building effect, insofar as it gives States Parties to a treaty confidence in the general intentions and in the good faith of other Parties in the fulfilment of mutual obligations. This is not, however, the more important and fundamental function of verification in the arms limitation and disarmament field. The essential purpose of a verification system is to deter and to detect violations, by establishing an adequate framework of technical, juridical and political safeguards within which a treaty can operate, giving to the Parties reliable assurances that the treaty is fully and correctly implemented by all the Parties.

Under these circumstances, it is self-evident that there is a close interrelationship between the scope of each agreement and the type of verification.

In envisaging a verification system for a convention banning all chemical weapons and prescribing their removal from the military arsenals, the following requirements should be met:

- (a) To ensure that prohibited agents are not being manufactured neither in previous production facilities, nor in new factories;
- (b) To provide proof that prohibited agents are not being obtained from outside sources;
- (c) To ascertain that existing stocks of prohibited agents are eliminated;
- (d) To detect and observe suspicious activities.

Bearing in mind such requirements, it is the view of the Italian delegation that a

certain degree of internationalization is indispensable to any effective verification pattern of a chemical weapons ban. We should, in other words, adopt a mixed solution based on the combination of national verification means with international control procedures, including some forms of physical access to the territory of the State being verified, when the circumstances require it.

The Italian delegation is well aware of the objections of a group of members of our Committee to systems of verification of an "intrusive" nature. The argument has been often advanced that such forms of control would entail an encroachment on a State's affairs and would be prejudicial to the protection of national industrial and commercial secrets.

We are, however, persuaded that such concerns might be overcome through a careful assessment and a better knowledge of the implications of different types of verifications, in a spirit of mutual co-operation and goodwill.

In this light, my Government has highly appreciated the initiative taken by the Federal Republic of Germany and the United Kingdom in organizing two workshops with a view to providing evidence that "on-site" inspections for the purpose of verifying the non-production of chemical weapons can be carried out without the disclosure of production data and technologies which need to be protected. Italian experts have been happy to participate in this significant exercise, the results of which deserve to be considered with the greatest attention by all the members of the Committee, including those who, for various reasons, were not able to respond affirmatively to the invitation.

This morning we have listened with sincere interest to the statements of the distinguished representatives of the United Kingdom and of the Federal Republic of Germany.

It is our hope that the valuable work begun in their two countries can be further expanded and that experts from other countries would be prepared in the near future to take part in similar technical investigations, with a view to developing a common understanding of the various aspects of the problem of verification of a chemical weapons ban.

CD/PV.29

pp.33-36

Sweden/Lidgard

24.4.79

CW

New elements of possible importance for the scope of a treaty have also been discussed. Sweden, like some other countries, has in the past few years presented ideas in this field. One of the many problems is that chemical warfare agents can be acquired fairly quickly. However, adequate organization, planning and training, which are equally indispensable for a militarily important offensive chemical warfare capability, take much longer. Were these activities to be prohibited, the time lag from violating the convention to an actual attack with chemical weapons would increase considerably. Also in the long-term perspective this will diminish the risks connected with possibly hidden stockpiles and thus diminish the need for intrusive verification measures. These facts must also be taken into account if a convention is to be made credible. We have so far had very little discussion on the implications of these facts. Such discussion should start now.

Further, it is important to be aware of the fact that the destruction of stockpiles of chemical weapons is a time-consuming procedure, probably taking many years. Consequently, a chemical warfare capability can be retained by a country having large stockpiles for a considerable period after destruction has started. Circumstances like this must as well be considered when negotiating a convention.

Another important matter is the possible development of new chemical agents, which may also lead to new forms of chemical warfare. This means that the scientific and

technical developments in the chemical field must be kept under review in order to identify possible new applications for military purposes based upon new scientific discoveries. We have already been studying the problem of methods for such surveillance (CCD/569). Work in this field should be continued on a broader basis, which incidentally seems to have been recognized also in the Italian working paper CD/5.

The problem of verification is still far from solved, even if some steps appear to have been taken towards a common understanding in the bilateral talks between the United States and the Soviet Union. Thus agreement seems to have been reached between them that verification activities should be performed by both national and international means. However, as was explicitly stated in the joint USA-USSR communiqué a year ago (CCD/PV.788), the specific methods of verification, especially of the destruction of production facilities and stockpiles, have not been agreed upon.

Past work in the Conference of the Committee on Disarmament has provided a sound technical basis for negotiations on verification measures. It should also be noted that not only have ingenious measures for different types of on-site verification been worked out, e.g. chemical analytical methods, toxicity tests, satellite monitored seals, etc., but serious attempts have also been made to find complementary non-intrusive methods, like the phosphorus-accounting system and remote-sensing systems, including the use of satellites. Particular attention has also been paid to the problem of applying verification methods without revealing legitimate production secrets of the chemical industry.

The readiness of chemical industries in the Federal Republic of Germany and the United Kingdom to permit visits of the kind recently arranged seems to indicate that industrial secrets need not be revealed by such inspections. As the necessary political steps have not been taken, it is difficult to evaluate or advocate any particular method. Furthermore, it may not be possible to verify, for instance, hidden production facilities or stockpiles.

With respect to mechanisms for complaint procedures a consultative committee should be established. In the opinion of the Swedish Government this is particularly important. From our side we have deplored the lack in the Convention on Biological Weapons of practically useful mechanisms for such complaint procedures. This problem must be solved in connexion with a chemical weapons convention.

I just referred to the tremendous problems related to the verification of hidden production facilities and stockpiles and to the fact that chemical warfare agents can be produced relatively quickly, whereas it often takes many years to destroy the stockpiles. Also in view of these facts it is necessary that a convention should allow for protective measures against chemical weapons.

It has long been agreed that mutual trust is of fundamental importance for reaching disarmament agreements. However, confidence-building measures were first considered explicitly with regard to chemical weapons in the summer of 1976 when the United Kingdom presented its draft on a chemical weapons convention. It was then suggested that States, as soon as they signed the convention, should give information regarding their possession of chemical weapons as a confidence-building measure, thus before the convention was actually ratified and had come into force. This suggestion provoked some criticism at the time, mainly because it was considered improper to request States to give information with respect to their chemical warfare capacity before the convention was in force. Confidence-building measures should, however, be discussed in a broad context. It is essential, given the specific characteristics of the chemical weapons field, that confidence between States should be further strengthened already in the negotiation phase of a chemical weapons convention. This might be achieved by exchanging information on different subjects to be covered by the convention. Such an exchange must be voluntary, and need not necessarily be directly linked to the provisions of the convention. However, it must have a practical bearing on its substance and intent.

It is also conceivable, of course, that a convention will prescribe that such information should be provided, although such a provision would not be binding until the convention was in force.

Other examples of confidence-building measures that would facilitate verification could be information on stockpiles of chemical weapons and facilities for their destruction and the time required for this, technical visits to such destruction facilities, possibilities of attending military manoeuvres in order to permit the observation of elements of interest with regard to chemical warfare potential, demonstration of chemical protection, and offers of co-operation in this area. I am sure that also other confidence-building measures could be discussed, and I would therefore suggest that sufficient time be devoted to identifying such measures.

CD/PV.30

p.8

Netherlands/Fein

25.4.79

CW

Finally, a few words on the very interesting workshops in the Federal Republic of Germany and the United Kingdom, a subject to which we shall revert in more detail in informal meetings. We are very grateful for the great hospitality tendered by these two countries and we were even more impressed by the excellent programme which they organized. Verification of a chemical weapons ban is a most thorny question. We have discussed this issue, in the abstract, for a long time. The practical workshops have demonstrated in a much more convincing way what possibilities there are for on-site inspection and which problems it raises. It has convinced us again that practical and not unacceptably intrusive verification of important elements of a chemical weapons ban is possible, although we realize that much more work still needs to be done. It was a pity that some members of this Committee did not see their way clear to sending their experts, countries which have at times stated that on-site inspection is not possible. They could have seen for themselves that it is indeed possible, even in countries with a free, competitive market economy. Hopefully, there will be more workshops in the future to demonstrate to experts and negotiators how to find practical solutions for our future chemical weapons ban.

CD/PV.31

pp.14-16

Egypt/El-Shafei

26.4.79

CW

Turning now to the question of substance, I would like to recall that my country made its position clear when it subscribed to the paper presented in 1973 to the CCD by a group of non-aligned and neutral countries. I am referring to working paper tabled as document CCD/400, which set down, in no ambiguous terms, the basic broad principles for a chemical weapons ban. In our view the propositions included in that paper remain valid. The paper states that negotiations should aim at reaching a comprehensive ban covering the development, production and stockpiling of all chemical weapons, their equipment and means of delivery as well as the destruction of existing stocks. It further states that the degree of danger represented by the use of chemical agents for military purposes depends, besides their toxicity, to a high degree on the protection available, as well as on the means of delivery. It goes on to state that it is essential that the prohibition of chemical weapons should be coupled with adequate verification, and on this issue it affirms that the question of verification has both technical and political aspects which should be reconciled and therefore it is connected with the scope of the prohibition, and that solutions to the problem of scope and verification should not be discriminatory and should maintain an acceptable balance of obligations and responsibilities for all States.

The compliance with any convention on the prohibition of the development, production and stockpiling of chemical weapons and their destruction, whether comprehensive or gradual in approach, is largely dependent on the verification methods it encompasses. The convention must provide, if it is to be of value, at the very least, a limited degree of satisfaction and assurance to all parties concerned, that their compliance with it will not lead to diminished security, and that the other parties to the convention are complying with it with an equal degree of righteousness and exactitude.

Some countries have apprehensions about the exclusive reliance on national technical measures for verification. Others believe that compliance with the convention should be based on such national measures. We fully comprehend, and appreciate, these divergent opinions.

However, while not attempting to belittle the significant added value of national verification measures, we sincerely believe that such measures would be inadequate to provide the necessary assurances for all concerned parties, and should be complemented by international measures.

We encourage national verification measures, such as unilateral declarations related to the prohibition of production and development of chemical weapons and agents, particularly those concerning the destruction of existing stockpiles. National legislation and regulations aimed at implementing the prohibition could be beneficial and necessary. The establishment of a national verification system, to co-ordinate its activities with an equivalent international body, is another valuable and foreseeable measure.

The absolute necessity for tangible assurances for States on issues of national security makes it imperative that verification means be universally non-discriminatory in nature, and international in application. With these requirements in mind, and giving high and justly warranted emphasis to the security requirements of sovereign States, we believe that only a qualified international verification organ can co-ordinate national and international verification measures. Only such an organ, with the necessary degree of independence, can be universal and non-discriminate in nature; by definition its axis of operation will span the continents of our globe, and its findings should be made available to all.

The pace of technological advancement in the world has had multifaceted effects, occasionally with conflicting vices and virtues. Technological advancement has allowed us to foresee the use of extra-territorial monitoring techniques, including satellites, as means for objective and tangible assurances for compliance with disarmament measures. On the other hand, the same technological progress has rendered these measures less effective and allowed clandestine concealment of arms potential capability. A very simple illustration of the dilemma is that while the effectiveness of extra-territorial monitoring in verifying the destruction of known stockpiles of chemical weapons and the dismantling of known chemical warfare plants is not challenged, these techniques alone cannot guarantee that a prohibition of the development of chemical weapons and agents is being complied with, or that concealed chemical weapons plants have not been, and are not being, established. In other words the effectiveness of such techniques is restricted to verifying declared intentions related to known chemical plants or unclassified stockpiles or capabilities.

Without prejudice to the other verification measures, we believe that on-site inspection remains the most effective and applicable verification measure capable of adequately providing the assurances required by the concerned parties. The recent workshops, which the Governments of the Federal Republic of Germany and the United Kingdom so graciously hosted, have shed light on the feasibility of applying on-site verification measures without sacrificing industrial secrets. Future workshops should encourage the development of techniques that allow inspectors the liberty of taking samples and photographs, when necessary.

Verification measures should not be restricted to organophosphorous agents but should encompass non-organophosphorus agents which are also used in chemical warfare. Scientific advancement has widened the range of chemical agents with arms potential. For verification measures to be effective they would also have to cover binary chemical weapons. These binary agents provide the more military and technologically advanced countries with an enormous military capability in chemical weapons, without having to face the often obtuse and complex problems of their storage or stockpiling. There is no need to mention all, for that would be a long list of sophisticated weapons which could not be verified except through on-site inspection.

CD/PV.33

p.8

USA/Seignious

18.6.79

SALT II

No description of SALT II would be complete without giving some indication of the complexity and pervasiveness of its verification provisions. These are an essential part of the obligations established by the Treaty and the Protocol. Let me mention a few of them.

As in SALT I, interference with national technical means of verification is prohibited, as is deliberate concealment that impedes verification of compliance. Precise definitions and counting rules have been incorporated to solve such problems as determining which missiles are to be counted as MIRV and which are not. For the first time in the history of negotiations on strategic offensive arms, the United States and the Soviet Union have exchanged information setting forth the numbers, by category, of their respective strategic offensive nuclear forces limited by SALT. This basic data, to be exchanged twice a year, will ensure that each nation has confidence that the other is applying the provisions of the agreement in the same manner. It will also provide a clear agreed baseline from which further reductions can be made. The United States-Soviet Standing Consultative Commission, established in SALT I, has been maintained as a mechanism for working out procedures for implementation of the agreements and for resolving questions of compliance.

CD/PV.38

pp.14-15

USSR/Issraelyan

3.7.79

ND

During the discussion of the proposals submitted by the socialist countries, certain delegations noted that the solution of problems connected with verification of the implementation of a nuclear disarmament arrangement will raise considerable difficulties. Attempts were even made, on the basis of this argument, to cast doubt on the expediency of conducting negotiations aimed at the elimination of nuclear weapons. In submitting their proposal, the socialist countries proceeded on the assumption that nuclear disarmament negotiations will inevitably be difficult because they cover political, military and technical questions which, by their very nature, are complex. As we see it, problems of verification will not be the only ones calling for serious efforts on the part of the participants in the negotiations if they are to be solved. Furthermore, we have already acquired a certain amount of experience in the solution of verification problems. Indeed, there is a whole series of agreements in force concerning disarmament and the limitation of the arms race, and each of them contains a provision on verification. Naturally, observance of commitments to cease the production of and eliminate nuclear weapons calls for extremely effective verification. It can be based on the use of national means of verification supplemented by well-thought-out international procedures. Since measures aimed at halting the production of nuclear weapons and eliminating them will be complex and consist of a number of stages, the form and conditions

of such verification must correspond to the objective, extent and nature of the measures implemented in each stage.

CD/PV.39 pp.16-17 UK/Summerhayes 5.7.79 ND

I wish to turn finally to the question of verification. It is no secret that the ability of one party to have the necessary confidence that another party is complying with an agreement has been the question which has often slowed progress towards disarmament agreement. We have welcomed the assertion that agreement in any nuclear disarmament negotiations should be based on agreement on the necessary verification measures. This is common ground. I am sure it is also recognized that proposals for nuclear disarmament would need to be accompanied by more far-reaching measures of verification than the world community has ever experienced. But could such measures be acceptable to all the nuclear-weapon States concerned? As the distinguished representative of the Netherlands pointed out in his statement on 19 April, the main sponsor of one of the proposals before us has not yet accepted the elementary degree of inspection devised in the nuclear fields so far. I am referring to IAEA inspection of civil nuclear facilities now accepted by more than 100 States, including a majority of nuclear-weapon States.

CD/PV.39 p.21 Canada/Jay 5.7.79 C-O

We envisage that a number of preparatory steps would have to be taken before a ban on production came into effect. These steps would include the collection of accurate information on the total production of fissionable material and related production facilities; the declaration by nuclear-weapon States of ceilings on stocks of fissionable material for weapons purposes; and the expansion of existing verification procedures, specifically the administration of full-scope safeguards. These procedures would have to provide adequate assurance that the total production of fissionable material is accounted for, or at least that any production of such material outside the régime would run a high risk of early discovery. Only after this stage was achieved could the régime be expected to enter into force with any reasonable assurances of success. There would have to be constant adjustments to the régime to take into account changes in fissionable material production requirements and improvements in verification technology. The key to the operation of the régime is of course confidence — confidence in full disclosure and confidence in accurate verification. Once these and related conditions pertain however, it may be possible to envisage actual disarmament measures, including the reduction of ceilings on inventories of fissionable materials held for weapons purposes.

CD/PV.39 p.37 Japan/Ogiso 5.7.79 C-O

Japan has urged since 1969 that a cut-off is an important nuclear disarmament measure as a first step towards the cessation of the production of nuclear weapons, and that it will also play an important role in strengthening the nuclear non-proliferation régime. My delegation believes that realization of the cut-off, together with effective safeguards and means of verification, is a substantial measure crucial for freezing the quantitative expansion of nuclear weapons. In this connexion, I would like to take note of the statement of the distinguished representative of the Soviet Union at the previous plenary meeting on 3 July, in which he referred to verification based on national means

"supplemented by well-thought-out international procedures". My delegation considers that, as one of the international means to facilitate the verification of the cut-off, all the nuclear-weapon States should give serious consideration to the possibility of accepting the IAEA safeguards which are applied to non-nuclear-weapon States under the nuclear non-proliferation régime.

CD/PV.40 p.9 USSR/Issraelyan 10.7.79 RW

Paragraph VIII deals with verification questions. It reflects the principle that verification measures provided for in any agreement on arms limitation should correspond to the subject and scope of the prohibition. The experience acquired with the agreements in force in the field of the limitation of the arms race and of disarmament was made use of in the preparation of this provision. Members of the Committee who took part in the elaboration of those agreements will, of course, immediately notice this. The provision provides for the establishment of a consultative committee of experts to resolve questions regarding compliance with obligations under the treaty, and states the conditions for making findings of fact should any doubt arise on questions of compliance with the provisions of the treaty and on similar matters.

CD/PV.40 p.13 USA/Fisher 10.7.79 RW

An essential and long-recognized requirement of any effective arms control or disarmament measure is that it must contain measures of verification adequate to the special nature of the weapons to be controlled in order to create the necessary confidence that it is being observed by all parties. The United States is satisfied that the verification provisions incorporated in this joint initiative meet the requirements of this particular treaty.

Paragraph VIII contains procedures proposed for dealing with problems that might arise in insuring compliance with the treaty. It sets forth the basic undertaking to consult and co-operate in solving any such problem. It provides for a Consultative Committee of Experts. It also specifies procedures for submitting complaints to the United Nations Security Council.

CD/PV.41 p.18 FRG/Pfeiffer 12.7.79 RW

The second point I would like to touch upon is the verification system as envisaged in the joint proposal. It is identical with the system included in the Convention of the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD). We may go along with it, but it is our understanding that the verification system provided for in the treaty prohibiting radiological weapons is completely without prejudice to and not binding for any other real disarmament agreement which will be negotiated in the future. Agreements which require, inter alia, actual weapons destruction need a very different verification system.

Returning briefly to the item under discussion, namely, "New weapons of mass destruction and new systems of such weapons", I should like to reiterate my delegation's well-known position that these weapons have to be dealt with not in a general agreement, but on a case-by-case basis. We believe that a meaningful prohibition of weapons of mass destruction can be achieved only by defining these weapons in separate agreements and at the same time by defining an adequate verification system which guaran-

tees the observance of all parties of their commitments.

CD/PV.42 pp.8-9 Italy/di Montezemolo 17.7.79 RW

The second problem is verification. My delegation has taken due note of the treatment given to this key issue in the draft proposal. The approach envisaged is closely modelled on a pattern already adopted for the ENMOD convention and my delegation has no major difficulties with it. It is our interpretation, however, that such an approach does not constitute a precedent for other disarmament agreements, each disarmament agreement demanding, in our view, specific verification provisions corresponding to the nature and scope of the prohibition.

CD/PV.42 pp.9-10 FRG/Pfeiffer 17.7.79 CW

My country feels that high priority should be given to the elaboration of a convention providing for an effective prohibition of the development, production and stockpiling of chemical weapons and for their destruction. The reasons are manifold: first, and generally speaking, because chemical weapons are an already existing and particularly insidious means of mass destruction; secondly, because as early as 1954 my country unilaterally renounced the manufacture of nuclear, biological and chemical weapons — the only State having done so to date; and thirdly, the Federal Republic of Germany has every interest in a CW convention in view of its geostrategic position.

Such a convention requires above all, however, a verification arrangement commensurate with the military significance of chemical weapons. Verification is the basis of confidence in compliance with the prohibition. It is the most important and, at the same time, the most difficult of the problems to be resolved. This is one of the reasons why so little progress has been made so far. My Government, therefore, has emphasized time and again the priority which should be given to finding a satisfactory solution of the verification problem. We are convinced that an international verification system, including on-site inspections, can be designed so as to rule out the disclosure of commercial and industrial secrets. This has been proven by the experience gained from IAEA safeguards in the nuclear field and by our own particular experience with specific international controls in the chemical field. This was also confirmed by the outcome of the Pugwash workshop, which was held at a major chemical production plant in the Federal Republic of Germany in August 1977, and which was attended by representatives from East and West.

The urgency of a solution, on the one hand, and the lack of any decisive progress despite considerable efforts, on the other, led to my Government's invitation to attend a verification workshop in the Federal Republic of Germany in March 1979. Based on our own experience gained from the international verification of our pledge not to manufacture chemical weapons, we are in a position to contribute to the discussion on how to verify the non-production of chemical weapons.

In the working paper (CD/37) I am introducing today, reference is made, therefore, in greater detail not only to the results of the workshop in the Federal Republic of Germany, but also to the verification role of the Western European Union's Armaments Control Agency. The experience of more than 20 years shows clearly that it is possible to verify adequately, by means of on-site inspections compliance with a chemical weapons production ban, and that this verification procedure is technically practicable without disclosing and jeopardizing certain production techniques or other company-specific technologies. Using this as our point of departure, we have, in the last part of

our paper, submitted for discussion and further consideration possible principles which can be used as a basis for the verification of a chemical weapons production ban.

No reference is made in our working paper to verification problems concerning the destruction of existing stocks or the destruction of CW facilities.

We do not expect our paper to be the model for future on-site inspections in the verification of a production ban. We hope, however, that it will be a useful contribution to the discussion of the verification problems.

CD/PV.42

p.13

Spain/De Laiglesia

17.7.79

CW

My Government feels that verification, in the case of chemical weapons, requires the establishment of machinery to monitor compliance with the provisions contained in the treaties in such a way that neither the security of States nor their legitimate right to economic development would be jeopardized. We therefore think that the proposals made by various delegations for the establishment of international verification bodies are extremely positive. Similarly, we believe that, independently of the bodies of a political nature which it may be considered useful to establish, extensive technical advice should be available which could be provided by groups of highly qualified experts. In this way, any report addressed to the international body by countries which felt that others were not complying with the provisions of the treaty in question could be examined with the maximum assurance of objectivity. Similarly all States should have access to that body without any discrimination, and there should be no special régime enabling some States to block measures designed to ensure prompt verification.

It should be borne in mind that, of all the weapons of mass destruction at present in existence, the most easily available in any armed conflict would be weapons of this nature. Therefore any efforts aimed at their total elimination will contribute to the consolidation of peace. If, unfortunately, this does not prove possible, the overkill capacity on our planet will be increased by a vast amount of lethal substances which, unlike nuclear weapons, are cheap, easy to produce and difficult to detect. Thus a point which will have to be watched and carefully taken into account in any draft on the prohibition of chemical weapons is that of technological development. Indeed, substances which are at present used only for peaceful purposes can, in the future, by means of relatively simple operations, be converted into dangerous chemical weapons. Obviously this further complicates the problem of verification, because a large proportion of the world's production of chemicals could be used for military purposes. In this connexion it may be noted that preparations which are considered harmless are frequently found to have unsuspected harmful properties.

CD/PV.43

pp.8-9

Poland/Sujka

19.7.79

CW

Thirdly, we must seek to prohibit the development, production, acquisition, stockpiling or other retention of CW agents, as well as to destroy existing stocks of agents having no justification for peaceful purposes.

One of the more difficult and complex problems will be that of declaring stocks of CW agents as well as their production facilities. In our view, such a process of declaring stocks and production facilities will be conceivable only after the entry into force of the convention. This should in no way hinder or prevent us from stipulating specific and practicable time-limits for the elimination or conversion of CW agents to peaceful uses. The same goes for the dismantling of production facilities.

Now, a few remarks about the broad and important issue of verification. We have

listened to and studied with considerable interest the suggestions and observations in that regard made in the Committee and included in several documents. The observations contained in working paper CD/37, tabled by the delegation of the Federal Republic of Germany, are among the more interesting ones if only because they are based on practical experience of a working control system. We need to gather information on such experience and to study carefully suggestions formulated on the basis of it. At the same time, we feel that to go into this problem in some detail at this specific time may be somewhat premature. Before we reach agreement on at least the scope of the prohibition and other key issues, detailed examination of verification mechanisms could result in an unwarranted waste of time. In other words, we would rather follow the logical sequence in dealing with a CW agreement.

We might also be well advised not to ignore the experience acquired with verification systems operating under some multilateral agreements concluded earlier. Actually, we do recommend that they should be considered very seriously, and this is reflected in points 13 to 17 of our informal working paper.

The Polish delegation believes that one of the major pre-conditions for the success of our endeavours to elaborate an effective and durable ban on CW is to retain, adapt and where possible to build upon the provisions contained in such milestone international agreements as, for instance, the Geneva Protocol of 1925, the Convention on the Prohibition of Bacteriological (Biological) and Toxin Weapons or the Convention on the Prohibition of Military or any Other Hostile Use of Environmental Modification Techniques.

Ratified or acceded to by many States, these international juridical instruments may be regarded as an important protective barrier before a future CW convention enters into force. By seeking to provide that a future CW convention in no way limits or detracts from obligations contracted under the above-mentioned agreements, we want to contribute to expanding and reinforcing a comprehensive system safeguarding man against the effects of the use of these weapons of mass destruction.

CD/PV.43

pp.12-14

Finland/Rajakoski

19.7.79

CW

On 26 April this year I had the opportunity of informing this Committee about a research project which had been initiated in Finland more than six years previously on the role of the instrumental analysis of chemical weapons agents in their verification. The goal of this project is the creation of a national chemical weapons verification capacity which could eventually be put to international use. We are, of course, fully aware of the complexity of the problems encountered in the negotiations on the treaty banning chemical weapons. We understand that such a treaty is not yet within immediate reach. Nevertheless, the Finnish project on verification has been pursued with undiminished vigour and interest because the creation of a national chemical weapons verification capacity needs a continuing effort to keep verification techniques abreast of the galloping development of chemical warfare technology. We also fully understand that verification is not the only problem to be solved and agreed upon before a chemical weapons ban can be concluded. Important as it is, it is still just one of the issues.

You will recall that the Finnish delegation last April distributed to the members of this Committee a working document (CD/14) which explains various research studies carried out in Finland in the field of CW verification. At that time I stated that the Finnish Government was to continue the project and to make available subsequent results to the Committee on Disarmament in a form of a further progress report. I am happy to inform you now that this report has recently been completed and distributed to members of the CD in working document CD/39.

The present Finnish working paper, entitled "Identification of potential organo-

phosphorus warfare agents - An approach for the standardization of techniques and reference data", is a continuation of our previous reports. In 1977 a variety of techniques suitable for the verification of the presence or absence of organophosphorus warfare agents were generally reviewed, based on chemical literature and experimental work. In 1978 a special technique — high resolution glass capillary gas chromatography combined with selective detectors and mass spectrometry — was developed. This technique was considered to be the most sensitive and generally useful method for the trace analysis of chemicals revealing different types of CW agents.

The present report describes the progress made by the experimental study towards the more systematic use of more effective but relatively simple techniques.

The present Finnish working paper is mainly intended to give a general picture of the possibilities and difficulties involved in a systematic verification analysis and has been submitted for criticism and comments by the specialized laboratories of other nations working in this field. Experiments of several laboratories have to be compared when adopting internationally standardized procedures.

This is, very briefly, the purpose of the present study. I hope that there will be another occasion in the next few days when our chemical expert will be able to explain further details of the study. He will also be happy to answer any questions related to the study.

In this context I would once again like to stress that the Finnish project has been conceived as a multipurpose one, both substantively and functionally. Substantively, the planned control capacity could be used in three different verification activities: 1. verification of the destruction of stocks, 2. verification of non-production of chemical weapons, and 3. verification of alleged use. Functionally, the capacity could be of service in the modalities of verification to be agreed upon: 1. it could be used for national verification or any combination of national and international inspection, 2. it could be used in connexion with an investigation ordered by an international authority, and 3. it could meet some of the concern expressed by certain developing countries about possible difficulties in carrying out verification by their national means alone.

Before concluding my statement this morning I should like to pay a tribute to the delegation of the Federal Republic of Germany for its efforts in preparing a most useful working paper (CD/37) on some aspects of international verification of non-production of chemical weapons. The general outline of that working paper coincides with certain basic ideas according to which the Finnish, more specific, project is being developed. Equally useful, in our view, is the Netherlands delegation's rather systematic approach of presenting some crucial questions which has been summarized in an unofficial working paper placed at the disposal of other delegations participating in the discussions on chemical weapons. I am confident that all these efforts will be most useful in achieving the concrete and positive results in the field of chemical disarmament which are awaited by the international community.

CD/PV.43

pp.17-18

France/de la Gorce

19.7.79

CW

The effective verification of chemical disarmament is, in our opinion, a crucial aspect of the convention. It also raises the most difficult problems. Various proposals made and experiments carried out so far give us reason to believe that effective on-site verification of chemical disarmament measures is technically feasible.

It is indispensable, in our opinion, for any verification to be of an international character.

On-site verification should, in particular, ensure:

Observance of the clause prohibiting the manufacture of toxic substances with

specifically military uses and their means of delivery;

Observance of time-tables for the destruction and conversion of stocks and manufacturing plant;

Control of the products of laboratories still authorized to carry out pure research and research required for maintaining a protection capability.

Verification of the basic chemicals used for the manufacture of toxic substances with military uses and verification of the non-diversion of dual-purpose substances to military ends are problems which raise immense difficulties, and are substantially different from the problem of verification of substances with specifically military uses. An answer to that problem has been found within the Western European Union. This precedent might perhaps be studied if a regional type of solution seems appropriate.

CD/PV.44

p.7

Denmark/Kastoft

24.7.79

CW

It is generally accepted that implementation of measures of disarmament should be subject to adequate international control. This, of course, should also apply to a chemical weapons convention. Denmark is fully aware of the extremely complicated nature of the issues raised by verification of a CW-convention, and feels that consideration should be given to the development of verification procedures as little intrusive as possible. This could include monitoring of air and waste water samples collected even at great distance from manufacturing sites. Valuable contributions in this respect have already been made by the Netherlands (CCD/533) and Finland (CD/14 and 39). In addition, the possibility of making use of modern technology, including observation satellites, should be explored.

For the time being it would appear, however, that on-site inspections constitute the only fully effective means of verification. Until non-intrusive techniques have been sufficiently developed and an international consensus has subsequently been achieved on their application, visits performed by a highly qualified international agency seem to be indispensable. It would appear that such visits, properly arranged, could be carried out without unjustifiable intrusion and without the disclosure of State or commercial secrets. My delegation therefore feels that the establishment of an adequately controlled CW ban need not await the development of more sophisticated extraterritorial verification procedures.

CD/PV.44

p.9

Mongolia/Erdembileg

24.7.79

CW

As it seems to us, there is in the Committee, in the first place, a broad degree of agreement regarding determination of the scope of the prohibition, based on the criterion of a common objective. This key point is also dealt with in the draft convention submitted by the socialist countries in 1972. In the second place, the prevailing opinion is that only a comprehensive approach can lead to the elaboration of a stable international instrument, although there is also some support for the idea of reaching agreement on partial measures in this field, i.e. on the prohibition, as a first step, of the most dangerous and lethal chemical means of warfare. In the third place, we are united in the view that the future agreement must not only answer the purpose of the complete and effective prohibition of the development, production and stockpiling of chemical weapons; it must also be verifiable — in other words, it must provide for appropriate methods of checking the destruction of stockpiles of chemical weapons.

On this complicated issue of control, we, as before, take the view that it is perfectly possible to secure effective control on the basis of national means of verifica-

tion, in combination with a few admissible international measures. But the latter must not be used to the detriment of the national interests of States.

I should like to emphasize that our progress would have a positive effect on strengthening the universality of such important international instruments as the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, and also the Geneva Protocol of 1925.

CD/PV.44

p.17

Czechoslovakia/Tylner

24.7.79

CW

Another major element of the treaty is the destruction of existing CWA stockpiles. We consider it therefore useful to provide for the obligation to declare — after the treaty has been signed — the stocked CWA, the time-table for their destruction and the time-limits for supplying information thereon.

The elimination of production facilities and the destruction of stocked CWA should be carried out under the supervision of national control organs.

The verification of the observance of the treaty is another problem. The States participating in the treaty will evidently have the obligation to take internal measures ensuring the observance of the treaty.

National organs of control should concentrate on: verification of the destruction of stocks, verification of the observance of the prohibition of production, and verification of complaints concerning violation of the treaty.

International procedures should be applied mainly in case of complaints of violations of the treaty.

The treaty should equally provide for the establishment of an International consultative body of experts, which would collect data for the carrying out of national controls and organize an exchange of experience. It might be recommended — as is the case with other treaties — to assess its implementation at regular intervals. Especially in the first period following the conclusion of the treaty, when a number of technical problems are expected to arise in connexion with the destruction of CWA stocks and with the elimination of production facilities, review conferences should promote a useful exchange of experience.

CD/PV.45

pp.16-17

Canada/Simard

26.7.79

CW

Although we are in favour of a comprehensive ban, it is probably necessary to give consideration to a certain number of exemptions from the ban on production, for medical and protection purposes, for example. The verification system should be so devised that production for industrial or peaceful purposes may continue. Certain branches of production which it may be necessary to verify could be subject to special verification methods to ensure that the treaty obligations are observed and that there is no diversion.

Like many, we agree that the main element for the definition of banned agents should be the general criterion of purpose or use. The toxicity criterion is pertinent but inadequate. It is for this reason that we have above all insisted on the prohibition of activities rather than of agents, although some agents must of course be banned. We are not therefore in favour of the compilation of an exhaustive list of chemical agents to be prohibited; in any case, it would be very difficult to establish such a list and keep it up to date.

In negotiating a treaty on chemical weapons, verification questions will be among

the most difficult to settle. We agree with those who have suggested that, in the context of a treaty, a national system of control for parties to the treaty possessing a chemical industry would be useful for implementation of any necessary internal laws and regulations and to serve as a link with the international verification procedures for which provision will have to be made. We dealt at length with the problem of verification in our earlier speeches; I shall therefore confine myself here to the main point. We assume that systems of verification in stages will be approved, with different approaches for the monitoring of different activities. Verification by challenge may be useful, particularly to monitor initial statements, but it will have to be backed up by other systems. Provision will have to be made for both national technical means and on-the-spot inspections. It will obviously be necessary, in particular, to ensure that existing stockpiles of chemical weapons are destroyed, that existing production plants are dismantled or converted and that highly toxic single-purpose agents, such as nerve agents, including precursor agents, are not produced.

It is probably premature, when negotiations at the multilateral level are still in their early stages, to determine the kind of structure which will be needed for the successful accomplishment of international verification tasks. A structure similar to that of the International Atomic Energy Agency might, however, be suitable. That is a possible model for a chemical weapons control agency, but all the facets of the question will of course have to be studied in much greater detail when we know the exact scope of the treaty.

We also spoke in favour of the concept of regional agreements in the field of chemical weapons, and we gave the reason for this in our statement of 29 March 1979: "At the same time, we should not overlook that regional agreements might well prove to be useful supplements to the main convention. By taking into account regional differences and specific sectional concerns not easily catered for in a global treaty, these supplementary instruments could increase the prospect that the international community can be brought, in one way or another, to accepting the obligations of a ban on chemical weapons. Presumably any such regional agreement that might emerge would derive its impetus from within the region concerned and should include the major military Powers of the area. Other States would be asked to undertake to respect the regional arrangement. Finally, under the regional arrangement, as under the global treaty itself, it will be necessary to ensure that no military advantage could accrue to any State as a result of the agreement".

Such regional agreements, with strict verification measures, could of course only be implemented if the principal military Powers were able to agree on a global verification system.

CD/PV.46

pp.8-9

Netherlands/Fein

31.7.79

CTB

Now, we have the impression that one of the main reasons for such a delay might be a number of complicated technical problems related to verification. If that were the case, one may wonder whether it would not be useful to submit the basic outlines of the treaty to the CD without having resolved all those technical problems.

The treaty could not be finalized by the CD in any case, until the trilateral parties have solved their differences on the outstanding details. If they fail to reach agreement on the technical details, concerning verification and such, the CD would of course not come to a final conclusion. However, if they do resolve their problems while the CD is negotiating the basic outlines, much valuable time with a view to the NPT Conference would have been gained.

In our opinion, the CD must necessarily assume a significant role in the negotiations

on a CTB. Not because of more or less theological considerations concerning what the CD is supposed to be, but for the very practical reason that what in the end is required is a multilateral CTB. Only as a truly multilateral treaty can the CTB have a function in the non-proliferation regime. It would be a shame if an opportunity were lost to achieve a widely acceptable important arms control agreement.

To arrive at such a multilateral treaty, the negotiations in the CD must be taken seriously. I am convinced that, as always, the members of the Committee will act in a responsible way and they will take into account the particular position of the nuclear weapon Powers involved. But a widely accepted, effective multilateral treaty implies, ipso facto, that also the views of the non-nuclear-weapon States are respected. I imagine that those countries would wish to concentrate on the comprehensive character of the treaty, its duration, its termination clauses and its complaint and verification provisions, and in particular the international seismic system to be established. Therefore, only after a real dialogue could one expect non-nuclear-weapon States to join the treaty.

An essential part of a CTB, if it is to be a world-wide multilateral agreement, would be a properly working international seismic system. Such a seismic network would provide opportunities for all parties to the CTB to become involved in the verification process. Now it is, of course, quite understandable and acceptable that the nuclear-weapon States, amongst themselves, should wish to make some additional arrangements, additional to the international seismic system. Such additional arrangements could strengthen the confidence that the obligations under the treaty are faithfully fulfilled. But a different matter is that there have been tendencies in the Ad Hoc Group of seismic experts to weaken the proposed international system — apparently because those trilateral arrangements are in the make. We have noticed that some nuclear-weapon States attempted to diminish the role that international data centres must play in the dissemination of identification data, while other nuclear-weapon States accepted this in silence. This is serious, because that identification task of the planned data centres was the main one going beyond present seismological practices. The Netherlands hope that this incident is not a foreboding of the attitude the trilateral partners will take with respect to the international seismic system.

In general, however, my delegation is of the opinion that the seismic experts accomplished their task satisfactorily. We are grateful for the new report, which will provide a more detailed basis for the proposed system. In the meantime, much detailed work remains to be done, both on the national level and between countries wishing to do so. The seismic group made certain recommendations about their future work in this respect. Those ideas are sound, and we would therefore support a renewed mandate of the group in that direction. It must be clear, of course, that the submission of a trilateral draft CTB to the CD would change the situation and we would have to review at that time what the seismic group is supposed to do.

Finally, I would like to thank the World Meteorological Organization for its co-operation with the seismic experts. The last WMO Congress, this summer, took a decision which will make it possible, in the future, to use the Global Telecommunications System of the WMO for the seismic data exchange. This will be most helpful for our future work.

The tripartite negotiations between the Soviet Union, the United Kingdom and the United States on a treaty prohibiting nuclear weapon tests in all environments and its protocol covering nuclear explosions for peaceful purposes, have continued intensively

over the past year.

A large measure of agreement has already been reached between the three negotiating parties. As was explained in their statement of 8 August 1978, the parties are fully agreed that the treaty should establish a ban on any nuclear weapon test explosion in any environment and that the provisions of a protocol, which would be an integral part of the treaty, would apply to nuclear explosions for peaceful purposes. They envisage that, after a certain period, the parties to the treaty will wish to hold a conference to review its operation.

Negotiations over the past year have concentrated on the question of verifying compliance with the treaty. There is agreement that the treaty should provide for verification by national technical means and for the possibility of on-site verification by national technical means and for the possibility of on-site inspection. Another important aspect of verification will be the exchange of seismic data. In this connexion, the three negotiating partners wish to express their warm appreciation of the work of the Ad Hoc Group of seismic experts of the Committee on Disarmament. That Group's recommendations will, in large measure, influence the way in which the exchange of seismic data is implemented in practice. The negotiating parties consider that a Committee of Experts drawn from the Parties to the treaty should be established to assist in the implementation of the exchange.

Though there is agreement on the main elements of verification, negotiations are still proceeding on the detailed arrangements. As members of the Committee on Disarmament know, verification is a complex subject, involving many technical issues that require time to negotiate.

The three negotiating partners recognize the close, legitimate and valued interest of this Committee in the earliest completion of the negotiations — and the calls to that effect in successive United Nations General Assembly resolutions, as well as in the Final Document of the special session of the United Nations General Assembly devoted to disarmament. They are determined to achieve an agreement which will meet international expectations and attract the widest possible adherence.

CD/PV.46

pp.22-25

Sweden/Lidgard

31.7.79

CTB

The second report of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and to Identify Seismic Events has now been put before you in document CD/43, and I will therefore start my intervention by giving my delegation's comments on that document. I then intend to turn to the subjects of the continued work of the Ad Hoc Group, the decision by WMO on the use of its Global Telecommunication System (WMO/GTS) for an exchange of seismic data and, finally, the recent demonstration of temporary data centre facilities in Stockholm to invited representatives and scientific experts from a number of countries.

The Swedish delegation considers the second report of the Ad Hoc Group, which presents a consensus view among the experts in the Group, to be a valuable contribution to the efforts to establish a monitoring system acceptable to all. The report is the result of considerable work carried out by scientific experts from more than 20 countries. The Swedish delegation appreciates the co-operative and constructive way in which the work has been conducted. We feel that the open and penetrating technical discussions have increased the understanding of the verification problems among the countries engaged in this work. Important contributions have been made by scientific experts from invited States not members of the CD and by representatives from WMO. We see world-wide participation in this work as particularly important and are therefore happy to note that experts also from Mexico and Spain have now joined the Group.

In its second report, the Ad Hoc Group has elaborated on scientific and technical aspects of international co-operative measures to detect and identify seismic events as outlined in its first report. These measures are foreseen to contain three basic elements: a global network of seismological stations, a fast international exchange of data over the global telecommunication system of WMO and, thirdly, special international data centres for the use of participant States.

The second report specifies in detail the seismological data that should be exchanged on a routine basis and recommends that all network stations should be equipped with modern seismograph systems capable of continuous recording of data in digital form.

The Ad Hoc Group also points out that the requirements for reliability of equipment and consistency of reporting should be considerably more stringent than according to present practice.

The report calls for the transmission of seismic data over the WMO/GTS network and contains an investigation of the capabilities of that network to transmit seismic data in various parts of the world. This investigation was made in close co-operation with WMO. The conclusion was that in most places only few problems are expected to arise in transmitting such data.

The report also gives detailed technical descriptions of the scientific functions of the proposed data centres. They should be regarded as service facilities for the States participating in the international data exchange, by providing them with easily accessible data for national assessments of seismic events.

It is important that the CD should now take further steps in this matter. My delegation therefore proposes that the CD should decide that the Ad Hoc Group should be maintained and continue its work under a new mandate. In working paper CD/46 we have formulated a proposal for such a mandate. In its report, the Ad Hoc Group has pointed out several matters which remain to be specified or to be given further study. Our proposal follows the recommendations of the Ad Hoc Group in its second report. They include further elaboration of detailed instructions for an experimental test of the envisaged global system as well as further development of the scientific and technical aspects of the envisaged international co-operative measures. In addition, the Ad Hoc Group should contribute to the review and analysis of national investigations, such as investigations concerning the conditions for using the procedures for obtaining desired data at individual stations and procedures for analysis at data centres. As under its previous mandate, the work should be purely scientific, and the Ad Hoc Group should not attempt to assess the adequacy of the system for verifying a comprehensive test ban. The composition of the Ad Hoc Group in its continued work would remain unchanged. We hope, however, that experts from additional CD member States will participate.

As I stated at the outset, it was also my intention to deal with the WMO/GTS. The co-operation between the Ad Hoc Group and the Secretariat of WMO is well established so far as concerns the question how the WMO/GTS can be used for a global data exchange for test-ban verification purposes. My delegation introduced the idea of such a use as far back as in 1965, and the response from the Secretary-General of WMO, Mr. D.A. Davies, was immediate and positive. This year, as a consequence of the first report of the Ad Hoc Group, the Eighth Congress of WMO has decided, in principle, that WMO should, if formally requested, assist the United Nations in the matter of routine transmission of seismic-event data. The Executive Committee of WMO was therefore authorized to study and take appropriate action on such a request if it is received prior to the Ninth Congress. I have mentioned this decision of WMO because of its fundamental importance for the implementation of the recommendations of the Ad Hoc Group on international co-operative measures. The Chairman of the Ad Hoc Group has asked me

also to mention the particular efforts of the Secretary-General of WMO in this context.

I will now give you a brief account of the demonstration of temporary data centre facilities in Stockholm and, maybe particularly, the ideas behind it.

As we have stressed repeatedly from the Swedish side, a CTBT must be a truly international treaty and not one concluded only between nuclear-weapon States. In order to make a CTBT effective and internationally accepted, it is necessary that the Committee on Disarmament should be fully enabled to play a substantive role in the negotiation of the treaty.

The question of how to achieve adequate verification has been one of the key questions throughout the many years of CTB negotiations. Seismic means have been generally accepted as the main verification methods. Different views have been expressed on the adequacy of seismic verification methods.

Our view is that seismic verification by means of a global monitoring system would provide adequate verification, by giving necessary deterrence against clandestine tests. We also consider that active participation in the verification of an international treaty, such as the CTBT, is the right and duty of all countries parties to the treaty. Every such country has the right to know that other parties to the treaty fulfil their treaty obligations, every country also has the duty to make its contribution to the over-all monitoring of such an international treaty.

The CTBT would be a good example of treaties where verification can and should be carried out in co-operation between all the countries involved. For test-ban verification, seismic data are needed from a number of observatories around the world. The Ad Hoc Group of seismic experts has suggested a seismic verification system with some 50 high-quality seismological observatories, with fast communication through the WMO/GTS and with international data centres for the compilation and routine analysis of the data.

These international data centres are essential elements in the verification system. They could act as service facilities by providing compiled and pre-processed data from a global network of seismic stations to all States parties to the treaty. This will make it possible for all States to base the national assessment of individual seismic events on data from the entire globe and not only from their own national observatories. In this way small States also will be enabled to verify the CTBT in a meaningful way. Such equal possibilities for all States parties to the treaty would in our view be fundamental to the true international character of a CTBT.

My Government has on several occasions expressed its readiness to establish, operate and finance an international seismological data centre in Sweden, as part of a global monitoring system. This offer, and the work that for more than 10 years has been carried out at the Hagfors Observatory, have the single purpose of contributing towards the achievement of a CTBT.

Following invitations by my Government to the member States of the CD and of the Ad Hoc Group, representatives and experts from 26 countries and WMO attended a demonstration from 12 to 14 July of temporary data centre facilities in Stockholm. These facilities and the tentative results obtained from them are presented in working paper CD/45. As elaborated in that paper, we wanted to demonstrate one possible way of carrying out some of the main functions of the envisaged international data centres. I am not going to dwell on technical details of the demonstration. I want, however, to make it known that we intend to maintain the data centre facilities thus set up in Stockholm and make them available for the scientific and technical work that remains to be done in the development of international data centres, as foreseen for the global system of international co-operative measures to detect and identify seismic events.

The delegations of the USSR and the United States recently carried out intensive work in the framework of the Soviet-United States negotiations on the question of the prohibition of chemical weapons with a view to elaborating a joint USSR-United States report on progress in the negotiations. This work has been successfully completed and today I am submitting this joint report to the Committee on Disarmament. The text of the joint USSR-United States report on progress in the bilateral negotiations on the prohibition of chemical weapons reads:

"During the course of the Vienna meeting of the leaders of the United States and the USSR in June 1979, both sides affirmed the importance of a general, complete, and verifiable prohibition of chemical weapons and agreed to intensify their efforts to prepare an agreed joint proposal for submission to the Committee on Disarmament. The USSR and United States delegations are guided by this principle at the tenth series of the bilateral negotiations, which began on 16 July, 1979.

"In the negotiations, the United States and USSR delegations take into account the fact that prohibition of chemical weapons is, as was stressed in the Final Document of the special session of the United Nations General Assembly devoted to disarmament, one of the most urgent and vital problems in the area of disarmament. They are also guided by the requirement that a convention on the prohibition of chemical weapons, like any other international agreement in the field of arms control and disarmament, should strengthen rather than detract from the security of the parties.

"The USSR and United States delegations, taking into consideration the interest expressed by many delegations in the Committee on Disarmament concerning the status of the bilateral negotiations on a prohibition of chemical weapons, submit the following joint report:

"1. The two sides believe that the scope of the prohibition should be determined on the basis of a general-purpose criterion. Parties to the convention should assume the obligation never in any circumstances to develop, produce, stockpile, otherwise acquire or possess, or retain supertoxic lethal chemicals, other lethal or highly toxic chemicals or their precursors, with the exception of chemicals intended for permitted purposes of such types and in such quantities as are appropriate to such purposes, as well as chemical munitions or other means of chemical warfare. Negotiations are continuing on several issues relating to the scope of prohibition.

"2. By permitted purposes is meant non-hostile purposes (industrial, research, medical, or other peaceful purposes, law-enforcement purposes, and purposes of development and testing of means of protection against chemical weapons) as well as military purposes not related to chemical warfare.

"3. In order to facilitate verification, it would be appropriate to use, in addition to the general-purpose criterion, toxicity criteria and certain other provisions.

"4. Agreement has been reached on the following approximate values for the additional criteria of toxicity mentioned above:

(a) $LCT_{50} = 2,000 \text{ mg.min/m}^3$ for inhalation and/or $LD_{50} = 0.5 \text{ mg/kg}$ for subcutaneous injections;

(b) $LCT_{50} = 20,000 \text{ mg.min/m}^3$ for inhalation and/or $LD_{50} = 10 \text{ mg/kg}$ for subcutaneous injections.

On the basis of these criteria, it will be possible to separate chemicals into appropriate categories, to each of which the general-purpose criterion would be applied.

"5. Different degrees of prohibition and limitation, as well as differentiated methods of verification, would be applied on the basis of these toxicity criteria and certain other provisions. These issues continue to be subjects of negotiations.

"6. Negotiations are also continuing on the definition of terms and several other issues.

"7. The two sides have agreed that parties to the convention should assume an obligation not to transfer to anyone, whether directly or indirectly, the means of chemical warfare, and not in any way to assist, encourage, or induce any State, group of States, or any organization to carry out activities which parties would undertake not to engage in pursuant to the convention.

"8. The two sides have come to an understanding regarding the necessity for States to declare, immediately after they become parties to the convention, both the volumes of acquired stocks of means of chemical warfare and the means of production of chemical munitions and chemicals covered by the convention. Plans for the destruction of declared stocks of chemical weapons should also be declared. These declarations should contain information on the volume and time-tables for destruction of such stocks. Plans for the destruction or dismantling of relevant means of production should also be declared. In the course of the bilateral negotiations, the two sides are continuing to make efforts to agree on the specific content of the declarations concerning stocks of means of chemical warfare and concerning means of production. In this connexion, the basic concept of means of production is also a subject that remains to be resolved.

"9. Agreement has been reached that stocks of means for chemical warfare should be destroyed or diverted for permitted purposes within 10 years after a State becomes a party. Means of production should be shut down and eventually destroyed or dismantled. The destruction or dismantling of means of production should begin not later than eight years, and should be completed not later than 10 years, after a State becomes a party.

"10. In this connexion, the United States and the USSR believe that a future convention should contain provisions in accordance with which parties would periodically exchange statements and notifications concerning: the progress of the destruction of stocks of means of chemical warfare or their diversion for permitted purposes, the progress of the destruction or dismantling of means of production of chemical munitions and chemicals covered by the convention, and of the completion of these processes.

"11. The USSR and the United States believe that the fulfilment of the obligations assumed under the future convention should be subject to the important requirement of adequate verification. They also believe that measures with respect to such verification should be based on a combination of national and international measures.

"12. International verification measures should include the creation of a consultative committee. This committee could be convened as appropriate by the depositary of the convention, as well as upon the request of any party.

"13. The activities of the consultative committee in the interval between meetings should be carried out by a secretariat. The mandate of the secretariat is a subject of negotiations.

"14. The participants should exchange, through the consultative committee or bilaterally, certain data on super-toxic lethal chemicals produced, acquired, accumulated, and used for permitted purposes, as well as on important lethal chemicals and the most important precursors used for permitted purposes. To this end, it is envisaged to compile lists of the relevant chemicals and precursors. The two sides have reached a significant degree of mutual understanding in developing agreed approaches to the compilation of such lists. The scope of the data to be presented remains to be agreed.

"15. Additional functions for the consultative committee remain under discussion.

"16. In order to ensure the possibility of beginning the work of the consultative committee immediately after entry into force of the convention, the United States and the USSR believe it appropriate to embark upon the creation of a preparatory committee upon signature of the convention.

"17. A convention should include provisions in accordance with which any party should have the right on a bilateral basis, or through the consultative committee, to request from another party with respect to which suspicions have arisen that it is acting in

violation of obligations under the convention, relevant information on the actual state of affairs, as well as to request investigation of the actual state of affairs on site, providing appropriate reasons in support of the necessity of such an investigation.

"18. A party may agree to such an on-site investigation or decide otherwise, providing appropriate explanations.

"19. It should also be provided that any party could turn to the Security Council with a complaint which would include appropriate arguments. In case of suspicion regarding compliance with the convention, the consultative committee, upon request of any party, or of the Security Council of the United Nations, could also take steps to clarify the actual state of affairs.

"20. The question of other international verification measures remains unresolved.

"21. National measures would include the use of national technical means of verification in a manner consistent with generally accepted principles of international law. In this connexion, parties should not impede, including through the use of deliberate concealment measures, the national technical means of other parties used to carry out the aforementioned verification functions.

"22. The USSR and the United States believe that a future convention should reflect the obligation of each party to take appropriate internal measures in accordance with its constitutional procedures to prohibit and prevent any activity contrary to the provisions of the convention anywhere under its jurisdiction or control.

"23. Possibilities of confidence-building measures are being explored.

"24. A future chemical weapons convention should include a withdrawal provision of the type included in other arms control and disarmament agreements.

"25. The question of the conditions for entry into force of the convention remains unresolved.

"26. The two sides believe that an effective prohibition of chemical weapons will require working out a large number of technical questions which would be dealt with in annexes to the convention and which are now being studied.

CD/PV.47

p.7

Canada/Simard

2.8.79

CTB

We were also happy to note in this report that the three negotiating Powers are proposing that an international system for the exchange of seismological data should play an important role in verification. We think that the negotiating Powers can agree among themselves whatever verification procedures for such a treaty they deem necessary. But we also think that if it is wished to make the treaty truly multilateral, all the States parties should have the possibility of participating in a meaningful way in the verification process. The international proposed seismic network seems to us to provide the international community with the best means of assuring itself that the obligations of such a treaty are being respected. This undertaking must therefore be given adequate resources to enable it to play its part to the full. In that connexion, we hope that the fears voiced by the representative of the Netherlands in his speech of 31 July will prove groundless. We also take this occasion to thank the Group of Experts for the excellent work they have accomplished so far. We support the recommendations contained in the report submitted to us, and we hope that the Group's mandate will be extended. We will continue to participate actively in its work.

CD/PV.47

pp.12-13

Australia/Plimsoll

2.8.79

CTB

We support the proposal as it is, but I will make a few comments on it. Let me

begin my remarks on the Swedish proposal by paying some tribute to Sweden, not just for this but for its constructive activity in this field and its promotion of international co-operation over many years. The Swedish proposal refers to the analysis and data-handling procedures of the envisaged data centre, as one of the things that should be studied under the renewed mandate. The Swedish delegation has described the demonstration of its national data facility in some detail in document CD/45. This exercise held in Stockholm last month was a valuable one. It demonstrated one solution to the handling of seismic data, which is one element — only one element, but a key element — in an international seismic network. The exercise was highly instructive as an example of how seismic data could be processed. It is a pity that more countries did not avail themselves of the opportunity which the demonstration afforded.

But the most important element proposed for the renewed mandate, which is contained in CD/46, is the first subparagraph of paragraph 2, which says that the work of the Group should include the further elaboration of detailed instructions for an experimental test of the global system for international co-operative measures to detect and identify seismic events. A verification system is basic to any arms control measure like the comprehensive test ban, and we want an international system, with data internationally available. I think there are three elements that we want out of this. We want to concern ourselves with the reliability of the system; with the international breadth of participation; and with free flow of information. Apart from the substantive benefits, it will build confidence. We also need to be looking at the institutional aspects of an international seismic network. I will not go into detail on that. It is something that we should all now be turning over in our minds in preparing ourselves, if not in discussion in this Committee, at least in getting ready for further discussions in this Committee. We should be thinking about the institutional aspects of an international seismic network.

I have been emphasizing the role of verification in a comprehensive test ban. But my remarks have been predicated on the fact that the treaty will be truly international. That means there must be a genuinely multilateral, effective seismic network. And I might say it will have great benefits not only in regard to the comprehensive test ban or in the regard to arms control, but also in the non-military field by increasing our international co-operation, understanding, and detection of seismic phenomena generally. As I have said, there has to be a genuinely multilateral, effective seismic network. That in turn leads me to urge the three negotiating Powers to do their utmost to facilitate now and actively the accomplishment of the test set out in the first subparagraph of paragraph 2 of the Swedish draft resolution, namely, the setting up of this global system.

CD/PV.47

pp.16-17

Italy/di Montezemolo

2.8.79

CW

The prior declaration of existing stocks and of facilities for the production of chemical weapons would represent, in my delegation's view, a step of some significance in the process of encouraging and building up confidence.

The legal, economic and technical problems posed by the destruction of all chemical-weapons facilities, and by the dismantling or conversion of factories producing those weapons, must not be underestimated. An adequate period of time should be allowed for completing the elimination of stocks under effective international control and in a manner calculated to safeguard the requirements both of security and of the protection of health and the environment.

The dismantling of factories would in certain circumstances, in the opinion of the experts, provide more effective safeguards than conversion.

I should now like to take up the question of the verification of respect for written

undertakings, which, in my Government's view, is one of the essential aspects of the future convention.

In that context, I would remind you of the views expressed by the Italian delegation at the meeting of 24 April 1979 (CD/PV.29) and, in particular, to draw attention to the correlation which must exist between the scope of the convention and the accompanying system of verification.

The Italian delegation said at that time, among other things, the following:

"In envisaging a verification system for a convention banning all chemical weapons and prescribing their removal from the military arsenals, the following requirements should be met:

- (a) To ensure that prohibited agents are not being manufactured neither in previous production facilities, nor in new factories;
- (b) To provide proof that prohibited agents are not being obtained from outside sources;
- (c) To ascertain that existing stocks of prohibited agents are eliminated;
- (d) To detect and observe suspicious activities.

Bearing in mind such requirements, it is the view of the Italian delegation that a certain degree of internationalization is indispensable to any effective verification pattern of a chemical-weapons ban. We should, in other words, adopt a mixed solution based on the combination of national verification means with international control procedures, including some forms of physical access to the territory of the State being verified, when the circumstances require it."

In confirming what I have just quoted, I should like to express my delegation's appreciation of the working documents recently submitted on the subject of verification by the delegations of the Federal Republic of Germany and the United Kingdom. In our opinion, the study sessions organized by those two countries a few months ago were a useful means of bringing out the fact that "on-site" inspections are not always necessarily incompatible with the requirements of the protection of industrial production and of commercial information.

I would not wish to go again now into the details of the international control machinery whose establishment could prove necessary for the effective verification of the various aspects of a convention on the banning of chemical weapons. The idea of a consultative committee has been raised. It deserves careful consideration, so that the duties, powers and responsibilities which might be given to such a body can be more clearly discerned. The experience of other agencies, such as IAEA, could also be taken into account.

Some delegations have rightly stressed the importance of confidence-building measures. Such measures can clearly be no substitute for national and international verification machinery. They may, however, play a very useful complementary role. We are thinking, in particular, of the exchange of information, of visits and of any other initiatives which may help to throw more light on the problem and establish a climate of mutual confidence. The possibility of encouraging the adoption of such measures at the regional level should be given special consideration.

Lastly, there is the basic problem of verification. It has been the subject of several contributions since the beginning of the Committee's work, and the statements made in the course of the discussions have revealed how much importance delegations attach to

this problem. We now have before us a broad array of proposals. The joint report we heard yesterday has made an important contribution to the debate. It epitomized an agreement of principle between the two negotiating countries on the need for adequate verification and the principle of combining national and international means of verification.

This twofold aspect of verification presents one of the most difficult problems: National means of verification are highly developed in certain countries; in others they are much less so. There is thus a fundamental inequality in the possibilities offered to various States in the matter of verification by national means, and what the great Powers can do to ensure that the provisions of a future convention are observed is undoubtedly beyond the reach of the majority of States. This situation gives added importance to the problem of international verification. This problem is the subject of some interesting suggestions in the joint report submitted to us yesterday; methods and bodies are proposed, such as a consultative committee and a procedure for appealing to the Security Council. Some delegations have proposed other solutions, such as on-site investigation and verification by challenge; the latter method is referred to in the joint report presented to us yesterday. In any case, the question will be a particularly important and difficult one to be tackled by our Committee when it resumes its consideration of chemical disarmament at its next session.

CD/PV.47

p.26

India/Gharekhan

2.8.79

CTB

My delegation has received the report of the seismic experts contained in document CD/43. I would like to express our thanks and appreciation to the experts for their fairly comprehensive report and for their consensus report -- because it is important that this report should reflect a consensus among all the participants. India has been taking part in this Ad Hoc Group of Experts from its beginning and, indeed, we were, for a long time, the only developing country to be associated with this work. My delegation is happy that more and more countries from the so-called third world are also taking an active interest in the work of the Ad Hoc Group. We shall refer this report to our Government for study, but there are one or two things that I could at this stage comment on in the report of the experts. It seems that the implementation of the recommendations of the experts would have certain financial implications for countries participating in the international co-operative effort. From this point of view, my delegation would have to -- my Government would have to -- consider the recommendation about the standardized equipment which is contained in the report. Furthermore, the report is silent about the cost of the international data centres. It is not quite clear who is to bear the expense of the proposed international data centres. Everybody understands that there are going to be three of them, and I would presume that the cost of setting up these data centres would be borne by the countries which offer to host them. My delegation has seen the draft decision which has been put forward by the delegation of Sweden on the extension or the renewal of the mandate of the Ad Hoc Group, and my delegation is in a position in principle to support the continuation of the mandate of the Ad Hoc Group of seismic experts. I would also like to take this opportunity to express our thanks to WMO for co-operating with this Committee. I suppose that the international co-operative effort in this field is more necessary for countries like mine and others which are not nuclear-weapon States than for the negotiating Powers. I would imagine that the States which are negotiating the treaty would have the necessary ability or capability to verify compliance through their own national means. I am not sure how significant or how vital the international co-operative measures are for the negotiating States themselves from the point of view of verification, but in any case for

the rest of us the international effort would be of very considerable importance. It is from that point of view that we have been participating in the work of the Ad Hoc Group.

CD/PV.63

pp.13-14

Sweden/Lidgard

26.2.80

RW

In article III of the draft convention, the deliberate dissemination of radioactive material which is not produced by a nuclear explosive device is prohibited, if the intention is to cause destruction, damage or injury by means of the radiation produced by the decay of such material. We should, however, be aware that military attacks or deliberate damaging in war of nuclear reactors or other nuclear-fuel-cycle facilities may cause the release of dangerous radioactive substances, which may imply considerably larger risk of damage and injury than that from direct spread of such substances. We therefore consider that this problem should be taken into account when we consider article III or generally the scope of the convention.

Prohibition of such military action has been prescribed in the Protocols additional to the Geneva Conventions of 1949 (Protocol I, art.56, and Protocol II, art.15), but the prohibition is limited to the purpose of the protection of civilians and refers only to "nuclear electrical generating stations". For the purpose of a treaty prohibiting radiological warfare, we should consider such a ban to be without operational exceptions and to cover all facilities containing large amounts of radioactive substances.

The provisions of article VI of the draft convention seem to bear some relationship to the recently concluded Convention on the physical protection of nuclear material. Some explicit reference therefore seems worth considering, either in article VI or in the preamble.

In that context it might be explored whether IAEA safeguards should be applied, as modified for this purpose, to all radioactive waste in the States parties to the future convention. Because of the risks of hostile use of radioactive substances by terrorists, it may also be considered whether the Convention on the physical protection of nuclear material should be extended to radioactive waste.

As regards the complaints procedure in the draft treaty, we have some serious concern. The only instance which may decide upon the complaint of a State party against another State party because of an alleged breach of obligations deriving from the provisions of the treaty is the Security Council of the United Nations. As long as the permanent members may exercise their right of veto in such matters, we consider this procedure insufficient.

Finally, we also consider the proposed period of ten years from the entry into force of the convention till the first review conference too long, taking into account the rapid development in the field of nuclear technology, and also in view of the fact that the definition of the concept of "nuclear explosive device" in a nuclear-test-ban treaty might affect the scope of the convention on radiological weapons. We consider five years a more appropriate time length.

CD/PV.65

p.9

Canada/McPhail

4.3.80

CTB

Accordingly, we join those who continue to press for the tabling, just as soon as is possible, of the long-promised joint initiative on the subject. In the meantime, however, we believe that the CD has a positive and significant role to play. A nuclear test ban will require, for its functioning, the elaboration of a number of implementing measures. For example, the setting up of an international verification system will be of major

importance and in this context we think the CD could, and should, start elaborating the necessary institutional framework for such a system without delay. This was already suggested by Sir James Plimsoil on 5 February, and we recommend that the Committee pursue and refine his suggestion. We see this as a useful way in which to arrive at arrangements which such a treaty will require for its implementation, and we see no reason why the CD should not start working on issues of this kind now.

A CTBT will have many aspects. Some are under negotiation now among three nuclear-weapon Powers, and can only be tackled later by this Committee. However, other aspects, which may also be under consideration in the trilateral negotiations, could perhaps be considered simultaneously by our Committee. For example, we could look at mechanisms to promote implementation of and compliance with the terms of the treaty. These are only a few of the aspects in which our Committee could involve itself without impeding ongoing negotiations elsewhere. In fact, we consider that this work by the Committee would contribute to accelerating the elaboration of a treaty, once a joint initiative is tabled. We therefore hope that these suggestions will be looked on positively by members of our Committee and that it will be possible to define, by consensus, in this session, a practical and utilitarian negotiating role for the Committee in the complex over-all elaboration of a CTBT.

CD/PV.65

pp.9-10

Australia/Behm

4.3.80

CTB

The early conclusion of a multilateral CTB agreement is a cornerstone of Australia's arms control and disarmament policy. Our attitude to the early conclusion of a trilateral CTB, and its early translation into a multilateral treaty, is well known. It has been set out in a forthright and clear way in a number of international bodies during the last few years, and there is no need for us to rehearse yet again the principal features of our position. I would simply recall that the question of a CTB was given special emphasis in the statement delivered by Mr. Andrew Peacock, the Australian Minister for Foreign Affairs, when the Committee on Disarmament began its work last year. Mr. Peacock said:

"Of the matters facing this Committee, the elaboration of a treaty prohibiting nuclear-weapon testing in all environments is of primary importance and deserves the earliest attention... Even before the agreement is presented here, Australia believes the Committee could begin addressing the technical and operational aspects of an international seismic detection network... This is essential if there is to be any possibility that an international verification system is to be operational by the time the Committee has completed its work in the drafting of a multilateral CTB treaty.

A widely accepted CTB treaty will be a significant milestone in arms control and disarmament efforts. It will be a barrier to both the spread of nuclear weapons and the expansion of existing nuclear arsenals. It will contribute to a greater level of confidence among States in all regions of the world. It will also provide the opportunity for building further upon international verification procedures of the kind incorporated in the Nuclear Non-Proliferation Treaty."

In addition to these remarks, the Australian delegation made two major statements on CTB last year in which we reiterated our concern that progress should be made quickly. In seeking to realize our hopes for a CTB and to bring a multilateral CTB closer to conclusion, Australia has given great prominence to the item both here and elsewhere. We played a leading part in the development of the CTB resolution at the last session of the United Nations General Assembly.

2. Venezuela considers that the comprehensive test-ban treaty will be one of the most important steps along the road to nuclear disarmament, inasmuch as it will help to slow nuclear proliferation both horizontally and vertically. As to horizontal proliferation, the comprehensive test-ban treaty is very closely linked with the non-proliferation Treaty, particularly as regards performance of the obligation contained in article VI.

3. The ban established by the treaty should cover all explosions, in any environment, of any size and for ever. In our opinion, a partial ban will run counter to the objective of general acceptance which the treaty should necessarily try to attain.

4. As regards verification, while we recognize that this is the most delicate and difficult of the problems involved, we believe that the nuclear Powers should agree as rapidly as possible on a system which both safeguards the security of each of them and ensures fulfilment of the obligations they enter into under the treaty. The system should consist of a balanced combination of national and international methods of verification, including on-site inspections when justified, and the remote detection and identification of seismic phenomena.

5. On the question of participation, we believe that the parties to the treaty should include not only the nuclear-weapon States but also all States possessing the nuclear technology for testing nuclear devices by means involving their detonation. In the first stage, while preparation of the treaty is being completed, the nuclear Powers should impose a moratorium on themselves by voluntarily renouncing all nuclear tests without any kind of limitation (duration of the moratorium, environment in which the tests are conducted, power of the explosion, quantity).

Within the framework of efforts to achieve a comprehensive nuclear-test ban, my delegation has followed with attention and interest the work of the Ad Hoc Group of Scientific Experts, which presented its last interim report to us on 18 February last.

The Group has done some very useful work and has undoubtedly made a valuable contribution to the elucidation of the technical and scientific aspects of the organization of an international seismic-data exchange on which verification of the observance of a comprehensive test-ban treaty could be based. The contribution made to this study by the World Meteorological Organization experts was especially appreciated.

Verification is an essential element of the future treaty. We well know that without adequate verification — by international as well as national means — there would be no treaty.

My delegation therefore considers that it would be highly desirable if we could proceed as soon as possible — without necessarily waiting for the results of the tripartite negotiations — to an experimental exercise for putting the operation of the verification system envisaged by the Ad Hoc Group of Experts to a practical test.

In this connexion we welcome the initiative of the Federal Republic of Germany in organizing at the Grafenberg Observatory in July a demonstration which will usefully supplement the data obtained at the previous seminars organized in Japan and Sweden. My country will be pleased to participate in this exercise, which, though it will not be a substitute for practical testing of the verification system as a whole, may represent a positive step towards its realization in the near future. It is important that all members of the Committee should take part in these exercises, which also have the advantage of providing psychological training, such as may strengthen confidence among the participants.

At the same time we share the opinion expressed by some Western delegations, in particular those of Australia, Canada and Japan, that it could be particularly opportune at the present stage to undertake consultations within the Committee on the nature, the constitution and the characteristics of the institutional framework within which the control arrangements recommended by the Groups of Experts may exist and function. The putting into effect of this system would indeed have to be thought out and prepared with special care, so as to avoid any delay in the application of the treaty once agreement has been reached.

CD/PV.66

pp.33-34

Sri Lanka/Fonseka

6.3.80

CTB

But it is the two alternatives that have been proposed by the delegation of Canada and the delegation of Australia that I would like to deal with now. One of the alternatives proposed was that perhaps the Committee could elaborate an institutional framework for an international verification system. That was one role which this Committee might perform. The second: he has asked us to look at mechanisms to promote the implementation of and compliance with the terms of the treaty.

With regard to the first suggestion, an institutional framework, my delegation would like to think that verification is largely a technical issue. We have the very useful work -- two reports, I believe -- submitted to the Committee by the seismic expert Group who have been working on it. But the question I ask is, can this Committee be asked to contemplate or to discuss an institutional framework on the technical aspects of a treaty on which the tripartite negotiators have told us very little? I will not say nothing, but so far very little. Can the members of the Committee be asked to address their minds seriously to an area which for us is still, shall I say, grey? How can we even outline something like the elements or titles for such an institutional framework when we are not privy to the conclusions, the agreements reached or the disagreements that prevail among the tripartite negotiators? I ask, where do we begin and on what?

And we have the second suggestion, proposed by Canada and Australia: we might consider mechanisms to promote implementation and compliance. Again I ask, in relation to what are we to consider this? Implementation of and compliance with a treaty on which we have very little information? Are we to consider all this in a vacuum? These are just questions I pose, I do not have the answers, but I think that in the light of this very positive approach that these two delegations, Canada and Australia, and others, have taken today, one is obliged to ask, are these feasible, are these possible for a Committee which is still very much in the dark?

CD/PV.74

p.10

Canada/McPhail

1.4.80

CW

Finally, in concluding my speech, I would like to say a few words about rumours regarding the illegal use of chemical weapons in Laos, Kampuchea and Afghanistan. I want to say only that the existence of such allegations, in our opinion, underlines the requirement for adequate verification measures in regard to chemical and biological weapons régimes in particular, and with respect to arms control and disarmament agreements in general. One can draw the conclusion that on-site inspection and mechanisms for consultation and co-operation would have the effect of eliminating uncertainty caused by such rumours, one way or the other, and thus would strengthen respect for such agreements.

These recommendations are implemented by many countries. Moreover, a Convention was recently concluded in Vienna on the Physical Protection of Nuclear Materials, particularly during transport. Both these recommendations and the Convention cover fissionable materials, whether irradiated or not, but do not cover radioactive materials in which no fissionable material is present. If we accept the idea, as reflected in article VI of the RW draft, that this category of materials must also be protected, parties must try to achieve common standards with respect to the level of protection. This could be done by amending the said Convention; but this does seem to be a somewhat cumbersome approach. Although my delegation certainly would not like to exclude the possibility of amending the Convention in the future, the most practical approach seems to be to ask IAEA to reconvene the expert group with a view to expanding the already existing recommendations so as to cover radioactive materials as well. Consequently, I propose to invite the Director-General of IAEA to present his views on this matter as soon as possible.

As far as article VIII is concerned, we think, upon reflection, that the envisaged complaints procedure -- which, by the way, is completely identical to that of the ENMOD Convention -- is sufficient in the context of the limited military significance of radiological weapons. This does not mean that, in our view, the present complaints procedure should necessarily be regarded as a model for any other future arms control and disarmament convention. In our opinion, verification and complaints procedures should be geared to the scope of a specific treaty, to the military relevance of prohibited activities and/or weapons, as well as to the proportions and distribution of possible stockpiles of the weapons under consideration. On the other hand it is correct, in our opinion, that article X provides for an unlimited duration. We fail to see, however, why subparagraph 2 of article X contains a right to withdraw from the treaty. The ENMOD Convention does not provide for a right to withdraw.

As for review of the operation of the treaty, referred to in article XI of the present draft convention, we feel that the first review conference should take place not later than five years after the entry into force of the treaty. Further review conferences could be held at longer intervals, depending on the need felt and expressed by a majority of States or a number of States not constituting a majority, as may be agreed upon.

The wording of article III of the joint proposal leads us to ask its co-sponsors a question for the purpose of clarification. The radioactive material referred to here is material not specifically designed for use "by dissemination". Does this mean any radioactive material present in any nuclear power station? And if this is the case, does the prohibition apply only to acts of active use of such material by dissemination? Or are deliberate attacks against storage depots or nuclear power stations, with the risk of dissemination they involve, to be included in the prohibition as well?

In article VIII, paragraph 2, the procedure for convening the Consultative Committee of Experts seems particularly slow. The procedure envisaged could be improved by drafting the beginning of the paragraph as follows: "For the purposes set forth in Subparagraph 1 of this Paragraph, the Depositary shall, if possible immediately and in any case within one month of the receipt of a request...".

The wording of this article VIII, paragraph 2, gives the impression that the Consultative Committee is convened automatically once the depositary receives a request.

Would the depositary under the terms of this article, have no powers of consultation or rapid investigation before convening the Committee?

Our last comment relates to article 1 of the annex to the treaty, concerning the Consultative Committee of Experts. The Belgian delegation wonders whether the words "by the State party requesting the convening of the Committee" are essential, and whether they do not in fact excessively restrict the Consultative Committee's powers of deliberation by specifying that the Committee may express its views only on problems raised by the State requesting the convening of the Committee.

CD/PV.77

p.8

Egypt/El-Shafei

10.4.80

RW

Secondly, the definition contained in the joint proposal needs to be more specific. Here my delegation shares the view held by other delegations that a reference should be made to the importance of discussing the desirability of including weapons using radioactive particle beams among the prohibited radiological weapons. In the light of the identical statements made by the United States and Soviet representatives when submitting their joint proposal, to the effect that: "No obligations undertaken by States in the projected treaty will be interpreted as covering the use of radioactive materials or any sources of radiation except such uses as the parties to the treaty have undertaken not to engage in in pursuance of the provisions of the treaty", my delegation would like to join the Swedish delegation in inquiring about the kind and nature of the activities referred to.

Thirdly, the procedures of consultation and co-operation between the States Parties to the convention relating to the settlement of the disputes arising over the purposes of the treaty or the implementation of its provisions, in accordance with article 8 of the joint proposal, need to be more specific and effective. In particular, we would like to refer to the powers of the Consultative Committee, as defined in the annex to the joint proposal. We understand the powers of that Committee as consisting of carrying out fact-finding activities, and of providing technical expertise when problems arise over the application of the Convention as a first step before the filing of a specific complaint with the Security Council. Accordingly, the role and powers of the Consultative Committee as a monitoring device with regard to the implementation of the provisions of the Convention assume an important and concrete dimension, especially because only a small number of States possess the technical potentials to enable them to carry out monitoring operations using their national institutions.

In keeping with the monitoring and complaint procedures, the filing with the Security Council by the Parties to the convention of complaints regarding violations of the provisions of the treaty, coupled with the possibility of the permanent members vetoing those complaints constitutes, in our view, a violation of the principle of equal obligations and also brings into question the effectiveness of such a procedure. Furthermore, to grant Security Council members who are not parties to the treaty the right to interfere in the implementation of the treaty may be inconsistent with the principle of regarding treaties as a contract between the parties to it.

CD/PV.77

pp.15-16

Pakistan/Akram

10.4.80

RW

First, we would prefer the scope of the prohibition of radiological weapons to be as broad as possible. Therefore, we would like to consider carefully whether this prohibition should be limited only to radiation effects produced by non-explosive means. We also feel that the question posed by Sweden regarding the application of the convention

to the so-called particle beam weapons would need careful scrutiny.

Secondly, my delegation could not contemplate any provision in the convention which would have the effect of discriminating against any State, particularly between nuclear and non-nuclear States. Such a question of discrimination seems to arise with regard to the verification and safeguards provisions of the convention. The distinguished representative of Egypt has already replied to the inherent and innate qualities in the Security Council procedures which are contemplated in the draft convention as regards complaints and verification. But there are some other aspects also which need consideration.

The diversion of radio-active material for the purposes of the development of radiological weapons could be detected and perhaps prevented, in the case of those non-nuclear-weapon States which have accepted international safeguards over their nuclear and other facilities. In this connexion, the Netherlands delegation has proposed that the application of the recently developed Convention on the Physical Protection of Fissionable Materials should be extended to radio-active material also. We shall examine this idea very carefully. But the main question is how will the convention provide guarantees against the diversion of radio-active material from unsafeguarded facilities -- that is, from facilities in non-nuclear-weapon States which are not under safeguards or from dedicated facilities which are located in the nuclear-weapon States. This, to us, seems to constitute a serious loophole in the whole idea of a verifiable convention on the prohibition of radiological weapons.

CD/PV.80

pp.8-10

Australia/Behm

22.4.80

CTB

In his statement of 5 February, Sir James Plimsoll gave some examples of things which have to be settled before an institutional structure could be finalized. A number of delegations have discussed these examples with us. In the light of their comments and our own further examination of the question, we would like to expand our earlier suggestions to give them greater precision and clarity. In making our view more precise, we are not attempting to prescribe the Committee's work or to exclude any additional considerations. Our comments are intended to be purely illustrative. The Ad Hoc Group of Scientific Experts has already made substantial progress on the technical aspects of an international seismic monitoring system and its valuable work should be taken into account.

In order to create an institutional framework, the CD would need to look at the basic means of gathering, transmitting and processing information. To be fully effective, a verification system would require a communications network which was properly co-ordinated, efficiently managed and capable of handling data in real time, that is, within one or two days of the detection of any seismic event. The links in such a communications network would need to be carefully planned, and various channels which lie outside the normal international telecommunications network would require special arrangements. A formal arrangement would have to be negotiated with WMO, for example. While these elements are perhaps not central to the theoretical basis of a CTB, they are essential if an effective agreement is to come into operation.

Before the international seismic detection network can be brought into operation, a number of important questions concerning the legal basis of an international seismic monitoring system would need to be solved. For instance, the Committee might examine whether there is a need for a separate international legal instrument or "umbrella" for the acceptance by the parties of agreed administrative and financial arrangements. This would further entail consideration of the mutual obligations and responsibilities of signatories to such an instrument, its review and amendment procedures, how States

would become eligible for adherence, etc. Then, there would be the further question of the relationship between the CTB network and other international organizations such as the United Nations, the Committee on Disarmament, the World Meteorological Organization, to name but a few.

In addition, to these legal considerations, further problems would have to be addressed. For instance, how would parties to such an instrument arrange access to communications links requiring the consent of States not parties to the multilateral CTB? There is also the question of the need for specific agreements with the host Governments of States where international data exchange centres are to be located.

In elaborating the supporting legal basis for an international seismic detection system, the Committee would also need to address the administrative and financial aspects of the system. Would the system require an administrative secretariat and, if so, what would its precise function be, where would it be situated, how would it be staffed and how would it be financed? The Committee would need to resolve these questions with respect to both the data exchange centres and the seismic detection stations. Furthermore, it would be necessary for the Committee to consider the division of staffing and financing responsibilities between the various parties to the treaty. This would entail working out the basis for a multilateral financing formula, including how such a formula might be varied in the future to take into account both increases in the number of adherents to the treaty and changes in the national criteria determining the size of the contribution by individual parties. We would also have to consider how establishment, installation and incorporation costs would be met, whether an annual report on the administrative and financial aspects of the system would be necessary and, if so, who would prepare the report, who would approve it and to whom it would be presented. This, in turn, would raise the question of whether an international management panel would be required and, if so, how its functions and composition might be determined.

Once these administrative and financial aspects had been considered, the Committee would certainly wish to examine the general question of access to data and the distribution of information. For example, how would information be made available and distributed within the network itself? How would it be made available to States parties to the agreement covering the operation of the seismic monitoring system but which did not have detection stations located on their territory? Could information be made available to non-member States and international organizations? If so, on what basis? It should also be borne in mind that the data gained by an international seismic data network would be relevant not only to the monitoring of a ban on nuclear explosions, but also to the detection of all types of seismic events. Such data would therefore be of general scientific interest to geologists, geophysicists and seismologists, especially to those involved in earthquake prediction. Hence, could the information gathered by the network be made available to scientific institutions and, if so, on what basis?

There is also the related question of what role the United Nations ought to play in the institutional arrangements underpinning a CTB. Australia would favour a positive role for the United Nations in the terms of United Nations General Assembly resolution 31/90. In the third preambular paragraph of that resolution, attention is drawn to the need to improve existing United Nations facilities for the collection, compilation and dissemination of information on disarmament issues in order to keep all Governments, as well as world public opinion, properly informed on progress achieved in the field of disarmament. Given the crucial role which a multilateral CTB treaty would play in boosting international confidence, the United Nations would have an essential part to play. Furthermore, resolution 31/90, which was adopted without a vote, calls upon the United Nations Secretariat to assist, on request, States parties to multilateral disarmament arrangements in their duty to ensure the effective functioning of such agreements,

including appropriate review. The precise role of the United Nations in a CTB verification system would need very careful and detailed consideration.

CD/PV.80

pp.19-20

Sri Lanka/Naganathan

22.4.80

IDO

Mr. Chairman, may I return to the purpose of my intervention which is sub-title IV of the Disarmament Commission's recommendation on the elements of the comprehensive programme of disarmament, entitled "Machinery and Procedures". This section commences with a reference to the central role of the United Nations, and includes provision for review and verification of agreed measures. Under this sub-title, the Disarmament Commission has asked this Committee to undertake "an examination of the requirements of an institutional and procedural nature, to facilitate the disarmament process and to ensure implementation of disarmament agreements including the relevant proposals referred to in paragraph 125 of the Final Document, or made elsewhere". Any programme of disarmament would have to be a subject of frequent if not constant review. No less important are arrangements for adequate verification or effective control of the agreements that have been reached. It is within the scope of institutional arrangements and the need for review and verification that Sri Lanka, during the first special session on Disarmament, introduced the proposal of my President, His Excellency J.R. Jayewardene, for the establishment of a world disarmament authority. In doing so, we described that authority as in no way intended to detract from, or diminish, the functions and powers of any existing organ or machinery within the United Nations system. We then pointed out that the establishment of such an authority would also be within the ambit of the functions and powers of the General Assembly and the Security Council, both of which are also empowered under the Charter to establish such organs as they deem necessary for the performance of their functions.

May I say that the need for such an authority or institution was seen by other delegations, which advanced certain comparable and complementary proposals which were also placed before the special session. Those ideas, and some of that thinking, have taken more tangible form in subsequent resolutions that received the approval of the General Assembly of 1979. The delegation of Pakistan, during its intervention on 20 March, referred to the need for the establishment of such an authority as the third and final phase of the measures to be included in the comprehensive programme of disarmament. The Sri Lanka delegation will provide further elaboration of this proposal in the Ad Hoc Working Group on the Comprehensive Programme of Disarmament when it commences its work.

CD/PV.91

p.9

India/Venkateswaran

10.7.80

RW

The draft treaty text, in article VII, has referred to the obligations assumed by any State under any specific treaties, including the Treaty on the Non-Proliferation of Nuclear Weapons. My country is not a party to the Treaty on the Non-Proliferation of Nuclear Weapons. If a specific reference is made to commitments under any other treaty it may be necessary to state that nothing in the present treaty shall be interpreted as creating obligations for States which they have declined to assume under any other existing treaty.

In the course of discussions on the verification provisions in the proposed treaty, some delegations have referred to the possibility of extending IAEA-type safeguards to all radioactive wastes in the States which are parties to a future convention. Such a recommendation appears to us as an attempt to introduce the concept of full-scope

safeguards, in a modified form, on nuclear facilities of States which have refused to accept similar safeguards, because of their discriminatory and unequal nature, under the Non-Proliferation Treaty. My delegation reserves its position on this point, and would like to have more complete and precise details of what is entailed in the extension of IAEA-type safeguards to radioactive wastes.

CD/PV.91

pp.22-24

Sweden/Thorsson

10.7.80 CTB,CW

One main obstacle for a CTBT has been the question of a satisfactory verification process. Through the work of the Group of Seismic Experts it is obvious that an adequately verifiable CTBT can be made operable at short notice. All the relevant technical prerequisites are already present. Indeed, what is glaringly lacking now is the political will.

The Swedish delegation has already presented its general views on the scope of a forthcoming convention, and I shall of course not at this moment go into details. Suffice it to say that the ban must be comprehensive, and thus cover not only production, but the acquisition and retention of a chemical-warfare capability, i.e. every activity, facility and material intended to enable the utilization of the toxic properties of chemical substances for hostile purposes or in armed conflict should be prohibited. The Swedish Government welcomes the recently submitted joint US-USSR report on progress in the bilateral American-Soviet negotiations on these and other relevant matters. I take this opportunity to state that experience in the last few months seems to illustrate eloquently the need for adequate multilateral verification and complaints procedures.

Since the conclusion of the BW Review Conference, views on the complaints procedures prescribed in international treaties have advanced. At that conference the Swedish delegation was quite encouraged to receive support from the overwhelming majority of the participants for its request that these procedures should be improved. The considerable international debate around the possibility of existing stocks of biological weapons in a major country underlines the need for more effective and democratic verification arrangements and procedures.

Rumours, accusations and counter-accusations based on various reports have lately been circulating regarding the alleged use of chemical-warfare agents in Laos, Kampuchea and Afghanistan. All this is cause for grave concern to the Swedish Government. It must be in the interest of the international community that the actual situation be clarified through the presentation of all relevant facts.

The 1925 Geneva Protocol is, in the opinion of the Swedish Government, comprehensive. It thus covers all chemical-warfare agents. Moreover, the ban on the use of chemical weapons in international armed conflict must be considered part of international customary law. It would, therefore, be highly desirable that all States reconfirm their support of the Protocol and of its comprehensiveness and customary-law character.

One immediate practical conclusion to be drawn with regard to the current negotiations on chemical weapons in the CD is the necessity to establish adequate multilateral arrangements for verification and complaints procedures. It may be easier for the super-Powers to come to a mutually acceptable solution on certain issues. When, however, it comes to questions of compliance with international obligations in a climate of general distrust -- that is to say in a situation when verification is most crucial -- the problems can no longer be solved bilaterally. A reliable verification of multilateral conventions is a legitimate international concern. A multilateral machinery which starts working almost automatically will be needed. Political decisions to start investigations and carry out ad hoc inspections will always prove difficult and sometimes even

impossible. It should be in the best interest of every State party to a convention, acting in good faith, to co-operate in working out such arrangements.

CD/PV.93

pp.16-17

Bulgaria/Voutov

17.7.80

CW

Second, the agreement in principle that the convention should stipulate that States participating in it are to declare both their stocks of chemical weapons and the means of production of such weapons within 30 days after they become parties to the convention, as well as plans for destruction or conversion to peaceful purposes, within appropriate time limits, are new, concrete points in the bilateral talks.

Third, the agreement reached as to the aggregate quantity of super-toxic lethal chemicals for non-hostile military purposes possessed at any given time and produced at a single specialized facility is another positive step. The announced limit, which in any event is not to exceed one metric ton for any party, may seem at first glance not small enough. We should not, however, fail to take note of the fact that this is the upper limit: therefore, it does not mean that exactly this quantity is to be actually produced.

Fourth, as to the question of verification of the future agreement, in spite of their complicated nature and conceptual differences, a certain progress could be discerned in the eight paragraphs dealing with these matters.

Without underestimating in any way the importance of verification, our delegation is convinced that only a judicious combination of national and international measures could lead us to success in this complex and priority field of disarmament negotiations. Turning the question of on-site inspections into a kind of fetish is far from being the best way to proceed in dealing with this problem; and in a way it serves as a smoke screen to hide a certain lack of will to come to an agreement on the prohibition of chemical weapons.

The series of unofficial meetings with the participation of experts on chemical weapons, held between 24 and 26 June, confirmed the conviction of our delegation that 100 per cent verification is neither possible nor feasible. I would like to underline the opinion of some of the experts, who pointed out quite explicitly that, as to binary chemical weapons, on-site inspections are practically irrelevant.

That is why we state once again that, in the combination of national and international measures, national means of verification and control play an extremely important role, based on the determination of each State party to the convention to abide strictly by its provisions, so that we could eliminate this dangerous type of weapons of mass destruction, thus removing this particular threat to humanity.

CD/PV.94

pp.14-15

Netherlands/Fein

24.7.80

CW

Let me approach the subject in a roundabout way. We have tackled our task in the CW Working Group by dealing separately with the various different elements of a CW convention. Thus we have dealt with scope and later with verification. And we have also discussed protection again as an identifiable, separate element. But it is obvious that all these elements are interrelated, and the measure in which we can achieve the fullness of what is desirable regarding one element might influence -- or should influence, as I hope to demonstrate -- the measure of fullness of another element.

Let me give you an example. It would indeed be desirable that the scope of the agreement to be achieved would be fully comprehensive, so as to include all potentially harmful chemical warfare agents. Yet there are some practical limits to the implementation of that ambition. It has become generally accepted that the treaty will have to

provide for a scope containing a general purpose criterion. Such a criterion would be coupled with certain toxicity limits and probably supplemented by an illustrative list of agents and formulae. Though such a list would not be exhaustive it would, together with the toxicity limits, provide important points of reference for verification. These parameters have, however, their inherent limitations insofar as they should not be allowed to hamper the peaceful and legitimate civil chemical industry. Verification measures would therefore be commensurate to the scope as just perceived. They would be less demanding than if all conceivable potentially harmful agents were to be included in the scope. There is therefore an interrelationship between the requirements of scope and verification as elements of a convention, that has to be taken into account when negotiating.

In the same manner there is an interrelationship between verification and protection. Let me again give you an example. In the (only theoretically conceivable) event that some nation should manage to devise a foolproof complex of protection measures against a chemical attack, this would mean that this nation could be satisfied with rather inadequate verification provisions in the convention: being fully protected against a CW attack, it would be able to carry on its mission in war in any case. On the other hand, a nation that has no protection at all, would of course insist on the maximum verification possible. Here again we see that there is an interrelationship between the elements of a treaty -- in this case between verification and protection -- which makes possible a "trade-off" during the negotiating process on a treaty text.

This observation can be carried further. Within one and the same element, it is not always necessary to strive for perfection, provided that the imperfections of certain provisions are compensated elsewhere. (And now I return to the proposition I made at the beginning of my statement, concerning the feasibility and desirability of foolproof verification).

Let us take as example verification itself. Verification will also be, in itself, a system consisting of a number of elements such as:

- verification of the destruction of stockpiles of chemical weapons;
- verification of the closing-down or dismantling of CW production plants;
- verification of the non-production of CW agents in the chemical industry;
- verification that no offensive CW are used for training in manoeuvres;
- verification that no transfer of potential CW agents is taking place.

Some of these elements can be subdivided even further. All of these elements have national as well as international components, and all of them can be applied with varying degrees of intrusiveness. Here again we may have to compromise and seek "trade-offs" between different components. The main objective should be that the whole set, or complex, of verification provisions together should provide an adequate measure of certainty that there is compliance with the treaty. To illustrate this proposition let us look at the control of the non-production of chemical agents in the industry. The military threat of the highly toxic single-purpose agents is considerably higher than the threat of other chemical weapons, including most dual-purpose agents. It could therefore be argued that international verification measures with regard to the non-production of chemical warfare agents would be concentrated on the non-production of single-purpose supertoxic agents, such as nerve agents and comparable chemicals, including precursors for binary systems. Verification procedures with respect to other CW agents could then be somewhat less stringent. In sum, verification thus perceived should function with a view to deter, i.e. by making a breach or circumvention of the treaty too cumbersome and too costly to be acceptable.

To conclude this part of my statement, I should like to make the following proposition for your consideration. As the end result of our work -- not this year of course, but at some time in the not too distant future, we hope -- we should achieve the following three results:

- (a) a good definition of scope;
- (b) a reasonable system of verification methods;
- (c) an adequate system of protection measures.

If this can be achieved then we have the foundation for a CW convention that should be attractive to all nations.

CD/PV.97

pp.12-13

Netherlands/Fein

5.8.80

CTB

My remarks on CTB today should therefore be taken together with the statements on this subject that I made on behalf of my Government on earlier occasions, notably on the opening day of this year's session of the Committee on Disarmament and, more extensively, on 24 April 1980.

We are pleased that at least some of the measures which we recommended in our earlier statements seem to have found a place in the trilateral draft that is being negotiated; concerning some other measures which we also find desirable, the situation seems less clear.

But let me say in the first place that we note with satisfaction that the draft appears to be that of a multilateral treaty, and that there seems to be a substantial role for an international verification system. This is what we had hoped for. What is less clear is the question of the duration of the treaty. Paragraph 12 is somewhat less than explicit. We have stated on a number of occasions that a CTBT of only a few years' duration would not carry much weight. Then again, we are pleased to read in paragraph 11 that the Partial Test Ban Treaty will not be affected by the coming into force of the CTBT. We consider this of importance also in view of the uncertainty of the duration of the CTB to which I referred just now.

We agree with the envisaged establishment of a committee of experts for the international seismic system. We are somewhat concerned, however, about the procedure envisaged in getting this committee under way. At the end of paragraph 17 it is stated that the committee will hold its first meeting only after, i.e. not before, the entry into force of the treaty. In paragraph 11 it is stated that the treaty should enter into force only after ratification by twenty signatory Governments, including the three presently negotiating Powers.

In our view this procedure would entail unnecessary loss of time in developing the details of the seismic arrangements. We would therefore request the three negotiating Powers to set up a provisional committee that could start work on the required seismic arrangements, pending the entry into force of the treaty. In that way we can avoid what could be a considerable loss of time between the moment that the negotiations have been concluded, i.e. the moment the draft has left the Committee on Disarmament and started a life of its own, and the moment of entry into force. The question is in what form the consultations between the seismic experts can be pursued in that interim period which, as I said, could be a lengthy period of time while the expert consultations at the moment become more relevant than ever.

As I said, this waste of time could be avoided by an arrangement to the effect that the signatory governments set up an ad hoc (sub) committee to continue the work of organizing the international seismic network. As soon as the required number of ratifications have been obtained, the permanent committee of experts, as envisaged in the treaty, would take over.

As to the information contained in paragraph 15 of the report concerning the working of the seismic system, it would seem to us that the envisaged arrangements are oriented too much towards the CTB parties. In view of the open character of the WMO communication system, the level 1 data will be available world-wide in any case. It

would also be desirable to include all seismic information available world-wide, i.e. including information from countries that are not members of the CTB. Therefore, a rather "liberal" policy with regard to level 1 data would seem recommended.

One last remark about the CTB. Although the report we are discussing does envisage a committee of experts for the seismic verification system, there is no mention of a more general, political "consultative committee" of any kind.

From paragraph 18 we gain the impression that the three negotiating parties intend to settle any questions that may arise amongst themselves. This would not be in the interest of strengthening the multilateral character of the treaty and we consider that of importance.

We would therefore favour a political organ that would deal with problems that may arise, while the committee of experts would be subsidiary to that political body.

CD/PV.97 pp.22-23 Pakistan/Marker 5.8.80 CTB

I would like to thank the delegations of the USSR, the United Kingdom and the United States of America for the submission of the progress report on the tripartite negotiations on the nuclear test ban. The report submitted this year is much more substantive than last year's, although it is not as detailed as we would have wished. It is also unfortunate that the report has been submitted once again at the very end of the annual session of the Committee. Nevertheless, we have examined the document with interest and would like to offer some comments on the basis of information conveyed in the progress report.

First, the distinction drawn between the prohibition of nuclear weapon tests and a moratorium on PNEs is of notable importance for the scope of the treaty. This conclusion is reinforced by the fact that the moratorium on PNEs will last only "until arrangements for conducting them are worked out...". This is a significant evolution in the positions of at least two of the three negotiating parties. We would have liked to know more about the "arrangements" for conducting PNEs that are to be worked out. Is it envisaged that PNEs can be conducted by any State, only by nuclear-weapon States, or under the aegis of some international agency?

Second, we note that the duration of the test ban has yet to be agreed upon. The special relevance of this issue is self-evident, since it will determine whether the treaty is designed as a genuine prohibition of nuclear-weapon testing or merely as a moratorium, however extended, of such tests.

Third, it seems that national technical means are to be used for the verification of the treaty while other "co-operative measures", including an international exchange of seismic data, will be elaborated after the treaty comes into operation. Since national technical means of verification are available only to a limited number of States, it is obvious that the access of parties to information regarding compliance will be unequal, at least until the international exchange is agreed upon.

Fourth, it would appear that the three negotiating parties have agreed on the principle that on-site inspection should be made only upon the agreement of the party under suspicion. This is obviously insufficient to give adequate assurance regarding compliance especially since PNEs are not to be prohibited under the Treaty.

Next, my delegation is somewhat perplexed by the information that the three negotiating parties have decided to develop additional measures to facilitate verification of compliance with the treaty. It can hardly be justified that their "special concerns or circumstances" are in any way greater or more acute than that of any other party, and we are left with the unfortunate belief that in the opinion of the negotiating parties the general provisions regarding verification are considered as inadequate to provide

assurance to each other. If this is so, the "additional" measures should be made part of the general treaty; to develop two levels of verification procedures would hardly be consonant with the desirability of obtaining universal adherence to the treaty.

We are similarly concerned that in several other respects, e.g. with regard to amendments, decisions at a review conference, etc., the treaty being negotiated would include provisions extending the right of veto to the five permanent members of the Security Council. Such stipulations are bound to inhibit the prospects for general acceptance of the treaty.

Finally, my delegation has noted that the progress report contains no assurance that the treaty being negotiated by the three parties will be submitted to the Committee on Disarmament for the purposes of elaborating a multilateral agreement which takes into account the views, and responds to the "vital national security concerns", of all States. On the contrary, the progress report makes the assertion that the three negotiating parties "continue to believe that their trilateral negotiations offer the best way forward". I should like to express the sincere view that at the present stage in international relations it will be self-defeating even for a powerful condominium of States to seek to impose an unequal and discriminatory treaty on the rest of the world. A nuclear test ban treaty must be seen not as a modality for regulating the arms race between the major nuclear Powers, or as another instrument of nuclear non-proliferation, but as a significant step in halting and reversing the nuclear arms race.

CD/PV.97

pp.29-30

Australia/Walker

5.8.80

CTB

We have been pleased to note the prominent role given to an international seismic data exchange in the verification procedures for the projected treaty as envisaged by the three negotiating parties. The three parties appear to have paid considerable attention to the work done under the auspices of the Committee on Disarmament and its predecessor, in developing the general characteristics of an international seismic data exchange. That is as it should be. This reinforces us in our view that the work of the Seismic Experts Group continues to be very important in the context of the treaty. We continue to believe that this area of the work of the Committee on Disarmament is of immediate practical importance and that it should continue to be accorded high priority by all delegations. The trilateral statement says nothing explicitly as to the continuing role for the CD, in this area. Delegations will recall the initiative taken by the Australian delegation earlier this year which is set out in document CD/95. At that time we proposed that the Committee could usefully address the question of institutional and administrative arrangements for an international seismic network to support a CTB treaty. Australia attaches importance to the full participation by all States, and especially by all members of the CD, in the consideration of a CTB treaty. It remains the established Australian position that work on the international seismic detection network could usefully commence before the comprehensive test ban treaty is finalized. Once more we commend our proposal to the consideration of the Committee in the context of organizing its future work on CTB.

More generally on the question of verification procedures, my delegation concurs with the view expressed in paragraph 19 of the trilateral report that the verification measures being negotiated -- particularly the provisions regarding the international exchange of seismic data, the committee of experts and arrangements for on-site inspection -- break significant new ground in international arms limitation efforts and will give treaty parties the opportunity to participate in a substantial and constructive way in the process of verifying compliance with the treaty.

Two delegations have suggested that there could be a moratorium on nuclear testing pending the completion of the comprehensive test ban treaty. The United States delegation would like, however, to explain the reason why a moratorium on nuclear testing, which we recognize is strongly desired by many nations, does not seem to us to be a good idea.

The United States has strongly and consistently held the view that a comprehensive test ban, in order to promote stability and mutual confidence among its participants, must be based on adequate measures of verification. A moratorium by definition would not be based on such measures.

As the tripartite report shows, we are engaged in a detailed and technically complex process of elaborating adequate verification provisions. Although we are confident that effective and mutually agreeable solutions can be achieved, a moratorium on nuclear testing could seriously complicate efforts to develop satisfactory verification arrangements. It could even have the effect of lengthening the negotiating process.

Therefore, while we understand the motivations of those who have called for a moratorium, we believe the most direct route for arriving at our common goal -- that is, earliest possible achievement of a comprehensive test ban that can truly promote mutual confidence among its parties -- is through the trilateral negotiations.

Some in this chamber have questioned whether verification problems are as complex as the tripartite report and previous statements about the progress of the trilateral negotiations would indicate. In the report on CTB prepared at the behest of the General Assembly and circulated in the Committee as document CD/86, one of the conclusions reached was that verification problems should no longer be an obstacle to reaching agreement on a CTBT. With due respect to the authors, however, I would like to point out that their own discussion does not fully bear out this conclusion.

I would cite in particular paragraph 117 of the report. This paragraph points out that the problems of verification of a comprehensive test ban necessarily differ in important respects from those of the partial test ban treaty. The following paragraphs of CD/86 go on in a dispassionate way to describe the complexities of the international co-operative measures to detect and identify seismic events, national seismic stations and on-site inspection. In this connexion, the three CTB negotiating parties stated, in paragraph 13 of their report to the CD, that:

"Such [verification] measures in the treaty itself, and the additional measures under negotiation to facilitate verification of compliance with the treaty, must first be agreed in principle, and then drafted in detail, which is of course a laborious process. It must be done with care because the implementation of these measures will have important impact not only on ensuring compliance with the treaty, but also on political relations among its parties."

If further expert opinion on this subject is desired, I would cite a statement of the Chairman of the Group of Seismic Experts, Dr. Ericsson, at the informal meeting the Committee held with experts on 18 July. In reply to a question Dr. Ericsson stated that there was a considerable difference between the current detection and identification capabilities and those envisaged by the Group.

In any event, we must bear in mind that even after a common understanding is reached on principles, achieving agreement on the vital details of such a highly complex and unprecedented undertaking is far from easy. Without agreement on the specifics, agreement in principle would be meaningless.

The first of the situations to which I would draw attention concerns the BW Convention. At the time of the negotiation of the Convention in 1972, biological weapons were regarded not only as offending humanitarian instincts but also as unreliable and indeed probably uncontrollable. In consequence the BW Convention was founded largely on trust. Although some welcome amendments were proposed by Sweden and supported by a number of countries, including my own, at the recent Review Conference, the effectiveness of the Treaty still depends in large measure on confidence that parties to the Treaty will comply with its provisions. As a depositary of the BW Convention, the United Kingdom is anxious that its provisions should not be undermined. Our concern was therefore aroused by reports of an outbreak of anthrax at Sverdlovsk in April 1979. The official explanations offered by the Soviet authorities for the event have been unconvincing and self-contradictory. They have in our view fallen short of the co-operative attitude that seems necessary if the consultative provisions of article V are to have practical meaning. The United States authorities have let it be known that they will continue to seek clarification of the incident. My Government shares this concern and hopes that the Soviet Government will yet provide an explanation which will satisfy world opinion.

The second situation to which I think it necessary to refer concerns the many reports apparently pointing to the use of lethal or incapacitating weapons last year and this year in south-east Asia and Afghanistan, and even more lately in a country of Africa. Unfortunately the Geneva Protocol contains no mechanism providing adequately for its implementation or for the verification of any reports of use of CW. In the view of my Government, the very least that the international community should now do is to arrange ad hoc for an impartial investigation of the reports to which I have referred. A situation in which reports of this nature remain unverified one way or the other, for months on end, demonstrates the importance of relating verification provisions to the scope of a CW ban. It will be evident that the unresolved doubts about the Sverdlovsk incident must have implications for our attitude to a CW convention. So have the reports of use of CW in south-east Asia and Afghanistan. They strengthen our view that trust has to be supplemented by verification of compliance in important arms control agreements.

My third example demonstrates a different point. It concerns allegations made about my own country, in connexion with chemical weapons. Much to our surprise, it has been variously alleged in statements broadcast from Moscow Radio or published by the TASS news agency in the course of this year that stores of nerve gas are held in the United Kingdom, and that the United Kingdom is engaged in the production of lethal chemical agents and is testing bacteriological weapons. These allegations are completely untrue and one wonders what purpose they were designed to serve, particularly coming from a country which is known to possess a large stockpile of chemical warfare agents as well as the means of delivery of these agents. My authorities were among those who, like the Federal German authorities, gave an invitation to CW experts to visit their country last year. We did not do this in order to hide anything. On the contrary, experts from member countries of the CD were able to visit the only nerve agent plant we had previously operated in the United Kingdom and to see how a plant of this kind could be and had been dismantled. I would merely wish to point out in this way that my Government showed openness in the matter, and that is what we wish others also would do.

I hope that in my remarks I have conveyed the sense of active importance which my Government attaches to the problem of the verification of international agreements. We do not believe that wide-ranging but vague and unverifiable proposals offer a realistic route to progress in arms control. There are proposals before the Committee which

purport to offer ways towards progress on a number of difficult arms control issues without fully addressing the important and still fundamental problem of verification. We believe that under no circumstances can States have confidence in an agreement on issues central to their security without having adequate means of verification. It is our belief that the work of the Canadian, French and Netherlands delegations and others should form the basis for further study in this field next year. Perhaps our negotiations then could include an attempt to define the type of verification provisions necessary in specific types of arms control agreements to ensure that all States can have confidence in them, thus tackling one of the central problems in the disarmament process.

World-wide confidence in the arms control process is today at a rather low ebb. It will be through the formulation and adoption of adequate and appropriate measures of verification that States will acquire the necessary confidence to allow them to see arms control as the best route to genuine security.

CD/PV.97

pp.43-44

India/Venkateswaran

5.8.80

CTB

As already pointed out in my last statement, we are convinced that a sound basis for formulating a treaty on the prohibition of nuclear weapon testing already exists. This applies not merely to the three negotiating partners but is valid in the larger context as well. Verification methods that already exist provide a reasonable basis for ensuring compliance with the treaty. What is required now is the necessary political will to negotiate such a treaty in good faith. As a measure of this political will we see no reason why as a first step a complete moratorium on further nuclear-weapon testing by all nuclear-weapon States cannot be declared forthwith.

I may point out that a moratorium was in fact in existence for a short period in the late 1950s; so the idea is not a new one. The necessity for verification does not imply that nuclear-weapon testing must go on. Lack of adequate verification, if that is indeed the present state of affairs, may delay a treaty being worked out. However, it seems to my delegation to be quite another thing to say that, pending adequate verification measures, nuclear-weapon testing must go on. My delegation therefore reiterates its position, notwithstanding the argument advanced against it by the distinguished representative of the United States of America, which we feel is far outweighed by the beneficial impact such a moratorium would have both psychologically and in practical terms in the conclusion of a CTBT.

While the three negotiators have agreed that there will be national technical means of verification, with the possibility of on-site inspections by mutual agreement, they have also underlined the important role that a global seismic monitoring network could play in the verification of compliance with the treaty. However, we are a little puzzled by the assertion that the three negotiating parties have agreed that "the treaty will also contain a provision permitting any two or more treaty parties, because of special concerns or circumstances, to agree by mutual consent upon additional measures to facilitate verification of compliance with the treaty". To our mind, any treaty which is negotiated must have verification measures that are applicable to all State parties to the treaty. The same rules must apply to all. We would be grateful therefore for further clarification on this point from the trilateral negotiators. What, for example, could be the special concerns or circumstances in which additional verification measures may be required to ensure compliance among themselves?

The trilateral report states that the negotiating parties have agreed that the treaty should prohibit any nuclear-weapon test explosion in any environment and contain a protocol establishing a moratorium for PNEs. Sweden welcomes this approach. The Swedish delegation also shares the view expressed in the trilateral report that a comprehensive treaty should not affect obligations assumed by parties under other relevant international agreements.

Obviously, the scope of the treaty has a bearing on the question of treaty verification. The discussion so far on CTBT verification has been entirely focused on the monitoring of underground nuclear explosions. In view of the fact that the 1963 Partial Test Ban Treaty contains no verification procedures it might in this context be appropriate to consider international verification arrangements also for atmospheric explosions.

An international treaty where all amendments and decisions adopted at review conferences must be subject to the agreement of all permanent members of the United Nations Security Council parties to the treaty could hardly gain widespread international support. Those countries which are continuing their testing and development of nuclear weapons have a special responsibility to achieve nuclear disarmament. Sweden, however, fails to see why these countries should be entitled to a special veto right under a CTB treaty. The international community is unlikely to accept such discrimination.

Sweden has often maintained that CTBT must include an international verification system and we have in various ways actively promoted the establishment of an international seismic monitoring system. The Seismic Ad hoc Group has outlined the structure of such a system.

We note with satisfaction that the negotiating parties have agreed on provisions for the establishment of such an international monitoring system. It is of great importance that this system will be efficient. This can be achieved by the active participation of a large number of countries.

The international system will need the service of international data centres to give all parties to the treaty equal possibilities to benefit from high-quality, globally-collected data in their verification of the treaty. The Swedish Government has in this connexion repeatedly stated its readiness to establish, operate and finance such an international centre in Sweden.

The trilateral report states that a committee of experts should be established for reviewing the operation of the international monitoring system and to consider improvements and technical developments that have a bearing on the treaty. The committee will also serve as a forum for exchange of technical information and for promoting the effectiveness of the verification system. Sweden shares the view that such an organization should be set up to oversee the ongoing operation of the international verification system and to provide a forum for discussion of any technical item that might arise from the operation of this system.

The trilateral report also suggests that this committee of experts be responsible for developing detailed arrangements for the establishment of the system. In the Swedish view, this work cannot wait until the treaty is in force. It should start immediately so that the verification system can be in operation at the time when the treaty enters into force. The Ad hoc Seismic Expert Group should be entrusted with this task and should, therefore, have its mandate expanded accordingly.

The negotiating parties have furthermore agreed on other co-operative measures. These include direct consultations, exchange of inquiries and responses and also on-site inspections on challenge. Sweden welcomes the progress made on these matters. However, the elaboration of provisions and procedures for such international consulta-

tions and exchange of inquiries as well as modalities and technical arrangements for on-site inspections will no doubt be time-consuming and tedious. Therefore this work should start in the CD without further delay. This requires, however, that the trilaterally agreed text on this item be made available.

The so-called national seismic stations to be set up in the countries participating in the trilateral negotiations are supposed to be established under separate agreement restricting the availability of the data from these stations. The Swedish delegation fails to see why such data, which technically are comparable to other seismic data collected within the international verification system should not be made generally available. In our opinion it would be beneficial to all parties if these data were to be included in the international data exchange.

It is important to bear in mind that the treaty that the CD has been requested to negotiate should be a truly international CTBT. There is, therefore, an urgent need to start multilateral negotiations on those parts of the forthcoming treaty where such negotiations could well prove meaningful already today. One such area is, for instance, the above-mentioned procedures and provisions for international consultations and inquiries and the modalities and technical arrangements for international on-site inspection on challenge. Here we feel that the CD could start negotiations immediately. Another area is the detailed specifications of the international seismic monitoring system and the tasks and procedures for the committee of experts. The Seismic Ad hoc Group would, in the Swedish view, provide an appropriate forum for this work. To this end we urge the negotiating parties to make available the agreed text on these areas and other relevant information. These are but some preliminary comments on the trilateral report. Sweden may revert to the matter as soon as it has been possible to study the report in greater detail.

CD/PV.98

p.24

Japan/Okawa

7.8.80

CTB

In the very important field of verification, the Japanese delegation can support in principle an international verification system centering on an international exchange of seismic data, a committee of experts, and provisions for on-site inspections when agreed upon. We are pleased to note that the recommendations of the Ad hoc Group of Scientific Experts established under the CCD and continuing its work under the Committee on Disarmament will be drawn upon in connexion with the establishment and operation of the international exchange of seismic data.

We also note that it will be the committee of experts that will be responsible for developing detailed arrangements for establishing and operating the international exchange. However, if the committee of experts is to hold its first meeting "not later than ninety days after the entry into force of the treaty", as is stated in paragraph 17 of the report, one is given the feeling that the international exchange of seismic data will not be put into operation for quite some time even after the entry into force of the treaty. This prospect causes concern to my delegation. In this connexion I wish to recall that the Japanese delegation has referred in the past to the need to elaborate the detailed arrangements for the international exchange well in time for the entry into force of the treaty. I also recall the Australian proposal that the administrative aspects of the international exchange could be examined by the Committee on Disarmament to prepare the ground for the international exchange when the treaty enters into force.

In view of the fact that the Soviet Union and the United States are by far the largest of the nuclear-weapon States, the additional measures to facilitate verification that the three negotiating parties have agreed to develop for themselves, as mentioned in paragraph 20 of the report, as well as the envisaged exchange of supplemental

seismic data among the three parties, as mentioned in paragraph 22, can be regarded as a realistic approach to the comprehensive test ban. My delegation strongly hopes, however, that the negotiation of such additional measures will not delay even further the conclusion of the trilateral negotiations as a whole.

CD/PV.98

p.36

Belgium/Onkelinx

7.8.80

CW

Belgium is prepared to associate itself with any effort undertaken to improve the possibilities of investigation.

The prohibition of the use of bacteriological and chemical weapons, as set forth in the 1925 Geneva Protocol, is unfortunately not accompanied by an investigation and verification procedure. The following two paths are open to us in seeking to make good this omission:

Either to begin consultations among the States Parties to the Protocol with a view to supplementing it by the adoption of new provisions on investigation and verification concerning the use of chemical and bacteriological weapons, since the 1972 Convention on Bacteriological Weapons does not refer to the use of these weapons;

Or else, in the case of chemical weapons, to consider extending the proposed scope of the future convention on the prohibition of the development, production and stockpiling of chemical weapons. If the prohibition were to extend to the use of these weapons, the international community would then have at its disposal, in the event of allegations of use being made, the general provisions of the treaty concerning investigation and verification.

In this connexion, I should like to stress how sympathetic the Belgian authorities have been to the proposal of Canada for the creation of an international verification control agency for an agreement on the prohibition of chemical weapons.

The two approaches to which I have referred should be the subject of consultations both in the Committee and in the General Assembly. If one or the other were to receive a positive response, it would then be possible to remove from international disputes an issue which is a source of concern to all and which serves to undermine the climate of trust without which fruitful relations among States are difficult to envisage.

CD/PV.98

p.38

India/Venkateswaran

7.8.80

RW

Both in regard to articles I and IV of the draft treaty presented by the United States and the USSR, we are of the view that there should be an explicit reference to transfer of radiological weapons as well, and the scope of the treaty should specifically also cover transfer.

Article III of the draft treaty is also ambiguous in nature. Its language seems to suggest that the scope of the treaty is open-ended and extends beyond radiological weapons. Therefore, either this article should be drafted in a more precise manner so that it is clear what is intended, or it may be deleted altogether.

With respect to article V of the joint United States-USSR draft we feel that it is necessary to introduce the words "any radioactive material or" before the words "sources of radiation" so as to complete the meaning of this article and to bring it into conformity with article II.

Our final comment today concerns article VII of the draft United States-USSR treaty on radiological weapons. We have already commented on this article before, and have expressed our inability to accept a specific reference to the Treaty on the Non-Proliferation of Nuclear Weapons to which we, as well as many other countries, are not parties.

We, therefore, propose that article VII should be reformulated as follows:

"Nothing in the Treaty shall be interpreted as detracting from the obligations assumed by any State under any other international treaty or other existing rules of international law governing an armed conflict."

My delegation would like to reiterate its willingness to participate, in a constructive manner, in the multilateral negotiations in the CD to formulate a treaty prohibiting radiological weapons. However, it is necessary that the views held by my delegation, as also those held by other delegations represented here, are adequately taken into account while drafting the final treaty text. While we appreciate the work already accomplished in this regard by the delegations of the United States of America and the USSR, we are of the opinion that the draft presented by them is capable of being refined and modified in a manner that will take into account the concerns expressed by delegations here. In this spirit we look forward to participating actively in multilateral negotiations on radiological weapons during the 1981 session of the Committee on Disarmament.

CD/PV.107

pp.8-9

Sri Lanka/Palihakkara

17.2.81

CTB

As regards our agenda, the first item on it for the 1981 session is the nuclear test ban, a subject which has been under consideration in various forums for more than 25 years and on which the General Assembly has adopted more than 40 resolutions, reflecting the international community's impatience over the failure on the part of nuclear-weapon States to conclude a comprehensive test-ban treaty. This was in spite of the undertaking to seek the achievement of "the discontinuance of all test explosions of nuclear weapons for all time" given by three nuclear-weapon States in the partial test-ban Treaty, which was reiterated again in the non-proliferation Treaty of 1968. One need hardly stress the utmost importance of a comprehensive test-ban treaty towards preventing qualitative improvements in existing nuclear weapons and the development of new types of weapons as well as maintaining a viable non-proliferation régime. As regards the so-called inadequacy of existing verification measures relating to monitoring of test explosions, the international community will no longer believe that to be a major obstacle or an excuse for further delay in embarking on negotiations towards a CTBT. Suffice it to mention here that the General Assembly, at its thirty-fifth session, recalled in resolution 35/145A, a resolution which was co-sponsored by Sri Lanka, "that all the technical and scientific aspects of the problem have been so fully explored that only a political decision is now necessary in order to achieve final agreement, that when the existing means of verification are taken into account, it is difficult to understand further delay in achieving agreement on an underground test ban and that the potential risks of continuing underground nuclear-weapon tests would far outweigh any possible risks from ending such tests". Resolution 35/145B requests the Committee on Disarmament to take the necessary steps, including the establishment of a working group, to initiate substantive negotiations on a comprehensive test-ban treaty as a matter of the highest priority, which the Group of 21 has been emphasizing time and again in this Committee. It is to be hoped that the nuclear-weapon States will contribute to the consensus necessary to establish an ad hoc working group on a CTBT, a contribution which will no doubt give some credibility to nuclear-weapon States' commitment to disarmament and also to the role of the Committee on Disarmament as the single multilateral body for disarmament negotiations.

We are witnessing the negotiations under way between the United States of America, the USSR and the United Kingdom and from time to time also have the possibility of obtaining reports on the development of their negotiations. What we have heard so far may sound encouraging but does not mean too much in practical terms. No progress has been made and the reconciliation of the positions of the three nuclear-weapon Powers is extremely slow. In our opinion the tripartite negotiations should not be an obstacle for parallel work both here and there with regard to an international convention on a comprehensive nuclear test ban. These are two complementary actions which must take place simultaneously and for which the only important thing is that they are both conducted towards a successful solution. It is our assessment that the standstill in the negotiations and the unresolved problems between the nuclear-weapon Powers primarily rest with the problem of verification. However, in several reports of the Ad Hoc Expert Group on Seismic Events it is clearly indicated that verification problems can be overcome successfully if there is a desire to do so. That is why we think that we should embark upon the road of a more comprehensive consideration of the nuclear test ban, for which the Committee, apart from the trilateral negotiations, is both competent and responsible. Full use should be made of the fact that we are prepared, as members of the Committee, to give our full contribution to the settlement of this issue. According to our statements, we all aim to achieve the same goal and this is the halting of the nuclear arms race. We should, therefore, all give an adequate contribution to this end.

The Yugoslav delegation considers as fundamental the question of a corresponding political will to arrive as soon as possible and comprehensively at a consensus regarding the adoption of an international agreement on a nuclear test ban. If such political will is not shown immediately, in both options of the negotiations, one can rightfully cast doubt upon statements to that effect or remarks of the nuclear-weapon Powers in which these countries expressed the will to endeavour for the cessation of the nuclear arms race. The expressed desire does not mean much by itself if it is not really implemented and if it is not accompanied by adequate behaviour that will assure all of us that there is readiness for the undertaking of corresponding action.

It is our view that the negotiation of a treaty prohibiting nuclear-weapon testing is today essentially a political problem. Adequate technical means of verification already exist to ensure compliance with the provisions of the treaty. This has been stressed once again in the report on the subject by the United Nations Secretary-General which stated, inter alia: "Verification of compliance no longer seems to be an obstacle to reaching agreement". The risks involved in the possibility of surreptitious testing of nuclear warheads of less than 2 to 3 kilotonnes would be far outweighed by the increased security that would result for all States due to a qualitative restraint on the nuclear arms race and the increased sense of confidence and mutual trust that such a prohibition would bring about in relations among States. We must not forget that any further delay in the conclusion of such a treaty may well make our efforts in that direction irrelevant. As in other areas of weapons technology, the regrettably slow pace of disarmament negotiations is always in danger of being outstripped by the speed of technological change. One must reflect over the very real possibility that the verification system available to us today to enforce compliance with a prohibition of nuclear-weapon testing at the present level of technology may be the best we may ever get.

Further advance in such technology may soon make satisfactory verification technically impossible, if we continue to drag our feet. We therefore appeal to the countries which continue to insist on a foolproof verification system, to display a sense of pragmatism and political wisdom in dealing with this issue of concern to all of us. If, however, the parties engaged in trilateral negotiations feel that there is inadequate appreciation of the problems involved in this respect, surely the blame must lie with them for not providing this Committee with adequate information in order to enable it to form a proper judgement.

During the 1980 session of the Committee on Disarmament, the Group of 21 strongly urged the setting up without delay of an ad hoc working group to undertake multilateral negotiations on the complete cessation of nuclear weapons testing in all environments. We regret that it was not possible to achieve a consensus on this proposal last year. It is our earnest hope that those delegations which earlier expressed reservations about this proposal will heed the call of the international community and join the mainstream of opinion in this Committee in agreeing to the immediate setting up of such a working group during this present phase of the Committee's deliberations.

A suggestion has been made that such an ad hoc working group should begin its work with a limited mandate which would focus on the institutional and administrative steps necessary for establishing, testing and operating an international seismic monitoring network and effective verification system. My delegation cannot agree to such a limited and narrow approach, for the following reasons. Firstly, the verification system that would be adopted in relation to a comprehensive test-ban treaty cannot be predetermined. The nature of the verification system would depend upon the kind of treaty which we are able to negotiate in a multilateral context within this Committee. Secondly, the details of an international seismic monitoring network which would form part of the verification system of a future comprehensive test-ban treaty is already the subject of intensive discussion with the Ad Hoc Group of Scientific Experts on Seismic Events set up under the aegis of this Committee. The Committee on Disarmament, on the other hand, is a political body, and must function and be seen to function as such, although it may be assisted in its work by technical experts. As in the case of our negotiations on chemical weapons or radiological weapons, we should get down to concrete work on a comprehensive test-ban treaty, bringing in experts whenever we feel it necessary to advise us on various aspects or elements of the treaty, including those relating to verification.

In conclusion, I would once again reiterate a suggestion that has been made by my delegation several times in the past. We have recommended that pending the conclusion of a truly universal and comprehensive treaty prohibiting nuclear weapons testing, nuclear-weapon States should immediately agree to an indefinite moratorium on their nuclear weapons tests. Such a moratorium would help to convince the international community that nuclear-weapon States are indeed serious in their commitment to the eventual goal of nuclear disarmament.

CD/PV.108

p.22

GDR/Herder

19.2.81

CTB

Some delegations have expressed the view that the Committee should concentrate on the institutional and administrative measures which are necessary for an international seismic monitoring network and for an effective verification system. These questions are no doubt of great importance. However, they cannot be discussed separately from the basic question, namely, the scope of the treaty. As to the scope, the German Democratic Republic holds the view that all nuclear-weapon tests of all nuclear-weapon States have to be prohibited. We would be interested in listening to the views of all the

nuclear-weapon States on this idea.

Like other delegations, we attach great importance to effective measures of verification of compliance with a future CTBT. But under no circumstances should the verification issue serve as a pretext for delaying the conclusion of such a treaty. We reject any attempt to look endlessly for new verification "shortcomings" in order to block the way to a comprehensive test ban. Of course, as was already said, verification cannot be foolproof. However, the national technical means of verification existing nowadays, a system of international exchange of seismic data to be established and certain procedures of international co-operation, including on-site verification on a voluntary basis, would ensure to a sufficient extent compliance with a corresponding treaty. My delegation fully shares the view expressed on 3 February in this Committee by Mrs. Thorsson, the distinguished representative of Sweden, that the likelihood of the detection of clandestine nuclear-weapon tests is very high, and that the existing verification means are adequate. We must ask the opponents of a nuclear-weapon test ban: is not the risk of a violation of the treaty much less than the threat caused by the absence of such a treaty?

Concluding my statement, I should like to make some brief remarks on the activities of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events. Its progress report (CD/150) presented last week shows that the Group has worked intensively. Valuable findings have been made as to a number of detailed problems, which eventually will be auspicious for establishing an international monitoring network within the framework of a treaty on the complete and general prohibition of nuclear-weapon tests. In particular we support the demand expressed in the report for the inclusion of additional seismic stations located in the southern hemisphere in the global network. This would increase considerably the effectiveness of such a system. It goes without saying that a global system for international co-operative measures to detect and identify seismic events could be established only after the conclusion of a CTBT. In our view the seismic Group constitutes the appropriate framework for a more comprehensive consideration of the administrative and institutional aspects of a global data exchange. Progress towards the solution of the essential questions of a treaty on the complete and general prohibition of nuclear-weapon tests would make it possible to specify the mandate in this respect and to enhance further the role of the Group.

CD/PV.109

p.7

Japan/Okawa

24.2.81

CTB

The distinguished Ambassadors of Nigeria and India, among others, have urged the delegations of the three countries participating in the tripartite negotiations to respond to the questions which were put to them by many delegations towards the end of the session last year in connection with the tripartite report contained in document CD/130. I associate myself with that request and hope that the early resumption of the tripartite talks will facilitate their responding to that request. My own delegation raised a number of points in the statement I made in the Committee of 7 August last, among which was my delegation's concern that the international exchange of seismic data will not be put into operation for quite some time even after the entry into force of the treaty. This concern was revived the other day when I heard the distinguished Ambassador of the German Democratic Republic say that "It goes without saying that a global system for international co-operative measures to detect and identify seismic events could be established only after the conclusion of a CTBT". My delegation continues to feel that the detailed arrangements for the international exchange should be elaborated before the entry into force of the treaty. We also maintain that a global experimental exercise

of the exchange system should be implemented in advance of the entry into force of the treaty so that we can be certain that it will work effectively and that it can be put into operation immediately after the treaty enters into force. We find it difficult to understand why one of the tripartite negotiators which has expressed its support for the establishment of the CTB working group is reluctant to take part in such a global experimental exercise, and did not find it possible to participate even in the recent trial exchange that was conducted on a regional basis in October and November 1980. I reiterate my delegation's hope that all countries represented in the Ad Hoc Group of Scientific Experts will be able to participate in future trial exchanges and also in an experimental exercise on a global scale that would greatly contribute to the smooth and immediate implementation of the exchange system upon the entry into force of the treaty.

Finally, I am instructed to reiterate my Government's interest in seeing all States voluntarily refraining from all nuclear-test explosions, including all nuclear explosions for peaceful purposes, during the period prior to the conclusion of a comprehensive test-ban treaty.

CD/PV.110 p.40

USSR/Israelyan

26.2.81

CTB

Some delegations in the Committee on Disarmament have expressed a certain misunderstanding of the position of the Soviet Union as regards the testing of an international global network to detect and identify seismic events. The question is sometimes asked why the Soviet Union is in favour of establishing such a network only after a treaty banning nuclear-weapon tests has been concluded and not in the immediate future. Let us ask frankly what is this network required for? The answer is, to verify compliance with the treaty. And if there is no treaty? Let us suppose for a moment that we fail to reach agreement on such a treaty; then what will be the use of establishing such a network, spending huge sums of money on it and carrying out an extremely expensive global testing of it to boot? And will this not be a weakening factor, will it not cause States to slacken their efforts to achieve a complete prohibition of nuclear-weapon tests?

We sometimes have the impression that certain delegations instead of mobilizing all their energies and efforts towards the attainment of a treaty with the participation of the five nuclear-weapon Powers, are directing them at a secondary matter and exaggerating the importance of the difficulties of ensuring in the future the reliable operation of a global international network. We are anxious that there should be no doubts as to the position of the USSR in this regard and that it should be clear to everyone that we see the network as being useful once the treaty banning nuclear-weapon tests is in existence. At the same time, we want to emphasize that we are not against a consideration of the institutional and administrative steps necessary for the establishment, testing and operation of an international global network for the detection of seismic events. This issue also could be considered within the framework of the proposed working group. Of course, the network itself could be established only after a treaty on the complete and general prohibition of nuclear weapon tests has been concluded.

CD/PV.112 p.16

Kenya/Shitemi

5.3.81

CTB

Since its establishment in 1976, the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events has submitted several reports to this Committee in the hope that they could contribute to the solution

of the verification question.

The General Assembly has, through its numerous resolutions, called upon all the nuclear-weapon States to refrain from conducting any testing. That the Assembly attaches the highest priority to this question is indicated in paragraph 50 of the Final Document of the special session devoted to disarmament and in its latest resolution, 35/46, in which it called upon the Committee on Disarmament to exert all efforts in order that a draft comprehensive nuclear-test-ban treaty may be submitted to the General Assembly no later than at its second special session devoted to disarmament to be held in 1982.

Since the beginning, the discussions on this question have been faced by three problems which the nuclear-weapon States appeared to have had difficulties in resolving satisfactorily, namely, the questions of whether the adoption of a comprehensive test-ban should be made contingent upon the participation of all nuclear-weapon States, the control of the conduct of nuclear explosions for peaceful purposes under a ban, and that of effective means of verification. It is the understanding of my delegation that the first two problems have been solved and that the only major remaining issue is that of verification.

Without dwelling on this subject any longer, I think it would not be unreasonable to conclude that the question of the nuclear test-ban has been discussed exhaustively and that any further deliberations of a general nature will not contribute or even improve the work already done. What we need at this juncture is political will to begin concrete negotiations on the subject in the hope that we will have a draft ready to submit to the Assembly at its second special session on disarmament. We strongly urge the members of this Committee to show their good-will to facilitate the establishment of the two ad hoc working groups, on a nuclear test-ban and on the cessation of the nuclear arms race and nuclear disarmament. We have already expressed our support for the formation of these ad hoc working groups in all our earlier interventions in plenary meetings of this Committee.

We very much hope that the collective stand on this subject taken by the Group of 21 will be heeded.

CD/PV.113 p.21 Pakistan/Ahmad 10.3.81 ND

Finally, the question of verification will assume special importance in the context of multilateral negotiations on nuclear disarmament. At present, reasonably effective measures of verification are available to only two or three advanced States. For instance, the SALT II agreement provides for some novel techniques to ensure compliance, such as non-interference with national means of verification. The question arises as to how such measures for effective verification can be developed at the international level. In this context, the proposals for the International Satellite Monitoring Agency and the seismic monitoring system envisaged assume special importance.

CD/PV.113 pp.30-31 Norway/Holst 10.3.81 CTB

The technical issues are complex, especially those which related to verification. However, the benefits of an agreement and the risks involved in violating such an agreement should in my view now outweigh the technical obstacles to an agreement.

An adequate verification system is a necessary component in a total test-ban regime, both in order to ensure compliance and to build confidence. It is precisely in that area, concerning the question of an adequate verification system, that my country

is making its contribution through the expertise and instrumentation provided by the Norwegian seismic array (NORSAR).

A major part of such a verification system will be an effective international exchange of seismic data. In recent years most important progress has been made towards the establishment of a system for international seismic data exchange by the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events. This Group was originally established by the Conference of the Committee on Disarmament in July 1976 following a Swedish initiative, and later maintained by the Committee on Disarmament. Norwegian scientists have participated actively in the work of the Ad Hoc Group which, in its reports CCD/558 and CD/43, recommended the establishment of a global seismological system in order to facilitate verification of a CTB. As the scientific secretary of the Ad Hoc Group, a Norwegian scientist has been responsible for co-ordinating the technical activities of the Group. Another Norwegian expert is currently heading one of five study groups set up by the Ad Hoc Group with special responsibility for co-ordination of the groups' efforts to achieve a flexible and efficient international exchange of seismic waveform data.

The seismological observatory NORSAR, which comprises more than 50 seismometers distributed over the south-eastern part of Norway, has for more than 10 years been recording signals from earthquakes and underground nuclear explosions. Experts from many countries have participated in the research activities at NORSAR. These have resulted in improved methods for distinguishing the signals of explosions from those of earthquakes. This work has contributed to the technical feasibility of verifying a comprehensive test-ban agreement. In my view Norway is in a position to make significant contributions to the control system associated with such a treaty, by making NORSAR data available for a global seismological system, and by assisting in the scientific evaluation of the recorded data in order to verify adherence to the treaty.

In his address to the United Nations General Assembly's first special session on disarmament in 1978, the Norwegian Foreign Minister stated Norway's willingness to make NORSAR available as one of the stations in a global seismic verification system to monitor adherence to a comprehensive nuclear-test-ban agreement. NORSAR's detection capability for several important areas of the world is superior to that of any other of the seismic stations listed in document CCD/558.

During the past 10 years, Norwegian scientists have conducted extensive studies and completed large-scale research projects relevant to the problem of the detection, location and identification of underground nuclear explosions. Results from the most recent research have been presented to the Ad Hoc Group of Scientific Experts on Seismic Events for inclusion in the Group's report.

Under the Ad Hoc Group's current mandate the following technical contributions have been presented by Norwegian experts:

- (1) Magnitude estimates of earthquakes and underground explosions. This study was undertaken to obtain improved magnitude estimates at stations close to a given seismic event. It is recommended that the currently used magnitude-correction factors should be revised in order to obtain uniform determination of magnitude for earthquakes and explosions.
- (2) Identification of seismic phases from regional events. This study is based on data from an experimental small array which has been in operation at NORSAR since 1979. It is shown that seismic phases can be identified with high reliability from such an array, by use of specially developed signal processing techniques.
- (3) Location procedures for regional seismic events. This study describes a location procedure for a small array that can provide location estimates for regional seismic events with an error of less than 30 km. Such location data, although preliminary in character, would be most useful for event definition when reported to the international

data centres of a global surveillance network.

(4) Options for high-speed exchange of seismic waveform data. This study aims at evaluating the possibilities of using modern data communication technology to achieve fast and reliable exchange of seismic waveform data in digital form. The study recommends that practical experiments be carried out in this connection. Norway is willing to co-ordinate such experiments.

I understand that in its efforts to design a global surveillance system most of the work of the Ad Hoc Group has been based on currently available technology. In the coming years we hope to participate actively in upgrading such a global system to include the most advanced communications and computer systems available.

CD/PV.117

pp.10-11

Sweden/Lidgard

24.3.81

CW

On the question of verification, the reports from the bilateral negotiations have unfortunately not been of very great help. We note, however, with satisfaction that verification by challenge seems to be a concept which the bilateral negotiators have accepted. It can also be safely assumed that everybody by now is entirely aware of the crucial importance of a system of adequate verification. Laborious negotiations on this subject are still ahead of us, and difficult political decisions may be required to arrive at mutually and generally acceptable solutions. The will which so far has been shown in the CD this year gives me, however, confidence that the problems will in the end be overcome. The Swedish delegation attaches great importance to the role confidence-building measures will play in this connection, already in the course of our negotiations.

The technical problems connected with verification will no doubt also require much further work. I am referring both to such verification measures as may be required for the control of the destruction of stockpiles, and to such measures as will subsequently give assurance about compliance with the convention. The consultative committee, which most probably will be set up under the convention, will have important tasks in that connection. The complaints procedure will also have to be worked out carefully in order to facilitate the handling of any problems that may arise.

Last year's report of the Working Group on Chemical Weapons as well as the Group's continued work this year have shown that there is a convergence of views on the substantive issues which is sufficiently broad for starting the actual elaboration of a convention. As has been strongly emphasized by my delegation already long ago: the Working Group should without delay be provided with a mandate to carry out such a task in an appropriate way.

A well-known expert on chemical weapons, Julian Perry Robinson, commented upon the negotiations on chemical warfare arms control in an article with that title a year ago (Arms Control, Vol.1, May 1980, Number 1). He stated therein that the search for a CW convention warranted wider and closer attention than it had so far attracted, not least because of the precedents it could set for negotiations in other fields. First, he said, the negotiating objective subscribed to by all of the participants is not a mere reduction or ceiling, but a full-blown measure of disarmament. In accepting this objective, Governments are, according to his view, tacitly acknowledging that in some circumstances arms control may serve not only as an adjunct but also as an alternative to military strength as a determinant of security. Secondly, he continued, because of the nature of CW weapons, success in the negotiations now appears contingent upon general agreement to accept on-site inspection as a verification technique. Thirdly, a successful outcome may also depend upon agreement that specific confidence-building measures should play a concrete role in the régime to be established by the CW convention. The author concluded with the remark that it may be no exaggeration, then, to view the CW

talks as a proving ground for the future of arms control.

Even if this last terminology may not be the first choice of everyone here, I think we would all generally agree with his characterizations. There is no need for further underlining the importance of our task.

CD/PV.117 p.21 Indonesia/Darusman 24.3.81 CW

One of the weaknesses of the 1925 Protocol is the absence of a verification machinery to ensure that the provisions of the instrument are complied with by the parties to it.

As stated in the Indonesian working paper, CD/124, we support the idea of an international as well as a national system of verification for the new convention for all the prohibited activities, namely, the development, production, stockpiling and use of chemical weapons. As regards the international aspect of the verification system, a variety of mechanisms has been proposed. My delegation will continue to co-operate with other delegations in trying to arrive at an agreed machinery.

CD/PV.117 p.25 Denmark/Michaelson 24.3.81 CW

As mentioned before, experiences with the 1925 Protocol -- and, I might add, the Convention on biological weapons -- have proved that reliable verification procedures are a must.

Adequate verification of a CW ban must cover the following areas in particular:

- (a) Destruction of existing stocks of chemical weapons;
- (b) Destruction or closing down of existing production facilities for such weapons;
- (c) Control of current production of sensitive chemical agents to the extent necessary for the observance of a production ban.

In a number of working papers and documents tabled in the CD it is anticipated that the parties upon accession to a CW convention will be obliged to declare stocks and means of CW as well as the means of production of chemicals covered by the convention. Further, the plans for the destruction of CW stockpiles and for the destruction or dismantling of production facilities will have to be declared. I might add that Denmark takes a special interest in the question of means and procedures for destruction with regard to CW.

In view of the extremely complicated nature of the issues raised by verification of a CW convention it is felt that consideration should be given to the development of verification procedures which would involve the minimum element of intrusion. For the time being it appears, however, that on-site inspections constitute the only fully effective means of verification. Accordingly, such visits require the expertise of a highly qualified international agency which can ensure that inspections are properly arranged and carried out without unwarranted intrusion.

CD/PV.117 pp.26-28 Finland/Miettinen 24.3.81 CW

The main outstanding problems are questions pertaining to the scope, definitions, criteria and verification. This is not surprising, since the same problems are equally difficult in any arms control or other agreements. But as they have been solved elsewhere they cannot be impossible here either.

In all these deliberations the problem of verifying compliance with an eventual

treaty has often been on the forefront. Finland as a neutral country has a natural interest in disarmament and has thus endeavoured to make its contribution also to the efforts to solve this problem. As early as in 1972 Finland took a decision to create, on a national basis, a chemical warfare control capacity for a possible future international use. A working group of chemists has been employed to study analytical methods for chemical warfare agents for the purpose of such a control capacity.

Against this background, Finland has tried to develop its project on the role of instrumental analysis of chemical warfare agents and their verification. A working document (CD/164) has been distributed today to the members of this Committee which explains the present stage of the project we have under way. The project has been conceived as a multipurpose one, both substantively and functionally. Substantively, the planned control capacity could be used in three different verification activities: verification of the destruction of stocks, of the non-production of chemical weapons, and of alleged use. Functionally, the capacity could be used regardless of the modalities of agreed verification. This means that it could be used for national verification or any combination of national and international inspection; it could be used in connection with an investigation ordered by an appropriate international authority, and finally it could meet some of the concerns expressed by some developing countries about possible difficulties in carrying out verification by their national means only.

The progress of the Finnish project has been described in working papers and handbooks that Finland has annually presented to the CCD and the CD. These are listed in the working document we are presenting today.

The Finnish project concentrates on the development of the methodology necessary for a detailed trace analysis of any control samples that could be collected to verify a ban of chemical weapons. After the development of satisfactory methodology and the corresponding data bank, problems connected with the collection and preparation of samples for analysis will be studied.

The first step in the Finnish project was to synthesize model nerve agents and related chemical compounds, and examine their relevant properties with respect to possible verification analyses. After that, the suitability of available instrumental techniques for the identification of CW agents was studied. By using the most suitable techniques, and selected repeatable measuring conditions, an initial data base was recorded for about 150 agents and their degradation products. The selected techniques were arranged in the form of a system of microanalytical methods, and this system was proposed for consideration as a basis of international standardization of CW verification analysis. The proposed system was published by the Ministry for Foreign Affairs of Finland in 1979 and 1980 in the form of handbooks as referred to earlier (CD/14 and CD/103).

The Finnish project has also trained several research workers in the field of CW verification analysis. The head laboratory of the project is located at the Department of Chemistry of the University of Helsinki but the research is carried out in close co-operation with several other Finnish laboratories.

The primary goal of the first phase of the Finnish project was reached in summer 1980. It was a sensitive identification system for the most important supertoxic agents. The goal of the next phase is the development of detailed procedures for sample pre-preparation and quantitative organic determination on the trace level of known and potential agents. Accurate methods are necessary for obtaining useful information also on complex and metabolized sample matrices. Parallel with these studies, the Finnish project concentrates on the automation of the verification analysis, including the development of automatic monitoring instrumentation. Automated verification analysis makes possible sensitive monitoring of the prohibited chemicals alone, decreasing the fear of revealing commercial and industrial secrets from industrial samples by unneces-

sary revelation of other, peaceful compounds. The third future goal is the extension of the original data base to any chemical compound relevant to a CW ban.

Detailed studies on sample collection can be initiated only after completing the present methodological development of trace analysis. Such studies are, however, of primary importance in preparing detailed instructions for sample collection for verification analysis. Miniature field tests in the open air are necessary, and are being planned. They will include experiments for remote monitoring of air and water.

During the eight years when the Finnish project has been functioning, the sensitivity and specificity of analysis of organic chemical compounds has improved tremendously, by many orders of magnitude. Ten years ago one had to be happy if one could identify by comparison a known substance of which only a millionth of a gram, 10^{-6} g, was present in the sample. Today one can identify and structurally elucidate unknown compounds in 10^{-9} , or -- in favourable cases -- 10^{-12} g -- amounts which means up to a million times higher sensitivity. And there is still much room for improvement because 10^{-12} g contains a million times a million, or 10^{12} g, molecules of the average molecular weight of nerve agents. It is quite possible and even probable that during the next 10 years the sensitivity of organic analysis will further increase by several orders of magnitude.

What was said above concerns the sensitivity of instrumental analysis. One can further increase the sensitivity of the total, i.e. environmental analysis, by increasing the size of the environmental sample. One can, for instance, instead of the customary few litres of air pump many cubic metres, even thousands of cubic metres, of air through a trap where the desired compounds are captured, and process the condensate for analysis. The more complex the matrix -- a condensate of air, clean surface water, polluted water or a sample of soil, plant or animal tissue, etc. -- the more complicated the preparation, enrichment and pre-fractionation of the sample. This is a vast and demanding field which will require a lot of research in the coming years.

But soon it will be possible to identify any use of chemical agents in the open air like field testing, anti-insurgency activities or chemical warfare -- from distances of hundreds or thousands of kilometres below the wind. If good meteorological data are available, as is today the case for large parts of the globe, a trajectory can be calculated for the air package containing the agent and with known wind speeds its approximate location of origin can be calculated. If satellite observations are available from this region, an idea of the nature of the release may be formed.

The eight years' experience of the Finnish project shows that continuous research is needed to keep the methodology of analysis of CW agents abreast of the rapid technical development in instrumental technology. Even more demanding is the sample collection and pre-treatment. However, soon it will be possible to verify any wide area use (covering hectares) of CW agents in the open air from great distances but not production or destruction of such agents in hermetic facilities or their stockpiling in hermetic shelters. Verification of these activities will require on-site inspection, the terms of which have to be defined in the convention. This is the political part of the total problem of verification. Organo-analytical research cannot solve the political part of the problem but it can guarantee that the samples can be adequately analysed if they can be obtained.

CD/PV.118

pp.8-9

FRG/Pfeiffer

26.3.81

CW

First, the joint USSR-United States report on progress in the bilateral negotiations on the prohibition of chemical weapons of 7 July 1980 (CD/112) states that both negotiating parties "believe that the fulfilment of the obligations assumed under the future convention must be subject to the important requirement of adequate verification".

Secondly, the report of the Ad Hoc Working Group on Chemical Weapons to the Committee on Disarmament of 4 August 1980 (CD/131/Rev.1) refers to a general convergence of views among the delegations who participated in the discussion in recognizing "the importance of adequate verification" and believing that "verification measures should be commensurate with the scope of the prohibition and other aspects of a convention".

Unfortunately, there still seems to be a rather wide gap between those delegations favouring an approach which primarily relies on national verification measures and those which are of the view that verification should be essentially based on international measures. This question will be further discussed in the Working Group but it is pertinent to express one important point already now: as long as the signature of a State under a treaty is not sufficient to convince all parties that it is indeed observing all the stipulations of the treaty -- and if this were not the case today and in the foreseeable future, there would be no need for verification at all -- so long will the signature of the president of a national verification agency confirming that the State which employs him is not cheating have just as little value. One may deplore this state of affairs, but one cannot deny it.

That is why my Government is firmly convinced that only international verification measures can give States a credible assurance that a ban on chemical weapons is indeed being observed by all parties. To be effective, however, such measures have to include mandatory on-site inspections, which are, as of today, indispensable if a verification body is to satisfy itself as to the non-existence of activities contrary to a convention. My Government therefore welcomes the convergence of views, stated in the report of the Working Group on Chemical Weapons, that on-site inspections under certain conditions and procedures should be included in the convention.

Under the Brussels Treaty of 1954, the Federal Republic of Germany renounced the manufacture of chemical weapons. Since then, a special Treaty agency has verified the observance of this commitment. Regular checks are being carried out in chemical plants in the form of on-site inspections in order to verify that no substances which are classified as chemical weapons are produced. The experience of well over twenty years shows that it is possible adequately to verify a ban on the production of chemical weapons with reasonable means and without prejudice to the commercial interests of the chemical industry.

My Government has, in a workshop which was held in the Federal Republic of Germany in 1979, acquainted a group of 55 experts from 24 States with our experience in the field of on-site verification. The results of this workshop have been submitted to the Committee on Disarmament as a working paper (CD/37 of 12 July 1979). Some more recent considerations were presented last year to the Ad Hoc Working Group on Chemical Weapons as CD/CW/WP.5 entitled, "The impact of on-site inspections of current civilian production on the chemical industry". Furthermore, my delegation had the occasion to give a detailed account of the experience of the Federal Republic of Germany in the field of on-site inspections in an informal meeting outside the purview of the Working Group.

From the considerable interest with which these activities have met, we infer a growing appreciation of our position. We hope that the discussions in the Working Group will lead to a further narrowing of the still existing gap between opinions on this matter.

Let me come back to the connecting link -- which I mentioned earlier -- between the Geneva Protocol and a chemical weapons ban. My Government feels that this link could be provided by an inclusion in the chemical weapons ban of a verification procedure ensuring the observation of the Protocol. Considering the widespread recognition of the necessity of adequate verification and the fact that the Geneva Protocol

does not, in fact, provide for any verification at all, such a provision should not pose insuperable difficulties.

A verification mechanism concerning the Geneva Protocol would, in particular, be of importance in two events:

During the period necessary for the destruction of chemical weapons there could be allegations that a State had used chemical weapons; these would require verification.

After the expiration of this period there could be a need for verification that States had not used any stockpiles which inadvertently or on purpose had not been destroyed.

My delegation would welcome any suggestions which delegations might have concerning this very preliminary proposal which I have just put forward.

CD/PV.118 p.22 Canada/McPhail 26.3.81 CW

I would therefore suggest that members now centre their efforts on an analysis of adequate verification procedures and ways by which they could be implemented. These questions remain major stumbling blocks. National experts who are with us can make an important contribution to resolving them.

First and foremost amongst these questions is the form that verification will take and the interrelationship between the concepts of international and national methods I am tabling today (as CD/167), which will be distributed in all languages) a first step by Canadian experts to consider some of the implications of this aspect. I trust that this analysis in support of the Working Group's overall mandate will form a useful basis for discussion.

Our preliminary analysis suggests that each signatory must maintain a national verification group, and of course knowledge of its organization and responsibilities would be most useful. For nations without stocks of weapons and without production facilities this national commitment would be very small.

There must be as well an international verification agency. Thoughts on this have been advanced by a variety of nations in the past. Our analysis suggests that adequate assurance to the international community should be achievable through available resources. It is clear, however, that for certain activities some form of on-site inspection will have to be accepted to provide this assurance, since remote sensing by national technical means will be insufficient.

I invite other members to comment and to build on this paper. Canada agrees with the Chairman of the Chemical Weapons Working Group, Ambassador Lidgard, that problems related to verification are not insurmountable and that ways can always be found to deal with them.

CC/PV.118 p.25 China/Yu Peiwen 26.3.81 CW

The Chinese delegation, like many other delegations, has consistently favoured stringent and effective international monitoring and verification measures for prohibiting chemical weapons. We share the view expressed in working paper CD/106 put forward by the French delegation that "it would be more dangerous for the security of the countries affected to prohibit the manufacture and possession of chemical agents and weapons without providing means of verifying the strict application of the prohibition than to have no agreement whatsoever." This is completely in accord with the actual situation. The fact that the 1925 Geneva Protocol does not contain articles on

complaint and verification procedures with regard to violations of the convention prohibiting the use of chemical weapons has resulted in no investigation and confirmation of chemical weapons having been used in many wars and armed conflicts. This has emboldened some countries to use chemical weapons unbridled.

In its working paper CD/102, the Chinese delegation also clearly states that there should be stringent and effective measures for international control and supervision to ensure the strict implementation of the provisions of the convention. An appropriate organ of international control should be set up for this purpose charged with the responsibility of verifying the destruction of chemical weapon stockpiles and the dismantling of facilities for their production. The organ should also be empowered to investigate charges on the use of chemical weapons and on any other violations of the convention. Appropriate measures should be spelled out to deal with verified cases of violations of the convention with a view to bringing about their prompt cessation. Moreover, the organ should provide strong assistance to imperilled contracting parties.

How then can the organ of international control be enabled to carry out "stringent and effective" verification? In a statement which I made at the plenary meeting of the Committee on Disarmament on 3 July 1980, I clearly stated the position of the Chinese delegation: "In view of the uneven levels of scientific and technological development of the contracting parties, there is a great disparity between the parties in verification techniques and devices. If we depend on the parties themselves to monitor each other with the verification devices which they possess, this could prejudice the effectiveness and authoritativeness of such verification." Therefore, the organ of international control "should have qualified experts and advanced and effective verification techniques and devices to enable it to discharge the function of clear verification with which it is charged. In this way all contracting parties will be subject to equal control thereby ensuring the strict implementation of the convention."

Many delegations attach very great importance to the question of on-site inspection, and have put forward quite a number of specific proposals. The Chinese delegation is of the view that in order to ensure strict implementation of the articles of a convention on the complete prohibition and total destruction of chemical weapons, provision must be made for certain necessary on-site inspection measures. For instance, there should be international on-site inspection measures with regard to charges on the use of chemical weapons, the destruction of chemical weapon stockpiles and the dismantling of facilities for their production.

Various delegations have suggested three methods of dealing with the question of production facilities for chemical weapons: dismantling, conversion to peaceful purposes and shutting them down. We consider dismantling to be conducive to enhancing a sense of security and trust between States and is the most appropriate method for dealing with facilities for the production of chemical weapons. Converting them to peaceful production and shutting them down are not ideal measures, since they would not only make verification more difficult, but would also carry the potential risk of the facilities being utilized again within a short period of time to renew production of chemical weapons.

Other issues currently under examination by the Working Group include the system of measures designed to ensure compliance with the provisions of the convention, through a combination of national and international means of verification. Brazil believes that an independent international control authority should be established under the convention on an egalitarian basis, and entrusted with the administration of the

international verification system. Its duties would include the compilation of data provided to it by the national systems organized by each State party, the analysis and circulation of such data to all States party, as well as co-operation and assistance to the parties with regard to the national mechanism of control and verification. On-site inspections, on a voluntary basis, could be performed by the international authority, subject, in each case, to express agreement by the State party in question. Furthermore, the international procedures of verification should be periodically reviewed, taking into account new scientific and technological developments. The complaints procedure and the mechanism of periodical review of the Convention should not result in discriminatory arrangements; all States party to the instrument are entitled to equal treatment and equal rights.

CD/PV.119

pp.13-17

USSR/Issraelyan

31.3.81 VER,CW

The question of verification is an important issue. It is well known that in the course of the numerous negotiations on disarmament issues during the post-war period the failure to agree on this particular question was the root cause of the lack of success in the negotiations. We are more and more often facing a situation where the question of verification acts as a brake, hampering the achievement of genuine results. This applies, inter alia, to measures which could substantially limit the sphere of the arms race, and in the first place the qualitative arms race, and reverse it. As a result of the artificial magnification of the verification issues, the attainment of agreements is rendered more difficult, if not impossible. Moreover, there have even been certain attempts to take advantage of the verification issue by making use of the fact that verification is linked with a multitude of complex technical, military and other questions which are difficult for the general public to understand and can therefore be presented in a light that is advantageous to a country which does not want the agreement in question.

The Soviet delegation feels it necessary to present certain general considerations on the verification issue. First of all, we wish to recall certain basic approaches and concepts relating to these matters, some of which in the past have undermined the possibility of reaching agreements in the disarmament field.

What are these concepts? First and foremost, there is the concept which could be expressed in the following words: first verification and then disarmament, that is, essentially, the establishment of verification without disarmament. This concept was widely and persistently advocated by our partners in disarmament negotiations at the end of the 1940s and in the early 1950s. Some proposals which are being advanced even now are in a certain measure an echo of this kind of approach which has turned out to be unsound and has in the past led a number of disarmament negotiations to a deadlock.

Close to this concept is an approach which is based on the assumption that the possibilities of verification determine the scope of an agreement in the disarmament field. What is being suggested is to move from verification to disarmament, and not the other way round -- from agreement on the scope of disarmament to control. Special emphasis is laid on the extensive discussion of every possible technical detail of the verification issues even when the principal questions regarding the scope of a specific disarmament measure have not yet been defined and resolved. Thus, room is created for manoeuvring in the negotiations. One issue is made dependent on another; one technical problem gives rise to many others, and instead of the substantive resolution of major issues, the negotiations become mired down in fruitless and lengthy deliberations on various technical questions.

The "arms control" concept has gained wide dissemination in the West. This concept

plays a certain part in the implementation of some measures to restrain the arms race. However, the great drawback of this concept is that control over existing armaments takes the place of verification of disarmament. It would be possible, under this concept, for things to reach the point where the development of new types of weaponry could be interpreted as a positive factor. It must be observed, furthermore, that, under the pretext of arms control, attempts have repeatedly been made to damage the defence interests of the other side.

We wish particularly to speak of what might be called the "concept of distrust" which we quite frequently encounter in the Committee on Disarmament also. Under this concept, every party to a convention is regarded as a potential violator of its provisions, as one who will do everything possible to ensure that his neighbours ban and destroy their weapons while he himself keeps his so that he can use them either for deterrence or for a direct attack. On the basis of this approach, the significance of intrusive international verification is being exaggerated in every possible way and comprehensive, systematic and total international on-site inspections are being proposed, while at the same time the effectiveness of the contemporary national means of verification is being underestimated and neglected.

Let us examine what this concept of distrust can lead to, using as an example the problem of the prohibition of chemical weapons.

As everyone knows, modern industrial chemical production is characterized by its tremendous scale. Already now in some countries the number of enterprises amounts to many thousands. Moreover, we are witnessing an extremely complex interlinkage of chemical production with other branches of industry, in particular mechanical engineering. In these conditions, if we proceed on the basis of the concept of distrust, no matter how much we expand and complicate the verification system, no matter how comprehensive we strive to render it, we shall never reach the point at which we can be sure that no uncertainties have been left concerning some important aspect or other of the activities of States related to the observance of all the provisions of a convention banning chemical weapons.

To take another example, in the debates on questions of the prohibition of chemical weapons, mention has frequently been made of such chemicals as phosgene and hydrogen cyanide, which were used to fill munitions during the First World War. Incidentally, these chemicals are also mentioned in the working paper by the Chinese delegation which was distributed today. At the same time, their production for peaceful purposes at present is measured in hundreds of thousands of tons. It appears neither possible nor advisable to restrict the use of phosgene and hydrogen cyanide for peaceful purposes. Well, do we have now to place under control the entire production of these substances? Or do we have to fill enterprises with hundreds and thousands of foreign inspectors? And once again the same question arises: guided by the concept of distrust, can we be sure that a suspect State is not using these chemicals for prohibited purposes?

One more example. Many delegations have rightly pointed to the need to destroy chemical munitions and to end their development and production. Certainly, appropriate provisions should be included in the future convention, but it is also clear that there are probably nowhere in the world metalworking industries whose sole object is to produce unfilled munitions exclusively and only for chemical weapons. What follows from this? Would we really have to place under control all metalworking enterprises?

Further, the need to verify the destruction of chemical weapons stockpiles is obvious. But what kind of verification, and in what forms? Let us suppose, for example, that through the conduct of systematic international on-site inspections with the help of a whole army of inspectors we manage to confirm accurately enough that States have indeed destroyed the declared stocks of chemical weapons. But since these inspections would be based on the concept of distrust, on a presumption of the inclination of States

to cheat, then we would have to be consistent and assume that States would try not to declare all the chemical weapons at their disposal. In that case, we may ask, what would be gained by such verification of the destruction of the declared stocks?

There is also the question as to how it would be possible to check whether or not this or that State was developing new types of chemical weapons, such as binary or multicomponent weapons. In her book entitled The Game of Disarmament, Alva Myrdal writes that it is virtually impossible to control binary weapons because their components are not weapons as such until they are combined. Of course, binary weapons will be subject to prohibition, but how will it be in this case? Do we have to ensure that all chemical production is the subject of on-site verification involving a countless number of inspectors? Obviously not.

Or again, for example, what about a situation where a State which is a potential violator of the convention is preparing for a chemical war by using the production capacities of its allies, which are not parties to the convention, or is using their territories for activities prohibited under the convention?

Many other examples could be given to demonstrate the unsoundness of the "concept of distrust" and of the proposals it gives rise to regarding intrusive verification.

What, then, is the position of the Soviet Union on the question of verification? We wish to stress that we are in favour of strict and effective international control. The many proposals put forward by the Soviet Union with regard to the limitation of the arms race and disarmament have always provided for some form of verification of the implementation of the measure we have proposed. We are parties to agreements which provide for both national and international measures of verification and some of them envisage a combination of these.

I should like to point out that we have no reason for trusting others any more than others trust us. The Soviet Union believes that the main function of a system for ensuring compliance with disarmament agreements -- of which verification is an integral part -- is to give the parties to these agreements assurance of their observance by other parties, and through the employment of certain forms of co-operation to facilitate the resolution of questions in dispute thus ensuring the implementation by the States parties in good faith of the obligations they have assumed and building confidence between them. At the same time, the elaboration of specific forms of verification and other elements of the system for ensuring compliance with the relevant agreements, so that they fulfil their ultimate purpose, should be based on a number of important political principles.

Certain basic principles underlying our approach to questions of verification may be summarized as follows: (1) the conduct of verification should in no way prejudice the sovereign rights of States or permit interference in their internal affairs; (2) verification cannot exist without disarmament but must stem from a precise and clear agreement on measures for the limitation of armaments and for disarmament; (3) the scope and forms of verification should be commensurate with the character and scope of the specific obligations established in the relevant agreement relating to the limitation of armaments and disarmament; (4) the detailed elaboration of the verification provisions is possible only after an agreement on the scope of the prohibition has been mapped out; (5) we proceed from the assumption that a State becomes a party to a convention not in order to violate it but in order to abide strictly by the obligations it has assumed under it, and therefore that verification should not be built upon the principle of total distrust by States of one another, and should not take the form of global suspiciousness, but should simply be a link -- perhaps a very important one but still only a link -- in the chain of other measures ensuring confidence in the observance of the convention by all its parties; (6) international forms of verification should be limited; and lastly, (7) we also take into account the very important circumstances that in the conditions of the

present-day development of science and technology, any fairly less serious violation of an agreement in the field of disarmament, including the sphere of chemical weapons, has no chance of remaining undetected for very long.

Past experience shows that the settlement of verification issues has always depended on whether or not the various parties have the political will to conclude the relevant agreement. In spite of the difficulties involved in the solution of the complex technical problems of verification, it has proved possible for treaties to be concluded between the USSR and the United States of America on, for example, the limitation of strategic armaments and on nuclear explosions for peaceful purposes, which contain appropriate provisions relating to verification.

We resolutely oppose the elaboration of verification measures in isolation from the specific contents of this or that measure pertaining to the limitation of armaments or disarmament, its nature and significance in a broader context of disarmament, in isolation from the possible existence of other international norms or agreements ensuring the observance of the measure in question, and without seeing in due proportion the danger of non-compliance with this measure as compared with the negative consequences of superfluous interference in the peaceful activities of States and of the disclosure of commercial and technical secrets in certain spheres of industry. In other words, we are against giving absolute pre-eminence to verification and carrying it to absurd lengths; we are in favour of reasonable, balanced verification on the scale that is truly necessary -- no more, no less.

This is not merely our own point of view. As a result of the discussions held last year in the Ad Hoc Working Group on Chemical Weapons, agreement has been reached on a balanced approach to questions of verifying compliance with obligations under a convention on the prohibition of such weapons. The statements at the plenary meetings of the Committee on Disarmament and the papers presented by a number of States also contain quite a number of interesting thoughts on this subject. They were expressed, in particular, by the delegations of Brazil, Netherlands, France, Canada, Belgium and a number of others.

We believe that we should listen to the voice of all those who are in favour of well-founded moderation in the approach to the scope, forms, nature and methods of verification, and of ensuring that verification is a means of guaranteeing compliance with the convention and not an end in itself.

The Soviet Union delegation, for its part, intends to be guided by this precise approach, remembering that it alone leads to a success.

CD/PV.119

pp.19-20

Pakistan/Ahmad

31.3.81

CW

The procedures for verification included in the convention would constitute its backbone, and will be essential to give assurance that the obligations regarding the destruction of stockpiles and facilities and for the non-acquisition of chemical weapons are being complied with by all parties. There is agreement that verification would involve a combination of national and international means and that international verification would, in certain circumstances, entail intrusive procedures to ensure compliance. It is necessary to build on this broad agreement of principle. As regards national verification procedures, it is obvious that they will differ from State to State in accordance with the level of development and nature of its chemical industry. On the other hand, the nature and intrusiveness of international verification procedures would have to be determined in relation to the kind of activity that is to be verified. For instance, it is clear that some form of on-site inspection would be required to oversee the destruction of stockpiles and facilities. We believe that it would be beneficial to conduct an

in-depth examination of the contention reiterated by the Federal Republic of Germany that it is possible to conduct on-site verification without compromising the commercial secrets of the chemical industry.

As regards international procedures for verification, we favour the establishment of an independent international organization which would have the technical and financial resources to undertake the collection and dissemination of information and to conduct on-site and off-site inspection as well as to investigate suspected violations of the convention. One essential feature of the verification system should be to provide equal access for all parties to information regarding compliance, and equal opportunity to raise complaints regarding suspected violations of the convention. Therefore, my delegation could not agree to place ultimate reliance on the Security Council for the purpose of ensuring compliance with the convention, in view of the inherent inequality entailed in the procedures of the Council between the five permanent members and other States.

CD/PV.120

pp.10-11

Australia/Walker

2.4.81

CW

Verification is clearly the greatest outstanding problem over this convention. But even here the differences may not be as serious as they first appear. For Australia, verification is of cardinal importance. In developing a CW convention we are, in effect, asking some countries to divest themselves of a category of weapons which they currently have, and we are asking the other countries to deny themselves the possibility of acquiring these weapons. My delegation believes we can realistically expect each nation to accede to this proposal only if it can be made confident that others will also respect the requirements of the future convention. My delegation sees verification measures as central to achieving this confidence.

The verification issue has been the subject of intensive discussion in the Working Group, notably yesterday afternoon, and the distinguished Ambassador of the Soviet Union devoted an important intervention to it at our last plenary meeting. There were many statements in that address with which my delegation agrees. We were glad to hear restated, for example, that the Soviet Union stands for strict and effective international control. We share the view expressed by the distinguished Soviet delegate that verification should not be carried to absurd lengths, that there is no need, in his words, to "fill enterprises with hundreds and thousands of foreign inspectors", no call for superfluous interference in peaceful activities, or for the disclosure of commercial and technical secrets. There may be differences as to the interpretations our two delegations might put on these general statements and the concrete consequences that we would see flowing from them. After all, there are major differences between our two societies — notably as to the dissemination of information. But we must aim to devise concrete measures of verification that will inspire the necessary level of confidence on the part of all countries; and at the same time avoid the potential problems to which the distinguished Soviet delegate referred. This is the balance that must be achieved.

There were also several points in that statement on which I cannot join the distinguished Soviet delegate. He warned, for example, against "verification without disarmament". But is that really such an aberration? We, alas, do not have nuclear disarmament, but we benefit from the confidence generated by IAEA safeguards on civil nuclear industries. Under a CW convention, Australia and other countries which do not have CW will not actually disarm, but they will be subject to verification. Ambassador Issraelyan warned against "the principle of distrust". We deplore the mistrust which unfortunately exists between nations, and the causes of that mistrust. We think good verification measures in agreements such as the CW convention are one way of reducing that mistrust.

There are other points on which my delegation does not agree with that of the Soviet Union; but we are not here to try to pick holes in each other's arguments. Let me return instead to welcoming the Soviet reiteration of its acknowledgement, with the United States, in CD/112, that there must be adequate verification, based on a combination of national and international measures. My delegation is encouraged by this convergence of views. We are well aware of the wide range of possibilities that exist for verification and of the excellent work done in this field by, for example, Finland and Canada. The essential question is: how much verification is enough? In the view of my delegation the answer must be, enough to deter infractions, enough to satisfy the international community that the Treaty is being observed faithfully and enough to clear up definitively false reports of violations -- over-all, enough to generate the confidence that must exist if nations are to be expected to adhere to the convention. We believe this can be achieved without giving rise to the problems described by the distinguished representative of the Soviet Union.

I said at the outset that we had the paradox of a large measure of agreement and yet much that is difficult still lying ahead. Although I have tried to show that these difficulties may not be as great as they seem, I recognize that they may yet frustrate us. For instance, it is not possible to solve the remaining technical problems in isolation from the more "political" problems or the drafting problems: quite simply, each of the latter groups of problems will throw up technical issues requiring particular solutions. How can we proceed, given the possibility of frustration difficulties in our road and the certainty of time passing rapidly before our next over-all disarmament review at the special session of the General Assembly next year? I have two suggestions, two alternatives, to place before the Committee for its consideration.

The first is that we proceed step by step. We have, or will have by the end of this spring session, covered all the basic elements of a convention and the associated problems. How do we proceed from this position towards actual drafting? Rather than an article by article approach, which will constantly force us to leave issues open until agreement is reached on later articles, we might seek to tackle major groups of issues, and exhaust each in turn. Clearly, scope is one such group, and definitions and verification are others. Even if we take all summer to resolve the question of scope, it would in fact be a major achievement to get that far.

The second alternative, and it may be preferable, is to divide our task into two: one general and one on detailed technical issues. We may be able to take advantage of the very large measure of consensus on what we are aiming for that I have already mentioned and, relatively quickly, draw up the basic general framework of a chemical weapons convention covering the political engagements it would embody, including provisions for verification. There are several models for this, and again we can note the Biological Weapons Convention. The second facet of the convention would, on this scheme, take the form of technical protocols covering, for example, definitions (including toxicity criteria) and the technical specifications of verification devices. We do not envisage that the main body of the convention be drafted without regard to the technical considerations but that the technical specifics of these matters mentioned above be spelt out in the protocols. Obviously, agreement on the main body of the convention would be contingent on agreement being reached on these technical issues. This dual approach also has a number of models, both bilateral and multilateral.

Let me make clear that my delegation is not pressing for one or other of those particular work methods. Our central concern is that the momentum which has been built up over the years towards a CW convention and especially the present momentum in the CD be sustained.

Thirdly, there will be a need for a reasonable system of verification. Although national verification agencies can play an important role as clearing-houses for information, national means of verification cannot cover all aspects of the convention. Some kind of international verification machinery will have to be established, the core of which would be a small permanent secretariat that can rely on the co-operation of a great number of scientific and technical experts in all parts of the world. The important activities that call for international verification are: the destruction of stockpiles of existing chemical weapons and the confirmation that CW production facilities have in fact been closed down and eventually dismantled. Further discussion is necessary on how to verify that in the presumably peaceful chemical industry no chemical weapons agents are being produced, in particular, the most dangerous single purpose agents.

A moment ago I used the words "reasonable verification". That brings to mind the same words used by the distinguished representative of the Soviet Union a few days ago. He also stressed that verification should not become an objective in itself, that it should be closely related to the scope of a convention. I wholeheartedly agree. But verification -- "reasonable" verification -- is just one component of the system which I am putting forward to you today. We have to be careful with that word "reasonable". It should not be used to imply a lack of importance of this component. A chain is only as strong as its weakest link and therefore we should aim for such "reasonable" verification that it is of the same strength and importance as the other links, namely, the convention and the state of protection against the results of chemical attacks. And such a strong link would have to include, as I stated earlier, some on-site inspections.

In any case, the convention should provide for a system allowing for inspections on challenge. The basis for a request for such an inspection could vary quite significantly. It could be for example, that a chemical analysis of river water indicated residues of nerve agents (cf. the Netherlands working paper CCD/533 of 22 April 1977 concerning the verification of the presence of nerve agents, their decomposition products or starting materials downstream of chemical production plants). Or, and this is another example, there could be indications that large amounts of phosphorus have disappeared from the peaceful chemical industry. Other contingencies to be taken care of are, for instance, a finding of some chemical munitions indications, that chemical weapons were used somewhere, etc. A flexible system seems necessary, allowing for consultations between parties as well as, wherever relevant, international inspections. Such verification activities would often require sensitive and specific analyses, which would have to be as non-intrusive as possible. States should be encouraged to carry out research efforts in this direction.

There have been quite some exchanges of views in this Committee on the question of whether the use of CW would have to be prohibited in the convention or not. Whatever the outcome of this somewhat academic discussion, it need not be argued that the use of CW would provide strong evidence that a party had not fulfilled its obligations under the CW convention. Such a finding could therefore form the basis for an inspection in accordance with procedures that will need further discussion in this Committee.

I now come to my fourth observation. The level of protection against the effects of chemical warfare should be kept at or be brought up to an adequate level. Only under such circumstances would a reasonable amount of verification free from unacceptable intrusiveness be sufficient. Therefore the production of reasonable small amounts of chemical warfare agents has to be allowed with adequate notification to the international verification agency. The results of research and development in these protective areas could be made available to other States and the international verification agency

could provide an inventory of available equipment and of research efforts, thus laying the foundation for a whole set of confidence-building measures.

Last year I stated in this Committee that we should not overreach ourselves when dealing with each of the separate elements of the convention. I still think that this should be kept in mind. I should therefore like to repeat what I said last year in this respect.

I said I would like to make the following proposition for your consideration. As the end result of our work -- not this year, but at some time in the not too distant future -- we should achieve the following three results:

1. A good definition of scope;
2. A reasonable system of verification methods;
3. An adequate system of protection measures.

If this could be achieved, then we have the foundation for a CW convention that should be attractive to all nations. The advantages of such a convention, together with the auxiliary measures I mentioned, would outweigh all the tremendous disadvantages and risks involved in maintaining a chemical warfare capability for retaliation purposes. If this proposition is accepted, then the road to a CW convention might not be all that difficult.

CD/PV.120

pp.26-27

France/de la Gorce

2.4.81

CW

My delegation therefore considers that we should not be too ambitious about the scope of the future convention because it believes that only what can be verified can be prohibited or regulated.

The implementation of a rigorous system of verification of the non-manufacture or non-possession of chemical agents and weapons is likely to raise insoluble problems if it is to be applied to a large number of products. A distinction should therefore be made between super-toxic lethal chemical products and other lethal chemical products; such a distinction could be made on the basis of the definitions proposed in the joint United States-USSR report of 7 July 1980 (CD/112), which would, however, require supplementing as regards the modes of penetration of these products into the body.

As it has already explained in document CD/106 of 27 June 1980, my delegation proposes that only the manufacture of the super-toxic products and their specific precursors should be prohibited. It follows that very strict international control of such products should be contemplated. The other lethal products would be subject to national control, and every State should undertake to furnish, to an international body set up for the purpose, usable statistical data. Explanations could be asked for if excessive stocks were being built up, and international control should be provided for until unjustified stocks were eliminated. As for low-toxicity products such as weedkillers or irritants used for maintaining public order, my delegation feels that these should not be covered by the future convention.

The reason why my delegation wishes so stringently to define the scope of the convention and to restrict the list of prohibited products and of products subject merely to control is that it is anxious that verification of these provisions should be as effective and reliable as possible.

For the reasons explained here last week by the Ambassador of the Federal Republic of Germany, it would not be possible to rely exclusively on the national institutions of each State party to ensure the full implementation of all the provisions of the Convention. There must be international supervision, over and above national supervision, which should be entrusted to a committee set up for the purpose under the convention. Such a committee's duties would include the processing of the statistical data

furnished by States parties under the convention. It should be provided with the necessary resources in staff and equipment; it might have access to data furnished by the national technical facilities of States parties, for instance in connection with remote sensing. It might perhaps in due course benefit from the assistance of the satellite monitoring agency the establishment of which is under consideration. Lastly and more particularly, the committee should be authorized, where it considered it necessary, to have on-the-spot inspections conducted by experts recruited for the purpose, to investigate possible violations.

The purpose of international measures of verification would be to check compliance with two separate aspects of the Convention:

First, the fulfilment of undertakings to destroy stocks and dismantle specific production or munition filling facilities. Such measures would cease as soon as the subject of the action had been eliminated;

Secondly, the observance of undertakings prohibiting the manufacture and stockpiling of agents of chemical warfare or chemical weapons and stipulating the cessation of all activities connected therewith. These measures would be applied on a continuing basis so long as the convention remained in force.

Verification of the destruction of chemical agents and munitions and of the dismantling of specific production facilities would not be possible without on-the-spot inspection. The risks referred to by some who oppose such inspection (divulgence of the nature of the agents destroyed, violation of manufacturing secrecy if the destruction took place in proximity to industrial plants) seem slight. Most chemical warfare agents are in fact known, and for reasons of safety the installations for destruction would almost always need to be established in isolated areas away from large industrial complexes.

In order that these inspection operations should be effective, it would be desirable for international experts to be authorized to enquire into the destruction process and the plans for destruction facilities. They should then be authorized to observe and check the destruction operations carried out at each facility. No problem of secrecy need be involved, since the destruction facilities would be eliminated when their task was completed. Such verification, which would, by its nature, be temporary, would seem to be the easiest to carry out and the most acceptable.

The standing procedures to be devised for the verification of fulfilment of undertakings not to manufacture or stockpile would be of a different type. Such verification should not normally require the presence of international experts on the spot. It would be based mainly on the analysis by the international committee of the statistical data furnished by the States parties and of any other information which those States might provide. However, where the committee or a State party had any doubt about the behaviour of another State party with respect to the convention, the latter State should either furnish explanations of a kind which the committee deemed satisfactory or accept an on-the-spot inspection.

The insistence of many delegations, including our own, on the need for all parties to accept, where necessary, inspections on their territory, should not be interpreted as a sign of systematic distrust. On the contrary, we consider that the opening of frontiers to international inspection should be regarded by all as a pledge of the mutual trust there should be between the parties to a disarmament convention.

We also feel that adequate verification measures -- under strict and effective international control, to use the sacred formula -- increase the credibility of treaties and

help build confidence where it is lacking or insufficient, or where it is marred by an atmosphere of suspicion.

We listened to Ambassador Issraelyan's speech before the Committee on 31 March. We should like to tell him that our approach to the matter of verification is not based on a concept of systematic distrust. On the contrary, it is based on a presumption of progress in international co-operation and of trust in States which -- like individuals -- are to be considered innocent until they are proved guilty. However, we must provide for the possibility that violations may occur. In the same way as an individual under suspicion cannot be allowed to be his own judge, so it cannot be left to States -- in spite of the respect due to them -- to apply these measures of control to themselves. It is for this reason, too, that we think that national verification measures can do no more than supplement international measures. Furthermore there is, it seems to me, some confusion as regards national measures with respect to this aspect of the matter of chemical weapons. Such measures are not usually concerned with the verification of what is going on outside the State. Their primary object is that Governments should adopt the requisite internal legislation to enable them to secure full respect for the prohibitions in their territory. These measures are certainly important, but they do not really contribute to the attainment of the objectives of verification as I have just described them.

It is hardly useful, I feel, to engage in too abstract a discussion on the subject of verification. In the disarmament agreements concluded up to now, control measures have always been appropriate to the particular prohibition.

The prohibition of chemical weapons includes aspects which should obviously lend themselves to automatic and easy on-site inspection, for example, the matters of the destruction of stocks and the dismantling or even the conversion of production facilities.

On the other hand, as regards the much more complex question of the verification of non-production, an approach could be envisaged which would be gradually more "intrusive", that is, methods of control which would become more and more meticulous as doubt increased, in spite of control efforts. This system would have the advantage of avoiding unnecessarily strict control from the very beginning. Such a system might, for example, start with verification by satellite and if it became necessary because of suspicion might then move on to on-site surveillance from a distance and then, if necessary, to surveillance from nearby and lastly to on-site inspection with the taking of samples. For this purpose it would be necessary to evaluate the so-called "off-site" verification methods. The international co-operation that already to some extent exists with respect to environmental pollution could provide a useful basis for this joint evaluation. Furthermore, even in the case of the verification of non-production, on-site inspection should not be a means of last resort, bearing with it an element of dramatization. It could be seen as something more routine, carried out on the basis both of a challenge and of the spot checking of production facilities.

We are confident in approaching these problems of verification of the prohibition of chemical weapons, for although they are certainly difficult, they are far from being insurmountable.

It is clear from our earlier experience and that in the activities of the Working Group that the structuring of an adequate verification system for a future treaty is a crucial problem. In this connection let me refer to certain basic considerations which -- in the view of my delegation -- are instrumental from the point of view of the successful outcome of our efforts. As in the case of all agreements in the field of disarmament,

the verification system should be commensurate with the scope of the prohibition; it should pursue the realistic aim of providing for adequate verification and should be simple in its structure and comprehensible in its dimensions so as to facilitate its implementation. It is also crucial in this respect that the verification system should be applicable to all parties to the treaty, equally to those who declared possession of chemical warfare agents and those who declared non-possession of such weapons. The verification system should ensure for all the parties that the convention is strictly implemented without unnecessary intrusion into the peaceful activities of the chemical industry or causing damage to the security interests of the participant not related to chemical warfare.

There is a growing understanding, and we fully support it, that such a verification system should be a combination of national and international means providing for the possibility of on-the-spot inspection whenever it is indispensable, on a voluntary basis. This aim can be achieved through a properly structured consultative committee of experts.

My delegation is of the view that to set such considerations into the basis of our work and build an appropriate system of verification around them would greatly facilitate the advance of our work and could speed up the attainment of a comprehensive prohibition on the development, production and stockpiling of all chemical weapons and on the destruction of their stockpiles which has long been urged and hoped for by the international community.

CD/PV.121

pp.11-12

Venezuela/Taylorhardat

3.4.81

CW

3. Verification

With regard to verification, I should like to explain a few of my delegation's ideas on this important question, which, as no one will deny, is the most difficult of all those arising in connection with these or indeed with any other disarmament negotiations.

As has often been said, the fundamental requirement to be met by any procedure or system of verification is that it should be effective. In order to be effective, the method of verification must be compatible with the type or nature of the disarmament measure to which it is to be applied.

In the case of chemical weapons, the very fact that, as we have stated earlier, the convention now being prepared will include obligations of different kinds, some negative and others positive, some of action and others of abstention, makes the problem of verification particularly complicated to deal with. Moreover, the fact that this will be a genuine disarmament measure makes it necessary that the verification system should be very carefully thought out.

At the same time, it has to be recognized that it is not possible to achieve a perfect system of verification. It is precisely here that the political will and the spirit of compromise necessary in all negotiations will be called for. Bearing in mind the popular precept that the best is the enemy of the good, it will surely be necessary for us to accept a compromise and to agree on a method of verification that is, on the one hand, satisfactory and, on the other, as effective as possible.

In order to be compatible with the nature of the disarmament measure to which it is to be applied, and which includes obligations of two different kinds, the verification system will have to be -- to use an expression familiar to us from the terminology of chemical weapons -- dual-purpose. We might perhaps call it a binary system.

On the one hand, it ought to include a procedure -- one that should function automatically -- for verifying the fulfilment of the positive obligations. This would entail a system of inspections to confirm the veracity of declarations concerning

arsenals or stockpiles of weapons, munitions, chemical agents, facilities, etc., and to verify that the destruction of such arsenals and the dismantling, closure or conversion of the facilities had actually been carried out.

The other verification procedure, which would be initiated by a complaint, would be designed to check the truth of any allegation that might be made of the breach of a negative obligation -- an obligation to refrain from a certain activity. What would be involved here would be cases in which one country accused another of producing or developing, stockpiling, acquiring or retaining chemical weapons or of carrying out any of the activities expressly prohibited under the convention. This category would, naturally, include the use or employment of chemical weapons.

We believe that the verification system should include an appropriate combination of national measures and international measures, the latter constituting a larger proportion than the former. Furthermore, on-site inspection should play a particularly important role. With respect, for example, to the verification of declarations and of measures of destruction, there seems no possibility of finding any more suitable method than that of direct observation. This observation or inspection should in any case be as unobtrusive as possible and compatible with respect for the sovereignty of States, avoiding unnecessary interference in their internal affairs. We consider that the main basis of the system of on-site verification should be a presumption of the good faith of all the contracting parties. If we start from the assumption that all States are fulfilling the obligations they have assumed, no State party should feel offended if the control authority which it would, by its own sovereign will, have agreed to set up, were to request permission to carry out an inspection in order to confirm or verify that an obligation had been, or was being discharged. That is how we see the mutual trust that should prevail between the States parties to the convention.

With respect to the question of verification, we find the study submitted by the delegation of Canada in document CD/167 very helpful. We also consider the summary of questions relating to verification contained in working paper CD/CW/WP.10 prepared by the Chairman of the Working Group very interesting. Both documents contain material that will be very useful when we move on to the next stage of our work.

With respect to the control authority, our thinking runs along the lines suggested in the Canadian document, and we consider that the convention should provide for the establishment of an international committee of a political nature, with a limited, periodically renewable membership appointed by the General Assembly or by the conference of States parties. The committee could take it upon itself to carry out visits irregularly and at random for the purpose of verifying the discharge of obligations of commission, but it would also receive complaints and make the necessary arrangements for verifying alleged breaches of the convention. It would be answerable to the General Assembly or the conference of the parties and would report periodically to that body on its activities. The committee would be able to call upon experts for advice and assistance whenever necessary. Finally, we think that the committee should be designed to be as simple as possible and that its procedures should be flexible so that it can carry out its work with maximum efficiency.

We do not share the idea contained in the bilateral report by the United States and the Soviet Union that the main role as regards verification should be assigned to the Security Council. We would prefer the body entrusted with that important function to be one that was more democratic in its composition and representativity.

In tackling the question of chemical weapons, we are dealing not with some poten-

tial future weapon, but with armaments which exist in the world and which have been used in the past to terrible effect. The United Kingdom has always taken the view that in any disarmament treaty there must be appropriate and adequate measures of verification. Where the arms concerned are actually in existence, that view is reinforced; it takes on increased importance. The United Kingdom Government believe that a CW convention must be adequately verifiable. Without adequate verification States will not have confidence that such a convention would be observed. Indeed, it is mainly because we have been unable so far to agree on provisions for verification in which all States would have confidence, that better progress has not been made. Verification is and will remain the keystone of progress.

I should like, therefore, to take a few minutes to examine further what my delegation means when we talk of adequate verification. Obviously we cannot realistically hope for agreement on a verification system that would provide a 100 per cent certainty of compliance. Desirable as it would be to devise such a system, we recognize that this would not be possible -- and this fact was admirably demonstrated in document CD/CW/WP.9, submitted by Canada in the CW Working Group. But we must have provisions which will give all parties to a convention a good degree of confidence that all other States party are observing it. Moreover, if we incorporate such provisions, these will in themselves provide an incentive to all States to comply fully with the letter as well as the spirit of the agreement.

The question then is what activities will need to be verified if States are to have such confidence in the convention, and what form should this verification take? The United Kingdom considers that verification measures would be necessary for each stage of implementation of all the provisions of the convention relating to the declaration and destruction of stockpiles and of production facilities, and thereafter for monitoring the compliance of States with the provisions banning development and production, including monitoring the use for permitted peaceful purposes of chemical warfare agents and dual purpose chemical agents. The United Kingdom Government also considers it essential that the convention should have an effective complaints procedure.

I am sure that the United Kingdom position on these issues is well known. But I should like to take a little time to elaborate on one or two of the fundamental aspects of that position. One of the main elements of an adequate verification régime would in our view be the establishment of a consultative committee. The committee would, in our view, be most efficient if it were limited in numbers, its composition being drawn from the States parties to the convention. Such a committee would have the central role in the verification régime. Experts from the States parties would be in a position to play a constructive part in ensuring that the convention was being observed. The concept of a multilateral consultative committee also implies a willingness on the part of States parties to share expertise and information, to be open on issues relating to this crucial subject. A high degree of openness, of frank exchange of information between States, will provide a basis of confidence. Indeed, I would go further and say that it is essential to the creation of the climate of confidence which would be necessary for a CW convention to be successfully implemented.

My country has already put forward ideas on what some of the functions of the consultative committee might be. We believe that it should analyse and evaluate reports and information provided by States parties; it should have the power to call for supplementary information as necessary and to conduct inquiries. It would carry out required measures of verification and also conduct on-site and other inspections as provided for in the convention. It would inform all States parties of its findings and it would consult and co-operate with national authorities charged with domestic activities in connection with the fulfilment of the provisions of the convention.

The consultative committee should not merely be a bureaucratic or administrative

body, but would also provide a forum for consultation and co-operation between States parties. Through their participation States parties would have confidence in the committee itself; its international membership would mean that it would not represent one particular State or group of States, but would be independent and impartial. None of these provisions would, however, detract from the right of States parties which have complaints to pursue them at a higher political level. But it would be our hope that the procedures for consultation and co-operation would mean that such measures were necessary only in extreme circumstances. In all events, the consultative committee would be a means of fostering the greater openness and confidence between States which the United Kingdom so earnestly desires.

Of course, a consultative committee would not operate on its own. States parties would have rights and obligations too. I have already referred to the need for openness and I should like to set out in a little more detail the form such openness might take. In the first place, States would make declarations on signature of or accession to the Convention. It has been suggested that these declarations could be made prior to signature, perhaps even during the negotiation of a convention. That is a possibility: if any State wished to make such a declaration in advance of a convention I am sure my authorities would welcome it as a sign of increasing confidence and trust. But as was demonstrated in document CD/142, put forward by the Swedish delegation, the position of a State with regard to a CW capability could change very quickly. The United Kingdom therefore believes that the best time for declarations to be made is on the entry into force of the convention, or very shortly thereafter, so that at that time States acceding to it may make available and receive the most up-to-date information.

In our view, these declarations would need to be of a detailed and precise nature. They would need first to say whether a State possessed CW agents, precursors and munitions, and then to give details of the types of agents held and the quantity of each type. In addition, the location and types of all production facilities for CW would need to be listed. States would also need to make declarations either at the same time or soon after about the types and quantities of agents to be retained for permitted activities, and the production facilities to be maintained for that purpose. Until all CW stocks and facilities had been destroyed, further periodic declarations would need to be made; in the case of CW agents retained for peaceful purposes, declarations would probably need to be made annually. Such declarations would all be processed by the consultative committee, and would form the basis for their further work in verifying the convention.

The States parties would have various duties in respect of the consultative committee. In participating in the committee, States would be recognizing the value of co-operation. That co-operation would have to extend further than the straightforward exchange of data. There would also need to be provision for a degree of on-site inspection to ensure that the terms of the convention had been and were being complied with, that the declarations made were accurate and that stockpiles had been destroyed and production facilities dismantled. A few countries have considered it regrettable that such measures should be thought necessary. We believe they are needed -- but that they also offer a positive benefit in offering a way for States to remove any lingering doubts and to build confidence. The aim of the verification régime for a CW convention should, we believe, be to ensure that such doubts do not arise, or that if they do arise, they can be promptly allayed. Obviously we cannot hope to police the chemical industries of the world -- the resources required, and the expense, would be immense. But it is right that every consideration should be given to opening to impartial and conscientious inspection those specific areas of activity which could give rise to concern or doubt. If there is nothing to hide, what objection can there be to this?

It has been suggested that inspection would be unacceptable because it would involve a breach of commercial confidence. But I believe members of this Committee

will agree that where such potentially fearful weapons are involved, where so much is at stake, we cannot allow ourselves to be deflected by this problem. We can accept that maintaining commercial confidence is important -- but I am sure that ways can be found of ensuring that commercial confidentiality is maintained, while all the steps necessary are taken to enhance the even more vital issue of confidence in a CW convention. The experience of the Federal Republic of Germany in the field of inspections of commercial production facilities will be valuable when detailed consideration is given to this subject. The United Kingdom will be further developing its ideas on this aspect at a later stage.

I should like to turn now to a relatively new concept which has been under serious discussion for the first time this year in the CW Working Group, namely, the Swedish proposal to extend the scope of the treaty to cover areas of offensive CW capability such as planning, organization and training. The ideas of the Swedish delegation are set out in some detail in document CD/142. This is an interesting and far-reaching proposal, although one which also presents a number of difficulties. My authorities are still giving it detailed consideration, but I should like today to offer some preliminary comments.

The banning of what I might describe as the doctrinal, as opposed to the material, elements of an offensive CW capability is not in our view central or fundamental to a CW convention. It is more in the nature of a measure for building confidence -- in this case confidence that a State party will not suddenly abrogate the Convention at some future date. As a first stage, as I understand it, States would make declarations of any aspects of a CW capability they might have. As a second stage, observers would be invited to attend military manoeuvres in general, and those involving NBC training in particular. In the latter case, observers would be permitted to monitor electronic communications. In the third stage, States would instruct their armed forces that no further activities specifically connected with the possession of a capability to conduct offensive CW operations were to take place. Finally, there could be provisions for the exchange of information and, most importantly, for on-site inspection of military installations, munitions stockpiles and airfields. That is how we have understood the proposals in CD/142, as elaborated in CD/CW/WP.7.

This is a complex and detailed proposal. The United Kingdom has in the past advocated the use of a confidence-building régime to help States to prepare for a CW convention, and to reassure States about compliance once such a convention has come into being. But the ideas contained in the Swedish paper are of a rather different nature from these earlier proposals, and need very careful thought. The United Kingdom is in favour of some kind of confidence-building régime in connection with a ban on chemical weapons -- indeed, we have supported certain earlier proposals in this field. But we need to give this question careful thought. In the first place, I wonder whether the proposals are not too complex for inclusion in a convention the primary and vital function of which would be to prohibit the possession of chemical weapons. The negotiation of a convention limited to this purpose will be a most complicated task, as we have seen from the long discussions in this Committee and from the efforts of the two States members of this Committee which have been involved in bilateral negotiations. We should ask ourselves whether measures over and above those essential to the main function of the convention might not be better treated separately. In this way it might be possible to avoid the penalty of further delays in progress in negotiating a ban on chemical weapons.

Secondly, I think we must ask ourselves what the measures proposed by the Swedish delegation would achieve. Would they in fact build confidence in the treaty régime? We can see that, if all States parties to a convention were sure that all other States parties had entirely ceased all planning, training or organizing in relation to offensive CW operations, confidence would be increased. But, despite the high degree of openness

required by the measures proposed in CD/142, we really doubt whether it would ever be possible to be certain that all doctrinal activities related to offensive CW had ceased.

Thirdly, in view of a number of statements already made in the CW Working Group, we think that there must also be some doubt whether the measures proposed would ever be acceptable to a number of States whose accession to a CW convention would be absolutely essential. We would urge that in pursuing negotiations for a CW convention, we would do well to limit ourselves to the basic issue of prohibiting the development, production and stockpiling of these weapons.

CD/PV.121

p.18

Nigeria/Adeniji

3.4.81

CW

Obviously, one of the important issues in reaching agreement on a chemical weapons convention is verification. The presence of many experts in various delegations over the last two weeks has resulted in effective consideration of this topic and some interesting working papers have emerged, among which was CD/167 from Canada, which deserves careful study.

My delegation shares the view which found expression in paragraph 11 of the USSR-United States joint report on the progress in the bilateral negotiations on the prohibition of chemical weapons (document CD/112) that a combination of national and international means of verification should be embodied in any proposed convention on the prohibition of chemical weapons.

Obviously the nature and combination of this dual verification system has to be more fully negotiated. We believe this can be done in the next phase of negotiations in the Working Group. We note the convergence of views on the technical feasibility of certain means of verification, though there is the problem of the amount of intrusion to be permitted. In this context the statement of Professor Pfirschke of the Federal Republic of Germany is quite instructive. He stated in the Working Group on Chemical Weapons on 1 April 1981:

"The Chemical industry of my country, which is the fourth largest in the world, has been subject to on-site inspection for a quarter of a century, without having to reveal production secrets."

This view should go a long way to allay the fears of those States which are apprehensive of the intrusive nature of on-site inspection.

My delegation attaches importance to the destruction of weapon stocks in a CW convention. On-site inspection for this activity is vital since national technical means carried out by national agencies will not give sufficient assurance and confidence to other parties to the convention and additional means may therefore be required.

CD/PV.122

p.17

Romania/Malita

7.4.81

CW

Lastly, we should like to refer to the question of verification, which has been the subject of many statements. The Romanian delegation is in favour of establishing an effective system for verifying compliance with the provisions of the convention on the prohibition of chemical weapons. At the same time we are of the view that the machinery agreed upon, however perfect it may be, will not be able to guarantee absolutely that all the provisions of the convention will be respected. That is why the Romanian delegation considers that it is in the interests of all States to supplement the specific verification provisions contained in the convention by a set of measures designed to increase confidence among all the parties in the implementation of this international instrument. We are thinking of provisions for the development of co-operation with

regard to protective equipment, antidotes, alert and decontamination systems, etc. It is in that light too, that we should study the proposal of Sweden regarding the scope of the prohibition and that of Brazil concerning the title of the convention itself.

CD/PV.123

pp.11-13

Japan/Okawa

9.4.81

CW

I now turn to the question of verification, which is one of the keystones of a chemical weapons ban. The method or means of verifying whether obligations under the convention are being lived up to will vary according to what is to be verified. Different techniques will need to be employed for different situations. This is why our consideration of the multiple problems related to verification has a very close relationship to the scope of the prohibition under the convention. This point is recognized in paragraph 10 of the report of last year's Working Group on Chemical Weapons, where it is stated in section B: "It was held that verification measures should be commensurate with the scope of prohibition and other aspects of a convention". In the view of my delegation this is a point of practical importance that needs to be borne in mind.

It was also recognized last year that the verification system could be based on an appropriate combination of national and international measures. We think we could envisage national organs that would be responsible, inter alia, for observing and supervising national activities related to the subject matter of the convention, the collection of statistical and other information, and the preparation of periodic reports that would be presented to a consultative committee or other international verification organ to be established by the parties to the convention. The international organ would analyse and evaluate the periodic reports and statistical and other information submitted by the national organs of States parties, and be invited to send observers to be present when stocks are being destroyed or when production facilities are being dismantled. In connection with the obligation not to engage in the production of prohibited chemical agents, the international organ would request explanations from States parties and conduct inquiries as well as inspections, if necessary, upon invitation or with the agreement of the State party concerned.

What should the international verification system be expected to verify? The destruction of existing stocks of chemical weapons and of chemical warfare agents for hostile military purposes, and the destruction, dismantling or conversion to peaceful purposes of the facilities for the production of the above, as well as filling facilities and storage facilities are the principal items that immediately come to mind. One might also envisage the moth-balling of these facilities in the intermediate stage that could occur after the declaration of plans to destroy or dismantle facilities and before their actual destruction. The task of effectively verifying all this would already seem to be an enormous responsibility and the successful execution of the highly complicated and costly operations that this would entail would be a significant achievement, to say the least. Setting aside for the time being the question of how stringent the verification measures should be, my delegation feels that we should initially aim at the early establishment of a verification system that would cover the items or activities I have just mentioned to the extent that would be realistic and feasible -- both from the technical and from the financial points of view.

One of the most difficult problems in the field of verification will be the way in which a reasonable system could be applied to so-called dual purpose chemical agents. No mention is made of dual purpose chemicals in the USSR-United States joint report, and my delegation understands that the distinction between single purpose and dual purpose chemicals is only relative. A number of valuable technical suggestions have been made in this Committee and its predecessor regarding this problem, and we feel that,

regardless of whether these terms will or will not appear in the text of our CW convention, the problem that so-called dual purpose chemicals would pose in the context of an effective chemical weapons ban cannot be avoided. We consider this important question to merit continued in-depth study in the Committee on Disarmament. At this stage I would simply say that it would be helpful if, with the help of experts, we could identify and list the principal chemical agents that could be used for both peaceful and hostile military purposes.

My Government considers that the verification measures to be provided for under the convention should be primarily directed against military or chemical-warfare-oriented activities, and that any intrusion into the normal operations of the chemical industries should be limited to the minimum necessary. My delegation fully shares the view expressed two weeks ago by the distinguished delegate of Brazil, Ambassador de Souza e Silva, that "the convention should be conceived according to the principle that civil industrial activities and the full use of technology for peaceful purposes should not only be allowed but actually encouraged; the production, development, stock-piling and transfer of chemical agents for warlike purposes is the exception that must be prohibited, rather than the other way around". Let me also quote a sentence from our own working paper CCD/430 of July 1974, in which we spoke of "the need to satisfy two conflicting requirements: to obtain verification results reliable enough to be able to deter non-compliance with the Convention and at the same time to minimize the burden of States parties to the Convention".

In the view of my delegation, the activities of chemical industries for peaceful purposes should not be submitted to on-site inspection, for instance, except in cases where the industry is suspected of producing prohibited chemical agents and no convincing explanations to the contrary have been put forward.

May I also express my delegation's appreciation to the delegation of Canada for its recent paper on verification, contained in document CD/167, as well, of course, as for its many contributions to the Committee on this subject over the years.

I would now like to touch upon the relationship between our CW convention and the Geneva Protocol of 1925. That document has played a most important role during the 50-odd years that it has been in force and my delegation has not the slightest intention of querying its usefulness. However, as has been pointed out by many delegations, there is room for reinforcing the Geneva Protocol. Several delegations have pointed out the possible duplication of legal obligations that would arise if the new convention were to embrace a prohibition of "use". On the other hand, we must also bear in mind that the scope of the prohibition under the new convention may not necessarily coincide exactly with the scope of the prohibition under the 1925 Protocol, that is to say: asphyxiating, poisonous or other gases, and all other analogous liquids, materials or devices. Furthermore, no provisions for verification are included in the Protocol. We can therefore understand the argument in favour of the use of chemical weapons also being covered in some form in the new convention.

Incidentally, my delegation listened with interest to the statement made two weeks ago by you yourself, Mr. Chairman, in your capacity as representative of the Federal Republic of Germany, in which you suggested the inclusion in the chemical weapons convention of a verification procedure that would aim at ensuring observation of the Geneva Protocol of 1925. We would like to give this suggestion careful consideration.

Much has been said about confidence-building measures that could be incorporated into the proposed convention, or could be implemented even before we have such a convention. My delegation agrees on their usefulness, but today I shall limit myself to saying that a workable and reliable verification system would be the greatest and most effective of all confidence-building measures.

CD/PV.124

pp.9-10

Cuba/Sola Vila

14.4.81

CW

I should like now to make some comments on the matter of the control and verification of compliance with undertakings and obligations under the future convention, and in so doing to indicate my delegation's position.

We realize that there are considerable difficulties in reaching agreement on the methods and systems for verification, which is only natural in view of the complexity and diversity of chemical industry technology and the great number of chemical industry installations in many countries.

As a matter of principle, no verification measure should affect the right of every country to provide for its own defence nor endanger its sovereignty.

We believe that national verification measures should form the basis of the verification system as a whole, but that they should be organized at the level of the State, State bodies being responsible for carrying them out. Nevertheless, we have no doubt that a wise and fitting combination of national measures with effective and appropriate international measures could provide a solution to this complex problem.

Furthermore, we consider it essential that the adoption of a convention on the prohibition of the production, development and stockpiling of chemical weapons and their destruction, should in no way undermine the importance of the Geneva Protocol of 1925 with regard specifically to the use of chemical weapons.

We also consider that the declarations by States parties to build or increase confidence, under paragraph 4.2.1 of part IV of the Chairman's outline, should be made after the convention has entered into force and not before.

We support the principle that verification should not be discriminatory, and that its results should be communicated to all States parties and should constitute a solid manifestation of confidence.

CD/PV.128

pp.18-20

Canada/McPhail

11.6.81

VER,CW,CTB

Mr. Chairman, at the beginning of the 1981 session, I indicated my intention to speak on the subject of verification and its significance to the arms control process, particularly as it relates to this Committee.

It is appropriate to do so today because it is almost one year since the Compendium of arms control verification proposals (CD/99) was tabled. The Compendium was followed by a second paper (CD/127) which served to quantify some of the research upon which the Compendium was based. Today, I have the honour to submit to this Committee the third and final working paper which deals with the subject in a generic fashion. It is entitled "A conceptual working paper on arms control verification".

More importantly, however, it is appropriate to consider verification as this Committee resumes its work because if priorities are oriented properly, 1981 could prove to be one of the most productive sessions in many years. Leading up to the United Nations General Assembly's second special session on disarmament, this Committee's negotiations could prove influential by achieving progress in areas where the verification aspects of the problem have taken on a particular significance. There are two areas where positive action could be taken.

In the Working Group on Chemical Weapons, there is an opportunity to explore verification at the top end of the spectrum. By that I mean that chemical weapons, which exist in great numbers and therefore constitute a real and present threat, must of consequence be subject to a high level of verification in such areas as non-production, facility dismantling and weapons destruction. The Canadian working paper on verification and control requirements tabled on 26 March 1981 (CD/167) provides an overview of

the problem. While we are aware that there have been fears expressed concerning intrusiveness and the possibility of compromising civilian industrial secrets, our appreciation is that such inspections are possible without detriment to legitimate commercial sensitivities. This is the conclusion pointed to by the 1979 workshop conducted by the Federal Republic of Germany (in terms of non-production) and of the subsequent British workshop (from the standpoint of dismantling and destruction of facilities). Results were presented in documents CD/37 and CD/15 respectively. Working papers documenting the Canadian experience in destruction of existing agents support this line of reasoning as well.

This Committee has not really come to grips with the verification issue vis-à-vis chemical weapons. I suggest, therefore, that during the second period of concentration of the chemical weapons Working Group, this aspect be explored. Such work would constitute a positive and realistic contribution in support of the bilateral negotiations.

While this Committee has not been involved in direct negotiations concerning a possible comprehensive test ban, many members, myself included, have registered our interest and concern. Progress toward a CTB agreement has been considered by all to be painfully slow, but we have recognized at the same time the complexity of the technical issues involved, particularly those relating to verification. The Norwegian representative underscored this fact for all of us, I think, when he pointed out on 10 March 1981 (CD/PV.113) that "an adequate verification system is a necessary component in a total test-ban régime, both in order to ensure compliance and to build confidence". In highlighting his own country's contribution through "NORSAR" in the area of seismic verification, he acknowledged the important progress achieved by the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events.

Canada considers the work accomplished by the Ad Hoc Group to be of singular significance in practical terms toward the realization of a comprehensive test ban. A ban is one of the four elements in the "Strategy of suffocation" which Prime Minister Trudeau outlined at the first special session of the General Assembly devoted to disarmament, in 1978. Beyond that, however, it is an area of interest to Canada precisely because it is one in which advanced technology, unfettered by other considerations, could provide adequate verification with practical and almost immediate results. I need hardly point out that as far back as in 1962, it was the Soviet Union which declared that, in the interests of seismic verification, it was "prepared to agree to two to three inspections a year being carried out in the territory of each of the nuclear powers" and that the proposal it had put forward for "automatic seismic stations" included "elements of international control" (ENDC/73).

Eighteen years later the negotiating States, in their tripartite report to this Committee (CD/130), acknowledged the contribution which co-operative seismic monitoring measures could make in verifying compliance with a treaty. The report accepted conditional "on-site" inspection as a co-operative measure. We strongly believe that this Committee and the seismic experts Group could supplement in a very practical manner the efforts of the negotiating States.

These two areas of negotiations - CTB and CW -- are representative of those in which verification plays a pivotal role. Very often it appeared that difficulties in verification issues were based on preconceived differences regarding purpose, methodology and definition. It was in part the frustration of being so close to and yet so far from a number of agreements which prompted the initiation of the basic research programme of which this conceptual paper is a result.

We accept the argument put forth very often that specific terms of verification cannot be negotiated before the arms control problem itself is defined. It has been our view, however, that there are similarities in the concept of verification which extend

across the spectrum of the arms control problem. Hence we can and should learn from our experience. It is in this spirit that we developed the "Compendium", to see what had actually been proposed and why, with the objective of developing a common perspective and verification typology. There has been a virtual revolution in terms of verification technology. Yet, argumentation has remained largely unchanged. On the one hand, information which might have been kept from hand-held cameras in 1960 is now made available, often by mutual agreement through national technical means today. On the other hand, while intrusion has indeed changed, in any practical sense we tend here to be rather historical, and updating is needed.

Prior to the Second World War -- the 1922 naval accords and the 1925 Geneva Protocol were examples -- arms control and disarmament agreements negotiated under comparatively normal peace-time conditions did not normally make provision for systematic and effective verification of compliance with obligations. In post-World War II negotiations, however, provision has generally be made for some type of verification. In fact, verification in some form is now normally a part of almost any significant agreement, whether public or private. As members of this Committee, we must recognize therefore, that to insist upon verification in an arms control agreement is not necessarily to question the good faith of any one of the negotiators entering into an agreement, but rather through the reciprocal nature of the provision, to build confidence and ultimately strengthen mutual trust.

I believe that it will be apparent to you upon reading the conceptual paper that the rationale which has been developed is without bias -- that has certainly been our intention. The definition of verification, for example, was selected not from any political document, but rather from the Oxford Concise Dictionary. It is a particularly apt definition in that it included "demonstration" as an equal, and in my view preferable, method of verification to "inspection".

Soviet Foreign Minister Gromyko warned last autumn that the arms race "is approaching a point beyond which it may become impossible to curb it effectively by means of agreements based on mutual verification". If mutual verification encompasses the principle of reciprocity in its broadest sense, then of course all of us can support his reasoning and his concern. That being said, members of the Committee have the right to believe that it should apply not only to verification means now in use internationally (such as national technical means), but also to all methods of verification, existing and potential. It means that preconceptions of "mutual verification" of the last 20 years must be reassessed, in the light of the necessities today. Should not the requirement for secrecy within national borders and the claim of intrusiveness as an argument against adequate verification be reviewed? Indeed it could be argued that national technical means, a verification method accepted by treaty in the SALT process, is the most intrusive method in terms of national security assets. I commend to you the discussion on intrusion contained in Canada's conceptual paper being tabled today.

In submitting this latest working paper on verification, Canada continues on a course set 20 years ago, in the then multilateral negotiating body here in Geneva. Canada then took a special interest in the verification provisions of the Sea-Bed Treaty; and today, we apply the same concept of verification to other subjects, recognizing the special requirements of each area.

We hope that this conceptual working paper will lead to greater consideration of verification in this body. We are not looking to the Committee to conduct a study of verification, which would be inappropriate for the Committee. We are looking to others to contribute to greater consideration of this subject: we hope others will choose to table papers on aspects of verification in which they may have special expertise and which can contribute to common understanding.

These questions are particularly relevant, since despite the sustained consideration of a nuclear test ban over the last quarter of a century or more, we are still no nearer to a treaty. Verification has been said to be a major stumbling block. But is that really the case? In 1958, a group of experts from both Western countries as well as socialist countries, studied the possibility of detection violations of a possible agreement on the suspension of nuclear tests. The experts had detailed a viable verification and control system and then came to the unanimous conclusion:

"The Conference of Experts, having considered a control system for detecting violations of a possible agreement on the suspension of nuclear tests, has come to the conclusion that the methods for detecting nuclear explosions available at the present time, viz., the method of collecting samples of radioactive debris, the methods of recording seismic, acoustic, and hydroacoustic waves, and the radio-signal method, along with the use of on-site inspection of unidentified events which could be suspected of being nuclear explosions, make it possible to detect and identify nuclear explosions, including low yield explosions (1-5 kt). The Conference has therefore come to the conclusion that it is technically feasible to establish, with the capabilities and limitations indicated below, a workable and effective control system, to detect violations of an agreement on the world-wide suspension of nuclear weapons tests."

That was in 1958. Technology has made rapid strides in the intervening years. And yet, some countries still continue to argue that adequate verification of a nuclear test ban remains an obstacle. The experts of the same countries had, more than 20 years ago, accepted that verification was not a problem, given the technology then available. Does not this demonstrate the validity of our assertion that the real difficulty lies in a lack of political will, not verification? Our Committee cannot evade this issue and still retain its credibility.

An ad hoc working group on a nuclear test ban could deal in a comprehensive manner with all aspects connected with the complete and general prohibition of nuclear weapon tests. All nuclear-weapon States would have an appropriate opportunity to explain their position and to reach agreement on these vital problems. To our knowledge, no single nuclear-weapon State has until now officially questioned the need for a comprehensive test ban. Thus, favourable conditions for the establishment of a CTB working group seem to exist. A first step to be agreed on by all five nuclear-weapon States could be a one-year moratorium on all nuclear-weapon tests. This would, without any doubt, favourably influence future CTB negotiations. At the same time we believe that such a working group should not interfere with the resumption of the trilateral negotiations but should rather help to promote them. These talks were interrupted by the Western side in November 1980 and, despite the readiness of the USSR and repeated appeals in this Committee, have not been resumed since then. The reasons are well known.

The reports submitted to the Committee on Disarmament by the trilateral negotiators show that considerable progress has been made on the road to a treaty on a complete and general prohibition of nuclear-weapon tests. Key provisions of such a treaty were agreed upon. The understanding reached on verification is of particular

importance. The use of seismic monitoring methods which, according to some reports, can detect 1 to 2 kt-yield nuclear explosions, on-site inspections on a voluntary basis in special cases, as well as a committee of experts, would ensure reliable verification of compliance with a CTBT. In this regard my delegation wishes to express its satisfaction at the work of the Committee's Ad Hoc Group of Scientific Experts on seismic events, which has already done much of the groundwork for the establishment of an international seismic data exchange system within the framework of a treaty on the complete and general prohibition of nuclear-weapon tests.

In view of all these achievements, we firmly reject all attempts to use a so-called verification question to justify a reluctant attitude to CTB negotiations. It is all too obvious that alleged verification difficulties are simply a cover for a lack of political will to agree on a CTB.

CD/PV.137

p.21

Morocco/Arrassen

14.7.81

RW

Before concluding, I should like very briefly to refer to the question of control and verification with regard to which the Working Group will certainly come up against some difficulties.

For the solution of any problems that may arise in relation to the objectives of the proposed treaty or its application, the agreed joint USSR-United States proposal provides in its article VIII that the parties will undertake to consult one another both directly and through a consultative committee of experts. The article further provides that any State party to the treaty which has reasons to believe that any other State party is acting in breach of obligations deriving from the proposed treaty on radiological weapons is free to lodge a complaint with the Security Council of the United Nations, which is equally free to decide whether or not to initiate an investigation into the matter.

Faithful to their practice of undertaking nothing in disarmament matters which could harm their Great Power interests, the United States and the USSR have proposed a totally emasculated verification and control body. The consultative committee of experts, according to the annex to the draft treaty, "shall undertake to make appropriate findings of fact" and "shall decide procedural questions relative to the organization of its work". However, the annex adds, "there shall be no voting on matters of substance" -- nothing less. As for the provisions of the joint proposal concerning the procedure for complaints, they are completely inadequate as regards violations of the prohibition to be embodied in the future convention. In view of all this, is it possible for our Committee to adopt such paltry provisions? As far as the Moroccan delegation is concerned, the answer is no!

It is, all the same, astonishing that when so many instruments have been adopted in the field of disarmament it has still not been possible, in the matter of control and verification, to devise a basic formula applicable to any category of non-conventional weapons, while allowing, of course, for certain modifications of the formula to take account of the specific characteristics of particular situations.

It is still more distressing to observe that the Committee on Disarmament has taken no steps to co-ordinate the work of the two working groups on chemical weapons and on radiological weapons as regards this aspect common to both.

In conclusion, the Moroccan delegation wishes to stress that if the regulation now under way of the question of radiological weapons does not take into consideration the essential question of the protection of civilian nuclear installations against all forms of attack and sabotage, the result is likely to appear to an impatient and eager international public opinion as nothing but a giant hoax deliberately designed to distract the

attention of the world's population from the most important of the disarmament problems, and the one on which its survival depends: the prohibition of nuclear weapons and nuclear disarmament.

CD/PV.137

p.23

Indonesia/Darusman

14.7.81

RW

As in the case of other international instruments of the same nature, one other question of crucial importance is the system of verification of compliance, to ensure that the provisions of the future convention are observed in good faith by all the parties to the instrument and that the objectives of the convention are attained. The systems set out in other existing international instruments of the same character would naturally be taken into consideration for comparative purposes. This should not, however, necessarily lead to the adoption of the same system in the proposed instrument on radiological weapons. What is essential in the system to be worked out is that it should be workable and that all the parties to the future convention should have the same obligations to make the system work. In the case of alleged non-compliance with the instrument, the mechanism relating to the examination of the question and the search for its solution should ensure that the matter can be dealt with in a speedy manner, considering the serious consequences that may occur as a result of such a situation. In order that the system should be workable, all States parties to the future convention should have the same right to participate in the consideration of the matter.

CD/PV.137

p.26

Switzerland/Pictet

14.7.81

CW

It is difficult to find a satisfactory definition of the precursors used for the synthesis of substances employed for peaceful purposes or for the manufacture of chemical warfare agents. Failing an acceptable definition, it is practically impossible to establish verification and control measures.

Switzerland attaches cardinal importance to the establishment of an effective system for verification of the application of the convention. This is not a matter of an attitude of excessive mistrust; it is, rather, a legitimate security demand.

There is, unfortunately, a very real risk of recourse to chemical weapons. The States parties to a convention on the prohibition of chemical weapons, and particularly the small States which do not possess and do not intend to possess such weapons, are entitled to expect all the guarantees that can reasonably be provided to ensure that they are not exposed to an attack by such weapons. In the absence of such guarantees, it is hard to see how they could forgo costly defence measures. The situation as regards chemical weapons is thus very different from that prevailing in the matter of bacteriological weapons, the use of which is infinitely less likely. The importance of adequate control measures is so great that, given the complexity of the problem involved, it would justify the protraction of the negotiations in order to secure a prohibition of chemical weapons that is accompanied by satisfactory guarantees on this fundamental aspect.

An effective verification system cannot be based on purely national measures. Such measures are necessary but they must be complemented by international procedures the application of which should be entrusted to an impartial international authority possessing adequate powers. The Swiss authorities believe that a combination of national and international measures is possible without endangering the legitimate interests of the chemical industry that pursues peaceful purposes. We believe in the possibility of reconciling the needs of national economic interests with those of international security. New

technologies, as yet in their first stages, may open up promising possibilities in this connection in the near future.

In particular, the Swiss authorities wonder whether the extremely important question of the verification of the destruction of stockpiles could not be resolved by setting up multinational destruction facilities placed under the control of an international authority.

Confidence-building measures would certainly help to create a favourable climate for the negotiation and, later, implementation of the convention. They would also facilitate the subsequent verification measures provided for in the convention. A number of these measures could be adopted at once. The Swiss authorities find the ideas mentioned in this regard in the Progress Report of the Chairman of the Ad Hoc Working Group on Chemical Weapons (CD/179, of 23 April 1981) particularly interesting, for example, unilateral declarations of non-possession of toxic gases for use in the exchange of information on methods of destruction, including the study of the possibilities of creating multinational destruction facilities, the exchange of information on military manoeuvres which could include elements related to the use of chemical weapons, or again, the exchange of invitations to attend such manoeuvres. Switzerland is ready to take part in such studies, if its participation is desired.

CD/PV.138 p.9

Canada/McPhail

16.7.81

VER

Reciprocity: Thus, agreements must be reciprocal and not one-sided. That is also why proposals for moratoria which favour the security interests of one side, such as the proposal for a freeze on European theatre nuclear forces, are unacceptable. The NPT is no exception to this rule either. A number of countries have criticized the NPT as imposing unequal obligations on the respective parties and as being discriminatory against non-nuclear-weapon States. Canada, too, has urged the nuclear-weapon States to exert greater efforts in the fulfilment of their obligations under article VI of the Treaty. But dissatisfaction about the pace of those negotiations, which deal with what is one of the most complex security relationships in history, in terms of nuclear and conventional forces, is not a legitimate excuse for the failure of non-nuclear-weapon Powers to recognize their own self-interest in accepting obligations under the same régime. Both aspects of proliferation are of equal importance to stability in the over-all régime. Failure in either case would be tragic and possibly catastrophic. Thus, reciprocity of vertical and horizontal non-proliferation obligations under the Treaty remains, we believe, in the mutual interests of all States.

Verification: Canada has always advocated and stressed the importance of adequate verification as an essential part of successful arms control and disarmament policies. We are frankly distressed when we listen to those who claim that verification has been employed as a means of delaying or side-tracking important negotiations in this field. When we speak of verification, we are not asking others to do anything more than we ourselves are prepared to do. It is an exercise of the principle of which we were just speaking: reciprocity. We are not infringing upon sovereignty, but rather exercising it, in the same manner as we do by entering into any international treaty. Of course, in a world of sovereign, independent States, verification cannot be 100 per cent certain. It is unrealistic to expect, in the real world, individual Governments in pursuit of the legitimate goal of the security of their people, to open every secret to the scrutiny of potentially hostile forces. That is why we speak of "adequate" means of verification; and adequacy as a political concept varies in relation to a number of complex factors which may be present in relation to different arms control proposals. It is thus not a monolithic condition. Members of the Committee will be familiar with Canadian efforts over

the past year or so to explain carefully and to document, in a non-partisan manner, some of the ideas we have in this area. We believe any unintentional misunderstandings can be dispelled through this process.

Verification, we believe, builds confidence; and arguments against adequate verification, or the underestimation of its role or importance do not, for us, inspire confidence. Thus it is a fact of political life that, if a proposed treaty is to impinge upon military options which may be available to a particular State in pursuit of national security, the treaty must win the support of the Government and, where the constitution so provides, as in the case of Canada, the democratically elected representatives of the people ultimately affected. It is not, therefore, practical to propose the conclusion of arms control and disarmament agreements that do not meet this imperative: that is, the treaty itself must provide the means for maintaining the necessary confidence concerning compliance with its terms that mere promises — particularly those which are contradicted by actions — are simply incapable of doing.

CD/PV.138

pp.14-15

UK/Summerhayes

16.7.81

CW

Now turning briefly to a question of detail, I would say that there is one vital area of the future convention where it is clear that a lot more work has to be done before we shall be ready to begin drafting texts. This is the question of defining a satisfactory verification regime. In my speech of 2 April, I outlined at length the verification measures which the United Kingdom considers to be necessary for a chemical weapons convention to give an adequate feeling of confidence that the provisions of the convention are being faithfully followed. My delegation has also been active in discussing these measures in the Working Group. We were therefore a little disappointed to find that Ambassador Lidgard's draft elements did not contain a clear and sufficiently detailed picture of the verification regime, particularly as far as international measures of verification are concerned. My delegation has put forward some detailed proposals on this question in the Working Group, and in particular on the role which will be played by international inspection in a chemical weapons convention and the role of a consultative committee. We hope that in revising his paper, the Chairman will take full account of these comments. Obviously we cannot insist on a 100 per cent verifiable treaty. We acknowledge that it is not possible to monitor full time the civilian chemical industries of the world. What we must aim for is a practical treaty which achieves the two key objects of the verified destruction of existing stockpiles of chemical weapons and the provision of a real sense of security that no chemical weapons will be developed and produced in the future. To fulfil these objectives, we shall need to commit ourselves to measures of verification, including provision for on-site inspections, in order to provide that reasonable degree of confidence for all parties.

In connection with the question of verification, I should like to say how much my delegation appreciates the sterling work done on this subject by the Canadian delegation, both in a general way with its conceptual papers and in its particular papers on verification of a chemical weapons convention. These will all provide a very useful basis for our further work.

CD/PV.138

pp.17-18

FRG/Pfeiffer

16.7.81

CW

One of the issues on which it would be useful to seek further clarification is that of verification. My delegation cannot share the view which was expressed by one delegation in yesterday's Working Group meeting, namely, that positions on verification are so

far apart that one should not even try to reconcile them. To reconcile various points of view is exactly what we are expected to do in our Committee. A narrowing or, hopefully, even bridging of the existing gap in this field might also facilitate agreement on the scope of the prohibition. My delegation, in its intervention on 26 March 1981, put forward a proposal as to how the link between the 1925 Geneva Protocol and a future chemical weapons convention could be established through a verification procedure applicable to both agreements. By this we do not intend any modification of the Geneva Protocol. We want, however, to make sure that the possible use of supertoxic agents even in peace-time does not go unnoticed. Any such use would indicate a violation of the obligation under a chemical weapons convention on the non-production, non-transfer and complete destruction of stocks.

Before embarking upon the subject of verification, I should like to pay tribute to the Government of Finland for the chemical weapons verification workshop which took place in Helsinki from 2 to 4 July 1981. The excellent preparation, the exact timing and the usefulness of the demonstrated results have filled us with admiration. My delegation took particular interest in the demonstration of the chemical reconnaissance vehicle which gave proof of the possibility of verifying whether an environment had been contaminated with supertoxic agents.

During the visit to the Neste plant my delegation found its view confirmed that supertoxic agents cannot be produced in militarily relevant quantities without the existence of easily visible protective means. Once more it became evident that it is possible adequately to verify a ban on the production of chemical weapons with reasonable means and without prejudice to the commercial interests of the chemical industry.

I should like to express again my gratitude to the Government of Finland for having made possible this successful seminar, and I add the expression of my hope that other States will follow and, in time, go ahead with similar exercises.

The position of my delegation with regard to verification has been set out at some length in plenary on 26 March 1981, and in the Ad Hoc Working Group on Chemical Weapons on 1 April 1981. I do not intend to repeat this well-known position, but I shall offer a few remarks to explain some details which have, perhaps, not been quite understood by all.

My Government is convinced that only international verification measures can give States a credible assurance that a ban on chemical weapons is indeed being observed by all parties. To be effective, however, such measures must include mandatory on-site inspections which are indispensable if the international verification body is to satisfy itself as to the non-existence of activities contrary to a convention. Already in its report to the Committee last year, the Ad Hoc Working Group on chemical weapons stated that there was a convergence of views that on-site inspection under certain conditions and procedures should be included in the convention.

Some may have misunderstood this to mean that my Government favours continued controls of all chemical production facilities in the world. It is obvious that this would be quite impossible. Neither is it necessary. Therefore, we would propose to exempt the inclusion of multi-purpose agents in the verification objectives. It would be sufficient reasonably to deter any possible violation of the convention within the range of the most important chemical agents if checks were carried out following a certain schedule under which the international verification body would from time to time decide where to carry out inspections.

This approach has three major advantages:

Firstly, it does not cause excessive cost, but allows verification at a reasonable expense; the "army of inspectors" which has been referred to by some would in fact hardly deserve that name.

Secondly, it implies the risk of immediate detection for every potential violator of

the convention; no State would know, until very shortly before the inspection is to take place, if and where installations on its territory would be subject to a control.

Thirdly, verification on this basis can take place in a business-like and co-operative atmosphere; no State would have to feel victimized because an inspection was taking place on its territory.

That is the approach we favour, and we feel that it is entirely in consonance with international efforts aimed at building and strengthening confidence among States and furthering international co-operation. We fail to understand how this view could be interpreted as being based on a "concept of distrust". We feel that international verification is a necessity if the confidence which is required if States are to come to further and more far-reaching agreements is to be created and enhanced. This was admirably put by the distinguished representative of Venezuela, Ambassador Taylhardat, at the 121st plenary meeting of the Committee on 3 April 1981. He said, with reference to the verification system of a future chemical weapons convention: "If we start from the assumption that all States are fulfilling the obligations they have assumed, no State party should feel offended if the control authority which it would, by its own sovereign will, have agreed to set up, were to request permission to carry out an inspection in order to confirm or verify that an obligation had been or was being discharged. That is how we see the mutual trust that should prevail between the States parties to the convention."

CD/PV.138

pp.19-20

USA/Flowerree

16.7.81

CW

I wish it could be said that the Working Group has been equally successful in certain other aspects of its work, although, as I noted earlier, much useful work is being done. Unfortunately the Working Group does not seem to be coming to grips with the verification-related issues which represent the key obstacle to success. The Working Group has so far not defined the specific issues in this area which must be discussed and resolved during negotiations on a convention. So our consideration of verification has not advanced beyond the discussion of general formulas which conceal rather than define the issues to be confronted.

Probably all delegations can agree that verification is important and should be based on a combination of national and international measures. But, frankly, that does not get us very far toward a practical, effective system of verification which will provide adequate assurance that States parties are fulfilling their obligations. For that purpose we need to establish a detailed complex of different provisions carefully tailored to specific activities and obligations. One general formula will not suffice for everything. What is adequate for one aspect will not necessarily be adequate for another.

It seems to us that what must be done now is to outline what it is that needs to be verified and the possible approaches for each case. In this connection the Canadian working paper CD/167, of 26 March 1981, can be a very useful guide. Certainly there will be different views expressed both on what to verify and how to do it. Perhaps there will be agreement on some points and disagreement on others. But that should not trouble us at this stage.

Only by patiently and systematically identifying specific objectives and the political and technical means for accomplishing them in practical terms will we move ahead in the important area of verification.

It might be argued that it is premature to consider verification in detail until the scope of the prohibition has been fully agreed. But in view of the close interrelationship between the scope and the means of verification, such an approach would, in my delegation's view, not be sound either in principle or in practice. Rather, the Working Group

should repeatedly consider each aspect in turn, steadily refining and making more concrete the approaches to scope and verification until they form a well-integrated, internally consistent whole.

I cannot over-emphasize the importance of dealing in concrete, practical terms with the multitude of questions involved in prohibiting chemical weapons. It bears repeating once again that chemical weapons exist in large quantities because some States have considered them important for their national security. A chemical weapons convention will not come into force, or long survive, unless those States are convinced that it protects and improves their national security. States must believe not only that the convention is based on sound principles but also that these principles can be put into practice effectively.

There is clearly a lot of work ahead. In the area of verification, which is of fundamental importance to an effective prohibition, work on the framework -- the underlying concepts -- has barely begun. And before a convention is completed, agreement will be necessary on extremely detailed matters. The Protocol to the United States-Soviet Treaty on Underground Nuclear Explosions for Peaceful Purposes provides a good illustration of the kinds of important details that must be specified to make verification effective.

CD/PV.138

pp.26-27

Finland/Keisalo

16.7.81

CW

The goal of investigation presented in the fourth Finnish report on "methodology and instrumentation for sampling and analysis in the verification of chemical disarmament" was to design methodology for the environmental monitoring of nerve agents. As such it constitutes a first step toward adaptation of the system of microanalytical methods proposed earlier to real world samples.

After our first report on chemical and instrumental verification in 1977, we prepared two reports on the systematic identification of agents and their degradation products (1979 and 1980). Although the plans call for a series of reports on identification, particularly of non-phosphorus warfare agents and components of binary weapons, we are planning to begin the study of more detailed procedures for ultra-sensitive trace analysis of new agents.

Instructions for sample collection and the description of dedicated monitoring instrumentation and a mobile unit, presently under development, will be additional topics for future annual reports.

The report presents selected simple sampling and sample preparation methods for environmental monitoring of nerve agents. It also describes certain important improvements in the analytical methodology proposed in our earlier reports for the study of sample concentrates. Two of the most significant improvements are a new simple technique for measurement of cholinesterase inhibition spectra from suspected sample components and automation of the chemical detection and identification of known nerve agents by high resolution gas chromatography.

The following requirements were put for the basic procedure developed for the environmental monitoring of chemical warfare agents:

1. The procedure must permit the unambiguous detection and identification of agents. Quantitative accuracy and precision are desirable but are not as important as qualitative aspects.
2. The procedure should be highly sensitive in the detection of agents.
3. The different stages of the procedure should be as simple as possible without risking the above requirements. The procedure should be rapid to carry out.
4. It should be applicable in a not too heavy mobile laboratory.

5. It should not rely on overly expensive instrumentation.
6. The procedure should be suitable for automatization in the future.
7. The basic procedure should be complemented with effective confirmatory methods and methods for further investigation in a central laboratory.

Without going into the details of the monitoring procedure developed, it can be stated that it fulfils the above requirements for air, water and sandy soil samples which were considered most important matrices in our preliminary experiments. Biological samples require more complex techniques and will be investigated later. The monitoring procedure was developed using sarin and soman as model agents. Other nerve agents and most important non-phosphorus agents will come later.

Optimization of the procedure for all important chemical warfare agents and its complete automatization will still take some years.

We would be very grateful for comments and assistance from experts and laboratories interested in developing these procedures. On this occasion, I wish to thank the distinguished representatives of Japan, the United Kingdom, the Federal Republic of Germany and the United States for their encouraging words concerning the Finnish contribution to our common work.

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Canada/McPhail

21.7.81

CW

With this in mind, I wish to draw attention to the interconnected problems of scope and verification. If we are successfully to conclude our consideration of "elements", these elements must be balanced and in correct proportion to each other. Some have suggested that it is not possible to deal with verification in any substantive way until the scope of a treaty has been adequately defined. Others have suggested that questions of scope and definition, interrelated as they are, need to be examined simultaneously with the problem of verification so that in this fashion a balanced text will emerge as a natural outcome of the process of discussion. We share this latter view.

In the meantime, however, it is clear that the discussions on verification within the Chemical Weapons Working Group have been superficial and inadequate. This same inadequacy is inevitably reflected in element VII in working paper 21. This, of course, is no fault of the Chairman, but simply represents the highest common denominator the Working Group has been able to achieve so far. We therefore intend to develop wording on this matter which we hope would be acceptable to all in terms of the verification régime required and the methods necessary to achieve it. In this regard, we are encouraged by the number of statements which have remarked favourably upon the Canadian working paper, document CD/167, on "verification and control requirements for a chemical arms control treaty based on an analysis of activities". Bearing in mind the comments of a number of delegations, we propose to develop wording which would deal with problems of concept, responsibility, organization and national/international arrangements in a chemical weapons verification régime. This wording, of course, would be suitable for consideration under element VII of the text now before the Working Group.

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Argentina/Carasales

21.7.81

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It has been repeated often enough in this forum that a convention on chemical weapons must include a complaints procedure and a verification system adequate to ensure the implementation of the terms of the convention.

However, we are convinced that the primary element on which the agreement should

be built is a genuine commitment by States parties never in any circumstances to use or possess chemical weapons. On this basis, verification would represent only a mutual reassurance for States and not a complex and all-embracing system which, because of its breadth and detail, would be resisted by a large number of countries and would therefore fail to win the necessary consensus.

To this end the verification system ought to have certain characteristics that would render it adequate to meet the interests of the international community. In our view, these are as follows.

(a) The system should be both national and international in character. The national bodies which are organized or selected for the application of the system in each State party, in accordance with its own legislation and internal structure, will be the key components of the system, co-ordinating with similar bodies in other States and with the relevant international bodies.

The international character of the system will be assured by the presence within the system of an independent element, made up of experts in the fields involved in chemical weapons. The organic and functional characteristics of this element, which we could agree to call a consultative committee, should be discussed in the Ad Hoc Working Group, but we should like to emphasize that it would be advisable for the committee to consist of a fairly small group of experts on the subject. It would then be able to act quickly and effectively in its own field, without becoming involved in aspects having nothing to do with the technical and scientific content of the matters it should deal with.

(b) The system should employ simple methods, accepted and recognized by the States parties, of a kind to ensure a thorough study of any problems that may arise and the securing of rapid and conclusive results.

(c) It should use verification procedures appropriate to the circumstances of the case in question. In this context, random, non-routine visits to the installations or premises of the different States parties, following co-ordination with them, will help to build mutual confidence and reinforce the fulfilment of the convention.

(d) The system should permit the prompt and thorough investigation of any complaints that may be made of non-compliance with the convention.

(e) It should permit the settlement of disputes at the level of bilateral agreements.

Confidence-building measures

These include measures which will have to be taken in implementation of the terms of the agreement and which it may be appropriate to carry out before the agreement comes into force in order to confirm the commitment never to use chemical weapons, a commitment to which I referred earlier.

Basically, the "confidence-building measures" should be designed to ensure internationally the freezing and limitation of the development, stockpiling and production of chemical weapons. Among possible measures of this kind, we should like to mention:

(a) The declaration of stocks and production facilities;

(b) The programmed destruction of stocks, in the presence of invited international commissions;

(c) The dismantling of production facilities or possibly their conversion to other purposes, also in the presence of invited international commissions;

(d) The exchange of information between States in the sphere of chemical weapons and related matters.

One issue on which considerably divergent views persist is that of the scope of the convention and another is verification and compliance. These two issues will be pivotal in the elaboration for consideration of a draft chemical weapons convention and consequently a serious and in-depth examination of all proposals relating to these central issues should be made with a view to finding a mutually acceptable formula. As for my delegation, we would like to see the scope of the convention as comprehensive as possible, encompassing a complete ban on the development, production, stockpiling, acquisition, retention, assistance and transfer of all chemical weapons and on their destruction.

The question of verification will play a decisive role for a successful chemical weapons convention. As we are all aware, a system of measures designed to ensure faithful compliance with the provisions of the chemical weapons convention is a complex and sensitive issue that would need to be addressed with the utmost care. It would be an ideal achievement if we could all agree on a 100 per cent foolproof verification procedure, but in this imperfect world of ours we must all be realistic and practical in our approach. My delegation would be happy to see a balanced combination of national and international control systems which would involve the minimum element of intrusion.

My delegation highly appreciates the contribution of the Government of Finland in providing this Committee with an opportunity to acquaint itself with the Finnish project on the role of instrumental analysis of chemical warfare agents and their verification. I am sure that the workshop held in Helsinki in June was a practical approach to this complex problem. I also wish to take this opportunity to express our satisfaction with the results of the meeting of chemical experts on toxicity determination concluded under the chairmanship of Dr. Lundin of Sweden. My delegation feels sure that such expertise on the technical aspects of certain problems could help clarify a number of complicated problems. My delegation earnestly looks forward to the increased participation and contribution of technical experts in the future.

(b) Monitoring and verification of the prohibition

The members of the Committee on Disarmament are unanimous in considering that a ban on the production and possession of chemical means of warfare, without any means of verifying the strict application of the ban, would be much more dangerous for the safety of States than no ban at all; but they are no longer unanimous when it comes to establishing and defining the procedures for such verification. Two arguments are advanced in this regard.

The first is based on the principle that only on-site inspections, effected under international control, would permit effective verification of the non-production of chemical warfare agents. The second argument rejects this "intrusive" procedure on the grounds that it might violate the sovereign rights of States Parties and lead inevitably to the disclosure of industrial, commercial and military secrets. The proponents of this view argue that, for adequate verification of compliance with obligations assumed under a convention on chemical weapons, it would be preferable to use national means of control, possibly in association with certain international machinery and procedures. This is purely and simply an invitation to copy the system of inspection — altogether ineffective — provided for in the Convention on biological weapons.

In order to find a compromise between these two approaches which reflect the two principal philosophies that entirely dominate the views and discussions on disarmament

matters, the negotiators will have to display much imagination, patience and adroitness. The compromise will, in any case, have to include international verification measures at least as stringent as those entrusted to IAEA under the Non-Proliferation Treaty. Otherwise, with national verification measures alone, we may fall back, as in the case of biological weapons, into the rut of self-inspection machinery, which is so unreliable.

A system of international control of the application of, and compliance with, a Convention on chemical weapons must, of course, be based on appropriate structures. There is unanimous agreement among the members of the Committee on Disarmament on the idea of making provision in the future instrument for a consultative committee on the lines of the one already existing in the Convention on the Environment. All that remains is to define the concrete aspects of its organization, operation and powers.

The very complex nature of chemical weapons, the particularly wide range of agents which can be used to produce them, and also the great variety of the activities to be monitored — research, development, production, stockpiling, elimination, closing down or reconversion of plant — might induce the Committee on Disarmament to have big ideas and envisage the establishment of an international agency for disarmament control which might later be entrusted with the monitoring of subsequent disarmament measures, in addition to the ban on chemical weapons.

In elaborating effective and economically unharmed international measures for monitoring and verifying a prohibition on the production of chemical weapons, the Committee on Disarmament would find it very useful, the Moroccan delegation believes, to draw upon the experience of the Federal Republic of Germany which is bound by the Agreements of 23 October 1954 to refrain from producing chemical weapons and to submit to controls by the Agency of the Western European Union established to verify compliance with that obligation.

The controls consist of an assessment of written information supplied on request, and also of visits and on-site inspections on the initiative of the Agency itself. During these inspections, the international inspectors of the Agency obtain information on the organization, operation and production programme of a chemical plant, but visit only the sector in which the decisive phase of the reaction occurs — the phase which, during the full production process, immediately precedes the completion of the end-item. Thus, the inspections do not cover entire plants, but rather particular "characteristic substances" that are considered to be initial or key products without which prohibited warfare agents cannot be manufactured.

This does not prevent the inspectors from giving special attention to safety precautions which are always visible and, together with the lack of special equipment which is also difficult to conceal, provide the clearest possible indication that no chemical warfare agents are being produced in the plant. Also, by comparing data obtained by built-in measuring instruments with the figures entered in the records of the production unit, the inspectors can check the quantity of precursors used in the production of a substance or end-item. Lastly, in some cases, they may even resort to sampling in order to identify particular substances and to determine whether they are in fact prohibited agents.

The Federal Republic of Germany made an even more valuable contribution to the work of the Committee on Disarmament on chemical weapons by organizing an international workshop from 12 to 14 March 1979, following the invitation which the West German Chancellor had addressed to all States Members of the United Nations in May 1978 at the General Assembly's special session devoted to disarmament. In the framework of what must indeed be regarded as a genuine premiere in the field of negotiations on chemical disarmament, the Federal Republic of Germany was able, by means of practical examples, to demonstrate to an international audience of chemical experts the experience it had acquired from the inspections carried out by WEU — experience which

the members of the Committee on Disarmament, and particularly those who are opposed to the introduction of a system of on-site international inspections into a Convention on chemical weapons, might do well to reflect upon, even if it is derived only from a single disarmament measure limited in space and also imposed on a defeated country.

This exercise, which gave participants an opportunity to get acquainted with the practice of international on-site inspections, was designed principally to demonstrate that:

In the absence of safety precautions, no super-toxic compounds can be manufactured in the production plants at present available to the chemical industry;

The absence of such safety precautions is perceivable in the course of a plant inspection and thus can provide proof of the non-production of warfare agents;

A rapid conversion of available production plants into plants producing warfare agents is not technically possible.

In addition, the exercise amply demonstrated that there was no basis for "the objection occasionally raised to on-site inspections as a means of controlling current production in civilian chemical plants", — namely, that such inspections "would be intrusive and liable to harm the legitimate interests of producers, since they would involve the disclosure of classified information of a technical and economic nature". Better still, "it is possible for on-site inspections to prove, without disclosing any classified information on the production process", and without interfering with the process, "that chemical warfare agents are not being produced."

Thus, it has been fully demonstrated that on-site inspections — periodic or unscheduled — on request, or following a complaint from a State Party or an international organization — and effected by an international control authority, are the only means of guaranteeing compliance with a ban on the production of chemical weapons.

Inspections of this type are also irreplaceable for monitoring national activities such as the destruction of existing stocks, "moth-balling", reconversion or demolition of plant producing chemical weapons, research and development activities for peaceful and defensive (protection) purposes, and the monitoring of plants producing agents closely related to the organophosphorus compounds (pesticides), not to mention the monitoring of the non-production of new chemical weapons.

As a concession to those for whom on-site inspections arouse fears of disclosure of industrial, commercial or military secrets, their degree of "intrusiveness" can be modified during the very early years of operation of the international control system by reducing them simply to summary and superficial visits designed solely to ascertain the absence of safety precautions and devices.

Other forms of international control may supplement but not replace on-site inspections. They consist of a series of quasi-on-site inspections, ranging from remote detection of chemical agents in liquid or gaseous effluents from a suspect plant, using ultra-sensitive detectors installed in satellites or on the ground outside the frontiers of the country subject to the supervision, to statistical control of figures for the production and consumption of raw materials and basic chemical products, and opto-electronic sealing of plants which have stopped all production.

It must be noted that, of the various international methods of control enumerated above, all — except on-site inspections — have the same disadvantage: their practical efficiency has never been verified.

Moreover, the absence of positive indications of clandestine production does not provide a definite assurance of non-violation of the prohibition. Nevertheless, one can be almost certain that the mere fact of the application of such measures will have a dissuasive effect and render any attempt at evasion extremely complicated.

The delegation of the German Democratic Republic attaches great importance to the question of verification of compliance with a CW convention. We envisage a verification system and a complaints procedure which provide each party to the Convention with the required confidence that its obligations are complied with by the other parties.

It is not my intention now to pursue the question of verification in detail. This should be done when the issues connected with the scope of the prohibition have been clarified.

It seems that for the time being two different concepts concerning verification prevail in the CW field. The first one proceeds from a balanced combination of national and international measures and means of verification. The second one especially emphasizes regular and permanent international inspections while largely neglecting the potential of domestic control measures, of national technical means of verification, and of such international procedures as, for example, verification by challenge. This concept seems to be very much influenced by the idea that the means of verification should determine the scope of prohibition. We cannot agree with such a perception which is in direct contradiction with one of the basic principles of the Final Document of the first special session devoted to disarmament. It would involve us in endless debates on detailed and highly technical aspects of verification and lead to an actual postponement, if not the prevention, of a CW convention.

I cannot but agree with Ambassador Summerhayes of the United Kingdom who stated on 16 July that we must be careful not to become too bogged down in a wealth of detail and that our aim must be a workable treaty. Given the necessary political will and a basic amount of confidence on all sides, the verification problem can be overcome. Of course, from whatever angle one may look at verification, no 100 per cent solution will be found. I think the whole complex of available and possible verification methods, ranging from national control to international inspection by challenge, provides a high degree of assurance that a violation of a CW convention could be detected. It is most doubtful that a militarily important violation could be concealed. Every would-be violator will seriously take into account the political set-backs of such a step. Here, by the way, one should ask the question: is it really that certain that a State which has just signed a disarmament agreement will shortly afterwards try to break it?

Concluding my remarks on CW, I would like to thank the Finnish authorities for their persevering efforts to contribute to the solution of the verification issue. We regard as very valuable the recent workshop in Helsinki in which an expert from the German Democratic Republic participated, as well as the document entitled "Trace analysis of chemical warfare agents" tabled last week. We also highly appreciate the endeavour of the Canadian delegation to clarify verification questions. Its recent document CD/167 provides a useful analysis of the pros and cons of several verification measures. This document, in our view, shows the great capability of a system based on national means of control and international verification by challenge.

The ban on use in the convention would also provide an assurance against any possible ambiguities arising as to the effect of the new convention. That convention will allow potentially harmful chemicals to be made and stockpiled for peaceful purposes. And chemical research for peaceful purposes will also continue — research that may throw up new chemicals capable of being used as chemical weapons. It would be an additional reassurance to the international community to know that in no circumstances

could any chemical be used as a chemical weapon without contravening the convention. In this approach the prohibition on use would be a fall-back, catch-all provision, emphasizing the fully comprehensive nature of the ban, in the new convention, on the acquisition or retention of chemical weapons.

A similar consideration carries over into the field of verification. It should be clearly established that any evidence of the use of chemical weapons would be evidence of a breach of the convention. There should be no room for argument that it is necessary in addition to demonstrate the existence of an illegal factory or stockpile. The inclusion in the convention of a ban on use would ensure that here again there could be no scope for ambiguity.

Verification has been discussed in some detail in the Chemical Weapons Working Group. Last week it was suggested that there are two possibly irreconcilable approaches, one based on the voluntary provision of information and the other on a system of automatic checking. My delegation does not feel these two approaches are irreconcilable and we note that in any case there already exists broad agreement not only for a combination of national and international verification measures but also for the creation of a consultative committee. I would like to say something on verification, from a conceptual point of view, and then outline some ideas my delegation has for the consultative committee.

The reservations expressed about proposed verification activities have been of two kinds. Some have been of a practical nature, concerning such matters as possible interference with the civil chemical industry and possible risks for commercial or military secrets. Without doubt there are legitimate concerns of this nature; in devising the verification provisions of the future convention it will be necessary to take account of such concerns and to seek ways of accommodating them to the extent possible. The other kind of objections to this type of verification measures has been of a philosophical nature. It has been suggested, for instance, that questions of national sovereignty are involved and that we should not be guided by a doctrine of mistrust.

Taking the last point first, it has to be acknowledged that every State has the right and duty to look at its own security and that no nation will disarm unless it believes it can do so safely. If full international confidence reigned, there would be no need for disarmament negotiations. To acknowledge the need for arms control and disarmament agreements is to acknowledge that international confidence is not what it should be in a better world, but paradoxically, there can be no effective arms control or disarmament treaty without a high level of confidence on the part of all parties to the treaty that its provisions will be respected by all concerned and that the general behaviour of nations should be such as to make possible the necessary level of mutual confidence. That is a matter beyond the control of this Committee. But the other requirement is up to us: it is to devise verification measures that will generate that necessary level of mutual confidence. The function of verification is to generate well-founded confidence.

But what of national sovereignty? No nations' sovereignty can in any way be offended by treaties which it enters into freely, in the exercise of that sovereignty. The meticulous discharge of treaty obligations is an honourable manifestation of national sovereignty. Other delegations have already made the point well that in verification there is no infringement of sovereignty but exercise of it.

National measures of verification, if they go beyond self-verification, are focused on attempts by one country to detect breaches of the agreement by other countries, e.g. by sending reconnaissance satellites over their territory. But the focus of international measures of verification is on the demonstration of compliance. A country which respects the convention will co-operate voluntarily with international verification arrangements so as to demonstrate its compliance and thus give the international community grounds for confidence. Under an international verification system, each

country has within its own sovereign control the ability to refute any unfounded allegations against it by demonstrating its innocence. International verification, including on-site inspections, whether routine or by challenge, is predicated on full recognition of national sovereignty.

The appropriate analogy for international verification procedures is not a policeman searching a suspect. Rather it is the auditors, familiar figures in many countries, who verify the financial affairs of public and private bodies and whose reports are published at regular intervals. Auditors are not called in by the shareholders or the electors to try to catch the managers stealing the money. Rather, the auditors are called in by the managers themselves, in accordance with the applicable laws, to demonstrate to all concerned that the funds in their responsibility have been correctly accounted for. This is the way, I suggest, in which we should think of international verification.

As I have indicated earlier, my delegation believes that in negotiating towards a convention on chemical weapons, the Committee on Disarmament should make every reasonable effort to accommodate practical concerns for the minimizing of interference with the peaceful chemical industry and the protection of industrial or military secrets. For example, when chemical weapons are due to be destroyed, it will be necessary to demonstrate, to the satisfaction of the international community, that inter alia, the material being destroyed actually is the chemical weapon, and not some other substance. In the case of well-known chemical weapons, this can readily be verified by chemically analysing samples of the feedstock of the destruction plant. In the case of secret weapons-related chemicals, there could be alternative arrangements in the future convention for specified chemical tests, less intrusive than full analysis, either of the feedstock or of the degradation products. Of course, any such alternative arrangements would have to be fully effective from a technical point of view and spelt out in appropriate terms in the convention or in an associated document. New technologies possibly applicable to the verification of the convention have, as I mentioned earlier in my statement, been brought to the attention of the Working Group and hold out prospects for the monitoring of many aspects of a chemical plant with a minimum need for actual visits by outsiders.

CD/PV.142

pp.30-31

India/Saran

30.7.81

CW

During the past several weeks, the Ad Hoc Working Group on Chemical Weapons, under the energetic and skillful leadership of Ambassador Lidgard of Sweden, has given intensive consideration to the draft elements to be included in a future chemical weapons ban. However, there are certain key questions which remain to be resolved, e.g. concerning the scope of the future ban and measures relating to verification. The prospects for the early conclusion of our work will depend greatly on the approach we adopt with respect to these crucial issues.

In the view of our delegation, the Committee must constantly bear in mind the aim of a chemical weapons ban. What we have set out to accomplish is to prohibit the use of chemicals for hostile and military purposes. The aim is not to prohibit toxic or lethal chemicals; rather it is to prevent their use as agents of warfare. Of course, there may be some supertoxic lethal chemicals which may at present have only limited use in peaceful applications. In such cases, by mutual agreement, one could consider setting a ceiling for both production and stockpiling. This, however, is an exception. In general, the prohibition applies to purpose or use, not to the chemicals themselves.

It is important to keep this perspective in focus during the process of negotiation. Technical discussions may be necessary to establish criteria for distinguishing between various categories of toxic and lethal chemicals. However, precision in this area is not

as important as evolving mutually agreed criteria that all are familiar with. Toxicity criteria would serve only a limited purpose in the context of the proposed convention.

The aim of the convention is not to ban toxic or lethal chemicals. It is to prohibit the use of such chemicals for military purposes. The identification of criteria for determining toxicity would have been a critical area of concern if our purpose was to prescribe absolute and verifiable limits on the production of certain types of chemicals. During our negotiations so far, it is only with respect to super-toxic lethal chemicals that a quantitative limit has been recommended. If accepted, such a recommendation may involve defining with a fair degree of precision what is meant by super-toxic chemicals. But with respect to other types of chemicals, covering the entire range of toxic, lethal and incapacitating chemical agents, the determination of toxicity criteria will have little relevance since no one has seriously suggested that any quantitative limits be placed on their output. Again, precise toxicity criteria would be required only if we proposed that production facilities for each variety of chemicals throughout the chemical industry in each State party to the future convention should be subject to different procedures of verification. That is, if a different set of verification measures were proposed for toxic lethal chemicals as against other lethal chemicals, then it would perhaps be important to have precise criteria for determining toxicity. Our negotiations so far do not seem to suggest that this is in fact what delegations have in mind with respect to verification procedures. My delegation would therefore submit that our technical discussions be closely related to the actual requirements of the future convention. Otherwise such technical discussions may well become a substitute for engaging in serious political negotiations on a future convention.

The question of verification is, of course, an important issue. However, let us acknowledge frankly that with respect to a chemical weapons ban, there will be large areas where effective verification will not be possible. The chemical industry, involving peaceful applications of a wide range of toxic and lethal chemicals, is already a significant sector in the economies of most advanced countries. In several developing countries, it is one of the most rapidly growing sectors of the national economy. There will be large quantities of toxic and lethal chemicals produced and stockpiled for legitimate and peaceful purposes. To evolve a verification system which would keep a complete account of the production of the entire chemical industry all over the world would, of course, not be feasible. Reference has been made to new methods of verification, involving remote control techniques to detect the presence of so-called chemical warfare agents. However, the problem is that the mere presence of highly toxic or lethal chemicals is no evidence of the presence of chemical weapons. Therefore, let us not waste time in exploring measures of verification that will not, in the final analysis, add to confidence in the implementation of the convention. We must search for methods of verification which verify, not the presence or absence of toxic or lethal chemicals, but rather the diversion of such chemicals for purposes of developing and producing chemical weapons. This is the point of application of verification procedures. For example, let us find out from experts in chemical weapons whether production facilities for chemical weapons differ significantly in their observable characteristics from facilities using toxic and lethal chemicals for peaceful purposes. If the answer is yes, then perhaps we could devise means of verification that take such differences into account. Let us not pursue verification procedures which may be "intrusive" but not necessarily effective in ensuring compliance. There is a tendency in the Working Group to assume that on-site inspection or other intrusive methods of verification necessarily ensure compliance. When we are dealing with as complex a field as chemicals, we cannot be so sure. Our debate should not concentrate merely on whether or not to have on-site inspection. Rather we should try to determine what methods of verification are (i) feasible and (ii) optimal in ensuring compliance.

We agree that with respect to verification of declarations of existing stockpiles, the destruction of such stockpiles, and also the dismantling or conversion of existing facilities for producing chemical weapons on-site inspection may provide a high degree of confidence in compliance. However, with respect to the prohibition of the development and production of chemical weapons, on-site inspection may be only marginally useful, given the size and complexity of the chemical industry all over the world.

Reference has been made in the Working Group to including in the future treaty a provision for national technical means of verification. However, we are all aware that the concept of national technical means of verification evolved in the context of a bilateral arms regulation agreement. We must, therefore, examine carefully how such a concept could be incorporated in a multilateral context. We need to know, first of all, whether information gathered through national technical means will be made available to all States parties to the future convention. What would be the machinery for disseminating such information? Only when such questions have been satisfactorily answered could our delegation consider the inclusion of such a provision in the future treaty.

CD/PV.150 p.14 Mexico/Garcia Robles 2.2.82 CTB

In its preambular part, assuredly in order to bring these facts well to the fore since they are essential to a correct evaluation of this question, the resolution recalls that the subject has been under consideration for more than 25 years in the United Nations; that the General Assembly has adopted more than 40 resolutions on it; that on seven different occasions the General Assembly has condemned nuclear-weapon tests in the strongest terms; that whatever may be the differences on the question of verification, there is no valid reason for delaying the conclusion of a treaty on that subject; that when the existing means of verification and the exhaustive technical and scientific studies that have been made of all aspects of the problem are taken into account, the only conclusion to be drawn is that all that is needed now is a political decision; that the three nuclear-weapon States which act as depositaries of what is known as the partial test-ban Treaty undertook in that instrument, almost 20 years ago, to seek the achievement of the discontinuance of all test explosions of nuclear weapons for all time; and that such an undertaking was explicitly reiterated in 1968 in the Treaty on the Non-Proliferation of Nuclear Weapons.

CD/PV.150 pp.20-22 Netherlands/Fein 2.2.82 CTB,C-O,CW

The Netherlands delegation calls for the opening of serious and constructive negotiations in the Committee on Disarmament on a comprehensive test ban, but we fear that in fact interest in a CTB treaty is on the wane. It is a matter of great concern to the Netherlands Government that every now and then, from various quarters, the relevance of a CTB treaty for all time is questioned or belittled.

In our view both the ripeness of the file and the urgency of the matter call for the establishment by the Committee on Disarmament of a CTB working group with a meaningful mandate. We hold the role of the Committee in achieving a CTB treaty for all time to be an essential one if the ensuing treaty is going to attract — as it should — the widest possible international support and adherence. In our view, not only is it necessary to arrange adequate verification measures in a CTB treaty but we are convinced that adequate verification is also possible. As far as there are technical problems, we are confident that they can be overcome, inter alia, by drawing on the experience gained and to be gained in the Ad Hoc Group of Scientific Experts on

seismic events, in which the Netherlands participates. I may recall that significant progress has been made by this Group in the design of a global verification system. Effective continuation of these efforts, including a full scale test of the seismic system, is called for. The time is also ripe for working out the administrative elements for such a seismic system within a CTB treaty.

A corollary to a CTB treaty would be a so-called "cut-off" agreement which would ban the production of fissionable materials for weapons use. This, too, would be an effective step in curbing the nuclear arms race. We are not unaware of the verification problems involved, but a cut-off presents one of the few effective nuclear arms control measures for which in principle an international verification system has already been worked out, to wit: nuclear safeguards. It seems logical, therefore, that the Committee on Disarmament should deal with this matter as well.

It stands to reason that the Ad Hoc Working Group on Chemical Weapons should be re-established. The Netherlands delegation is one of those who hold that under the inspiring chairmanship of Ambassador Lidgard of Sweden the Ad Hoc Working Group on Chemical Weapons came close to exhausting its mandate last year. We hope very much, therefore, that a new mandate can be agreed upon now, enabling the Ad Hoc Working Group to elaborate, as a matter of high priority, a multilateral convention on the complete and effective prohibition of the development, production and stockpiling of chemical weapons, and on their destruction.

Next to matters relating to the scope of a chemical weapons convention, the Ad Hoc Working Group will have to deal extensively with its verification provisions. We believe that verification should serve as one component in a system that, together with a meaningful scope and a reasonable amount of protective measures, will give a State more national security than the maintenance of the chemical weapon option would do. Without adequate verification, States will not be confident that the provisions of a convention will be observed. As we stated before, it is our considered view that within the framework of a chemical weapons convention, national and international verification are complementary. After all, we are dealing with a proven weapon system, ready and available in large amounts.

At the end of last year's summer session, at the 143rd meeting of the Committee on Disarmament, on 4 August 1981, I had the honour to introduce document CD/203 concerning consultative and co-operative verification measures and a complaints procedure in the framework of a chemical weapons convention. This document gives a complete outline of a reasonable, but effective, verification system and was designed in such a way as to take care especially of practical needs. Allow me briefly to recapitulate the main characteristics of our proposals:

Consultation, co-operation, verification and complaints are not treated individually but form elements of one integrated, consistent system;

National and international verification are therefore interlinked;

The establishment of national implementation agencies will be called for;

The national implementation agency will, inter alia, work closely together with a consultative committee to be established;

The consultative committee should permanently oversee the destruction or diversion for permitted purposes of declared stocks of chemical weapons;

The consultative committee must carry out the supervision of the destruction and diversion through on-site inspections on a permanent basis;

Through random on-site inspections the consultative committee will check periodically that the production of supertoxic lethal chemicals does not exceed agreed quantities;

With a view to enhancing confidence, the consultative committee should undertake inspections on a random basis at facilities on the territory of

States parties that will on a regular basis be assigned by lot;
The consultative committee shall be competent to enquire into facts concerning alleged ambiguities in, or violations of, the compliance with the convention;

In the context of such an enquiry the consultative committee would be competent to undertake on-site inspections after consultation with the State party concerned. If the latter State party, however, does not agree to such an on-site inspection, it must provide appropriate explanations;

Each State party to the convention may use national technical means of verification;

Complaints can be lodged with the Security Council. Each State party undertakes to co-operate in carrying out any investigation which the Security Council may initiate.

CD/PV.150 pp.31-32 Sweden/Thorsson 2.2.82 CTB

Continuing developments in the nuclear field underline the fact that the achievement of a CTBT is as urgent as ever, despite indications that some nuclear-weapon State is inclined to consider it a "non-issue". This view will never be accepted. The CTB is important in order to prevent, or at least render more difficult, the further improvement of existing capabilities as well as the attainment of nuclear explosive capability. This argument has been advanced repeatedly over the years and it remains as valid as ever. Sweden expects, therefore, that all sides will now accept the early establishment during this session of a working group on a CTBT with full powers to negotiate all relevant aspects of such a treaty.

As to the question of verification of such a treaty, the seismic expert group is well on the way to developing an international system for the seismic monitoring of a CTBT. This work has clearly demonstrated that from the technical point of view the question of control of a CTBT can be solved.

In this context, I should like to mention the possibility of identifying certain nuclear explosions by analysing samples of airborne radioactivity. There exist, in fact, already today a number of stations around the world where airborne radioactivity is collected and analysed. It seems to be worth considering the possibility of organizing these stations and future ones in a system for the international surveillance of airborne radioactivity. This system would, no doubt constitute an effective and inexpensive additional method of obtaining information regarding nuclear tests and other forms of clandestine nuclear activities. We are furthermore convinced that such a system would have made it possible to obtain much clearer information about certain suspected events, like the one that occurred south of Africa on 22 September 1979. In the view of the Swedish delegation, this question should be considered by the Committee on Disarmament in an appropriate context. We are therefore planning to submit a working paper on this subject.

CD/PV.150 p.54 Czechoslovakia/Strucka 2.2.82 VER

In the process of the elaboration of the CPD, attention must be paid to the need to provide for verification of arms limitations and disarmament. Concerning this question we maintain that the agreements on arms limitation and disarmament must provide for an adequate and reliable verification of their implementation so as to ensure compliance with the agreements by all parties. The forms and conditions of the control will depend on the objectives, scope and character of a given agreement. The problems of control

must be discussed and solved at the same time as and in organic connection with the negotiations on the concrete disarmament problems and not separately from them.

The experience gained so far shows that national technical means represent a reliable basis for the verification of compliance with the agreements. Various methods of verification and other control procedures should be combined where necessary, including international procedures on a voluntary basis. The strengthening of trust would create favourable conditions for the application of supplementary measures of control.

The primary precondition for the implementation of the various agreed steps in arms limitation and disarmament is the existence of political will on the part of Governments; references to the technical difficulties of verification must not be used as a pretext for avoiding the achievement of agreements on measures for the cessation of the arms race.

CD/PV.151

p.13

FRG/Wegener

4.2.82

CW

Experience of agreements lacking a proper verification mechanism, such as the Geneva Protocol and the Biological Weapons Convention, stresses the need for a comprehensive solution to this question.

My delegation has on many occasions set out its views on the essentials of an effective international verification system. Let me just recapitulate:

Verification must follow a regular, pre-established procedure so as to be non-discriminatory and take place in a businesslike and co-operative atmosphere;

It must provide for impartial investigations into events which require clarification; and

It must protect legitimate economic interests.

In order to advance work in this direction, my delegation will, during this session, introduce a working paper which will set out in greater detail the mechanisms and procedures which are, in our view, necessary for an effective verification of a chemical weapons convention. This working paper will, inter alia, specifically deal with the problems of binary weapons. In particular, we intend to propose a way whereby -- contrary to certain allegations that the non-production of binary weapons is not verifiable -- verification can also be extended to and include binary weapons.

CD/PV.152

pp.13-14, 16

USA/Rostow

9.2.82

CTB,CW

The United States Government has reviewed the question of nuclear testing in the context of its impact not only on arms control efforts but also on the need to maintain the stability of the nuclear balance, bearing in mind in particular the importance of achieving effective verification measures and ensuring compliance with any agreed restrictions.

It is clear that any consideration of a complete cessation of nuclear explosions must be related to the ability of the Western nations to maintain credible deterrent forces. It is equally clear that a test ban cannot of itself end the threat posed by nuclear weapons. Limitations on testing must necessarily be considered within the broad range of nuclear issues. Direct means for achieving progress towards the elimination of the nuclear menace are the restoration of Article 2(4) of the United Nations Charter as a reality in world politics, the negotiation of significant reductions in nuclear weapons, and the eventual elimination of the weapons themselves. Thus, while a comprehensive ban on nuclear testing remains an element in the full range of long-term United States arms control objectives, we do not believe that, under present circumstances, a compre-

hensive test ban could help to reduce the threat of nuclear weapons or to maintain the stability of the nuclear balance. The United States fully shares the keen concern of members of this Committee to move forward rapidly in the effort to remove the burden of nuclear weapons from world politics. The United States will work constructively with the Committee in its efforts to achieve this end.

In the area of chemical weapons, the Committee on Disarmament has already done useful work, and the United States commends the Chairmen of previous chemical weapons working groups and the delegations that have participated so effectively in this effort. President Reagan has now reaffirmed United States support for efforts to achieve a complete and verifiable ban on chemical weapons and has directed United States representatives to participate actively in this important quest. The United States believes that the Committee on Disarmament is the appropriate forum for work toward a chemical weapons convention. Therefore, it is the United States' intention to concentrate its efforts toward the elaboration of a convention banning chemical weapons in this Committee. We believe the Working Group has successfully completed the bulk of its initial task and, in so doing, has identified important areas of agreement and disagreement. The next step is to see if it is possible to harmonize views on the major elements of an eventual agreement. Such a step is a prerequisite to the achievement of our ultimate objective, and the United States delegation, therefore, will support a revised mandate for the Working Group that will allow it to undertake this essential task.

It is no secret that views diverge widely on the subject of verifying compliance with arms control agreements. The United States believes that the chemical weapons Working Group should devote particular attention to verification and compliance issues, from both a political and a technical standpoint. I urge the members of the Working Group to apply their expertise and imagination to finding ways to overcome the many complex problems which face us in this area. One such problem is that of undeclared stocks and undeclared chemical weapons production, filling and storage facilities. Further, when the chemical weapons experts meet, I urge that, in addition to continuing their work on toxicity standards, they be asked to examine promising technical methods for monitoring the shut down of chemical weapons production and filling facilities. In this manner the Committee can make use of our collective expertise to try to surmount a major hurdle relating to verification of an eventual agreement. It is the conviction of the United States that in this, as in other areas, the problem of verifying compliance with arms control agreements requires active co-operation among the signatories and not reliance on national technical means alone.

While I am on the subject of expert groups I should dwell for a moment on the work of the Group of Scientific Experts, whose efforts thus far have been pointed toward the international exchange of seismic data. As you are aware, the United States has been an active participant in all the activities of this Group. We want this work to continue for as long as useful results are being produced and we intend fully to support its ongoing efforts. We are aware of the interest which has been expressed by other delegations in an enlarged mandate for the Group, one that would enable it to consider the possibility of exchanging data on nuclear explosions and on certain other unusual events occurring in the atmosphere. We have also examined this possibility and want to share our views informally with other delegations. The idea here is to increase the ability of the Group of Scientific Experts to make a useful contribution to improving our verification capabilities.

It is therefore essential that the verification of compliance with arms control treaties be made a central feature of our work programme here. Until the nations agree on the principle of far-reaching international co-operation in monitoring and enforcing

compliance with such agreements, arms control and disarmament cannot begin to achieve their full potential as programmes of peace. The Soviet Union has recently stated that while it continued to rely primarily on national means of verification of compliance with arms control treaties, it was willing to accept co-operative means of verification where circumstances make such procedures necessary and desirable. The United States welcomes this assurance. And it recalls the fact that in 1947 the Soviet Union made a far more comprehensive statement of its readiness to accept inspection and other co-operative means of verification in the interest of arms control during the consideration of the United States' proposal for the international control of nuclear energy, known as the Baruch Plan. The volatility and fragility of the international atmosphere make it essential that the Soviet Union go beyond President Brezhnev's statement of 23 November 1981, to Foreign Minister Gromyko's earlier and more ample offer.

CD/PV.152

p.51

China/Tian Jin

9.2.82

CW

The prohibition of chemical weapons has always been an important issue at the sessions of the Committee on Disarmament. The continued use of such weapons of mass destruction in massacring people has aroused grave concern on the part of the world public opinion. Over the past year, there have again been many reports on the use of chemical weapons in Afghanistan, Kampuchea and other places. It is disturbing to note that the superpowers which possess large arsenals of chemical weapons are stepping up the production, development and deployment of these weapons. All this commands greater urgency in the task of formulating an international convention on the complete prohibition and total destruction of chemical weapons. We agree with the proposal of many countries that the mandate of the Working Group be extended.

We maintain that the scope of the prohibition in the future convention should cover the use of chemical weapons. To emphasize anew the prohibition of the use of chemical weapons would supplement and strengthen the 1925 Geneva Protocol. In order to ensure implementation of the future convention, we maintain that stringent and effective measures for international verification be provided for, including on-site inspections on the use of chemical weapons, the destruction of stockpiles of such weapons and the dismantling of facilities for their production.

CD/PV.153

p.10

UK/Summerhayes

11.2.82

CW

....we intend shortly to put forward some detailed suggestions on the question of verification. The United Kingdom's views on this subject are already well-known. While the various elements of a convention are clearly bound up with each other, the purpose of the working paper, which, while focusing on verification, will be to build on the progress made on this issue since the United Kingdom tabled its views in 1976. Verification is still the central problem we face in drawing up a convention. Satisfactory resolution of this problem is the only way in which the parties to a convention can have confidence in it.

The United Kingdom considers that verification provisions would be necessary for each stage of implementation -- that is, for the declaration and destruction of stockpiles and production facilities -- and thereafter to monitor the compliance of States, including the monitoring of permitted peaceful uses of chemical warfare agents and dual-purpose agents. It is essential also that the convention should have an effective complaints procedure.

We believe that the verification of implementation of the destruction of stockpiles

and production facilities must be under international control. Thereafter, verification of compliance could be by a mixture of bilateral and multilateral contacts between States parties, with an international body -- the Consultative Committee, on which we have already made detailed proposals -- having ultimate responsibility.

CD/PV.156

pp.10-11

Canada/McPhail

18.2.82

CTB

The question of setting up a working group on a comprehensive test ban is essentially a procedural matter, but we would support the establishment of a political experts group under the auspices of the Committee on Disarmament to discuss matters which were not at issue in the trilateral negotiations from 1977 to 1980. They could include the financial, legal and administrative aspects of an international seismic data exchange as proposed in the Committee on Disarmament in April 1980 by Australia. The mandate for such a group would of course have to be agreed in consultation with the trilateral negotiating States.

Canada is not convinced that nuclear weapon testing must go on forever or at its current disturbing pace. Restrictions on the number and yield of tests should be possible, as well as on geographic locations of testing sites. To existing nuclear testing agreements could be added further agreements which would move towards the objective of an eventual comprehensive test ban treaty. There is a need to generate some movement in the negotiating process. There is a need to avoid risks inherent in a continued freeze in the negotiating process on nuclear testing. A number of arms control treaties were realized as a result of the precedents created in working out the partial test-ban treaty of 1963. They include the Threshold Test Ban Treaty of 1974 and the Treaty on peaceful nuclear explosions of 1976. It has been argued by some that the ratification of the Threshold Test Ban Treaty and the Treaty on peaceful nuclear explosions would be undesirable and could be counterproductive. We do not agree. Fully implemented, these two Treaties, with international co-operation, could be utilized and built upon to move towards a comprehensive test ban treaty.

The ratification of the Threshold Test Ban Treaty and on the Treaty on peaceful nuclear explosions would bring into force limitations on yield, albeit at a high level. It would also bring into force the exchange of technical data about testing programmes and the limiting of testing to specific designated sites, as provided for in the Protocol to the Threshold Test Ban Treaty. It would also bring into force the provisions of the Protocol of the Treaty on peaceful nuclear explosions dealing with technical arrangements for monitoring and exchanging information.

A very useful further step would be the resumption of the trilateral negotiations for the specific purpose of negotiating a second-stage agreement which would further restrict the numbers and yields of tests and the location of testing sites. Such an agreement could be for specific reductions or, even better, for sets of reductions over time.

With such a process in motion, it would seem possible to envisage a greater role for the Committee on Disarmament's Ad Hoc Group of Scientific Experts on Seismic Events by involving it in aspects of the exchange of information which would be occurring with the two Treaties earlier mentioned. At some stage in the not too distant future, the implementation of the international seismic data exchange (ISDE) would also appear to be useful.

The implementation of this international verification measure in connection with an interim agreement implies that such an agreement, once reached in trilateral negotiations, would, in certain respects at least, lead to the Committee on Disarmament's involvement.

Canada would hope that in such a process the other nuclear-weapon States, France

and China, would join and would sign the partial test-ban Treaty.

The confidence which a verifiable second-stage agreement would build should, in turn, bring within the realm of possibility whatever further agreements on limitations and reductions may be required to move towards a permanent comprehensive test-ban treaty.

CD/PV.156

p.34

USSR/Issraelyan

18.2.82

CTB

At the same time, taking into account the great interest of the members of the Committee on Disarmament in this urgent matter, the Soviet delegation would like to inform the members of the Committee of the Soviet Union's position on some aspects of the question of the elaboration and conclusion of a treaty on a complete and general nuclear-weapons test ban.

We believe that the treaty should contain a commitment on the part of each party to prohibit, to prevent and not to carry out any test explosions of nuclear weapons any place under its jurisdiction or control, in any sphere, as well as to refrain from the instigation or encouragement of or any participation in the conduct of nuclear weapons test explosions anywhere else.

We believe that the treaty should be supplemented by a protocol on nuclear explosions for peaceful purposes, which would be an integral part of the treaty and would take into account the provisions of article V of the Treaty on the Non-Proliferation of Nuclear Weapons. Under the protocol, the parties to the treaty would institute a moratorium on peaceful nuclear explosions and refrain from providing any inducement or encouragement to, granting permission for or taking any part in the carrying out of such explosions until an appropriate procedure for conducting them has been elaborated.

We support the idea that after the treaty enters into force the parties to it should continue without delay to examine the question of a procedure for the carrying out of peaceful nuclear explosions. Such a procedure could be embodied in a special agreement or special agreements and be brought into force through appropriate amendment of the protocol mentioned above.

We believe that in order to ensure that the treaty was without prejudice to any arms limitation agreements concluded earlier, it ought not to touch upon commitments compatible with it that have been undertaken by the parties under other international agreements. In our opinion the treaty should provide a procedure for its amendment and should contain a provision concerning withdrawal from it on grounds of higher national interests.

Recognizing the great importance of questions of verification of compliance with the treaty, we believe that the parties to the treaty should use the available national technical means of verification, as well as the possibility of the international exchange of seismic data. In the elaboration of such measures a leading role could be played and is being played by the Committee on Disarmament, under whose aegis a group of seismology experts has been working successfully for a number of years past.

Other means of co-operation could also be examined, in particular, the exchange of additional seismic data. This would be connected with the establishment and use by the USSR, the United States and the United Kingdom of high-quality national seismological stations with agreed features.

This position was, of course, stated during the trilateral negotiations and it is reflected in the progress report on those negotiations which was submitted to the Committee on Disarmament.

The Ad Hoc Group of Scientific Experts will be reconvening from the beginning of March to continue its important work of setting up an international system for the exchange of seismic data to help in detecting underground nuclear tests. My delegation looks forward to hearing the Ad Hoc Group's evaluation of the second trial exchange which was conducted in November last year, especially since more countries than at the first trial participated this time, including several socialist States. We understand that it would be possible to detect underground tests down to a yield of about 10 kilotons with a reasonable degree of accuracy if the detonation took place in hard rock, provided there is an appropriately deployed network of seismic stations. The detection threshold would be higher if the explosion were detonated in alluvium, for instance. We are told that such a network would render it possible to distinguish between earthquakes and nuclear explosions of a relatively low yield. If that were the case, surely it would be worthwhile to endeavour to achieve a ban on underground tests of a yield above, say, 10 kilotons. This would certainly be a welcome one step forward in the direction of a comprehensive ban of all underground tests.

There are apparently various ways of evading detection of an underground nuclear explosion by an international network of seismic stations. The experts will no doubt continue to seek ways of closing these loopholes. The effective functioning of a reliable verification system is of fundamental importance to any disarmament or arms control measure. However, the quest for absolute perfection in the verification mechanism, an infallible verification method, may result in no agreement at all. A reasonable balance has to be struck between the value of having a positive if not complete disarmament agreement, on the one hand, and the risk that certain violations may be theoretically possible in spite of the verification mechanism that has been agreed upon, on the other. Perhaps the adequacy of any verification system is ultimately a matter of political judgement and mutual trust.

While my Government refuses to abandon the hope that a truly comprehensive ban on all nuclear explosions of any kind and by any State is an attainable objective, it also feels that, in the state of affairs where we are, even limited additional restrictions on nuclear-weapon testing would have the effect of at least slowing down the further development of new types of weapons or hindering the further sophistication of existing ones. And above all the political impact of such a step on international efforts devoted to the cause of disarmament would be undeniable. The very first step in the direction of nuclear disarmament would have been taken and this would give much-needed new hope and encouragement to those engaged in the disarmament process.

As a representative of a non-nuclear-weapon State, I can merely express the hope that the nuclear-weapon States bear in mind the pledges they made in the partial test-ban Treaty of 1963 and the non-proliferation Treaty of 1968 "to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time and to continue negotiations to this end."

If an Ad Hoc Group of Scientific Experts has been allowed to conduct such useful work over the years, why can we not have an ad hoc group of administrative experts, for instance, to work out the necessary administrative arrangements for the proposed seismic data exchange? As Ambassador McPhail, the distinguished Ambassador of Canada, pointed out last week, the idea was originally proposed by the Australian delegation two years ago. My delegation has been in favour of that proposal. The Committee or a suitable subsidiary body should begin discussing the financial, legal and administrative aspects of the envisaged international seismic data exchange. These details should be worked out before the entry into force of the CTB treaty so that the data exchange can begin operating together with the treaty and not from an unspecified

date after the treaty has entered into force.

Much has been said about the importance of a CTB in the context of maintaining the non-proliferation régime and I will simply recall the unhappy outcome of the 1980 NPT Review Conference and remind member States that the next Review Conference in 1985 could turn out to be crucial to the NPT régime.

My delegation understands that the Treaty on the Limitation of Underground Nuclear Weapon Tests of 1974, and the Treaty on Underground Nuclear Explosions for Peaceful Purposes of 1976 are under consideration by the signatories for ratification. I wish to reiterate my Government's view that the entry into force of these two instruments would constitute an important step towards the achievement of a CTB. May I also express my delegation's hope that the trilateral CTB negotiations can be reopened at the earliest possible date.

My delegation listened with interest the other day to the idea put forward by MMe Thorsson, the distinguished Under-Secretary of State of Sweden, in connection with the international surveillance of airborne radioactivity as a means of monitoring nuclear tests in the atmosphere. We look forward to receiving the working paper that Mme Thorsson promised us. We would also be interested in hearing the reactions of other delegations.

CD/PV.157

pp.18-19

UK/Summerhayes

23.2.82

CW

Mr. Chairman, as you have just said, I have asked for the floor this morning to introduce document CD/244, which we have entitled "Verification and the Monitoring of Compliance in a Chemical Weapons Convention". We have put this document forward as a contribution under item 4 of our Committee's agenda. We tabled this new working paper to be available at the time when the Committee had just taken the decision to give a revised mandate to the Ad Hoc Working Group on Chemical Weapons. We look forward to the resumption of the Group's work later this week under the leadership of Ambassador Sujka of Poland and we hope that our paper, which we have also asked should be circulated as a working document under the symbol CD/CW/WP.26, will be considered in detail in that forum as soon as possible. We understand that all language versions will be available this evening.

I will not take up much of the Committee's time now in describing the substance of the working paper, but I think it is useful to do so very briefly. As I made clear in my opening statement on 11 February, my Government has had a long-standing commitment to the achievement of a comprehensive, effective and adequately verifiable ban on chemical weapons. We believe that verification is the central problem to be faced in drawing up a CW convention and that the Working Group will need to ensure that adequate attention is devoted to this key issue if we are to make progress. This is the reason why my delegation has concentrated on verification and compliance in the paper I have introduced; we are nevertheless very much aware that other important issues such as the definition of the scope of the convention will also need to be resolved and we hope that it will prove possible to work in tandem on these issues.

Perhaps I should now make a few explanatory remarks about document CD/244 which other delegations might find helpful in further considering our proposals.

The paper is set out in two sections: the first describes in the form of a memorandum the United Kingdom's view on the way in which a chemical weapons convention should be verified; the second sets out, in the form of draft elements, the type of provisions which a convention would need to include in order to fulfil the requirements set out in the first section of the paper. We will of course be happy to elaborate further upon the reasoning behind our proposals; the first section of document CD/244 gives a

preliminary explanation of the provisions which are set out as what we have called draft elements.

In looking at the substance of document CD/244, delegations may find it helpful to know that we approach the verification of a chemical weapons convention from two directions: first, the verification of the destruction of stockpiles and, secondly, "monitoring of compliance". We have divided verification into these two separate categories because the different activities to be verified will need different monitoring techniques. Moreover, for the vast majority of countries which, of course, do not possess any stock of chemical weapons, only the second category of verification measures, that is, those relating to the monitoring of non-production, would come into force.

As our working paper makes clear, the verification of both these aspects of a ban on chemical weapons will require a combination of national and international measures. National measures of verification may in time be of increasing value in monitoring the non-production of chemical weapons.

CD/PV.157

pp.19-20

Australia/Sadleir

23.2.82

CTB

The concept of gaps is particularly relevant. The Treaties I have just mentioned, imperfect as they might be, do raise important barriers to the unrestricted testing of nuclear weapons. There are large gaps between each of them, but why, in the absence of any more encouraging prospect, should we not do our best to create further barriers? Clearly if the Tlatelolco principle, to take only one example, were extended, it would cut down the geographic area over which testing takes place. If extended everywhere, it would have the same effect as a CTB treaty. Similarly, one could consider a lowering of the permitted yield of nuclear tests, perhaps in a succession of treaties, until the zero target is reached: this again would achieve a CTB treaty.

The attraction I find in the Canadian statement of 18 February is that it offers a coherent approach to a CTB based on the closing of gaps. Ambassador McPhail drew attention, for example, to the possibilities existing in the Threshold Test Ban Treaty and the Treaty on peaceful nuclear explosions. These Treaties could also conceivably lend themselves to extension.

If for a moment we forego the all-in-one approach to a CTB, many thoughts are provoked. Might existing Treaties — whether bilateral or multilateral — be extended to those nuclear-weapon States which are not yet parties to them? Might the bilateral treaties be developed into multilateral ones? The Threshold Test Ban Treaty prohibits explosions above 150 kilotons, but, if the public debate is a guide to national security concerns, then a threshold which is one order of magnitude lower could be quite quickly achievable. The verification provisions of the TTBT and the PNET, providing for a wide measure of detailed data exchange and direct co-operation between the parties, might be of great relevance in a wider context.

What would we be doing if we had been in a position to establish a working group on a CTB? My guess is that we would not be attempting to draft, not at an early stage anyway, on novel, sensitive and intricate issues. More likely we would, as in the Chemical Weapons Working Group, be drawing heavily on existing international instruments and the results of negotiations in restricted forums and, in general, following a step-by-step approach.

I have referred to barriers and gaps: it might be more explicit if I referred instead to the bricks necessary to make a wall. We have an opportunity to add more bricks with the aim of steadily building a total and complete barrier to nuclear tests. Australia in the past has suggested that we tackle the legal and administrative aspects of an inter-

national seismic data exchange. Other proposals have been made. An expanded scope for the Ad Hoc Group of Scientific Experts has been suggested. I submit that, if we can devise a way to relate each of these ideas, brick-by-brick to our final objective, the eventual wall, we will not attract negative reactions from those who, for one reason or another, shy at building a wall in one stroke and from those who, on the other hand, consider that one brick is too insignificant -- indeed too distracting -- an impediment to be worthwhile putting in place. Apart from the fact that the process of building can go on in different places at the same time, there is the practical need to get the lower ones cemented in place before adding higher ones. Here I am thinking again of the Australian proposal made in document CD/95.

Canada has proposed the establishment of a group of political experts, under the aegis of the Committee on Disarmament, to discuss matters which were not at issue in the trilateral negotiations. My delegation feels this proposal has some merit, in the difficult circumstances in which we find ourselves on a CTB. The same group could discuss all the points I have made today and give the Committee an indication of whether new approaches may help it to tackle its priority agenda item.

CD/PV.158

pp.13-14

USA/Fields

25.2.82

CTB

Today I should like to address very briefly the question of the work of the Ad Hoc Group of Scientific Experts, which is scheduled to convene its 13th meeting here next week.

Last summer, the delegations of Italy and Japan addressed the question of what the future work of this group should be. Thus far during this session, the distinguished representative of Sweden, Mrs. Thorsson, has made the suggestion that the Committee on Disarmament should consider in an appropriate context the possibility of organizing stations which sample radioactivity in the atmosphere into a system for international surveillance. During this session also, the distinguished representative of Japan, Ambassador Okawa, has once again noted the ongoing work of the Group of Scientific Experts and reminded us that we shall be hearing from the Group its evaluation of the second international experiment related to the exchange of seismic data.

I would recall that, in addressing this Committee on 9 February, the Director of the United States Arms Control and Disarmament Agency, Dr. Eugene Rostow, expressed the interest of my Government in discussing with other delegations the possibility of an enlarged mandate for the Group and, in particular, a mandate which would enable it to consider the feasibility and usefulness of exchanging data on nuclear explosions and other unusual events occurring in the atmosphere. This may prove to be an attractive effort in view of its relevance to the strengthening of existing treaty régimes and in anticipation of further agreements in this area.

My delegation believes that the Group of Scientific Experts has, and should continue to have, an important role in our work in this complex, but vital area of verification. From the outset of the modern era of agreements in the field of arms control and disarmament, the ability effectively to verify compliance with the terms of agreements has been recognized as a matter of the utmost importance. This is the case not only in the negotiation of the terms of a specific agreement, where scope and verification must be considered together, but also in the implementation of the agreement throughout the course of its existence. The Antarctic Treaty, for example, makes provision for on-site inspection, by any party, of any other party's facilities throughout the region, to ensure that the terms of the treaty are being complied with. It also provides for aerial observation over all of the region. Other treaties have more far-reaching provisions. The nuclear non-proliferation Treaty provides for a system of safeguards operated under the

auspices of the International Atomic Energy Agency, which are employed to ensure effective compliance. I might add that the United States and the United Kingdom, as nuclear-weapon States parties to the NPT, have also, on a voluntary basis, concluded agreements with IAEA placing their peaceful nuclear facilities under safeguards. These initiatives demonstrate that the NPT verification provisions are neither unduly onerous nor a threat to commercial activities involving nuclear energy. As well, they point up the fact that it is the responsibility of all of us to build confidence in international arms control and disarmament agreements.

The Group of Scientific Experts has not completed its current work. It would be premature for the Committee on Disarmament to take a decision now on its future activities. The Group has a considerable amount of work to accomplish in the field of an international seismological data exchange under the terms of its present mandate during its forthcoming meeting. And it has important tasks which will occupy it into the summer and possibly beyond. My Government supports fully the present work of the Ad Hoc Group of Scientific Experts and will continue to do so, so long as it is useful. We do believe, however, that the time has come to begin thinking and consulting on tasks which we should assign the Group for its future work. The time for decision will probably come during the summer meeting of our Committee, when we will have had an opportunity to review the report of the Group of Scientific Experts in response to its current mandate. We are indeed indebted to those who have already put forward concrete ideas and we look forward to hearing from and discussing with other delegations their ideas, in particular concerning the possibility of an expanded mandate for the Group of Scientific Experts. In consideration of ways of improving the monitoring of the atmosphere, this could make a useful contribution to our verification capabilities.

CD/PV.160

pp.35-36

Norway/Berg

4.3.82 CTB,PNE

Norway has taken a special interest in the verification issue concerning the comprehensive test ban question, which we consider extremely important. Adequate verification is an essential element in any agreement of this kind. We have participated actively in the Ad Hoc Group of Scientific Experts set up to consider international measures to detect and identify seismic events. This is due to the expertise and instrumentation provided by the Norwegian Seismic Array (NORSAR). Considerable progress has been made in this Group. In fact, the Scientific Group has done some pioneering work. Its proposed system of verification can be a model for verification mechanisms in other areas, in our opinion.

I would like to reconfirm the readiness of my Government to make NORSAR available as a station in a global seismic verification system to monitor compliance with a comprehensive test-ban treaty.

While, admittedly, there is a regrettable lack of progress in the field of nuclear disarmament, we feel that such lack of progress cannot be accepted as justifying the rejection of non-proliferation measures. It is a matter of great concern to us that several threshold States in regions of tension and conflict have not yet abandoned the option to develop nuclear weapons.

For its part, Norway supports the principle that sensitive nuclear material, equipment and technology should not be transferred or exported unless all nuclear activities of the recipient non-nuclear-weapon States are subject to IAEA safeguards or other similarly binding international commitments not to acquire nuclear explosive devices. Consequently, Norway has decided to restrict its own nuclear exports to countries that are parties to the Non-Proliferation Treaty.

Permit me also very briefly to reiterate our views on chemical weapons. In view of recent reports on the use of chemical weapons, we consider it an urgent need to build obstacles against further developments in this field. We therefore urge intensified efforts to reach agreement on a chemical weapons convention.

The Ad Hoc Group on Chemical Weapons made significant progress last year. Every effort should now be made with a view to arriving at a draft text on the prohibition of the development, production and stockpiling of chemical weapons and the destruction of existing stocks. For this reason, we have noted with satisfaction that the Committee has succeeded in arriving at a consensus decision on a new mandate for the Working Group on Chemical Weapons.

A new convention must, in our view, contain provisions for adequate verification, to which we hope to make a modest contribution. The Norwegian participant in the expert meetings of the Working Group on Chemical Weapons has initiated a research programme on the sampling and identification of chemical warfare agents used under winter conditions. The objective of the programme is, inter alia, to develop international verification procedures for the purpose of finding evidence of the use of chemical agents. The results of this research project will be submitted to the Committee on Disarmament.

CD/PV.161

p.7

Bulgaria/Tellalov

9.3.82

CTB

Several socialist countries, among them Bulgaria, are taking an active part in the Group of Scientific Experts on Seismic Events. At the same time, it is clear to all of us that the proposals to concentrate the attention of the Committee on the administrative, legal and financial aspects of an international data exchange system and other "limited steps" make sense only in close connection with the elaboration of a treaty on the general and complete prohibition of nuclear weapon tests. To do otherwise would be to put the cart before the horse. As pointed out in document CD/209 introduced by the delegation of India, "There can be no merit, either in sterile and abstract discussions of the complexities of verification issues, kinds of verification régimes, or in stressing the need for some kind of international verification organization, without reference to any concrete measure of real disarmament or serious arms limitations".

CD/PV.161

pp.15-16

Sweden/Lidgard

9.3.82

CTB

I have the honour to introduce today the working paper contained in document CD/257, which has been distributed this morning and which is entitled "An international system for the detection of airborne radioactivity from nuclear explosions".

This working paper should be seen as an effort on the part of my delegation further to prepare the ground for a comprehensive nuclear test-ban treaty. The Swedish delegation deeply regrets the lack of consensus so far on the establishment of an ad hoc working group in the Committee on the negotiation of a CTBT. This must, however, not paralyse our efforts to prepare ourselves for the many difficult issues such a negotiation will no doubt entail.

A great deal of valuable work is being carried out in the Ad Hoc Group of Scientific Experts to Consider International Co-operative Methods to Detect and Identify Seismic Events. However, seismic methods apply primarily to underground tests. It would therefore, in our view, be useful at this stage to take up also other aspects of the verification of a comprehensive nuclear test ban, namely, the monitoring of airborne radioactivity.

The Working paper proposes that the Committee on Disarmament should consider questions relating to the establishment of an international data exchange for the detection of airborne radioactivity from nuclear explosions. Such an international exchange would be complementary to a system for the international exchange of seismic data, as elaborated in the Ad Hoc Group of Scientific Experts. The techniques for collecting and analysing radioactive substances are well advanced and a number of stations in at least 30 countries all over the world are already monitoring the atmosphere. The costs of establishing the new stations which may be required for a satisfactory coverage of the globe are likely to be modest.

A global network for the surveillance of the atmosphere would no doubt add substantially to the present means of verification of nuclear explosions. It would not only be of great importance for the verification of compliance with a future treaty banning all nuclear tests, but is also likely to make a valuable contribution to confidence in existing agreements, such as the partial test-ban Treaty and the non-proliferation Treaty. It would, furthermore, contribute to the identification of possible nuclear explosions carried out by countries which are not parties to any of these treaties. Thus, it is likely that the identification of the much debated event south of Africa on 22 September 1979 would have been considerably facilitated if a system of the kind envisaged in the present working paper had been in operation on that occasion. Such a data exchange would not only add to the efficiency of present means of verification, but it would also be truly international and non-discriminatory in character, which is an important aspect for the vast majority of countries represented around this table, including my own.

With these words, I submit that the working paper contained in document CD/257 should be carefully studied and considered by the members of this Committee. As to the appropriate framework for dealing with this matter, it seems to my delegation that the Ad Hoc Group of Scientific Experts provides a suitable forum with an accordingly amended mandate. My delegation is, however, open to other proposals in this regard. One alternative might be to convene an ad hoc meeting of experts to discuss the matter.

CD/PV.162 p.9

USA/Fields

11.3.82

CTB

I have already stated the position of my Government regarding the broad issue of a comprehensive test ban and that position remains unchanged. However, my delegation believes that the Committee on Disarmament has a legitimate interest in all disarmament issues and an obligation to make a substantial contribution to the disarmament process in all its aspects, including consideration of the issues, such as agenda item 1, on which the negotiation of an agreement, for whatever reasons, may not be propitious at the time.

Foremost among the concerns which surround the question of a comprehensive test ban are the issues of effective verification of and compliance with such an agreement. Indeed, these concerns have been a constant preoccupation of this Committee and its predecessor body for at least a decade.

My delegation believes that the Committee can make a useful contribution in this regard and, further, that work in this area can begin now. Therefore, if a consensus can be developed to establish a subsidiary body to discuss and define issues relating to verification and compliance which would have to be dealt with in any comprehensive test-ban agreement, my delegation will join that consensus.

I believe that a serious examination of these extremely important issues, in all their aspects in the Committee on Disarmament would be a step forward. My delegation looks

forward to consulting with you, Mr. Chairman, as well as with other delegations on the establishment of such a subsidiary body and the mandate to be given to it.

CD/PV.162

pp.12-13

UK/Summerhayes

11.3.82

CTB

In my statement at the 153rd plenary meeting on 11 February, I said that my Government well understood the disappointment which existed that it had not proved possible so far to achieve a comprehensive test ban. I said also that my Government would continue to seek progress on test ban issues. This remains the case today. Since I spoke on that occasion, many delegations have devoted time in their plenary statements to this issue, always eloquently and frequently very forcefully, and the strong sentiments voiced in these speeches have been registered by my delegation. We also studied carefully the remarks made by the Director of the United States Arms Control and Disarmament Agency, Dr. Eugene Rostow, on 9 February.

The trilateral negotiations held here from 1977 until the autumn of 1980 clarified many of the issues involved in negotiating a comprehensive test-ban treaty. The tripartite report which was made to the Committee on Disarmament in July 1980 showed where points of agreement had been reached, but it also pointed to important areas where difficulties still existed; there remained at that time serious problems, concerned particularly with verification, which had still to be resolved before further progress could be expected.

The achievement of a comprehensive nuclear test ban remains an important goal of the British Government in the field of disarmament. The question was and still is how best work towards that goal. Having reviewed the current situation, having studied the views expressed in the Committee and, in particular, recognizing that it is evident that, for the present, no further progress can be expected in the trilateral talks, my Government has concluded that, in addition to the expert discussions already being held, there would be advantage in holding discussions within the Committee on Disarmament which would concentrate on the key issue of verification. My Government hopes that such discussions would not only throw light on the nature of the problem, but would indicate detailed ways in which it might be resolved. My delegation therefore welcomes the statement made this morning by the distinguished representative of the United States of America that his delegation would be prepared to join in a consensus to set up a subsidiary body to consider some of the issues relating to a nuclear test ban. My delegation believes that this statement will be welcomed by all delegations as representing a significant step forward and hopes that we can proceed rapidly to reach agreement on a mandate for a working group -- or whatever other form of subsidiary body may be acceptable to the Committee -- in order that it can begin its work without delay.

It goes without saying that my delegation will also continue to participate actively in the work of the Group of Scientific Experts in the belief that it is important to reach full agreement on the technical aspects of the detection and analysis of seismic events as they relate to the solution of the problems of verification of a nuclear test ban. We have taken note of the proposal of the distinguished representative of Sweden that the possibility of improving present capabilities of monitoring radioactivity in the air should also be discussed in an appropriate context under the auspices of the Committee and believe that this suggestion should be carefully considered. Work in these technical areas will be a support and contribution to the wider examination of verification and other issues which I hope we shall now be able to conduct. With respect to item 2 of our agenda, I would emphasize that my delegation remains willing to contribute fully to the discussion on nuclear matters in the Committee and would be willing, as in the past, to participate in informal meetings.

CD/PV.162 p.20

USA/Fields

11.3.82

CW

I would like to propose formally that the draft decision be amended to include a reference to the International Atomic Energy Agency along the following lines: following the words "United Nations Environment Programme", my proposed amendment would insert the words "Director-General of IAEA" and then, further down, in the matter "of the Ad Hoc Working Group on Chemical Weapons as well as consultations convened by its Chairman on toxicity determinations", I would substitute the words "on technical matters" for the words "on toxicity determinations" and then make appropriate adjustments to the end of that sentence by striking out the word "to" before the word "organizations" and ending the sentence with a full stop after the word "organizations". My rationale for this proposed amendment is as follows: the Committee will recall that, during the informal consultations with chemical weapons experts held by Ambassador Lidgard last summer (document CD/CW/WP.22/Rev.1), a presentation was made to the Group by the United States delegation concerning a system for remote continual verification, known by the acronym RECOVER. A number of delegations expressed interest in learning more about this concept. It is being developed by the International Atomic Energy Agency (IAEA) in conjunction with its nuclear safeguards programme and a demonstration project is currently underway. My delegation and others have been very interested in the possibilities of remote continual verification and its possible application to CW verification problems. On behalf of interested delegations, I intend to request that time be allocated during the expert session next week for further informal discussions on this possibility. It would therefore seem appropriate to request that IAEA be invited to send a technical expert to participate in the appropriate session of the informal consultations for the purpose of providing technical information with respect to the work of IAEA in the field of remote continual verification and its possible application to a CW prohibition. In this regard, I think the same criteria would apply that have just been alluded to by the distinguished Ambassador of Argentina: this participation is only for the purpose of aiding the Working Group and the Committee in a derivative sense, concerning particular technical matters. It should be related solely to technical information without recognition of anything more than this contribution by technical experts from that body who have unique qualifications and expertise in this matter.

CD/PV.163 pp.13-14

Japan/Okawa

16.3.82

CTB

When we were discussing last year the work of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events, I expressed on two occasions the hope that as many countries as possible would be able to participate in the second experiment. My delegation is all the more pleased to learn that some 20 countries, I believe, including five socialist countries, participated in the recent experiment and that, consequently, the results showed considerable improvement over the results of the 1980 exercise, although a number of problems remain to be solved.

I understand that most of the problems that came up in the context of last year's experiment can be attributed to the fact that the utilization of the WMO global telecommunications system for the transmission of seismic data over a global network has not yet been officially recognized by the Congress of the World Meteorological Organization. Up to the present, the trial exchanges have been conducted only under provisional arrangements with WMO.

My delegation is therefore of the view that the Committee on Disarmament should formally request the World Meteorological Organization to co-operate in the global

transmission of seismic data by authorizing the use of its global telecommunications system for that purpose; such a request should be made early enough to enable the WMO to consider it and take the necessary decision at its ninth Congress which is to be held in the early summer of 1983. My delegation is convinced that even more satisfactory results could be achieved if the next experimental exchange could be conducted with the official blessing and co-operation of the WMO.

Dr. Ichikawa, our expert on the Ad Hoc group, informs me that, while a certain degree of confidence has been obtained with regard to the exchange of so-called Level I data, the exchange of Level II data remains far from satisfactory. It has apparently become clear that the examination of Level II data can be highly effective in the detection of minor seismic events, and a workable method for exchanging Level II data would appear to be essential in order to utilize such data to the maximum extent possible. According to Dr. Ichikawa, considerable progress has been achieved in recent years in the technology for data exchange of this sort and efforts should be made to apply such new technology to the exchange of Level II data.

CD/PV.163

p.21

Cuba/Solà Vila

16.3.82

CTB

Within this context, it may be noted that one of the delegations that have been most opposed to the starting of negotiations on these items in the last two years, is now proposing the setting up of a working group to consider issues relating to the verification of compliance with an agreement on the prohibition of nuclear weapon tests. This proposal, in my delegation's opinion, shows that that delegation's opposition to the starting of serious negotiations on these items remains unchanged.

According to the dictionary, to verify means to establish the truth or correctness of something, and to bear out, make good or fulfil something predicted or promised. Thus, before there can be verification, there must first be an agreement. The proposed working groups is to negotiate on the verification of what? -- to conduct negotiations in order to verify -- what agreements? How is it possible to attempt to negotiate on ways of verifying something which does not exist.

If members of the Committee are really prepared to negotiate, why do we not set up a working group on a comprehensive nuclear test ban, with a mandate similar to the one proposed by the Group of 21? If the Committee were to take such a decision, matters relating to verification would undoubtedly be considered, in their proper context, together with the effective prohibition of testing.

I am taking the liberty of pointing this out to the Committee because we ought not to give the impression that we are negotiating when what we are actually doing is putting off what is urgently necessary -- the prohibition of nuclear tests.

CD/PV.163

p.26

USA/Busby

16.3.82

CW

Very briefly -- as you recall, my delegation proposed at our last plenary meeting the amendment of Working Paper No. 57 to include an invitation to a representative of the International Atomic Energy Agency. As you pointed out, we have had subsequent discussion within the Working Group on our proposal and it is obvious to my delegation that our amendment cannot command consensus at this stage of our work on chemical weapons. Therefore, Mr. Chairman, I would like formally to withdraw the amendment which we put forward at our last meeting and my delegation will join a consensus on Working Paper No. 57. I would note, however, that my delegation, and, we believe, others, think that the Ad Hoc Working Group on Chemical Weapons should examine any

technical means which offers promise of being useful in resolving the difficult and complex issues in the field of verification of compliance with a complete ban on chemical weapons. We consider that the technology associated with the Recover programme offers such promise and we do intend to pursue it. Further, we hope that the failure of our amendment to command consensus at this time does not represent, on the part of the objecting delegations, either an objection in principle to having a technical representative visit the Working Group at some time in the future, or reluctance to consider technical means to resolve the issues that are before us.

CD/PV.163 p.27 Sweden/Lidgard 16.3.82 CW

....I therefore support the draft decision which is contained in Working Paper No. 57. However, we are, for objective reasons, interested in exploring the possibilities of using the verification system implied in what is referred to by the name "Recover", within the framework of a chemical weapons convention. We would therefore welcome the participation of one expert or several experts from the international organ that has experience of this particular verification system for the purpose of providing technical information on the subject. Consequently, my delegation hopes that this Committee will take a decision which will make it possible for such expert or experts to participate in the consultations which are going on this week under the leadership of the distinguished Chairman of the Ad Hoc Working Group on Chemical Weapons.

CD/PV.164 pp.12-14 Australia/Sadleir 18.3.82 CTB

The overview summary annexed to document CD/260 which is before us on the table begins with a sentence that is self-explanatory: "The Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events, so as to facilitate the monitoring of a comprehensive nuclear test ban treaty, was established in 1976 by the then Conference of the Committee on Disarmament and has later been maintained by the Committee on Disarmament". Australia has from the very outset and even before it became a member of the Committee on Disarmament, played an active role in that Group. The Australian delegation regularly encourages the Group to continue its excellent and important work under the distinguished chairmanship of Dr. Ericsson. I need only refer to the most recent Australian statement on the matter, namely, that of 18 August 1981 when the progress report on the twelfth session was submitted to the Committee.

The progress report on the thirteenth session, covering work done in the first two weeks of March, is submitted to us today. It is a valuable report, valuable as much for what it does not say as for what it does say. It has not been possible to include in the report full details of all the important achievements of national investigations in recent years. It is hard for any group having a restricted mandate to look at all the implications of its work or to speculate into the future. Those are largely political tasks and therefore tasks for this Committee.

There have, in recent years, been some remarkable technological advances of direct application to the work of the seismic Group. The advances open up many new possibilities. In three areas alone the advances have changed our ideas of what is possible. The areas to which I refer are the digital recording of data from seismographs, improvements in computers and the development of communications satellites. Such are the advances that have been made that it is probably fair to say that they have rendered the 1976 mandate somewhat antique, even antediluvian in several respects. The mandate says, for

example, that level 2 data (i.e. information which is substantially more detailed than the level 1 basic parameters of detected seismic signals and which are provided in response to requests for additional information) may be delayed for 4-6 weeks. It is now possible and, indeed, more convenient, for seismic stations to pass on at least some level 2 data with negligible delay. In the view of my delegation the Committee has an obligation to take full advantage of the startling information revolution that I describe: if seismic data can be transmitted for analysis in larger quantities, at faster speeds and with greater benefits then this will be of very considerable value in monitoring a comprehensive nuclear test-ban treaty.

I mentioned the national investigations carried out under the auspices of the Group. Some of the investigations, for example those considered by study group 4, deal with the format and procedures for exchanging level 2 data and illustrate the possibilities I have just mentioned. Australia and Japan have had responsibility for study group 3 which has looked into the possibility of exchanging seismic data using the World Meteorological Organization's global telecommunication system. I join Ambassador Okawa who on 16 March spoke of the results produced in the second experiment with this system: I share, in particular, his satisfaction that some 20 countries, including five socialist countries, took part. Finally, I draw the Committee's attention to a proposal, put forward by Australia and Japan for study group 3, and Sweden and the United States for study group 5, to develop the experiment with the global telecommunication system by exchanging seismic data through temporary data centres. The experiment would simulate many of the functions envisaged for an eventual full system and would have considerable practical benefit both for the Group and for the work of the Committee as a whole. Again it will be important to have good participation in this experiment which, I understand, may be able to take place as early as at the end of this year or the beginning of next year.

I have spoken in some detail about the work of the Ad Hoc Group of Scientific Experts, a body which I described in my statement of 11 February as a model of patient industry. There is no doubt that the Group makes a very great contribution to our work. It is perhaps unnecessarily hampered by aspects of its mandate. I have already suggested that in part that mandate is out of date. In part, too, it is ambiguous: whereas ambiguity was an asset in 1976 when agreement on the mandate was reached it is now, in our view, a distinct liability. It seems to me that the time has come for us to begin remedying the situation.

One more substantive restraint on the mandate, should, however, remain. Change in the central political aspect of the mandate of the Group of Scientific Experts, as spelled out in document CCD/558, would change the Group's essential charter in the setting up of an international co-operative system. I refer to the important sentence in CCD/558 which reads, "The Group should not, however, assess the adequacy of such a system for verifying a comprehensive test ban".

Last week the distinguished representative of the United States of America proposed that a subsidiary body of the Committee on Disarmament could usefully discuss and define issues relating to the verification of, and compliance with an agreement on a comprehensive test ban. The proposal fills in a missing dimension in the work of the Group of Scientific Experts. The proposal also offers an opportunity to fill in the main gap left in the work of the trilateral CTB negotiators. We know from the report submitted to the Committee on the progress of the trilateral negotiations that the subject of verification and compliance is an important one and one on which substantial work is still to be done. Other documents, notably the Secretary-General's report on a comprehensive test ban, contained in document CD/86, place verification of a CTB as first among the "major unresolved issues". The statement by the Group of 21 embodied in document CD/181 similarly draws attention to the issue.

Australia is unequivocally committed to the early negotiation of a comprehensive nuclear test ban. Our commitment also encompasses whatever might be done to make progress towards such a ban. That, quite simply, is why we supported the step-by-step approach put forward by Canada. It is because of our commitment that we fully support the United States proposal. The proposal enables our Committee to take up immediately and for the first time, in a serious and detailed way, issues even more central to a comprehensive test ban than those canvassed in the Canadian proposal. We agree with those who hope for a dynamic in the Committee's handling of this issue. We agree with those who want to ensure that the goal of a treaty on a comprehensive test ban is not lost sight of.

We accept, in similar fashion, the logic of the questions: verification of what? Compliance with what? But the answers to those questions have already been given. The answers are implicit in what I have already had to say about the main gap left by the work of the trilateral negotiators. The answers are even more evident in what many of those around this table have already had to say on the question of a comprehensive test ban. I take, for instance, two examples. The first is from the statement that the distinguished representative of the Union of Soviet Socialist Republics, Ambassador Issraelyan, made on 18 February in this Committee on the subject of a nuclear weapons test ban. In talking of the course of the trilateral negotiations he said:

"It can be affirmed that the greater part of the work of elaborating the treaty was done."

I turn to the second of the two examples which give us the answer to the questions of verify what? Comply with what? That is to be found in the statement of the distinguished representative of Pakistan, Ambassador Mansur Ahmad, who said:

"Of course it is self-evident that negotiations relating to verification of compliance with a nuclear test ban must be based on a prior understanding, if not agreement, on the scope of the treaty. It would appear from the report of the trilateral negotiations submitted to the Committee last year that at least as between the three negotiating Powers, an agreement or understanding was achieved on the scope of the test-ban treaty. This was, in fact, reflected in the language of paragraph 51 of the Final Document of the first special session...".

In short, there is a sufficient body of established doctrine in the international community, as shown by the remarks of our colleagues I have cited, to permit this Committee to be reasonably clear on what we are aiming to verify and what we want to ensure compliance with. Not all the doctrine is there. It could not possibly be there since much of it was established in the negotiations between the Soviet Union, the United Kingdom and the United States. All the doctrine on the scope and definition of the treaty cannot be there since that was a trilateral negotiation and what this Committee is about is a multilateral negotiation. But sufficient of the doctrine is there and, as I mentioned a few minutes ago, shown in our statements to be there, to allow anyone seriously concerned to bring about a CTB, to begin in this Committee, for the first time, serious work on that most central of matters. The history of efforts of disarmament has been too much the history of unseen or lost opportunities. I urge you all, distinguished colleagues, to see and to take with both hands the opportunity that now exists, lest it is no longer here tomorrow.

Thirdly, the United States proposal suggests that the subsidiary body discuss and define issues relating to verification and compliance. It is evident at once that the

ambit of work suggested is a limited one -- only to discuss and define but not to negotiate. Discussion and definition are essential requirements but like painting the sky they can be endless and seamless, and where one will get to is totally uncertain. It can become an extremely interesting, academic exercise, shedding a lot of light on the twin problems of verification and compliance. But to what will the exercise be anchored and to what will it be directed?

Verification and compliance are complex, essential, vital elements of any future CTBT. They can be most effectively discussed and examined, not in a vacuum but in relation to a proposed treaty, agreement or other such instrument. A technical examination of verification and compliance alone cannot produce a political document. Any CTBT has to be a political document if it is to gain the favour and win the approval of member States. But in the United States proposal we can find no provision that will assist in giving the proposed discussions the dimension and quality needed to formulate a political document.

CD/PV.164

p.30

GDR/Herder

18.3.82

CTB

Recent developments in this Committee have reinforced our doubts. As in the past, we favour the establishment of an ad hoc working group to negotiate on a CTBT. It should be not merely a subsidiary organ for deliberations but a real negotiating body which should deal with all the issues connected with a CTBT. While we recognize the importance of verification, we believe that this question cannot be singled out and also that it cannot be considered in the abstract. In so believing, we are proceeding from the Final Document of the first special session on disarmament which in paragraph 31 clearly says that the "form and modalities of the verification to be provided for in any specific agreement depend on and should be determined by the purposes, scope and nature of the agreement". This means that, before considering aspects of verification we should be aware of what we are going to prohibit. Proceeding from this assumption, my delegation shares the considerations and doubts expressed by the distinguished representatives of Brazil, Cuba and Pakistan on 16 March 1982 and today, who stressed the link between the substance of a CTBT, i.e. the scope of prohibition, and verification measures.

As long as a CTB is regarded by some nuclear-weapon countries only as a "long-term objective", there is the real danger that a singled-out verification debate could only serve to camouflage the lack of political will to achieve and implement a CTB.

This, by the way, is by no means a new discovery made by my delegation. The history of disarmament negotiations since the Second World War provides sufficient proof that unjustified verification demands have very often been used for the purpose of blocking progress in the negotiations concerned. We have sometimes seen attempts to convert negotiations on disarmament into negotiations or discussions on verification.

Before concluding, allow me, Mr. Chairman, to touch upon the statement made by the United Kingdom delegation on 11 March. We were told that, on the one hand, the trilateral negotiations were useful in clarifying many issues of a CTBT. On the other hand, the view was expressed that "for the present, no further progress can be expected in the trilateral talks". Since this problem is closely connected with our work in the Committee on Disarmament concerning item 1, my delegation is very interested in hearing the reasons for this assumption. In the same way we would like to know why the United States delegation, while proposing a discussion on CTB verification considers that negotiation on an agreement on item 1 "may not be propitious at the time".

Thank you, Sir. Ladies and gentlemen, document CD/260 is a progress report in the customary fashion, to the Committee on Disarmament, of the Ad Hoc Group of Scientific Experts. This time, the meeting was attended by scientists from 27 co-operating States, five of them not members of the Committee, and we also again enjoyed the co-operation of a representative from the World Meteorological Organization. In paragraph 10 of the progress report, it is stated that the report has an appendix which is an overview summary of its work up to March 1982. That appendix is intended to assist the Committee on Disarmament in its reporting to the General Assembly at its second special session on disarmament. If you turn your attention to the first page of the annex to document CD/260, you will find a number of paragraphs which outline the history and the structure of the data exchange which has been proposed and, I think, widely accepted, to assist States in their national endeavours to monitor a complete nuclear test ban.

The data exchange proposed consists of a global system with three main elements: first, a network of more than 50 existing or planned seismological stations, including equipment and up-graded procedures for the extraction of data; secondly, an international exchange of data from those stations, over the global telecommunications system of the World Meteorological Organization, and thirdly, a processing of the data at special international data centres for the use of participant States. I may say that the clearly understood purpose here is that these international data centres would only prepare the data for national assessments as to the nature of the observed events.

The Group has made several observations about this proposed system. One which I think is very important is the desirability of increasing the number of observatories in the southern hemisphere and also generally providing such observatories with modern equipment for what is called digital recording. The data to be extracted from the earth and transmitted in the fashion indicated to participating States would be on two levels of detail. Level 1 would be basic parameters, that is, brief descriptions of the observations. The second level would be rather detailed descriptions of what has been recorded, in fact, whole records. In the system originally proposed, and I think widely accepted, the global exchange would be of level 1 data, of the brief description of events. And for this purpose WMO has very kindly given its preliminary acceptance of such a scheme. It is also foreseen that the system envisaged would exchange complete records, on request. The proposed international data centres would have the purpose of providing States with easily accessible data on seismic events for the national assessment of those events by the participating States. The international data centres would not themselves assess the nature of the events. They would, however, be expected to provide quite a lot of details of the mathematical treatment of the data, so as to make them easily understandable to the human mind.

What I have described now is essentially the content of the consensus reports CCD/558 and CD/43 which were submitted a few years ago. Since then, the Group has devoted itself essentially to the further development of the scientific and technical aspects of this proposed global system. This has been done by means of national investigations, a few of them of considerable volume and impact on the matter. Among them, a variety of scientific methods for the analysis of the data have been studied and developed. The conditions for reliable data exchange through the WMO system have been studied in two global experiments, the last one last year engaging not less than 20 participating States. As a result of that experiment, these conditions are still under study and certainly need additional investigation. The details of how to operate data centres have been developed by vast and, I think, very efficient efforts by participating

States. In summary, the impact of the now very fast development of computer and telecommunication technology has made itself felt, strongly suggesting that the efficiency of the global exchange system as envisaged in the reports which I mentioned could, in principle, be greatly increased by the adoption of these new methods and technical possibilities. The extent of consensus in the Group about these new developments has, however, not yet been established and, therefore, suggestions from the Group as to how the original proposal about the global system for international co-operative measures to detect and identify seismic events might be improved in the light of recent scientific and technological progress would have to wait for some further efforts by the Ad Hoc Group. I might add that I would be very glad to answer questions on this matter.

CD/PV.164

p.33

USA/Fields

18.3.82

CTB

Mr. Chairman, I have listened with great interest to the report of Dr. Ericsson on the work of the Ad Hoc Group of Scientific Experts. My delegation agrees that the Committee should take note of this report. My delegation also agrees that the "Overview summary" of this report, contained in its annex, should be used in reporting on the work of our Committee to the General Assembly at its second special session on disarmament. My delegation does, however, have some concerns about the report, and I would like to make a few comments and direct a question to Dr. Ericsson.

First, the United States experts who participated in the thirteenth session of the Group have reported to me that they have not discerned any notable degree of disarmament among those experts who participated in the meetings with regard to matters of a purely scientific nature. I think that this is an important point for us to recognize. On the one hand it is encouraging, but at the same time it gives rise to questions as to why the report is so brief.

I am also encouraged regarding the recent second global experiment carried out by participants in the Ad Hoc Group of Scientific Experts. In this experiment the conditions for the reliable exchange of seismic data, using the global telecommunications system of the World Meteorological Organization, were studied. Twenty States, with broad geographical distribution, participated in this experiment. My delegation looks forward to the continuation of such investigations, and in fact has made a proposal to this effect in the Group of Scientific Experts in co-operation with Australia, Japan and Sweden.

CD/PV.165

pp.8-12

GDR/Herder

23.3.82

CW,VER

Secondly, the production of binary weapons is likely to undermine the search for a chemical weapons agreement since it complicates or even foils the elaboration of adequate verification techniques. Thus, with regard to verification, a completely new situation has emerged with the development and production of binary chemical weapons. Already some years ago, responsible scientists had emphasized this aspect. In 1975 the SIPRI publication Chemical disarmament - new weapons for old stated that "binary weapons are, in effect, miniaturized nerve-gas production plants. The problems which they represent for verification are therefore analogous to those of moth-balled nerve-gas factories, with the important exception that their locations are unlikely to be detectable by any form of extra-territorial surveillance. Most of the verification procedures which have so far been proposed will thus have great difficulty in establishing whether binaries do or do not exist within a particular country. The appearance of binaries has therefore had the consequence of removing much of the value from existing

verification studies; it has necessitated an expansion of these studies into areas that have not been extensively explored". Unfortunately, at the time when binary weapons were still in the developmental stage, the chance for precluding their full-scale production was missed because of only too well-known reasons. Today, as in other cases, too, we have to note that the military use of the latest achievements of science and technology has outpaced our negotiations in which we are trying to find solutions for ageing weapons. These solutions are likely to be rendered meaningless by the production and deployment of binary weapons.

This process must be stopped. While continuing our negotiations on a multilateral chemical weapons convention as a matter of high priority, we should explore other possibilities as well which could contribute to an early halt to the chemical arms race.

Of special importance in this regard is the appeal contained in resolution 36/96 B of the United Nations General Assembly. This resolution called upon all States to refrain from any action which could impede negotiations on the prohibition of chemical weapons. States should specifically refrain from the production and deployment of binary and other new types of chemical weapons as well as from stationing chemical weapons in those States where such weapons do not exist at present.

The implementation of this appeal would, without doubt, promote our efforts here in the Committee on Disarmament to deal with all aspects of the prohibition of chemical weapons.

During recent years, considerable progress has been achieved in the Ad Hoc Working Group on Chemical Weapons. As a result of the able guidance of this group by its previous chairmen, Ambassador Sujka of Poland is now in a position to build upon the "Elements" elaborated in the past. We welcome and support his efforts to achieve a new quality in the work of the Group. We believe it is time to proceed, in accordance with the mandate, to actual drafting. The above-mentioned Elements as well as proposals concerning the scope of prohibition tabled in recent weeks by different delegations provide a sound basis for this. This endeavour should not be hampered by differences of opinion with regard to some questions. Moreover, all efforts should be made to arrive at reasonable compromise formulas.

This applies to verification provisions as well. Sometimes we hear arguments that the Socialist countries are not interested in real verification measures and are only prepared to accept measures of "self-control". To the contrary, as regards verification of compliance with a future chemical weapons convention, we contemplate a variety of different methods and procedures, the core of which consists of the following three main elements:

Firstly, a national verification system. It is our belief that it is in the first instance up to the States parties themselves to enforce the obligations undertaken internationally on their own national territories and also to give some assurance to other parties that these obligations are being complied with. No international organization can relieve a State party of this obligation. In the German Democratic Republic, the chemical industry is centrally planned and managed. This provides excellent conditions for our Government to ensure compliance with a chemical weapons convention by all chemical enterprises.

The establishment of a national control system is, of course, the prerogative of the countries concerned. But this should not prevent us from introducing some recommendations about such a system in a chemical weapons convention. It was satisfactory to my delegation that our ideas in this connection found their reflection in the Elements drafted under the guidance of Ambassador Lidgard last year. At the same time, we cannot but deplore the fact that in working paper CD/244 tabled by the United Kingdom delegation, virtually no role has been envisaged for a national verification system.

Secondly, national technical means of verification could play a useful role in monitoring compliance with a chemical weapons ban. These means should be used in accordance

with the generally recognized principles of international law.

A great body of interesting data and assessments has been assembled in many working papers tabled over the years in this Committee and its predecessors. These papers show the great verification potential inherent in national technical means. Here I would only like to draw your attention to working papers CCD/371 and CCD/502 tabled by the United Kingdom, CCD/533 by the Netherlands, CCD/538 and CCD/539 by the USSR and CCD/344 and CCD/577 by Finland. So, in United Kingdom document CCD/502 it was stated that once a reliable indication of an infringement of a convention had been obtained by national technical means, then a case for on-site inspection would be greatly strengthened.

Thirdly, we envisage an international complaints procedure involving a consultative committee, certain international procedures of consultation and co-operation within the United Nations, and the Security Council. To establish the actual state of affairs in case of suspicion concerning compliance with the convention, relevant information might be requested and some form of verification by challenge could be used. In general, parties could exchange different kinds of data necessary for assessing compliance with the convention by other parties.

In view of the character of the modern chemical industry, regular and permanent international on-site inspections can only very marginally add to the effectiveness of a verification system. But they would be connected with serious political, economic, technical and financial problems which would more than outweigh their limited value. This concern was very eloquently stated in the Committee on Disarmament three years ago by the former Australian representative, Ambassador Sir James Plimsoll, whom I would like to quote:

"Problems of verification arise in acute forms because so much of chemical capacity and of chemicals themselves can be used for different purposes. There are going to be limitations on the value of inspection. To inspect all chemical productive capacity would involve a whole army of people -- an enormous number of people. The problems of preserving industrial secrets, commercial secrets as well as security secrets, are very considerable. One has to ask oneself how detailed an inspection is going to be justifiable either in results or in cost, because it is not just production that will have to be looked at, it is also the ultimate use. Chemicals can be stored perhaps for years and then be available for use in chemical weapons." (CD/PV.44, p.20)

On the other hand, it is difficult to agree with the conclusion of Ambassador Sir James Plimsoll that it would take years to work out all these things. This approach as well as the approach that the verification means should determine the scope of prohibition would endlessly postpone the conclusion of a chemical weapons convention.

In the same way we have to recognize the problems stressed in 1978 by the former representative of Japan, Ambassador Ogiso, who stated that "since the threshold to be applied to chemical agents to be banned and verification procedures for dual-purpose agents involve technical, specialized and complicated problems, each country is concerned over the strong possibility that such verification procedures may obtrude upon its chemical industries for peaceful uses, and therefore needs to conduct detailed examinations in relation to national laws and regulations". (CCD/PV.801, pp.25-26)

Having these problems in mind, one may ask if the private corporations of some States asking for intrusive international inspection are ready to accept these controls. The Canadian document CD/167 provides a useful analysis of the pros and cons of several verification methods. This document, in our judgement, very much shows the advantages of a verification system based on a combination of the three main elements listed above.

I think the whole complex of verification methods available and possible, ranging from national control to some international verification by challenge, provides a high degree of assurance that a violation of a chemical weapons convention could be detected. It is highly doubtful that a militarily important violation could be concealed. So, we should be very reasonable and not lose ourselves in a labyrinth of technical details, forgetting about our ultimate aim in this regard -- a convention on the complete prohibition of chemical weapons containing adequate procedures for verification of compliance with it.

Before concluding my statement allow me, Mr. Chairman, some general remarks concerning verification. Certain representatives, particularly from Western countries, this year again have come out with ideas to put more emphasis on consideration of the so-called verification question. In this connection we have again witnessed in this hall attempts to misinterpret the stand of socialist countries towards verification of compliance with agreements on arms limitation and disarmament. It has been alleged that socialist countries underrated verification, and were even not ready to join far-reaching verification measures. As a matter of fact, we are no less than other countries interested in verification. The basic principles of our approach to these questions were clearly outlined here on 31 March 1981 by the representative of the USSR, Ambassador V. Issraelyan. This approach is fully based on the Final Document of the first special session of the General Assembly devoted to disarmament which in paragraph 31 and other parts contains clear provisions on verification. We also agree with the view of the Indian delegation reflected in working paper CD/209 "that it would be wrong to make a fetish of verification. It would be equally wrong to devise or establish a machinery of controls in the absence of genuine measures of arms limitation or disarmament. To do that would be like putting the cart before the horse. There can be no merit, either, in sterile and abstract discussions of the complexities of verification issues, kinds of verification régimes, or in stressing the need for some kind of an international verification organization, without reference to any concrete measure of real disarmament or serious arms limitation".

Yet is it just this clear relationship between disarmament and verification measures which was neglected in recent statements about "far-reaching verification measures". Actually we were told a lot about "balanced agreements", "transparency" and confidence-building measures, but virtually nothing was said about real disarmament measures. We subscribe to the view stated in the above-mentioned Indian working paper that "it is universally recognized that strong political will is a prerequisite to reaching agreement on any significant or meaningful measure in the field of disarmament. Once such political will has been built up, it will not be difficult, and certainly not beyond human ingenuity, to devise controls appropriate to any requirement in the field of disarmament, no matter how complex it may be".

Let me briefly raise two further political questions closely connected with verification.

Firstly, we proceed from the conviction that it should be the objective of verification measures to provide assurance that the corresponding agreement is observed by all parties, thus enhancing confidence in the agreement and attracting other States to adhere to it.

On the other hand, a certain minimum of confidence is necessary as a basis for devising an effective verification system. Thus, it was not by chance that in the 1970s when détente prevailed, satisfactory solutions to some verification problems were found. Then all parties agreed that these procedures worked well.

In recent years we have heard accusations concerning the compliance of socialist States with certain agreements on arms limitation. It is difficult to see how the picture should have changed in some years' time. Moreover, one may ask if these accusations

just conceal the intention to call into doubt the usefulness of curbing the arms race by mutual agreement.

In general we proceed from the conviction that normal relations between States based on détente and recognition of mutual interest are very conducive to the elaboration of reliable verification procedures, whereas a policy aggravating international tension and enhancing suspicion is not likely to promote the agreement on far-reaching verification measures. Can verification under these circumstances really be a substitute for trust? Furthermore, in discussing verification questions, should we not also take into account the international law of treaties? Why should a given country enter into a disarmament agreement if it intends to violate it? Why should a party violate a certain agreement, thus risking its international credibility, if it could easily withdraw from it, using the relevant treaty provisions?

Secondly, it is obvious that verification capabilities are in a continuous race with changing military technology which by such features as miniaturization, mobility, deployment methods and so on undercut the possibilities for making special disarmament measures verifiable. One may cite such examples as land- and sea-based cruise missiles, certain plans for MX deployment, binary weapons and other systems. For example, land-based cruise missiles resist verification as the launchers are small and mobile. In this regard one may agree with John Newhouse, a former Assistant Director of the United States Arms Control and Disarmament Agency, who wrote that "there is no need for such weapons. They may very well give the arms competition another dimension. Once deployed, there will be no reliable way for the other side to count them. The Administration says it will deploy several hundred cruise missiles. If the Soviets said the same thing, one would assume eventual deployment of thousands". It should be quite clear that such weapon developments as cruise missiles threaten to undermine the very basis for disarmament talks -- a fact which was so eloquently described here by the distinguished representative of Sweden, Mrs. Thorsson, some weeks ago. The example of the cruise missiles shows that the protagonists of the qualitative arms race and of "far-reaching" verification measures are identical. It is difficult to understand how one can, on the one hand, reduce international confidence by creating new and unverifiable weapon systems and, on the other hand, demand "effective" verification measures rendered impossible by the foregoing. Furthermore, here again there is an attempt as usual to apply a double standard in verification questions: whereas socialist countries could not be trusted, the insinuation is that one's own trustworthiness is always out of the question.

Let me summarize our views on verification: the German Democratic Republic, like other socialist countries, stands for strict verification of compliance with concrete measures in the disarmament field. Verification measures should enhance confidence in those agreements, thereby promoting the disarmament process. In this sense my delegation is ready to play an active and constructive part in the elaboration of verification measures connected with concrete steps of arms limitation and disarmament. But the Committee on Disarmament should not be involved in an abstract verification discussion diverting its attention from substantive disarmament problems.

CD/PV.165

pp.14-15

UK/Summerhayes

23.3.82

CW

I should now like to turn briefly to the United Kingdom working paper on verification aspects of a chemical weapons treaty, circulated as CD/244 and as Working Paper 26 of the Working Group. I am very grateful to delegations for the many comments which they have made on this working paper, both in the Working Group and privately. I look forward to its further discussion in the remaining sessions of the Working Group

devoted to verification. One point has emerged from the discussion of the United Kingdom paper which I think it might be helpful to respond to here. Many delegations clearly feel that the fact that a particular proposal or particular course of action has not been included in the draft elements contained in CD/244 means that my Government opposes that particular course of action or proposal. This is not the case. The purpose of CD/244 was to change somewhat the emphasis contained in the draft elements attached to last year's report of the Working Group, because my delegation does not believe that those elements give sufficient emphasis to international means of verification. My delegation is not opposed to the inclusion of additional language in the elements, for example, on national means of verification or on the collection and exchange of data and information under the convention, subject, of course, to the language being satisfactory. We would in fact welcome concrete proposals from other delegations to deal with these points. But we attach great importance to the balance between national and international measures of verification which we have described in CD/244.

I should also this morning like to make a few comments on the meetings of chemical weapons experts which were held last week. As always, the presence of technical expertise proved stimulating within the delegations, and helped us to focus on the areas where further work is required before we can achieve a ban on chemical weapons. But I want to record a view which is perhaps shared by other delegations, that, at least initially, the meetings of the experts appeared to have lost some of the impetus with which they began their work last year. This was perhaps because the Working Group did not tell the experts clearly enough what was wanted from them. However, towards the end of the week the meetings picked up momentum again, and the Chairman's report which has just emerged shows a satisfying degree of progress towards finding solutions to some of the technical problems associated with toxicity determinations. In order to ensure that the meetings of experts continue to maintain this momentum, my delegation believes that the Working Group should consider very carefully the list of suggestions put forward last week for further work on the technical aspects of a chemical weapons convention and recorded in the Chairman's report. We believe that we have now reached the stage where it would be useful to widen the scope of the experts' meetings in order to examine issues other than those related to toxicity criteria. For example, it would be useful to have a discussion of the technical aspects of the most basic provision of a convention, namely, the destruction of stockpiles, and the verification of their destruction. As far as toxicity criteria are concerned, my delegation feels that the Ad Hoc Working Group will need to consider more carefully the specific purposes for which such criteria will be used in a chemical weapons convention before requesting the experts to look again at this question. I should like to record here my delegation's gratitude to Professor Rump of the Polish delegation for his endeavours as Chairman of the meetings of experts.

Finally, my delegation would like to comment on the concern expressed recently by a number of delegations that because toxic chemicals can be produced by the binary process, a new dimension has been added to our discussions. I think we should give this matter careful consideration before reaching any conclusion of this sort. It is clear that binary weapons will need to be dealt with in a chemical weapons convention because, in common with all other types of chemical weapons, their production and stockpiling will be prohibited. But we question whether by their nature binary weapons make problems of verification more difficult. The components of binary weapons must be chemically very highly reactive for them to be suitable for use in such weapons systems. If the materials to be used are chemically highly reactive, then storage problems for at least one of the precursors will be just as serious as for other chemical warfare agents, and such precursors will not be stored in large amounts for civilian use. A system of verifi-

cation which included on-site inspections of a random sample of major chemical installations, such as the United Kingdom has proposed in CD/244, would thus be adequate to verify the non-production of binary weapons as well as of other types of chemical weapons. Thus the problems of verification of essential binary precursors will be similar to those of the verification of other lethal agents, and in fact less difficult than the problems of dual-purpose chemicals such as hydrogen cyanide. We must not allow imaginary problems associated with binary agents to cause an unnecessary diversion in our work on a chemical weapons convention.

CD/PV.165

Poland Sujka

pp.19-20

23.3.82 CW,CTB

In the Working Group, we have examined in depth the questions concerning the scope of prohibition, aiming at further narrowing the differences. The Group, I have to stress, unfortunately has not managed to determine clearly the scope of prohibition. But I would like to come now to the question of verification. From the first round of discussions it can be said that a more reasonable approach seems to be emerging during this session. However, in our view, further discussion should concentrate more on the aspect of the adequacy of the verification system in relation to the sphere of prohibition. I think that there exists a somewhat artificial problem or certain misunderstanding in the discussions on verification. It is pointless to discuss whether national means of verification are better or more efficient than international mechanisms, and which ones are to be applied, because in fact both are needed. And the negotiations should go in both directions. Moreover, the negotiations should concentrate on methods and means of verification so that they can be adjusted to the contents and form of the prohibition. In other words, with three categories of chemical agents as spelled out in document CD/220, adequate forms of verification through national and international means should be applied to each of them in a differentiated but internally balanced and mutually interrelated system. This could be taken into account in our further discussions on verification.

As I mentioned at the beginning of my statement, I would like now to touch upon another question which has been quite intensively discussed at the recent meetings of the Committee. I mean the declaration made by the United States delegation at the meeting of 11 March with respect to the establishment of "a subsidiary body to discuss and define issues relating to verification and compliance which would have to be dealt with in any comprehensive test-ban agreement".

As you know, somewhat earlier, to be precise on 9 February of this year, the Director of the Arms Control and Disarmament Agency, Mr. Rostow, stated the United States position on the question of a nuclear weapons tests prohibition. He stated: "...we do not believe that, under present circumstances, a comprehensive test ban could help to reduce the threat of nuclear weapons or to maintain the stability of the nuclear balance". This statement shows that the United States refuses to study the question of the tests prohibition as an independent item, but rather links it with the "wide range of nuclear problems". At the same time, the United States flatly refuses to take any step towards multilateral negotiations on the limitation of nuclear weapons and nuclear disarmament. In particular, the United States impedes the establishment of a working group on this question which the non-aligned and socialist States insist upon. The United States delegation in its statement of 11 March reaffirmed its negative position both in respect of a nuclear weapons test ban and with respect to the nuclear disarmament problem as a whole.

Thus, on the one hand, the United States expresses its readiness to discuss the matters of verification connected with a nuclear weapons test ban, and on the other, it

excludes the possibility of concluding an agreement on this subject in the near future. In this connection, delegations have a number of questions. Our delegation would also like to ask some questions. The main question is: is there any reason to discuss matters of control if the possibility of concluding an agreement is being denied? If the United States delegation proposed starting the elaboration of an agreement on a nuclear test ban with questions of control, then maybe one could understand it (although not necessarily agree).

There is another question: matters of control of a nuclear test ban have been discussed for a quarter of a century in various bodies and in different forms; in what manner should the discussion of control questions differ from previous discussions of previous questions? Is it a fact that previously the discussions of control questions were carried out in connection with the need to conclude an appropriate agreement, and now the American side proposes to indulge in pure abstraction?

Finally, we would like to ask the United States delegation the following questions. Does it envisage discussing only the problems of control over a nuclear weapons test ban or also problems concerning peaceful nuclear explosions? What does it envisage doing with the question of the scope of prohibition? Is the American delegation going to initiate the discussion of this later? Or does it not see any necessity in it at all, since it denies the possibility of the conclusion of an agreement on this matter? Thus, we return to the point we started from: why discuss questions of control if there is no prospect of concluding an agreement?

CD/PV.165

pp.36-38

Switzerland/Pictet

23.3.82

CW

The question whether it would be appropriate to repeat in the convention the prohibition of the use of chemical weapons which appears in the 1925 Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (Geneva Protocol) has been the subject of a great many comments relating to Element I ("General provision"). On the one hand, it can be argued that such a prohibition would have the advantage of being more comprehensive than that contained in the Protocol, since the latter does not cover all chemical weapons and prohibits only their first use. Furthermore, it would be a means of making up for the absence in the Protocol of any control machinery, a highly regrettable shortcoming when allegations are made concerning the use of chemical weapons, as has been the case on several occasions recently. On the other hand, the fear has been expressed that to reaffirm the prohibition of use in the convention would in the final analysis lead to a weakening of the Protocol, which must, of course, be avoided. Upon reflection, we believe that this is to a great extent a false problem. In fact the future convention and the 1925 Geneva Protocol will, we believe, together form a set of complementary obligations, such that it seems extremely unlikely that a State would become a party to the convention without being bound by the Protocol. If that view is accepted, the convention should not only not "be interpreted as in any way limiting or detracting from ... the Protocol" (according to the wording proposed in Element VII entitled "Relationship with other treaties") but should rather express the idea of an organic link between the two instruments. That the parties to the convention should also be parties to the Protocol is important from three points of view: first, during the transitional period, which will be especially critical, in the course of which States will proceed to the dismantling of their stocks of chemical weapons, secondly, with regard to the amounts of super-toxic chemicals the possession of which would be authorized for non-hostile military purposes (as provided in Element VI); and, lastly, in the event of withdrawal from the convention. With these considerations in mind, my delegation wishes urgently

to reiterate the hope that all States will forthwith become parties to the Geneva Protocol. Universal adherence to the Protocol, combined with the making of unilateral declarations of the non-possession of chemical weapons and the intention never to possess any, like the declaration which Switzerland has made on two occasions, would constitute confidence-building measures that could not but help to create a climate favourable to the negotiation of the convention.

With regard to the general definition of chemical weapons, which is the subject of Element II, my authorities are of the opinion that it would be preferable if the convention covered only chemical weapons in the strict and classical sense of the term, i.e. super-toxic and toxic substances which are produced expressly for military purposes and have lethal effects on man or cause lasting physiological harm. We are aware that such a definition has the effect of leaving outside the scope of the convention dual-purpose chemicals and substances intended for civilian use even if they can be employed for hostile purposes, such as certain herbicides and insecticides. True, chemicals in this category constitute a definite danger from the military standpoint, but it is a danger that is incomparably less serious than that represented by chemical weapons proper.

Furthermore, various difficulties, such as the need to use huge quantities when they are employed for military purposes make their utilization in hostilities unlikely. However, the main reason why Switzerland advocates the exclusion of these substances from the scope of the convention is that verification measures in respect of them would pose immense problems. In fact, an effective control would call for the placing under surveillance of virtually all civilian chemical manufacturing concerns because it would be possible, in certain conditions, for a very wide range of chemical products to be used for military purposes. Even though certain verification techniques used in the matter of non-proliferation could be applied, it would hardly be possible to place a country's entire chemical industry under control, in the way the non-proliferation Treaty has placed all nuclear installations under control.

Moreover, as regards the use of herbicides and insecticides for hostile purposes, we may recall articles 54 and 55 of the first Additional Protocol to the Geneva Conventions and article 18 of the second Protocol, relating to the protection of property essential to the survival of the civilian population and the protection of the natural environment.

Other terms used in Element II ought also, we think, to be clarified. For example, the meaning of "other lethal, and other harmful chemicals" would be clearer if the text read "other lethal chemicals or chemicals causing lasting physiological harm to man which are capable of being used for military purposes". With regard to precursors, we believe that this term should be used only to designate the component elements of so-called binary weapons and not the chemical substances used as starting materials or intermediate products, with no distinction being made between the civilian and military sectors. Lastly, the "means of production of chemical weapons", the prohibition of which is envisaged in Elements I, IV and V, can, we believe, only refer to the facilities that carry out the operations which render capable of military use chemical substances to which the convention would be applicable (loading or filling facilities).

Element VI, to which I referred earlier, provides that each party to the convention should undertake not to possess super-toxic lethal chemicals for non-hostile military purposes in an aggregate quantity which exceeds 1,000 kilogrammes. We have serious reservations about this provision. It amounts in effect to perpetuating, and in fact legalizing, through the very convention that is designed to banish chemical weapons from the arsenals of States, the de facto inequality at present existing between the States which possess such weapons and those which do not. A State which possesses no chemical weapons at the time of its adherence to the convention will in fact be unable to acquire any quantity whatever of super-toxic lethal chemicals for non-hostile military

purposes without violating the undertaking under Element I "never under any circumstances to develop, produce, otherwise acquire, stockpile [or] retain ... chemical weapons".

Consequently, stocks intended for "non-hostile military" purposes would be held only by the powers, happily few in number, which now possess, or will possess, at the time of their adherence to the convention, chemical weapons in the form of super-toxic lethal chemicals. Thus the impression of equality created by the fact that, under Element VI, each State party would be able to possess the same quantities of these chemicals for such purposes is, we believe, a false one, concealing what is in reality the discriminatory nature of this provision.

In any event, the quantity permitted appears to my delegation to be altogether excessive since these are substances intended for purposes of research in the matter of defence and protection. Consequently, the possession of such quantities of these chemicals by certain Governments would continue, in spite of control measures intended to ensure that the authorized ceiling is not exceeded to constitute a threat to the security of other States.

Allow me, before concluding, to say a few words about the measures for verification of compliance with the convention. Switzerland continues to be firmly of the view that in order to provide adequate guarantees of security, the verification system will have to be based on a combination of national and international measures and to include the possibility of on-site inspections. We have read with great interest the working paper presented on 18 February by the United Kingdom delegation (document CD/244), which seems to us to be one of the most detailed texts presented on this subject. With regard to on-site inspections, it is essential that an explanation should be given for any refusal to authorize such an inspection, and that provisions should be made for a complaints or recourse procedure in such a case. In this connection Switzerland, faithful to the general principle of the peaceful settlement of disputes, is of the view that every party should have the right, in the event of disagreement regarding the interpretation of a provision of the convention, to bring the matter before the International Court of Justice, the recognition of whose competence should be compulsory. However, it seems to us somewhat premature to consider in detail at this stage the methods for verification of compliance with the convention. The modalities of control will in fact depend in part on the scope of the convention and, in particular, on the definition of chemical weapons given in it. As I indicated earlier, Switzerland would see many advantages in confining the convention to a limited range of chemicals, produced specifically for military purposes. The broader the scope of the convention, the more extensive the verification measures will have to be and, consequently, the more complex and difficult to apply.

CD/PV.166

pp.9-11

FRG/Ruth

25.3.82

CW

I know that we are all agreed on the following points:

Chemical weapons are regarded by the international public as being especially obnoxious and are a particularly great threat to the civilian population.

The danger that these weapons might be employed in a military confrontation despite the Geneva Protocol banning their use cannot be precluded as long as they exist.

This danger must be averted, and indeed it can be averted. This requires an agreement which stipulates the destruction of all existing chemical weapons subject to adequate verification and ensures that no State may in

future develop, produce or stockpile chemical weapons.

The observance of such an agreement must be reliably safeguarded. This is the only way of ensuring that the horrors of chemical warfare are completely banned and forever from the world.

Our experience with regard to the verification of the non-production of chemical weapons reinforces our conviction that, although these problems are even more multi-faceted and complex than those connected with other arms control agreements, practicable solutions that are universally acceptable can nonetheless be found. Let me outline some of the elements of a necessary verification arrangement.

(a) A chemical weapons convention cannot be monitored by national technical means alone. By looking at a chemical factory from the outside one cannot see what is going on inside.

(b) On-site inspections by teams of international experts must therefore be a firm component of a verification régime.

(c) A reliable verification régime has two main functions: it must enable situations requiring clarification to be examined impartially, and it must ensure the observance and implementation of the convention by means of regular and non-discriminatory international measures according to a fixed procedure.

(d) The legitimate interest in keeping chemical production and research methods secret must be fully protected.

There are, in my view, favourable prospects for progress towards a comprehensive chemical weapons convention. Only recently the President of the United States stated unequivocally that his country regards the conclusion of a comprehensive and verifiable chemical weapons convention as a high priority of its arms control policy and that it would welcome such an achievement by 1984 since it would then no longer need to resume the production of chemical weapons discontinued by the United States in 1969 and introduce modernized chemical weapons. The Committee's working group on chemical weapons has for the first time been given a comprehensive mandate for the drafting of a convention. The discussions in this group have been speeded up and intensified. The future work of the Committee can build on the substantive progress already achieved. International opinion has been made sensitive to the subject of chemical weapons not least by reports that such weapons may have been used in crisis areas in South Asia. Thus the conditions exist for a successful outcome which would free mankind from a nightmare.

The working paper submitted today by my delegation is intended to be a constructive contribution offering practicable solutions to the one problem still causing the greatest difficulty: that of adequate verification.

The authors of the paper have been guided by the following objectives: we propose a verification régime which, in our view, is both effective and acceptable. It recognizes that expenditure and the manpower requirements must be kept within reasonable limits.

The paper envisages regular checks for monitoring both the destruction of existing chemical weapons stocks and production facilities and the undertaking not to manufacture chemical weapons. In addition, the paper calls for inspection on challenge, that is the possibility of special checks in the event of founded suspicions. Neither of these two procedures is sufficient on its own; a dependable verification régime must include both of them.

The paper does not overlook the fact that a verification régime could be more elaborate. We do not exclude the possibility of defining additional confidence-building measures in the field of chemical weapons, which could have a particular psychological and political impact. The paper does not contain any specific suggestions in this field as it is designed to outline the elements of a verification régime that we consider indispensable for any ban on chemical weapons.

Let me add a few words on the regular checks described in the paper. We feel that we have not proposed any unreasonable measures. To verify that the commitment not to manufacture chemical weapons is being honoured, we consider it sufficient to ensure random on-site inspections of chemical plants producing organo-phosphorus substances. The paper recommends that lots be cast to select the plants for inspection. In our view, the very possibility of the lot falling upon a potential violator serves to ensure a large measure of confidence that the convention is being complied with.

Specific rules are suggested for verifying the destruction of chemical weapons stocks and production facilities. They provide for obligatory inspections before and after the period during which destruction is to be effected; during the period itself jointly agreed forms of monitoring with technical aids, such as flowmeters, and random on-site inspections are to be carried out.

As you will notice, we do not suggest the inclusion of regular checks to monitor the production of dual-purpose agents. In this respect the scope of the convention goes beyond that of this proposed verification régime. This seems to us to be a justified limitation. In our view, comprehensive verification would be very difficult to carry out from a technical point of view in this particular field. Furthermore and above all, the agents concerned are of less military importance. The regular checks suggested by the paper therefore concentrate on super-toxic agents. In this context the actual design of a production facility will give an indication of whether the convention is being violated.

In this connection the paper also suggests a method for verifying the non-production of binary weapons. This involves the taking of samples, which are analysed at the inspection site itself. The analysis involves a summary procedure which proves the non-production of the key precursors of binary weapons but does not disclose the complete actual composition of the sample. When I speak of binaries I mean a composition containing a key precursor as one of the two or more components. Only this key precursor is a phosphorus-organic compound which is essential for a binary weapon. It is this key precursor which must be subject to verification. It is thus not true that binary production techniques cannot be subjected to reasonable and effective verification. In this context I should like to add that the term "binary", as used in the paper, includes weapons made up of two or more active substances.

Let me stress that the proposed procedure is intended to rule out the possibility of any abuse. My country's chemical industry, which faces lively competition on both national and international markets, strongly supports the proposals made here and is willing to share the experience it has gained with any interested party.

I invite all delegations to the Committee to take a close look at our paper and to incorporate it in their own considerations. In the interest of increased international co-operation and trust, long-standing reservations should now be reconsidered. Clearly defined on-site inspections should be recognized as a suitable means of verification in the field of chemical weapons. This would also create favourable conditions for other disarmament and arms control efforts. Reliable verification is not to the advantage or disadvantage of any individual party: rather, it serves the interests of everyone concerned and enhances world-wide confidence in arms control agreements and the realistic expectation of achieving co-operative measures designed to ensure compliance with negotiated results.

CD/PV.166

pp.19-21

USA/Fields

25.3.82

CW

Unfortunately, progress has been very uneven. Far greater progress has been made in defining the scope of a prohibition than in working out arrangements to ensure universal confidence that all parties are complying with their obligations. It is clear

that lack of agreement on issues in the area of verification and compliance constitutes the key obstacle to successful completion of the Committee's work.

In this context, I would like to discuss briefly certain events outside the Committee which form an important part of the background for the Committee's discussions of a chemical weapons ban, and which have a great influence on the attitude of my Government. A proper understanding of these events is essential if members are to understand the United States position on this subject.

First, as is well known, the United States has concluded that it cannot any longer postpone steps to modernize its deterrent chemical weapons stockpile. More than a decade ago we shut down all of our chemical weapons production facilities. We have not produced any chemical weapons since that time and have in fact destroyed large quantities of such weapons. We had hoped for reciprocal behaviour on the part of the Soviet Union, and believed that progress toward a chemical weapons ban would obviate the need for future production by eliminating the threat our chemical warfare capabilities were designed to meet. Unfortunately, however, the threat not only remains, but is greater than ever. We must take prompt steps to deal with it -- to do otherwise would be irresponsible. We would greatly prefer an adequately verifiable treaty, we will continue to work actively for it, but until such an agreement is achieved, it is clear from Soviet actions that we must maintain military capabilities in the chemical weapons field. This approach is consistent with that taken by my Government in other areas where negotiations are under way. Sadly, my Government has concluded that no other approach is like to produce positive results. I shall not belabour this point. For the information of other distinguished delegates, my delegation is submitting today a working paper entitled, The United States programme to deter chemical warfare, which explains in greater detail the several steps we are taking and the reasons behind them. The objective of the United States chemical programme, as has been clearly stated, is to maintain the safest, smallest level of chemical munitions which will provide an effective deterrent to a chemical attack by an aggressor. It is not, as some would have you believe, to gain a superiority in these weapons, or even to match the sizeable Soviet capability. I would note in particular that over 70 per cent of our planned expenditures are related to protection against chemical attack.

Allegations have been made in this Committee that the United States is not negotiating in good faith, and that we are deliberately creating obstacles to an agreement by modernizing our chemical warfare capabilities. That is sheer nonsense. United States commitment to the goal of a complete and verifiable ban on chemical weapons has been reaffirmed by the highest authority of our Government. I would also like to make clear that if we are successful in achieving such a ban, we would be willing, indeed eager, to terminate our binary weapons programme promptly.

In addition, some delegations would have others believe that production of binary chemical weapons will make adequate verification of a chemical weapons ban considerably more difficult or perhaps even impossible. This, too, is nonsense. The fact is that all manufacturing processes for chemical warfare agents, whether for conventional, binary, or other multi-component weapons, present the same basic verification problems. Our planned binary systems will produce standard nerve agents which have been discussed extensively in this Committee. They will use the same key precursors used to produce nerve agents by conventional methods. A binary production facility will still contain special devices for handling toxic chemicals. These will not be as extensive as in a conventional nerve agent plant, but this difference will have no real impact on verification. National technical means are not adequate even for dealing with conventional chemical warfare agent plants. As with facilities which produce conventional chemical weapons, an on-site visit to the production facility itself could determine without great difficulty what was being produced and for what purpose. Also, as with

conventional chemical weapons, there are precursors involved which are "single-purpose"; that is, they have no commercial application. Such key precursors will have to be dealt with in a future convention, regardless of the type of chemical warfare agent production process in which they may be used.

There is a second series of events which has much more serious implications for the work of the Committee -- events which have created grave concerns that existing arms control constraints on chemical and biological weapons are being violated.

The United States now has good reason to question Soviet compliance with the biological and toxin weapons Convention -- an arms control treaty negotiated in this Committee's predecessor body. We have compelling evidence of a highly unusual outbreak of anthrax, linked to a heavily-secured military installation, in the Soviet city of Sverdlovsk in the spring of 1979. We have repeatedly, on a bilateral basis, asked the Soviet Union to provide information which would allay our concerns. The response of the Soviet Government -- that this outbreak was due to natural causes -- is frankly not consistent with the information available to us.

In addition to the Sverdlovsk outbreak, the United States and other countries have evidence of the use of chemical weapons by Soviet and Soviet-assisted forces in contravention of international law. Lethal toxins, whose possession for hostile purposes is prohibited by the biological and toxin weapons Convention, have been found in samples from areas of reported chemical weapons attacks in Laos and Kampuchea.

My Government has just completed an exhaustive review of all the information currently available on the reports that chemical weapons are being used in Laos, Kampuchea and Afghanistan. We have concluded that lethal and other chemical weapons are being used in all three countries and that a member of this Committee, the Soviet Union, is directly involved. We will make available to all delegations a copy of the document which outlines our conclusions and the information on which they are based.

This accumulation of evidence, from many different sources, raises a number of serious issues regarding existing and future arms control agreements, particularly in the area of chemical weapons. The need for improved international verification procedures and mechanisms for dealing with compliance issues has been clearly demonstrated. The repeated refusal of the Soviet Union to co-operate in resolving these outstanding issues, which are of great concern to the United States and others, casts a pall over our collective efforts to attain a chemical weapons ban.

These developments have reinforced my Government's determination to ensure that the verification and compliance arrangements of a future chemical weapons convention are truly effective.

The importance which my Government attaches to verification is well known. This is not an abstract negotiating position. It is a fundamental security consideration. We believe that a capability to retaliate in kind to a chemical attack is essential for the purpose of helping to deter such an attack. If we are to accept an obligation under a convention to relinquish such a capability, the provisions of the convention must provide an adequate level of confidence that potential adversaries are also relinquishing their chemical weapons capabilities. Let me be frank. We will not accept a convention that cannot be adequately verified and thus cannot be relied upon to eliminate the threat which chemical weapons pose to the security of the United States and others. I cannot conceive that my Government would enter into a convention if serious doubts on this remained.

There is general agreement that a verification system for a chemical weapons convention should be based on a combination of national and international means which would complement and supplement each other. However, fundamental differences exist. Some delegations want to rely almost totally on national technical means and national measures of implementation. Many others, including my own, believe that only interna-

tional measures, including systematic international on-site verification, can provide the basis for adequate verification. We are convinced that for the foreseeable future, national technical means will be inadequate. Furthermore, national implementation arrangements will not help assure others that national Governments are in compliance. There can be no substitute for co-operative international verification measures, including appropriate provisions for systematic on-site monitoring, agreed in advance in the convention.

Discussions of general approaches to verification have amply demonstrated that these fundamental differences exist in the Committee. One would think that in such a situation, an intensive effort would be made to isolate, and focus on, the problem areas. That is the approach favoured by my delegation and many others. But a number of delegations apparently want to avoid tackling these difficult questions. We do not see how such an approach can lead anywhere. Ignoring problems will not make them less real or less important and certainly does not facilitate their resolution. Meaningful progress toward a chemical weapons convention will depend upon progress in resolving basic verification issues. In my delegation's view, it is not productive to try to draft the text of provisions in other areas when there is not even the basis for a common approach on the verification provisions.

CD/PV.166

pp.31-32

Bulgaria/Grinberg

25.3.82

CW

We are all aware that in spite of the progress achieved so far, a lot of problems still remain to be resolved, including those of definitions, the scope of the prohibition, declarations concerning and the destruction of existing stocks of chemical weapons, verification of the implementation of the convention, etc. It is essential, at this stage, that all delegations take a balanced approach towards the whole complex of questions, without artificially upgrading some at the expense of other, equally important questions.

It is heartening to note that there is an increasing awareness of the necessity of such an approach. Even in the statements made on the complex and delicate subjects of control and verification, it has often been possible to discern signs of a growing realization that the "concept of distrust" would lead us nowhere. For our part, we fully share the position of the Soviet delegation, as presented by Ambassador Issraelyan in his important statement of 31 March 1981: "No matter how much we expand and complicate the verification system, no matter how comprehensive we strive to render it, we shall never reach the point at which we can be sure that no uncertainties have been left concerning some important aspect or other of the activities of States, related to the observance of all the provisions of a convention banning chemical weapons."

Having said this, however, I would like to stress most emphatically that our position regarding the possibility of devising an effective system of verification over the implementation of the future convention is a positive and optimistic one. In this respect my delegation has been encouraged by the initial exchange of views in the Working Group, which revealed that even though some important questions have yet to be resolved, there are a considerable number of converging points on questions of both principle and detail.

We could hardly make an attempt at assessing the present state of the negotiations on banning chemical weapons without taking into account the recent decision of the United States Administration to proceed to the production and deployment of what are known as binary and multi-component chemical weapons.

To condition the American people to accept these unpopular measures and in order to justify themselves before world public opinion, in the course of the last several years, the United States has been waging an unprecedented, large-scale defamation

campaign against the Soviet Union and other socialist countries, affirming the alleged use of chemical weapons in Afghanistan and south-east Asia. Today the United States representative, Ambassador Fields, thought fit to repeat these slanderous accusations in his statement. We can only regret that those who are responsible for this campaign have not yet abandoned their tactics which can only result in poisoning the atmosphere and making our work even more difficult than it actually is.

The fact is sufficiently worrisome in itself, that at a time of greatly increased tensions and an escalating arms race in many fields, a new, particularly deadly weapon is being added to the long list of horrible means of mass destruction, threatening the survival of mankind. But on top of this, as has been rightly pointed out by many delegations, we have to bear in mind that should these new weapons, based on the latest technological achievements and on qualitatively new principles, actually be produced and deployed, the current negotiations on the prohibition and destruction of chemical weapons would be greatly complicated. This is the opinion of the overwhelming majority of the international community as reflected in General Assembly resolution 36/96 B, which in its operative paragraph 5 "Calls upon all States to refrain from any action which could impede negotiations on the prohibition of chemical weapons and specifically to refrain from production and deployment of binary and other new types of chemical weapons". It is indeed regrettable that the United States cast the only negative vote on this important resolution.

We cannot fail to voice our anxiety and to deplore the fact that the new multi-billion-dollar programme for the production of binary weapons will open up a new channel in the arms race. But as Europeans we have additional reasons for concern because hardly anyone could doubt that these weapons are to be deployed in densely populated areas of the world, and above all in Europe. That is why my delegation strongly supports the idea of the non-stationing of chemical weapons on the territory of countries where such weapons are not stationed at present. We have also proposed that each State party to the convention should recall to its national territory, not later than six months after its adherence, all chemical weapons stationed under its jurisdiction on the territory of other States.

Following an objective preliminary analysis of the implications resulting from the emergence of binary weapons, the delegations of a group of socialist countries presented to the Committee document CD/258, in which they put forward their views on a number of issues related to those weapons. Apart from this, the Bulgarian delegation submitted to the Ad Hoc Working Group a questionnaire on the same subject. At this point I would like to refer in general terms to two major problems that the emergence of binary chemical weapons poses for all of us. The first one relates to the scope of the prohibition in the future convention, the second to its control and verification provisions.

1. In the considered opinion of our experts, binary weapons will further complicate the already difficult distinction between commercial chemicals and those which can be used for chemical weapons. This applies especially to organo-phosphorus compounds in the production of pesticides.

2. In the area of control and verification, binary weapons will multiply the difficulties in the evaluation of the declared stocks of chemical weapons, the control over non-production of chemical weapons, the non-possession of chemical weapons, etc.

In stating the above we are fully aware that these views are not shared by some delegations. Only two days ago the distinguished representative of the United Kingdom, Ambassador Summerhayes, questioned whether by their nature alone binary weapons made problems of verification more difficult. Today we heard similar views from the distinguished representative of the United States, Ambassador Fields. To prove his point Ambassador Summerhayes maintained that the components of binary weapons were chemically highly reactive and, because of storage problems, essential binary precursors

would not be stored in large amounts for civilian use. Hence, the problem of verification of such precursors would be similar to, if not less difficult than those of the verification of other lethal agents.

The arguments adduced by the United Kingdom delegation failed to remove our concern regarding the negative implications of binary weapons for our efforts.

As is well known, the civilian chemical industry uses for permitted purposes many substances which are highly reactive. Their storing in large amounts does cause some technical difficulties but these problems are not insurmountable. Thus, on the one hand, it would not be impossible to store highly reactive substances as precursors of binary weapons, and, on the other, the presence of such substances in a given country could not in itself constitute a basis for suspicions of non-compliance unless they are known to be components of binary weapons.

CD/PV.166

pp.36-39

USSR/Issraelyan

25.3.82

CW

....The Yugoslav delegation submitted an interesting document on binary weapons in the Ad Hoc Working Group on Chemical Weapons. We agree with the statement of the United Kingdom Ambassador that it is necessary to give careful consideration to the matter of binary chemical weapons before reaching any conclusion. One can also agree with his words that "binary weapons will need to be dealt with in a chemical weapons convention because, in common with all other types of chemical weapons, their production and stockpiling will be prohibited".

At the same time we can in no way share his opinion that the problems of control as regards binary weapons and as regards chemical weapons with ordinary unitary munitions differ very little from each other, since allegedly the components of binary weapons, designed by their nature to be highly reactive, are related to toxic chemicals also by their aggressiveness with respect to the material of the munition's case. There is no need to be an expert in order to understand that there is a serious inaccuracy here. From unclassified literature it may be learned that there is no correlation between a chemical's toxicity and its activity with respect to the material of the casing. Thus the high reactive capability of these chemicals is of no assistance in the matter of control.

As regards the additional difficulties which arise in connection with the emergence of binary chemical weapons, they include, for example, the ensuring of compliance by States parties with the commitment not to transfer chemical weapons, since the separation of chemicals for commercial purposes from chemicals for weapons purposes will become an almost insoluble problem. Difficulties will arise also in connection with the declaration by States of their stocks of chemical weapons and their means of production of such weapons, because it will be necessary to specify the chemicals for commercial purposes which may be produced for binary weapons.

To illustrate this problem let me take the following example. As components for the synthesis of warfare agents in the binary charges being elaborated and developed in the United States, isopropanol and polysulfide are being used, i.e. common chemical products. Consequently, in order to produce binary munitions the Pentagon has no special need to establish new branches of industry. The other components of the binary synthesis -- the chemicals "DF" and "QL" -- are somewhat more complicated in their composition, but they, too, without any particular difficulty can be absorbed into the technological processes for the production of organophosphorus pesticides production. In addition, the cases of binary munitions are virtually the same in structure and shape as those of other special munitions (smoke, signal, propaganda, etc.) and they could be produced by factories producing ordinary munitions.

It is quite probable that even at factories producing the separate components of

binary systems as well as cases for binary munitions, it will be impossible to determine the real purpose of the products. Thus even if the representatives of an international verification body are admitted to such a plant, they are unlikely to be able to detect anything relating to binary weapons. The conditions will therefore exist for the secret stockpiling and storage of chemicals for purposes of binary weapons — for the production of chemical weapons within the framework of commercial production. We shall, of course, study document CD/265, introduced today by the representative of the Federal Republic of Germany, but all that we have said shows that there is no justification for the conclusion contained in the statement of Ambassador Ruth that "it is not true that binary production techniques cannot be subjected to reasonable and effective verification".

The idea of binary weapons allows the possibility of selecting the pairs of components among a wide range of chemicals, which would lead to the emergence of ever new varieties and modifications of chemical agents with the most diversified spectrum of effects. This fact means that the establishment of a list of potential chemical agents to be prohibited would become meaningless. How, then, is it possible to dismiss as "nonsense", as the representative of the United States did today, the concern of a large number of States, including a number of Western countries, at the appearance of binary weapons?

We are saying all this now, not in order to give a political assessment of the actions connected with the production of binary weapons. That has already been done, at the thirty-sixth session of the General Assembly, in resolution 36/96 B, which contains an appeal to States to refrain from the production and deployment of binary chemical weapons. As you know, of the 157 States Members of the United Nations, only one voted against this resolution — the United States of America. Here in the Committee on Disarmament we are concerned, first and foremost, about the fate of the negotiations on the prohibition of chemical weapons and about the effectiveness of any agreements that might be reached at those negotiations.

The same resolution contains an appeal to States to refrain from stationing chemical weapons in those countries where there are no such weapons at present. This appeal, which in particular was also adopted on the initiative of the Soviet Union, is designed to increase the effectiveness of a future agreement on the complete prohibition of chemical weapons.

It is important, in our view, that while efforts are being directed towards the elaboration of a convention and also during the first years of its implementation, when stocks of chemical weapons are to be destroyed, no actions should be allowed which could lead to a proliferation of chemical weapons on the globe, and in particular to their stationing on the territories of other States. In the Ad Hoc Working Group, the Soviet delegation has already submitted a draft for a provision of the convention on the non-stationing of chemical weapons, either directly or indirectly, on the territories of other States during the period of implementation of the commitment on their destruction or conversion to non-hostile purposes. It would be a good idea also if we were to consider together how to solve the question of the non-stationing of chemical weapons also during the period before the convention enters into force.

I should like now to touch upon questions of verification. We have repeatedly stated, and we reaffirm it again, that we, no less than others, are concerned that the commitments under the future convention on the prohibition of chemical weapons should be strictly observed. We do not therefore altogether understand the United States representative's excessive emphasis of the importance of verification questions. Whom was he actually trying to convince? -- himself?

The Soviet delegation has already had an opportunity to express in the Committee on Disarmament the substance of our views regarding the verification of compliance

with a prohibition of chemical weapons. In order not to repeat myself I will refer to our statement of 31 March 1981. Briefly, our view is that control should be based on national methods of verification, supplemented by international procedures; it should not be accompanied by "total verifications", which are tantamount to interference in the internal affairs of States and are detrimental to peaceful industry. Control should in all respects and at all times be commensurate with the real requirements of the convention and ensure the fulfilment of each of the undertakings provided for in it.

The representative of the United States attempted in his statement to present the position of the Soviet Union and other socialist countries in a distorted light. He asserted that they rule out international forms of verification. This, like many other things in the statement of the United States delegation, is not in accordance with the facts. I repeat: we are in favour of a combination of different types of control measures. At the same time it is clear from the statement of the representative of the United States that the latter recognizes nothing other than systematic intrusive international verification. That, to be precise, is the true situation.

How then can we solve this difficult problem, taking into account all these requirements, which are undoubtedly fair in themselves, and on a basis acceptable to all States parties to the future convention? Past experience suggests that the time has come to change somewhat the methods used for the examination and elaboration of provisions on verification.

It seems to us that we could stop discussing in general terms whether preference should be given to national or to international means of verification, whether international on-site inspection should be carried out on a voluntary basis or not, whether such verification should be conducted when necessary, upon demand, by request, according to lots, on a systematic, regular, periodical basis, etc., etc., and pass on to a consideration of verification problems in a more specific way.

We have in mind the following. Clearly under the convention, the States parties will assume a very specific range of obligations. To a large extent these have already been defined. Thus, there is the possibility of considering concretely, for each of these obligations, what forms and types of control would be necessary and to what degree.

For example, States will be obliged to destroy within established periods of time their stocks of chemical weapons. There could be endless discussions, with no common view emerging, as to whether, in connection with this obligation, there should or should not be international inspections at the site of the destruction, whether samples should be taken at the same time, and if so of what kind, how often and by whom, etc. In order to start making some headway, we could proceed differently. We could think carefully about the series of measures necessary in order reliably and effectively to guarantee the destruction of stocks, beginning with those that are the most natural and easy for States to carry out, and passing on if necessary to the more complicated and difficult ones. In other words, whenever a common opinion emerges to the effect that national verification measures may be insufficient, appropriate international procedures could be discussed according to the same principle -- that is, proceeding from the relatively simpler to the more complicated measures.

In proposing that we should proceed in this way we are taking into account the extreme difficulty of devising a verification system which, while ensuring the requisite control over compliance with the convention, at the same time meets the need to respect the legitimate security interests of the States parties.

All more complicated and difficult verification measures should be used only in cases where the control measure more acceptable to the State cannot give the desired result, i.e. provide the assurance that the convention is being implemented.

This approach takes into account also the important fact that the control measures will be supplemented by various kinds of declarations, the exchange of information and

other measures giving States the assurance of compliance with the convention.

Allow me to refer to the words of the representative of Japan, Ambassador Okawa, concerning questions of control in connection with a nuclear weapons test ban. In particular he said: "The quest for absolute perfection in the verification mechanism, an infallible verification methods, may result in no agreement at all." Ambassador Okawa further said that the adequacy of any verification system is probably in the last resort a question of political assessment.

Distinguished delegates, we must endeavour to find a mutually acceptable solution to this problem. It is completely out of place to put forward preliminary conditions, as was done today, in an almost threatening manner, like an ultimatum: either the Committee accepts unconditionally the principles of verification for a convention prohibiting chemical weapons that please the United States, or that country will not become a party to the future convention. That is not the language of negotiation. It will lead nowhere. It merely compromises those who resort to it.

CD/PV.167

pp.15-18

Argentina/Carasales

30.3.82

CW

The complementarity of different criteria is particularly important in the matter of verification of compliance with the convention. The subjective nature of the so-called "general purpose" criterion and the difficulty of applying it, whether actively or passively, makes it necessary to have recourse to other means of establishing whether or not the production, stockpiling or transfer of a given substance in a given quantity constitutes a violation of the convention.

We believe that international records of the production, consumption, import and export of specific chemicals could be extremely useful in this connection.

The Argentine delegation, together with other delegations, has constantly advocated a complete prohibition of chemical weapons, the scope of which should include their "use".

Arguments have put forward against this proposal which, with all due respect for the positions of the delegations concerned, my delegation has found very unconvincing.

It has been argued that the Geneva Protocol of 1925 comprehensively prohibits the use of chemical substances in warfare, that to restate this prohibition would raise doubts as to the recognized value of the Protocol and that the inclusion of verification machinery would give rise to ambiguities.

We do not believe this to be so, for the following reasons:

In the first place, the proponents of the express prohibition of the "use" of chemical weapons have in no way sought to discredit the 1925 Protocol. On the contrary, its validity could be clearly reaffirmed in the text of the convention, both in the preamble and in its operative part.

The existence of international treaties which mutually reaffirm and complement each other is a normal occurrence in the constant evolution of international instruments. Examples of this are the Additional Protocols to the Geneva Conventions of 1949 concerning the protection of victims of international armed conflicts, which were adopted in 1977. These Protocols first, in their preambles, reaffirm the validity of the Conventions of 1949 and then set forth a series of provisions complementing and developing those of the Conventions.

Secondly, the Protocol of 1925 was drafted at a certain stage in the history of international law, which has since undergone changes and progress. In the past, "war", the only term used in the Protocol, was clearly distinguished from other types of "armed conflict". The specific character of its conditions and protagonists gave rise to legal consequences which did not apply to other types of conflict.

War was prohibited, first of all partially under the 1919 League of Nations Covenant and then wholly under the Kellogg-Briand Pact of 1928, but other armed conflicts whose characteristics did not qualify them to be described as *casus belli*, remained outside that prohibition. The Charter of the United Nations did away with that distinction, ruling out any resort to force.

From then on, the traditional term "war" was replaced by other expressions such as "armed conflict" or "hostilities", which broadened the concept as regards both the situations covered and the protagonists involved.

The Geneva Conventions of 1949 are a good example of the foregoing. Article "(1), common to the four Conventions, refers to "international armed conflicts", which includes both war and other armed conflicts between States, whatever their intensity. The Additional Protocols of 1977 continue that development by adding new elements to the concept.

The evolution of concepts can also be seen in the convention on chemical weapons we are discussing.

Element II of the draft contained in the report of the Working Group submitted in 1981 speaks of "hostile purposes", while element III refers to the prohibition of the transfer of chemical weapons to "anyone", a broad term which covers not only States but also any organization, group or person.

The limited nature of the provisions of the Geneva Protocol of 1925 is thus obvious, and the inclusion of the word "use" among the prohibitions of the new convention is therefore, in our view, essential.

Thirdly, the definition of the substances and devices prohibited under the Geneva Protocol is vague and gives rise to serious doubts as to whether it covers all the chemical weapons which the development of the chemical industry has made possible, including binary weapons.

And fourthly, in the course of the last 50 years many allegations have been made of the use of chemical weapons and we may assume from our experience of international realities that the same will happen in the future.

This situation of uncertainty, in which charges are made but there is no way of either establishing their truth or disproving them, is the result of the fact that the 1925 Protocol prohibited the "use" of chemical weapons but did not establish a procedure for the verification of compliance with that prohibition, and it can only be corrected if "use" is included within the general framework of the prohibition of a genuinely comprehensive convention embodying a satisfactory system of verification.

It is precisely to that other important aspect of the convention, verification, that I would like to refer now.

The problem of verification involves not only technical questions but also political decisions.

Argentina favours a flexible system of verification combining national and international mechanisms.

We believe that international verification, including on-site inspections carried out on a non-discriminatory basis, is the only effective system for developing countries which do not have access to sophisticated technologies enabling them to ensure that other States parties are complying with the convention.

Some States are opposed to international verification, involving arguments sovereignty and claiming that it would constitute interference in their countries' industrial activities.

However, if international verification is carried out through a body representative of the States parties to the convention, established on the basis of a fair geographical distribution, which uses universally accepted methods and verifies compliance with the convention by all States parties equally, the interests of each country would be duly

safeguarded.

In this sphere, discrimination is the element which affects the rights of States. And discrimination should not exist in a convention drafted within the framework of the Committee on Disarmament, the first truly multilateral negotiating body; if the Committee's rule of consensus is applied to the conclusion of an agreement, that should guarantee its universal acceptance.

As it has already stated on previous occasions, my delegation considers it essential that a consultative committee made up of not too large a number of States parties and having at its disposal a group of experts appointed by these States, should be recognized as the body responsible for the control and verification of compliance with and implementation of the convention on chemical weapons.

This consultative committee should receive allegations of possible violations and be responsible for confirming or disproving them.

On the other hand, we are not in favour of including the United Nations Security Council in any stage of the procedure.

The present voting system in that body makes it unsuitable for playing a positive and impartial role in the sphere of verification.

In addition to considerations of a political nature, as I said earlier, there are the technical issues. Many documents have been submitted to the Working Group and to this Committee, describing possible methods of verification for each of the elements of the convention.

I shall not go into the details of these suggestions but shall confine myself to pointing out that however much technological and scientific progress allows us to approach the idea of complete and exhaustive verification, there will always be a margin for doubt, and the possibility of deception or concealment.

Will it ever be possible to be sure that a State has really destroyed all its stocks of chemical weapons? Or that it has not omitted to mention, in its declaration, certain of its storage places? What kind of verification could be established to prevent scientists and engineers from divulging key information that would allow others to manufacture chemical weapons?

Ambassador Okawa, speaking at the plenary meeting on 23 February last with reference to item 1 of our agenda, said the following:

"The effective functioning of a reliable verification system is of fundamental importance to any disarmament or arms control measure. However, the quest for absolute perfection in the verification mechanism, an infallible verification method, may result in no agreement at all. A reasonable balance has to be struck between the value of having a positive if not complete disarmament agreement, on the one hand, and the risk that certain violations may be theoretically possible in spite of the verification mechanism that has been agreed upon, on the other. Perhaps the adequacy of any verification system is ultimately a matter of political judgement and mutual trust."

We believe that the words of the Ambassador of Japan are just as pertinent in connection with the convention on chemical weapons.

Every treaty must be based on a certain amount of trust between the parties.

If a choice is to be made between having a convention with an adequate -- and I stress the word "adequate" -- system of national and international verification, even though this system may not be perfect for each and every one of its provisions, and having no convention at all, we prefer the former.

My delegation will continue to contribute to the search for a system acceptable to all, so that it may be possible with the goodwill and co-operation of all the members of the Committee, to draft a convention on chemical weapons, the adoption of which is

becoming increasingly necessary and urgent.

CD/PV.167

p.20

China/Tian Jin

30.3.82

CW

The Working Group on Chemical Weapons is in the process of formulating the specific provisions of the future convention. We have consistently maintained that the scope of prohibition of the future convention should cover the prohibition of the use of chemical weapons. The reason underlying this has been repeatedly explained by our delegation at plenary meetings of the Committee on Disarmament and at meetings of the Working Group on Chemical Weapons. A provision on the prohibition of the use of chemical weapons was proposed in document CD/CW/CRP.24 of 3 March 1982, co-sponsored by Argentina, Australia, Indonesia, Pakistan and China. Here, I shall not repeat the reasons why the future convention will be complementary instead of contradictory to the Geneva Protocol of 1925, since they have been stated before. I simply want to confine myself to the following point, namely, that the Geneva Protocol lacks complaints procedures and verification clauses, which has resulted in failure to take the necessary actions to deal with and prevent acts of violation in the ensuing years. If the scope of prohibition of the future convention does not cover a prohibition of use, the measures of verification, no matter how detailed they may be, cannot apply to the use of chemical weapons, thus leaving a serious loophole. We hope that delegations present here, aware of the urgent need to prevent the use of chemical weapons, will take this proposal into serious consideration.

The Working Group has concretely discussed the question of verification. It is the consistent view of the Chinese delegation that a convention on the prohibition of chemical weapons must provide for strict and effective international control and measures of verification. Without these, there can be no really meaningful disarmament agreement. The Chinese delegation has made it clear in its working paper CD/102, submitted in 1980, that there should be stringent and effective measures for international control and supervision to ensure the strict implementation of the provisions of the convention. An appropriate organ of international control should be set up for this purpose, charged with the responsibility of verifying the destruction of the stockpiles of chemical weapons and the dismantling of facilities for their production. Such an organ should also be empowered to initiate prompt and necessary investigations in the event of a complaint concerning the use of chemical weapons or other violations, and to take appropriate measures to deal with such a violation when the complaint has been verified. In this regard, document CD/244 submitted by the delegation of the United Kingdom recently offers a comparatively comprehensive proposal in the form of provisions for the future convention. We appreciate this contribution on the part of the United Kingdom delegation.

With regard to the composition, task and working procedures of the international verification mechanism, there are some concrete proposals and suggestions in working paper CD/220. What I would like to point out is that in respect of the verification task of the future international monitoring and control mechanism, the said paper and other working papers do not have a clear provision for effective on-site inspection of the use of chemical weapons. We deem such on-site verification not only necessary but also more pressing than ever before in view of the international incidents which have taken place in recent years. As a matter of fact, there has been an almost continuous flow of complaints about the use of chemical weapons ever since signature of the 1925 Geneva Protocol. For this reason, we are of the opinion that not only should the scope of prohibition in the future convention cover the use of chemical weapons, but the verification measures should also apply to the use of such weapons. In this way, the Geneva

Protocol would be strengthened and the future convention would become more comprehensive and effective.

CD/PV.167 p.23 Venezuela/Navarro 30.3.82 CW

The tasks of the Ad Hoc Working Group on Chemical Weapons are of great interest to our country; there is a need for a convention which will complement and reinforce the Geneva Protocol of 1925 for the purpose of eradicating those atrocious weapons -- chemical weapons. We believe that policies of deterrence based on chemical weapons are incompatible with the objectives of such a convention. We hope that, through this convention, doubts with regard to the scope of application of the Geneva Protocol of 1925 may be resolved and that a procedure will be established for verifying charges of the use of chemical weapons as well as an adequate system for verification of compliance with the obligations flowing from the convention, whether these imply actions or refraining from actions. The importance of this convention as a true disarmament measure will reside precisely in the system of verification.

I shall resist the temptation to go into very detailed aspects of verification, but would like to stress the principle of verification since it is not only the details but the basic concept itself that is endangering the success of this future convention, as also, of course, that of the nuclear test-ban negotiations. In the first place, verification is in no way synonymous with confidence, nor can the one term be substituted for the other. Confidence is not achieved through verification and cannot be written into documents. It is a matter of the general attitude of one State towards another or towards the international community.

Whereas verification is a mechanical act, confidence is a human act. States must more actively endeavour to win the confidence of others, and a system of verification of a mixed character with the emphasis on openness towards the world forms part of this process of becoming worthy of confidence.

CD/PV.167 pp.27, 28-29 Czechoslovakia/Vejvoda 30.3.82 CTB,CW

Item 1 of our agenda has been widely discussed recently in connection with the proposal of the United States delegation, supported by the delegation of the United Kingdom, to establish a subsidiary body "to discuss and define issues relating to verification and compliance which would have to be dealt with in any comprehensive test-ban agreement". As to our delegation, we have a definite idea of what this agreement should be about. Therefore the expression "any comprehensive test-ban agreement" seems, after years of negotiations on the subject matter, rather outdated. It is our understanding that this expression has been used intentionally and is precious to the United States delegation. Its use leads us to believe that its proponents are willing to discuss verification and compliance in total isolation from the concrete provisions of a future agreement.

Besides, my delegation has also serious doubts on the utility of creating one more body to deal solely with problems of verification and compliance. The right approach to this problem was chosen in 1976, when the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events was created. The results achieved so far in this expert group, with the active participation of two experts from Czechoslovakia, create a solid basis for a reliable verification system, consisting of both national and international verification procedures.

Moreover, the proposal of the United States delegation is very unclear. It escapes

our understanding why a delegation suggests that a subsidiary body be created to discuss the verification and compliance aspects of an agreement the conclusion of which in the near future is excluded by this very delegation. But there is no need for me to seek all necessary clarifications since the relevant questions were raised by the distinguished representative of the German Democratic Republic and Poland in their statements of 18 and 23 March respectively. Regrettably, the United States delegation has so far not offered any answers.

A number of delegations around this table elaborated eloquently on the dangerous consequences of the further perfecting of nuclear weapons, should their testing continue unabated. Neutron weapons, the prohibition of which my delegation fully supports, should be a sufficient warning in this regard. And my delegation considers, that a working group with the mandate suggested by the United States delegation could not cope effectively with the problem of a nuclear test-ban. We therefore associate ourselves with the view expressed by the distinguished representative of Nigeria in his statement of 23 March in which he said: "A more serious look at the proposals and the further clarifications that we have heard so far in this Committee do not justify the orchestrated optimism that heralded those proposals".

I am now going to refer to another issue of high priority, that of a convention on the complete and effective prohibition of the development, production and stockpiling of chemical weapons and on their destruction.

We all know that in spite of the many years' efforts in the Committee, there continue to be significant divergences of views on a number of aspects of the principal elements of the future convention. The task of the Group will, therefore, certainly not be easy. Still, our delegation is convinced that substantial progress can be achieved, provided that the problems are approached in a business-like manner, and with good political will to co-operate and to find concrete and realistic solutions.

This is fully true also with regard to the problem of verification.

Rather too often, clamorous demands have been made for an over-all intrusive verification, according to which verification should permanently, through on-site inspection, in fact cover an unlimited range of industrial, defence and other types of activity. It seems self-evident that such one-sided and exaggerated demands, often virtually in the form of an ultimatum, cannot serve as a basis for serious international negotiations.

We are glad to note that some of the proposals submitted in the last period of our work show a greater sense of reality. With perhaps a few exceptions, the idea of an interlinked system of national and international verification measures seems to be generally accepted. It is also becoming increasingly understood not only that an atmosphere of co-operation is a prerequisite for verification, but also that all procedures relating to consultation, co-operation, national and international verification and complaints compose an integrated system assuring compliance with the convention. While national control of implementation, exchange of information, consultations and co-operation would be the main permanent procedure, the intrusive methods of verification should be reserved for selected situations. A lack of information on a substantive activity covered by the convention or a contradictory information which could not be sufficiently explained might perhaps be one such reason for suggesting the use of an intrusive international verification procedure.

We fully support the view of delegations suggesting the elaboration of concrete specific verification procedures for each relevant provision of the treaty. Such an approach will make it possible to discuss things in concrete terms and to evaluate the necessity of specific information, material, laboratory evidence, etc., with regard to all provisions of the convention.

As far as the States parties to the convention are concerned, it seems evident that they should create a national verification system. We are aware of some opinions expressed in the Committee that a national verification system may be a rather ineffective self-control of the Government concerned.

Such an approach might indicate a certain lack of information or at least a serious underestimation of the complexity of the problem.

The chemical weapons convention will have important implications not only for military activities but also for industry and research. Under present practice, no governmental organ exists covering such a broad spectrum of diverse activities.

We are not going to suggest the establishment of any obligatory national institutions controlling the implementation of the convention. This is fully for each Government to decide.

In principle, however, in any country with a developed chemical industry and a significant research basis (irrespective of the possession or non-possession of chemical weapons), there should be an organ responsible to the Government (but independent of institutions fulfilling the duties imposed by the convention), which would survey the implementation of the treaty by all institutions under the State's jurisdiction. It should have permanent access to all data relevant to the convention, and should collect, check, assess and publish them in a proper way. It should also have permanent access to all relevant activities, including the possibility of laboratory testing, etc.

In our understanding, this should be an organ to assist, in the first place, its own Government, since it is certainly the Government which is responsible for the implementation of the treaty. One can, however, assume that for routine contacts with a corresponding international organ such as the proposed consultative committee, there would be a delegation of the Government's responsibility to such an organ.

Also, for any intrusive international verification, the information gained from such a national organ would probably be the most important point of departure for any verification procedure. A close co-operation with such a national organ would also be indispensable in cases where technical assistance was needed, etc.

I have explained our views on some functions of the national verification system in more detail mainly to demonstrate that in our understanding the principle of a balanced system of national and international verification measures has quite a concrete content which opens a way for the further elaboration of specific questions.

CD/PV.167 p.35 Italy/Cabras 30.3.82 ASAT

Adequate verification, which is an essential requirement of any arms control and disarmament agreement, would, in this case, be very difficult to achieve. Even a limited ASAT capability, acquired or retained in evasion of an ASAT ban, could be significant. For this very reason, a comprehensive consideration of the problem could not avoid the question of disarmament per se. Operational capabilities in this field are already a reality. The issue of dismantling procedures for existing ASAT systems and their components, and the related verification procedures, would be yet another very complex issue.

CD/PV.167 pp.37-38 Sweden/Lidgard 30.3.82 CW

This brings me to the question of verification. We have studied the working paper presented by the United Kingdom delegation on verification, document CD/244, with great interest. It is clear in its aim. We have also noted the explanation by Ambassador

Summerhayes the other day that the suggestions in the working paper do not imply that proposals which are not dealt with in it would not be acceptable to the United Kingdom. The Swedish delegation shares the view that the verification provisions of a chemical weapons convention should include on-site verification. We think, however, that a more balanced presentation of all the aspects relevant to an interrelated complaints and verification procedure would have been obtained if the problem had been approached within the framework of the existing elements in CD/220 rather than by presenting a new structure.

For the moment, I would only like to state that the Swedish delegation attaches great importance to an adequately functioning structure, which allows information-gathering, fact-finding and information dissemination to serve the parties to the convention. It is our firm belief that a consultative committee -- which is necessary for many purposes -- cannot determine the respective security needs of the parties and what those needs may require as to clarifications from or on-site inspection on the territory of other parties. In this connection we note with interest the discussion on remote continual verification, the so-called RECOVER project, which highlights an interesting approach towards less intrusive verification measures. The Swedish delegation feels that this possibility should be further investigated.

My delegation noted with satisfaction the statement the other week by the Chairman of the Working Group in which he expressed confidence about the development of the negotiations on verification issues. Ambassador Herder on that same occasion gave a comprehensive and interesting review of the verification problems. A continuing constructive treatment of these questions would be most welcome, including an agreement on the necessity of adequate on-site inspection of the destruction of chemical weapons. The Federal Republic of Germany also introduced in the form of working paper CD/265 dated 24 March 1982, a considered view, *inter alia*, on the verification of non-production of chemical warfare agents, which my delegation will study with great interest.

In this context I should like to state that I listened with great interest to what Ambassador Rodriguez Navarro said this morning about confidence-building measures. My delegation entirely shares his evaluation of the importance of such measures. We intend to submit in due course a working paper on the subject to the Committee.

The discussions about allegations of the use of chemical weapons in various parts of the world very forcefully indicate the need to establish permanently available, flexible and objective complaints and verification mechanisms in arms limitation and disarmament agreements. They could, in the form of an international machinery, give the parties the possibility of having their cases investigated in an impartial manner. Such mechanisms would provide for investigations to be carried out without hindrance and for full access to sites and materials, which would shed light on the facts in each case. It is conceivable that the existence of such mechanisms would have been useful and of assistance to the countries involved in the present dispute.

Another lesson to be drawn from the current experience is that an effective control of disarmament agreements, including the one on chemical weapons, requires greater openness. To suggest relying on mutual trust is merely a pious hope when there is a grave dispute about compliance. When allegations of breaches of international agreements are made, co-operation between the parties will in most cases be difficult to obtain through bilateral contacts. This is but one of the factors which underline the necessity of multilateral negotiations and international solutions to problems which affect us all.

With regard to the banning of nuclear tests, my delegation believes that we should concentrate on the issues which present the greatest difficulties. This means in fact the problem of verification, for this question was the stumbling-block in the negotiations on a total nuclear test ban which were carried on in the separate talks the latest assessment of which was communicated to the Committee on Disarmament in June 1980 (document CD/130).

The verification of compliance with agreements in the sphere of arms control and disarmament is not of equal importance in every case. It depends very much on the subject-matter of the prohibition. The 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water, for example, did not give rise to any particular verification problem. That is no doubt why it was possible to conclude the Treaty without the inclusion of any provisions concerning its verification. This Treaty can easily be verified, principally by national technical means. However, the situation is quite different when the object of the prohibition is more ambitious, as in the case of a total nuclear test ban. Such a ban would properly constitute the field of application of the comprehensive treaty envisaged in paragraph 51 of the Final Document of the first special session of the General Assembly devoted to disarmament, as my colleagues from Pakistan and Australia have already pointed out. The crux of the problem of a total nuclear test ban thus clearly resides in the question of verification.

The experience of the trilateral negotiations should constitute an important element in our work on this subject. It would also be useful if this work, which will by definition be of a political and legal nature, were to take due account of the accumulated experience of the Ad Hoc Group of Scientific Experts to Consider International Co-Operative Measures to Detect and Identify Seismic Events. A revision of that Group's mandate might be a useful contribution to the work of the Committee's working group. It could, for example, consider the necessary methods of detection -- especially seismic and atmospheric -- for the verification of compliance with a total nuclear test ban. It could also determine the means required for the implementation of those methods: national means and international means. In that connection it could also consider the institutional machinery needed for a verification and complaints procedure.

Lastly, I would like to make some brief comments on verification measures. The development of binary chemical weapons has undoubtedly created a new situation and the methods of control which we have discussed for so many years do not appear to be able to guarantee with any certainty that a particular country has or does not have binary weapons.

The existence of chemical substances which can serve a dual purpose and be used both in civilian and in military industry detracts from the effectiveness of the so-called in situ inspections supported so strongly by some delegations. It can also be said that this situation lends itself to concealment of the funds which States allocate to chemical weapons and thus also affects the declarations we referred to earlier.

In view of the foregoing, it is essential to recognize the importance of a national system of verification and control under which States would, because their prestige was at stake, take all the necessary steps to guarantee strict compliance with an international agreement on the subject.

A national system of verification as a basis for the control of any agreement assumes considerable significance in terms of international verification measures, since

the direct participation of States in the control of agreements to which they are parties would prevent doubts and suspicions concerning the implementation of such agreements and guarantee that the collection of the data needed for effective control would not be hampered.

CD/PV.168

pp.21-22

Australia/Sadleir

1.4.82

CW

A ban on use is also logical from another point of view. The clauses of a CW convention aimed at determining whether or not the convention is being honoured are likely to be applied only when there are reports, suggestions or news that chemical weapons are being used. You may think that a pessimistic statement, what in the jargon of our times might be termed a "worst-case scenario", but it is for all that a realistic statement. Consequently, it seems to my delegation logical that provision must be made in a convention for a ban on use to be investigated and verified on its own merits. We should not make the problems of verification more difficult by introducing artificial constraints that permit verification only of less central and more oblique violations, such as unlawful production or stockpiling.

Even in the best case, use is pertinent: if our efforts are successful, that will be evident only by the fact that chemical weapons are not used. Whether or not there is unlawful production, stockpiling or transfer, there will be little real concern among States or on the part of world public opinion so long as there are no suggestions of use.

Recent reports of use in various conflicts bear directly on our task, both with regard to the scope of a future convention and with regard to its verification provisions. The United Nations is looking into these reports, but under considerable handicaps, not the least of them being the absence of agreed mechanisms. This is, in part, why the United Nations investigation has been extremely slow. The procedures for collecting and assessing material relevant to the United Nations team's enquiry are undetermined. The lesson to be drawn is that the convention we seek must provide for eventualities of this sort: it must ban use and it must establish machinery for complaints and for verification. Many sound ideas have been advanced on these aspects. Those ideas include proposals to link the new convention to existing instruments. In the Ad Hoc Working Group, detailed proposals have been put forward for establishing a consultative committee. One suggestion, which has not been made in this Committee before, but should not be ignored altogether, is for agreed, designated neutral States to make available a small corps which would specialize in verification techniques and could quickly investigate cases referred to it by the consultative committee. I mention these ideas to show not only that our work is urgent but that we should not have closed minds on the range of options open to us in tackling it.

Since the Committee on Disarmament first began work on this agenda item, it has benefited from the help of experts. Delegations have been able to draw on technical advice and feed it into the Working Group. This has helped in regular sessions of the Working Group and in separate exercises structured around specific problems such as the determination of toxicity. It is time, in the view of the Australian delegation, to develop this important aspect of our work. It is time that technical advice should be available when a political need for it has been determined. Conversely, technical advice can help to shape that political need and, indeed, ensure that the need is a real one or well-based or intelligently framed. My delegation considers that on aspects such as verification, it would greatly assist the Working Group to know what technologies are available and how they might be applied to our task. We have consistently supported, for example, the work done in this area by Finland and believe that this work will prove valuable. It is for this reason that we consider that the technology described as remote

continual verification -- or Recover -- should be further examined. It is why we believe that the CW specialists should be convened here again in August to explore technical aspects of a future convention, as recommended in Working Paper No.30.

We have heard a great deal about binary weapons at this session of the Committee on Disarmament. My delegation regrets any new development of chemical weapons, for whatever reason. We would be happy to see the shelving of any new development, including that of binary weapons. But some fundamental points need to be faced squarely. First, binary weapons are no more or no less than the sum of their parts: the known sum of known parts. For the purposes of our convention, as has been urgently argued by Yugoslavia in document CD/266, the parts can be called precursors, or more precisely "key precursors" and subjected to the same procedures as the chemicals which go to make up a chemical weapon of a non-binary type. The binary process -- involving chemical reaction during use -- would therefore be treated under the convention in the same way as the process of producing chemical weapons by a chemical reaction at a chemical plant. Secondly, are the most vocal opponents of this development in favour of a ban on binaries? If so what arrangements do they have in mind in practical terms for verifying such a ban? In my delegation's view, verifying a ban on binaries is no different from verifying a ban on other chemical weapons and it should, of course, involve on-site inspection. Finally, the clock cannot be stopped, let alone turned back. Assuming there was a ban on binaries, and an effective, verifiable one at that, we would still have to cope with the potential for binaries. We would still, in attempting to draw up a chemical weapons convention, have to acknowledge the possibility that a weapon could be constructed by mixing two chemical agents in flight. In other words, the issue of binaries is with us come what may: the problem is a technical one and it should have nothing to do with politics.

CD/PV.169

p.14

Indonesia/Sutresna

6.4.82

CW

2. Strict adherence to the 1925 Geneva Protocol by Indonesia, a party which did not make any reservations. Indonesia therefore considered that the countries party to this Protocol are obliged to destroy on their own initiative dangerous chemical agents existing in their respective countries or in the territories under their jurisdiction.

For this destruction, the Indonesian Government requested the Netherlands Government, the authority responsible for the existence of this agent in Indonesia, to provide technical assistance; for its part, Indonesia provided logistics and security for the whole operation.

The ensuing co-operation between the Governments of the Netherlands and Indonesia in the destruction of this dangerous agent was indeed exemplary and reflected the prevailing excellent and amicable relations between the two countries.

When the Indonesian-Netherlands joint operation came to an end, it turned out that there were still about 2,000 litres of mustard agent at the site. Indonesia took upon itself to destroy them by the hydrolysis method.

It is not my intention to dwell on the technical aspects of this operation, which was called "Obong". However, some of its highlights of a non-technical character are perhaps worth mentioning.

Indonesia, a country which does not possess or manufacture chemical weapons, gained invaluable experience from the destruction operation.

Despite 40 years of storage in the underground shelter, the agent was still potent mustard. This may serve as a reminder that, even after being stored for such a long period of time, the agent still possesses its full destructive capacity. Such agents are at

present probably still in the possession of a number of countries.

In a future convention, the need for on-site inspection during destruction is essential to ensure that the destruction of the agent is really carried out in terms of its declared type, quantity and location, thus eliminating possible doubts about the sincerity of the parties concerned.

CD/PV.169

p.19

Netherlands/van Dongen

6.4.82

CW

In the end, the decision was made to use a method of controlled incineration. A specially-designed incinerator was built in the Netherlands and shipped to Indonesia. After the Indonesian NBC Defence Corps had made the necessary preparations on the site, the construction and the testing phase started. This phase lasted for about a month. The actual incineration of the mustard agent took place in June 1979. A total quantity of 32,000 litres of mustard agent was destroyed. You will find in the working document a detailed description of the incineration method, as well as of the difficulties encountered in the destruction of part of the stock.

What lessons can be drawn from this operation and the history behind it? The first is that the destruction of considerable quantities of mustard agent under the conditions described can be safely carried out in a reasonably short period of time and with relatively simple equipment.

The second, no less important, is the demonstration of the value of co-operation. We have here a tangible example of a joint, practical effort to help build the basis for a treaty banning chemical weapons altogether.

The third lesson concerns verification. During the destruction operation, due attention was given to a possible verification mechanism. Supposing for a moment that the Obong operation had taken place under a chemical weapons convention, the question of a required type of verification would then, of course, have arisen. And our reply would have been that, with the technology now available, only on-site inspection on a regular basis would have provided adequate proof that the chemical warfare agent had indeed been effectively and totally destroyed. Theoretically, possibilities of remote observation and control exist, but they are still a long way from becoming operational. Much research and development will be required before the feasibility of such a system can be established. For the foreseeable future, only on-site inspection during the destruction will provide adequate verification for the destruction of stockpiles, as in Operation Obong.

These are some preliminary observations as an introduction to document CD/270 jointly circulated by the delegations of Indonesia and the Netherlands. Our two delegations intend to arrange for a presentation of a more technical nature in this Committee later in the year.

CD/PV.170

p.10

USA/Busby

8.4.82

CW

My purpose in asking for the floor today is to introduce document CD/271-CD/CW/WP.32 co-sponsored by the delegations of the United Kingdom, Australia and the United States and entitled "Technical evaluation of 'Recover' techniques for CW verification".

The achievement of a complete and verifiable prohibition of chemical weapons is a goal which ranks near the top of the Committee's agenda. The Committee's discussions of general approaches to verification of a future CW prohibition have demonstrated that fundamental differences exist on verification issues. If meaningful progress is to be

made on a chemical weapons convention, it is clear that progress must be made in resolving these issues.

Because of the variety of verification tasks to be dealt with in a CW prohibition, there can be no simply formula which can be applied in all cases. A variety of techniques, tailored to particular situations, will be required. Finding solutions to them will require active co-operation, imagination and expertise from all members of this Committee. It is in this spirit that my delegation has sponsored two briefings on the concept of remote continual verification ("recover").

The recover system is a unique global sensor-monitoring and data collection network being developed by the International Atomic Energy Agency for use primarily with regard to nuclear safeguards. However, it appears to the co-sponsors that the technology involved may have wider applicability. In particular, it is our view that the recover techniques may have potential application as one component of a broadly based CW verification system.

Document CD/271-CD/CW/WP.32 describes the remote continual verification concept and suggests a framework within which a technical evaluation of recover could be conducted under the auspices of the Committee. The results of such a technical evaluation would be used to determine the applicability of recover as one component of a CW verification system.

It is clear that the lack of agreement on issues in the area of verification and compliance is the principal obstacle to successful completion of this Committee's work on a complete and effective ban on chemical weapons. Document CD/271-CD/CW/WP.32 suggests a technical evaluation which could assist us by taking another step towards overcoming this obstacle. It could also serve as a confidence-building activity in which States would co-operate to develop and evaluate improved monitoring arrangements. For these reasons, we seek favourable consideration of this proposal and intend to propose the inclusion of this item in our work programme for the summer session.

CD/PV.170

p.12

Netherlands/van Dongen

8.4.82

OS

...There is, of course, the Soviet draft treaty on the prohibition of the stationing of weapons of any kind in outer space. We have, however, stated on several occasions that it is our considered opinion that this draft treaty does not meet our requirements. On the one hand, it seems that the complexity of arms control in outer space calls not for one comprehensive treaty, but, rather, warrants several instruments dealing with specific subject-matters. On the other hand, the Soviet draft treaty seems to allow for dangerous and inadmissible a contrario arguments that could undermine the provisions of the draft and indeed those of treaties already in force. The verification provisions will have to be scrutinized for their adequacy. Furthermore, the draft contains some baroque ornaments that have no place in a legal text.

For example, draft article 3 raises many questions about the character of the prohibition of the stationing of weapons of any kind in outer space. It seems to leave open the possibility of disabling space objects of other States parties if such objects are not placed in strict accordance with article 1, paragraph 1, of the draft treaty. Furthermore, the prohibition applies only to the space objects of other States which are parties to the treaty. These restrictions, together with the wording of article 1, paragraph 1, referring only to stationing, mean that the Soviet draft treaty does not prohibit the development, testing or production of "objects carrying weapons of any kind" or even their use under certain circumstances.

Another important point in this connection is that a clear definition of the term "weapon" is lacking.

With regard to the verification provisions of this draft treaty, it can be asked why the verification of the implementation of this treaty should be left exclusively to so-called "national" technical means of verification. These means were recognized for the first time as a legitimate method by the United States and the Soviet Union in the SALT agreements. However, what is adequate in a bilateral context is not necessarily adequate or acceptable in a multilateral context. And since we are talking about a multilateral draft treaty, it should in any case leave open the possibility of the further internationalization of the verification of this treaty.

Another observation with regard to the proposed verification régime is that it does not provide for recourse of any kind to international bodies in case of doubts or complaints about compliance or non-compliance with the treaty.

I would like to make some further observations on this subject.

First of all, in our view, the military uses of space by satellites can, thus far, on balance, be described as rather of a stabilizing nature. When we consider possible further measures to prevent an arms race in outer space, we can therefore not ignore developments in the elaboration of anti-satellite weapon systems, which should be regarded as a serious danger because of their destabilizing effect on international peace and security. The more satellites are used as the eyes and ears of modern military forces, the more crippling will be their loss through attacks with anti-satellite weapons. It is therefore entirely justified that General Assembly resolution 36/97 C, in addition to the provisions I referred to earlier, requested this Committee to consider, as a matter of priority, the question of negotiating an effective and verifiable agreement to prohibit anti-satellite systems as an important first step.

CD/PV.170 p.21 Nigeria/Ijewere 8.4.82 CW

At this session, Ambassador Fields of the United States has again stressed the importance of verification and has even expressed a lack of confidence in the Soviet Union. My delegation stresses the importance of effective verification measures in any disarmament negotiations. However, we would merely like to state here that "100 per cent verification" is impossible and hence there must be an element of confidence among States. Consequently, a combination of international and national means of verification would be the most ideal for a CW convention. We note with regret that some western and socialist States continue to disagree on the proportions in which such means could be mixed. However, the working papers presented at this session and the Canadian paper contained in document CD/167 continue to form a good basis for negotiations.

CD/PV.171 pp.8-11 FRG/Wegener 15.4.82 CW,OS

Let me first turn to the problem of chemical weapons. My delegation has attempted to provide a specific input relating to the technical aspects of verification procedures and supplementing the detailed efforts undertaken in the same direction by other delegations, particularly the delegation of the United Kingdom. We are gratified by the interest which the Working Paper contained in document CD/165 has aroused among all regional groups. The method of casting lots as a means of random selection of chemical installations for regular on-site inspections has met with particular interest and has been recognized by many delegations as a possible way of providing a comprehensive verification régime and still maintaining a low personnel input and cost effectiveness. The mere prospect that any chemical installation, even one inspected only a short while ago, could be designated by lot for inspection would act as a powerful disincentive to

any breach of the future convention.

Many delegations have asked how the system of casting lots would work in practice and I am pleased to use this intervention to reply to a certain number of these questions, thereby clarifying our approach. While our long-standing experience with the inspection system of the Western European Union has prompted us to make our general experience available to others, the system of random selection by casting lots has not been part of this particular verification régime. It has rather been developed independently with the assistance of computer-based studies.

The subjects of the regular random-selection inspections would be all the stocks and production units declared as such by States parties. Declarations would cover existing stocks and production facilities of supertoxic chemical weapon agents, the general industrial production of phosphor-organic compounds, as well as the limited quantities of supertoxic warfare agents permitted by the future convention. All declared substances and facilities would, without exception, be subject to the lot-casting procedure.

The number of lots to be drawn would depend on the general percentage to be set in advance by the consultative Committee of Experts. This percentage could vary from year to year, for instance because of a sudden increase in the total number of objects to be inspected resulting from an increase in the number of States Parties.

While all States would, from a legal point of view, be radically equal before the lot-casting authority, there might be variations in fact. States Parties which have no industrial production of phosphor-organic compounds and may therefore not have any object to declare would of course be exempted from inspections. A country which chose to conceal stocks or production facilities would, for the moment, be exempted from on-site inspection. However, if doubts arose as to the existence of such undeclared stocks or units, the on-challenge procedure would apply.

It has been asked how several related production units in one country should be treated, for instance if they were spread over a distance, but were nevertheless administratively connected. Here we would recommend a criterion of local propinquity. All production units situated within a certain local perimeter, sufficiently clustered to permit one single inspection, would be counted as one unit, while production units dispersed over several localities would have to be counted separately, even if they were administered by the same managerial authority. It is, however, obvious that the duration and intensity of the inspection and the number of inspectors needed would depend on the dimensions and sophistication of the plant.

In the questions put to us, preoccupation with the safeguarding of industrial secrets and property rights has played a substantial role. I would therefore like to emphasize that, whenever samples were to be drawn, they would, according to our conception, be taken by employees of the production units inspected. All chemical analyses would be conducted on the spot, a procedure made possible by the limited range of chemical substances indicative of compliance with or breach of the convention. No samples would be taken out of the country. The precise composition of the substances examined could therefore not be detected by the inspectors.

In reply to some other questions put to my delegation, I should like to stress that our procedure would not envisage national quotas for the total number of inspections to take place in each country. Identical treatment of all is guaranteed by the objectivity of criteria and the unpredictability of the lot-casting method.

My delegation has followed the debate on problems of outer space with great interest. In our view, the Committee has made a good beginning in approaching this topic in response to the relevant resolutions adopted at the last session of the General Assembly, one of which was co-sponsored by my delegation. The debate has quite clearly shown that there is a considerable difference of views concerning the method to be used in future work. Many delegations have subscribed to a pragmatic, gradual approach by

which concrete negotiating steps would, in a first phase, be taken to deal effectively with the most threatening and destabilizing weapons systems, i.e. anti-satellite weapons, especially since such systems have already been tested and made operational by at least one country; anti-satellite technology is available and deployment may already have taken place. There is another approach which aims at a purportedly broader, non-specific ban on all arms in outer space, but places very little emphasis on real effectiveness. It is also difficult to see in what order of priority the various complex issues involved would be treated under this approach. While my delegation is in favour of every possible step designed to exclude non-peaceful uses of outer space, it would appear logical and appropriate to us to adopt a step-by-step approach and to build upon the existing body of international regulations in this field. The establishment of a working group to take this work in hand in the coming summer session of the Committee would be welcomed by my delegation, if the mandate reflects this approach. I would like to remind the Committee in this respect that General Assembly resolution 36/97 C specifically requests the Committee on Disarmament to consider, as a matter of priority, the question of negotiating an effective and verifiable agreement to prohibit anti-satellite systems. The mandate of a future working group would have to reflect this and, in our view, the Committee, acting accordingly, will have to avoid clogging the agenda of a working group with broad and hazy projects which would not allow the Committee to deal with concrete problems in a limited time and not aim at a really effective peaceful space régime.

My delegation has already given its view on outer space problems in a more comprehensive manner during one of the informal meetings devoted to the subject; the text of our statement has been made available to delegations in an informal manner. Now that I have the opportunity to speak on the subject in a formal meeting, allow me to reaffirm one clarification. The draft treaty of 10 August 1981 contained in document A/36/192 and referred to in General Assembly resolution 36/99 does not appear to my delegation to be a suitable basis for negotiation in this Committee. We have already pointed out the many contradictions and inconsistencies which this draft treaty displays. In this connection, my delegation has asked a certain number of questions which so far have found no reply. We, like the Italian and the Dutch delegations, still wait for the necessary elucidation from the authors of that draft. In addition to the lacunae and ambiguities of the draft to which we have already drawn attention let me briefly mention two others. Article III of the draft makes it legitimate to intercept space objects if these are not operated for peaceful purposes. However, the determination and decision whether interception should take place lies with the interceptor alone, who would thus take on the role of a self-appointed space police. In the absence of firm criteria and of any objective determination of prerequisites for such a police role, this draft provision would seem to pave the way for misuse and serve, rather, as an incentive for the development and testing of additional anti-satellite systems. Secondly, the rules on verification contained in article IV appear to be insufficient even in the light of other existing multilateral disarmament agreements and certainly in relation to the purposes of the draft treaty. In the view of my delegation it would be indispensable to have a substantially more detailed verification régime, with at least an independent investigating authority, such as a Consultative Committee, lest the desired prescription remain totally ineffective in terms of the prevention of an arms race in outer space. In the light of all these arguments and in conjunction with those already advanced, my delegation must confirm its view that the draft treaty in question is seriously flawed and particularly unsuitable as a basis for negotiations in this Committee.

The Working Group on Chemical Weapons has finally been given a mandate appropriate to its task. We are pleased at this and we appreciated the attitude of the United States delegation in this connection. However, the work conducted very competently by Ambassador Sujka has not shown any very appreciable progress. In truth, there was insufficient time. The problem of verification was once more at the centre of the discussions. This is a fundamental problem the solution of which will largely determine whether or not it will be possible to take decisions on the prohibitions in question. For after all, what would be the point of instituting prohibitions if compliance with them could not effectively be verified? Some delegations put the accent on internal verification through purely national bodies. Others, ourselves included, stress the primary importance of an international system of verification. We do not deny that national authorities should be responsible for supervising the implementation of the convention on their territory, in order, in particular to prevent the chemical industry of their own country from engaging in prohibited activities clandestinely. But such control is far from meeting the requirements of an international convention. It does not constitute genuine verification. If a Government decided, in defiance of its commitments, to keep or to build up stocks of chemical weapons, a national control body could hardly prevent it from doing so, and much less would it denounce it. It is, however, essential that each State party should have the assurance that the convention is being fully applied by all, an assurance that can be given only by an international verification mechanism empowered to conduct on-the-spot investigations.

One of these major practical problems is verification. It has been a theme, if not the major theme, of this session. In aspects of the Committee's work where hope is highest, for example with respect to chemical weapons, the emphasis on verification is greatest. The accomplishments of the Committee on Disarmament through the activities of the Seismic Experts Working Group are essentially in the area of verification. The CTB Working Group will address the subject of verification. On the other hand, one of the built-in problems in achieving a mutually satisfactory and universal negative security assurance is that, by its very nature, such an assurance is unverifiable: it deals, not with arms, but with intentions. Perhaps the lesson of verification has only recently been learned. Many have asserted that verification adds to confidence, and does not detract from it. Treaties have been concluded in the past without adequate verification provisions, and the consequences have underlined their resulting weakness. Inherently unverifiable treaties have been concluded, such as the Briand Kellog Pact, which outlawed war. It is this historical experience which troubles many in discussing proposals that cannot be verified. In their view, and indeed in ours, the law is only the law if it is agreed -- and enforced, in the case of international agreement on arms control and disarmament, through verification.

Earlier I noted three positive signs in the Committee's work. There is a fourth. The Committee has moved beyond discussing verification as an abstract principle, and is now considering the means of verification. Views differ, perhaps not as much as before, and solutions are in sight, if not yet within grasp.

The resolution of verification problems is rarely a glamorous business. But it is always essential. The second special session, obviously, cannot do this work. We can and should.

There are some who, while agreeing in principle to verification, are concerned that

insistence on absolute verification, or something close to it, is a means to avoid progress on other substantive arms control and disarmament matters. It is easy to sympathize with this concern. That is why we believe our aim should be to seek adequate and mutually-acceptable verification measures. We are confident that with patience and perseverance, this can be done -- even in such technically demanding fields as chemical weapons verification. In the meantime, no agreement of consequence is likely to be achieved without suitable verification provisions. Let us therefore proceed accordingly. We, for our part, in due course, will be putting forward further suggestions on verification, particularly in the area of chemical weapons.

CD/PV.175

p.14

Mexico/Garcia Robles

3.8.82

CTB

We hope that during the next six weeks, which will constitute the whole of what is called the summer session of the Committee on Disarmament, it will be possible to establish exactly what the present situation is in this matter and how it may possibly develop in the near future. It should be borne in mind that the Ad Hoc Working Group on item 1 of our agenda, "Nuclear test ban", will be beginning its work for the first time. My delegation's position with regard to the question of "verification", which is given priority in that Group's mandate is well known. Basically it coincides with that expressed by none other than the Secretary-General of the United Nations in 1972 when he declared to the Conference of the Committee on Disarmament:

"I believe that all the technical and scientific aspects of the problem have been so fully explored that only a political decision is now necessary in order to achieve final agreement...

When one takes into account the existing means of verification ... it is difficult to understand further delay in achieving agreement on an underground test ban...

The potential risks of continuing underground nuclear weapon tests would far outweigh any possible risks from ending such tests."

That is what the Secretary-General of the United Nations said here in 1972 and, as we all know, he expressly repeated that statement in 1980 in his introduction to the report of the experts.

It is thus clear that acceptance of that mandate meant a tremendous concession on our part and we were only able to make that concession, as I said in my statement on 21 April last, at the 173rd meeting of the Committee, because, as is stated in its mandate, the working group "will take into account all existing proposals and future initiatives, and will report to the Committee on the progress of its work before the conclusion of the 1982 session," and also because, as is again stated in that mandate, "the Committee will thereafter take a decision on subsequent courses of action with a view to fulfilling its responsibilities in this regard."

We hope that the Superpower whose future attitude on this question will, as I said earlier, in our view, be decisive for the fate of the comprehensive programme of disarmament, will be able in turn to show the necessary flexibility so that it can adopt a position on the substance of the matter that is consonant with the obligations assumed in the Treaties of 1963 and 1968 to which I have referred and the position endorsed with its affirmative vote in the three General Assembly resolutions which I have also expressly mentioned.

CD/PV.175

pp.16-17

Canada/McPhail

21.4.82 CW,CTB

With respect to chemical weapons, I should like to recall the words of my Prime Minister at the second special session: "Given the complexity and characteristics of many modern weapons systems, national technical means may not be adequate for verifying arms control and disarmament agreements. Consequently, the international community should address itself to verification as one of the most significant factors in disarmament negotiations in the 1980s". Nowhere is this observation more apt than in our efforts to achieve a chemical weapons convention. Under previous Chairmen of the chemical weapons Working Group, Ambassadors Okawa and Lidgard, much was accomplished. Ambassador Sujka has already added his particular contribution to this progress. We have now come to the point where it is clear that the success of our efforts will depend upon the degree to which there is agreement on adequate measures of verification. This, I repeat, is now the fundamental issue before the Committee.

We have noted with great interest the Soviet proposals concerning verification of a chemical weapons convention announced by Foreign Minister Gromyko at the General Assembly's second special session. We look forward to exploring these proposals in detail during this session of the Committee on Disarmament. We want particularly to explore those provisions relating to "on-site verification on an agreed basis". In line with our objectives in achieving further progress towards a chemical weapons convention, Canadian expertise will be provided for a period longer than in the past for technical discussions on verification matters.

We are pleased that the Working Group on a comprehensive test ban will commence work at this session. We believe it to be in the interest of this Committee as a whole that it should begin substantive consideration of the items under its mandate as soon as possible. We recognize, however, that given the shortness of this session, an in-depth examination of many of the issues may have to await our 1983 session. In the meantime, the Ad Hoc Group of seismic experts will meet from 9 to 20 August; the creation of the comprehensive test ban Working Group adds to the seismic experts Group a dimension of additional importance. I should like to recall that Canada has played an active role for the past six years in the development of international seismic data exchange, which has been the primary responsibility of the Ad Hoc Group of seismic experts. In the forthcoming months, Canada will be able to join those countries which have been exchanging data on a provisional basis. In this way we shall be one further participant in the definitive data exchange from the outset. We believe that such an exchange can -- and should -- be implemented in advance of the achievement of a comprehensive test ban treaty.

CD/PV.176

p.10

Czechoslovakia/Vejvoda

5.8.82

CTB

Thanks to the constructive work of the group of experts in the field of seismology who, after seven years of complicated negotiations, have in fact resolved all the basic problems of the verification system for a future agreement, we can hope that this Working Group will be able this year to concentrate its efforts on the preparation of an agreement in all its aspects. Czechoslovakia is ready to offer the experience of its experts in seismology and intends to take an active part both in the meetings of experts as well as in the Working Group.

On the question of chemical weapons, the Working Group has been at work under the conscientious chairmanship of Ambassador Sujka since 20 July, prior to the opening of the summer session. My delegation hopes that, on the basis of the revised mandate achieved at our spring session, further substantial progress will be made toward the elaboration of the draft text of a convention by the end of this session.

In this connection a number of noteworthy proposals were tabled at the second special session by the delegations of the Federal Republic of Germany, France, the Soviet Union and others. My delegation hopes these proposals will contribute to advancing our discussions in this Committee. We have duly noted that the concept of on-site inspections has in principle been accepted by the Soviet Union, in particular with respect to verification of the destruction of existing chemical weapons stocks.

Japan has been consistently calling for the realization of nuclear disarmament as a matter of the utmost urgency. Japan has, in particular, urged the early conclusion of a comprehensive ban on nuclear testing, including underground testing, with a view to restraining the further sophistication of nuclear weapons as the first concrete step toward nuclear disarmament. It goes without saying that the elaboration of adequate and effective verification measures is indispensable for the realization of a comprehensive test ban. This is why Japan has been actively contributing over the years towards the establishment of a system of international co-operative measures to detect and identify seismic events.

In this connection, we wish to express our regret that the reopening of the trilateral CTB negotiations — which Japan has been calling for — seems to remain beyond our reach in the foreseeable future. Japan wishes to appeal once again for the early resumption of those trilateral negotiations, through joint efforts by the parties concerned to achieve a breakthrough in their quest for a solution to the problem of verification.

Among recent proposals made on the subject of chemical weapons, my delegation noted with the utmost interest those put forward at the second special session on disarmament by Mr. Gromyko, the Minister for Foreign Affairs of the Soviet Union, and reproduced in a document submitted last month to the Working Group on Chemical Weapons. A number of questions have been put to the Soviet delegation on the subject of that proposal and there will no doubt be others; the French delegation will undoubtedly wish to ask for clarifications on a number of points. Those questions and the Soviet Union's replies to them are of interest to the Committee as a whole, and the exchange will make a contribution of the highest importance to the consideration of the substantive problems that remain to be solved. Only when those substantive problems have been examined will it be possible to judge how far the drafting of a composite text would be useful to the progress of our work this year.

Among those problems, none is more essential than that of verification. In fact, only effective verification of each party's fulfilment of its undertakings can guarantee that the convention on chemical weapons will increase the security of all.

We consider that the system of verification to be established by the convention should be based essentially on international verification. We regard acceptance of such a system as the criterion of the political will to conclude the convention and to carry out its commitments in good faith.

CD/PV.177

p.8

Pakistan/Ahmad

10.8.82

CTB

The Ad Hoc Working Group has been asked to define, through substantive examination, the issues relating to the verification of a test-ban treaty. In our view, the first issue relating to verification is the scope of the test ban. In other words, is it our intention to prohibit "all nuclear tests in all environments for all time" — as stated in relevant General Assembly resolutions — or do we seek a prohibition of only nuclear weapons testing? The verification requirements of either alternative will be substantially different. If we choose the latter alternative, as the trilateral negotiators apparently did, what arrangements are to be envisaged for "peaceful nuclear explosions" and their verification? We would also be interested to know what verification and compliance measures can be envisaged to arrest the continued qualitative improvement of nuclear weapons through laboratory tests or simulation techniques that have reportedly been developed by some of the nuclear-weapon States. Some other relevant issues are also enumerated in the list of questions addressed by the Group of 21 to the trilateral negotiators last year in document CD/181.

CD/PV.177

pp.22-23

Belgium Onkelinx

10.8.82

CW

The Working Group has certainly make progress in its attempt to find alternative formulas to these two approaches. In conducting this exercise we have been able to see the close link that exists between the scope of the convention we are elaborating, the prohibitions set forth in the Geneva Protocol, and verification of compliance with the prohibition of use.

The 1925 Geneva Protocol was the basis of a lengthy undertaking aimed at the complete prohibition of all chemical and bacteriological weapons. In the provisions of the Protocol itself, the prohibition of use was intended to cover all chemical and bacteriological weapons. A problem would be created if a new regime relating to use were introduced solely for chemical weapons, bacteriological weapons being left aside. In this connection it is noteworthy that the 1972 Convention on Bacteriological Weapons carefully avoided saying anything about the prohibition of use, merely recalling, in its preamble, the provisions of the Geneva Protocol. Furthermore, a certain symmetry has been observed so far in the elaboration of measures aimed at the total prohibition of chemical and bacteriological weapons. Thus, after a period of joint negotiation on the two questions, the 1972 Convention on Bacteriological Weapons prescribed, in its article IX, the continuation of the negotiations only on the prohibition of the development, production and stockpiling of chemical weapons, and on their destruction. There is no reference in the article to the prohibition of their use. We have to bear this symmetry in mind if we wish to organize the regime of prohibition emerging from the Geneva Protocol in the broadest manner possible.

Verification of compliance with the prohibition of use also raises a number of questions. We think that the development of such a mechanism, both for bacteriological and for chemical weapons, would meet a requirement felt by the international community, since its absence has been the cause of many disputes and of much friction between States over the past decades. The modalities of such verification must be specific to the matter prohibited. Thus the provisions in this respect must be different from those relating to verification of the prohibition of development, production and stockpiling, as well as those relating to destruction. It is also becoming apparent that, in view of the interrelationship between the subjects and the symmetry between the regimes for the prohibition of chemical and bacteriological weapons, this type of verification should be

aimed at ensuring compliance with the prohibition of the use of both categories of weapons at the same time.

The link between scope and verification in the context of a single instrument is also something to be thought about. For it would be difficult to include in a convention on chemical weapons a system of verification which would apply to prohibitions not explicitly mentioned in the convention.

These are the main considerations which underlie the initiative taken by Belgium at the special session when it submitted a memorandum on monitoring of the prohibition of the use in combat of chemical and bacteriological weapons. We are now submitting this text to the Committee in document CD/301/CD/CW/WP.39, in the hope that this initiative will help us in our joint effort to find a solution to the problem of the use of chemical weapons.

I shall refrain from describing the contents of the document. I should simply like to emphasize its basic objectives.

The first objective is to make good the gaps in the 1925 Protocol by proposing a verification mechanism which would apply to all situations of the use of chemical and bacteriological weapons in combat. We would at the same time also settle the debate on the scope of the Protocol by providing that the prohibition relating to use covers all chemical and bacteriological weapons, not only in time of war but more generally in combat.

The second objective is to resolve the problem posed by the question of use with respect to the convention on chemical weapons.

And lastly, the third objective is to provide for a flexible mechanism which could be agreed on quickly and enter into force even before the convention on chemical weapons. The composition of the proposed advisory committee (at the present stage all the States parties to the 1925 Protocol and to the 1972 Convention on Bacteriological Weapons) and the conditions for entry into force (a very small number of ratifications, we believe) as we envisage them, are such as to permit the system very quickly to begin functioning.

The mechanism we have in mind could take the form of an instrument sui generis, whose links with existing instruments — the 1925 Protocol and the 1972 Convention on Bacteriological Weapons — as well as with the ongoing negotiations on chemical weapons, could be clearly and easily described.

CD/PV.178

pp.8-11

USA/Fields

12.8.82

CW

A number of delegations have made important and interesting proposals regarding a chemical weapons ban in the Committee this year. Last spring, the delegations of the United Kingdom and the Federal Republic of Germany presented detailed working papers on the subject of verification (CD/244 and CD/265). The Soviet document containing "basic provisions" of a chemical weapons convention (CD/294) is potentially useful in our discussions.

These are the positive elements. However, much remains to be done, and my delegation is not entirely satisfied with the Committee's work on chemical weapons so far this summer.

My delegation came prepared to do serious business. This has been difficult because a number of delegations, including several particularly influential ones, apparently wish to avoid dealing with the key obstacles to the elaboration of a convention. Although most delegations are pressing to come to grips with the fundamental verification and compliance issues, a few still try to divert attention to less important questions. Unless this difficulty can be overcome and the Committee can proceed to deal with the key

verification and compliance issues in a concrete, task-by-task manner, as I proposed here last March, we will not get very far.

Serious business has also been frustrated because the position of the Soviet delegation on verification and compliance issues remains unclear. We have heard that their delegation has new flexibility regarding on-site inspection provisions, an area crucial to real progress in this Working Group. We have been looking forward to receiving a clear explanation of how far the Soviet Union is prepared to go in meeting the verification concerns expressed by my delegation and many others. We were disappointed that such elaboration of the Soviet position was not presented when working paper CD/294 was tabled. But we are hopeful that such explanations will be forthcoming soon, so that the Committee can take them into consideration in its work this summer. For our part, we are ready to deal seriously with any and all constructive proposals regarding verification, whether from the Soviet delegation or any other.

One of the key disputes in the Working Group is whether or not to include a ban on the use of chemical weapons. The United States supports in principle the banning of any use of chemical weapons in armed conflict. At the same time we believe that care must be taken to avoid undermining the 1925 Geneva Protocol. Therefore, we believe consideration should be given to including in a convention a reaffirmation of the Protocol and of supplementary undertakings. Furthermore, we believe that the verification and compliance provisions should allow for a fact-finding inquiry into alleged uses of chemical weapons.

Let me turn now to issues relating to the declaration and elimination of stockpiles and facilities. The declaration of chemical weapons stockpiles and chemical weapons production and filling facilities should provide base-lines for monitoring purposes. Thus, any agreement should mandate prompt, detailed declaration of any chemicals, munitions and specially designed equipment in chemical weapons stockpiles. The agreement should also mandate prompt and detailed declaration of any facilities designed or used for the production of any chemical which is primarily used for chemical weapons purposes or for filling chemical munitions. Such facilities should be declared even if they are or were dual-purpose facilities designed or used in part for other purposes, such as civilian production. Declarations of stockpiles should include the chemical name and quantity of agent, munitions, equipment possessed, and the exact stockpile location. Declaration of production and filling facilities should include the nature of each facility, its capacity and exact location.

In this area the agreement should also provide for confirming declarations of stocks and facilities, for immediate and verifiable closure of facilities, and a ban on construction of any new facilities. Declared stockpiles and facilities should be destroyed over a ten-year period according to an agreed schedule and agreed procedures.

The agreement should also provide for agreed controls under which the declared chemicals with legitimate peaceful applications could be used for such purposes.

As the Committee is already well aware, my Government places particular emphasis on effective verification provisions. To be acceptable to the United States, the verification provisions of a chemical weapons convention must provide confidence that other parties are complying with all provisions of the convention. For the foreseeable future such confidence cannot be obtained by national technical means alone. In some situations, mandatory, extensive and carefully-specified on-site inspection will be needed. A chemical weapons convention will therefore require a verification system based on a combination of national and international measures. Included in international measures must be provisions for systematic international on-site inspection.

In particular we believe that there should be agreement in advance in the convention that the following activities, as a minimum, shall be subject to systematic interna-

tional on-site verification:

Destruction of declared stockpiles, on a continuous basis until destruction is completed;

Disposition of declared production and filling facilities, under agreed procedures, until the facilities have been destroyed;

Permitted small-scale production of super-toxic lethal chemicals for protective purposes, under agreed procedures, for as long as a facility is maintained for that purpose.

Furthermore, the agreement should provide for the creation of a consultative committee of parties with verification responsibilities.

Agreed procedures should be included for a fact-finding investigation under the auspices of the treaty parties in the event that suspicious activities were reported. A more practical arrangement than a meeting of the full consultative committee should be provided for initiation and carrying out such an inquiry.

We believe that the complaints procedure should incorporate the obligation to co-operate in resolving compliance issues expeditiously. This should include an appropriate right of on-site inspection at subject sites. A means for redress if the issue is not satisfactorily resolved should also be provided.

The agreement should include constraints specifically designed to reduce monitoring difficulties, and should contain effective confidence-building measures. Further, there should be provisions for exchange of information on the production and use of specific commercial chemicals, including precursors, which might be diverted to chemical weapons purposes.

Finally, and this is a particularly important point, there should be effective provisions for dealing with the possibility of undeclared stockpiles and facilities.

At our spring session, I noted with sorrow that the Committee's efforts to ban chemical weapons are taking place under the long and dark shadow of the use of chemical weapons in current conflicts. I wish I could today report that this heinous practice had ceased. Unfortunately this is not the case. The use of prohibited toxin weapons and lethal chemical agents in south-east Asia and chemical warfare in Afghanistan continue. As President Reagan said when he addressed the second special session:

"The Soviet Union and their allies are violating the Geneva Protocol of 1925, related rules of international law and the 1972 Biological Weapons Convention. There is conclusive evidence that the Soviet Government has provided toxins for use in Laos and Kampuchea, and are themselves using chemical weapons against freedom fighters in Afghanistan. We have repeatedly protested to the Soviet Government, as well as the Governments of Laos and Viet Nam, their use of chemical and toxin weapons. We call upon them now to grant full and free access to their countries or to territories they control so that United Nations experts can conduct an effective, independent investigation to verify cessation of these horrors".

There is an important lesson for the Committee to be drawn from this dreadful experience. Any new agreement must have effective provisions for ensuring compliance. The existing chemical weapons and biological weapons conventions do not have adequate verification and compliance provisions. They are being violated. We must not succumb to any temptation to conclude a convention which does not ban these weapons completely, effectively, and verifiably. We simply must never make that mistake again.

Today I would like to offer some observations on the relationship between national and international measures of control and verification. With a view to the solution of numerous issues in this complex domain, including the cost-effectiveness of these procedures, it seems necessary to discuss and outline in more precise terms at least the following aspects of this relationship:

The utilization to the maximum extent of the possibilities of national control, supplementing national mechanisms with international measures when and where an agreed necessity exists.

The correlation of national and international measures should be determined in every specific case depending on the nature of the relevant provisions of the convention with a view to constructing the most efficient and at the same time least cumbersome system of control and verification.

An evaluation of the role of confidence-building measures in the context of the over-all approach to the problems of control and verification. Of particular importance in this respect would be the fact that the different kinds of declarations envisaged in the convention will provide valuable and indispensable information, guaranteed by the authority of the respective State party to the convention.

We offer these considerations guided by the thought that the cornerstone of any system of control and verification must be rationality, rationality coupled with realism and objectivity. The national and international measures of verification should be organically combined, rather than doubling each other. What we suggest is not to lose the over-all picture when concentrating on the elaboration of particular areas of the future convention.

Here I would like to remind you of the experience of the early stages of the discussion of technical aspects of the verification of a test ban treaty. Initially, our predecessors in the disarmament negotiations, more than 20 years ago, were considering the establishment of dozens of internationally operated seismic stations all over the globe, involving huge costs and creating numerous technical and human problems. A much simpler and rational solution was generally accepted eventually, as all of us are aware, that is, the utilization of national seismic stations. This is only one example of applying rationality to the genuine requirements for verification of arms control and disarmament agreements.

Verification issues related to compliance with a chemical weapons convention have rightly become a focal point in the discussions in the Ad Hoc Working Group on Chemical Weapons. Today I will introduce two contributions on verification issues, one also on behalf of the delegation of the Federal Republic of Germany. Before going into the details, I believe it is proper for me to refer briefly to the general philosophy of The Netherlands with respect to verification. Adequate verification is, in our view, not identical with a set of measures that would be perfect in isolation. Rather would we consider verification measures to be adequate if, measured against a well-defined scope of the treaty and a credible system of protection measures, the advantages of compliance with the convention would outweigh the tremendous disadvantages and risks of maintaining a chemical warfare capability for retaliation purposes.

On behalf of the delegation of the Federal Republic of Germany and my own, I

would now like to introduce document CD/308, dated 10 August 1982. This document contains a list of questions that our respective authorities believe to be of relevance for a continuation of the efforts in the Ad Hoc Working Group, having studied document CD/294 -- CD/CW/WP.35 dated 21 July 1982 submitted by the delegation of the Soviet Union. It is the hope of our two delegations that this document, which supersedes and elaborates upon the set of questions put forward by the delegation of the Federal Republic of Germany in a meeting of the Ad Hoc Working Group a few weeks ago, will facilitate the further clarification which the delegation of the Soviet Union undertook to present in due course. I would like to make it clear that our respective authorities have considered with interest the Soviet draft "Basic provisions" of a chemical weapons convention. It is the hope of our two Governments that unambiguous answers to the questions contained in CD/308, in conjunction with subsequent in-depth discussion in the Ad Hoc Working Group, will provide fresh ground for speedy agreement on an effective and verifiable chemical weapons ban.

In 1977 the Netherlands delegation tabled document CCD/533, a working paper concerning the verification of the presence of nerve agents, their decomposition products or starting materials downstream of chemical production plants. In the last paragraph of that paper it was announced that further work would be carried out, inter alia, to investigate the applicability of the procedure in case of binary nerve agents systems.

Working document CD/307, which I am pleased to introduce today, contains the results of the announced further scientific work in my country.

Allow me to say a few words to refresh your memories as to what working paper CCD/533, now reissued as document CD/306, is about.

The scientific method described in CCD/533-CD/306 concentrated on a militarily highly significant class among the supertoxic single purpose agents, i.e. the nerve agents. It was defined with a view to contributing to the elaboration of international measures of verification of a chemical weapons ban, with emphasis on the non-production of these agents, including binary weapon systems -- measures that would be, in order to be acceptable to all States, of as non-intrusive a character as reasonably possible.

The method was developed under the direction of Dr. A.J.J. Ooms, well known to most delegations in the Committee on Disarmament and its predecessor, the Conference of the Committee on Disarmament, who is director of the Prins Maurits Laboratory of the Netherlands Defence Research Organization. This highly sensitive method is based on an analysis of waste water downstream of chemical production plants, with a view to detecting a phosphorus-methyl bond the presence of which is common to most of the known supertoxic nerve agents. It is very stable towards chemical reactions and can be used as -- and I think the comparison is comprehensible -- a "fingerprint". As the possible presence of the compounds at issue may also be due to the natural or industrial background, a reference sample upstream of the chemical production plant should be analysed in addition to a downstream sample. Only if the analysis is positive with respect to what I call the "fingerprint", pointing to the presence of decomposition products or starting materials in waste water, recourse may ultimately be had to more intrusive measures, such as a visit to the suspected plant to reveal the identity of the product manufactured.

Having explained this much about document CCD/533 (now reissued as document CD/306), I can venture to elaborate on our new working document CD/307. First of all, it contains positive results of research with respect to the applicability of the "fingerprint" method to binary nerve agents. After stating that it is safe to assume that one of the two precursors of the binary agent does already contain the fingerprint bond before reaction with the other, the paper goes on to say that the validity of the analytical

method for two distinguishable types of precursors has been tested with success. Thus the entire range of the most toxic binary G-agents as well as binary VX has been covered.

Research was also carried out to get acquainted with the occurrence of compounds containing the fingerprint in water from natural or industrial origin, since the findings in this respect could theoretically affect the applicability of the verification method. To our satisfaction it was found that the phosphorus-methyl procedure was sensitive even in heavily polluted water. The environmental background levels do not affect the maximum distance of a few hundred metres downstream where samples could be taken. Thus the originally foreseen degree of non-intrusiveness can be maintained.

The advantage of the system is obvious. It gives a simple yes or no answer to the question whether compounds related to chemical warfare nerve gases containing the "fingerprint" are present or not. The method is equally relevant for binary weapon precursors. The chemical analyses of the waste water can be performed by many laboratories in the world. The method is highly sensitive and can best be illustrated as follows. In many languages a particularly difficult fact-finding mission is metaphorically described as "looking for a needle in a haystack". The staff of the research institute was so tempted by this metaphor that they decided to compare the relative values of weight for needle and haystack with the values found for the fingerprint in a corresponding volume of waste water. It was found that the needle value was indeed matched.

Our research in this field will continue, but already at this stage we can safely recommend the method described as at least one valuable building block in a set of interacting components of a verification system to be agreed upon. We would very much hope that other delegations will carry out comparable research. In this context my delegation would like to express its respect to the delegation of an observer-State, Finland, for the impressive and laborious work that has been carried out in Finland over the years, of which the latest so-called "blue book" is yet another reflection. It is our sincere hope that thus the technical basis for verification will already have been established when the time is ripe for a final breakthrough in the Committee on Disarmament on the subject of a chemical weapons ban.

CD/PV.178

p.21

Czechoslovakia/Vejvoda

12.8.82

CW

The introduction of binary weapons into the arsenals of States would also significantly complicate the solution of the basic difficult in the elaboration of a chemical weapons convention, namely, that of separating commercial chemicals from those which can be used for chemical weapons. Consequently, the extremely difficult task of defining chemicals for commercial purposes which may be produced for binary weapons would arise. Thus, the implementation of many aspects of the future convention would be seriously complicated, e.g. the obligation not to transfer chemical weapons and other obligations related thereto. The process of the declaration by States of their stocks of chemical weapons and means of production of such weapons would also be seriously hampered. The emergence of binary weapons would also significantly facilitate possible covert stockpiling and storage of chemicals for binary weapons purposes and for developing chemical weapons under the guise of commercial production. There is no need to elaborate extensively on the grave consequences this would have for the relevant verification procedures, both national and international. We do not think it feasible to apply to binary weapons such verification methods as are based upon the extreme toxicity of the chemical agents used in traditional types of chemical weapons. We have heard some arguments to the contrary. However, we consider those arguments rather oversimplified.

Allow me now to dwell on questions of verification. I should like once again to reiterate our conception of the matter of the monitoring of implementation of an international agreement on the prohibition of chemical weapons. We are in favour of strict and effective but not intrusive verification. We are in favour of a verification which gives States the assurance of compliance with the convention but which will not at the same time engender mutual suspicion or in any way lead to a worsening of the relations between States.

As we have already stated more than once, we consider that effective implementation of the convention can be ensured by national monitoring, by national technical means of verification, supplemented by certain international procedures including on-site inspections on a voluntary basis or what some call challenge verification. However, in view of the decisive importance of the destruction of stocks, and wishing to provide for ourselves and for all other future parties to the convention, an additional assurance that no party is committing a violation of this most important undertaking, in the end, in some measure and simply to accommodate the positions of many of our partners in the negotiations, we considered it necessary to provide for the possibility of carrying out systematic international on-site inspections, for example, on the basis of an agreed quota, of the destruction of stocks at converted or specialized facilities.

We have also provided for a special verification procedure for the permitted production of supertoxic lethal chemicals at a specialized facility. This is on the understanding that such a facility will continue to exist even when total chemical disarmament has been accomplished and no chemical weapons as such remain on earth. In those circumstances, it would of course be extremely dangerous if someone should attempt to abuse the trust of other States and use that facility for the secret production and stockpiling of chemical weapons.

The Soviet "Basic provisions" provide for a very wide range of possible actions by States parties to the convention for the purpose of establishing confidence between them on the matter of the implementation of the convention and the monitoring of compliance with the obligations flowing from it, such as: a declaration by States as to whether or not they possess chemical weapons; the declaration of stocks of such weapons and capacities for their production, and of plans for their destruction or diversion to permitted purposes and plans for the destruction and dismantling of facilities, stating the location of the facilities; information concerning progress in carrying out the declared plans with notifications prior to the start of each stage of their implementation and also following the completion of the operations concerned. According to the Soviet provisions, such measures would be carried out by national verification bodies, by national technical means, if they possess such means or, in the case of other States which have an agreement to that effect, on the basis of information received through the use of those means, and lastly by the international verification body with the conduct of on-site inspections on the basis of a documented request as well as of systematic international inspections carried out, for example, on the basis of an agreed quota as I mentioned earlier. Our approach ensures confidence in the implementation of the convention while at the same time it is not burdensome.

In connection with the matter of the verification of the destruction of stocks at a specialized facility, some delegations have put forward proposals, firstly, for permanent on-site inspections (with international inspectors staying at the facility day and night throughout all the years during which stocks are being destroyed), and I believe this was referred to today in a statement, and secondly, for the installation at the facility of so-called "black boxes" which would collect and process information and transmit it by radio telecommunication.

Let us suppose for a moment that such a verification system had been established. There would be inspectors permanently stationed at the facility concerned, who could not leave it even for a second; there would be "black boxes" in every corner, and the people working in the facility would be stumbling over them; but let us suppose that this had been done. It would then be necessary seriously to ponder the question of what would be the results of the most meticulous and thorough verification of the progress of the destruction of stocks at a specialized facility if a State had not made a full declaration of its stocks. Or supposing a State after declaring the stocks that are to be destroyed at a specialized facility, then proceeds to conceal part of the stocks and does not submit them for destruction at the facility, or pretends that it has destroyed them?

Would it not be simpler to assume that, if it has such dishonest intentions, a State will merely fail to declare that part of its stocks which it does not intend to destroy, and no amount of day and night permanent inspection will be of any avail whatsoever?

No other method of international verification except inspection on grounds of suspicion in such a case will help to establish the truth. We should also reflect on how to take account, for our purposes, in the drawing up of measures for verifying the destruction of stocks, of the fact that any specialized facility of such a kind must have its own strict and clear technological regulations, specific parameters for the entry of chemicals and output of the products of their destruction, its own extensive range of devices for process management and control, and so forth.

In short, while appealing for a greater objectivity in the work on the provisions of the future convention relating to verification, we are gratified to note that some delegations are beginning to seek more realistic approaches. To mention just one example, the document on verification submitted by the delegation of Canada (CD/167) contains a whole series of interesting points, one of which says in effect that in the drawing up of various control measures the starting point should be minimum levels of intrusiveness in the internal affairs of States. It is to be hoped that in the positions of all delegations a spirit of realism and constructiveness will in the last resort prevail.

Mr. Chairman, in connection with the submission of the Soviet draft basic provisions of a convention on the prohibition of chemical weapons, a number of delegations have requested us to answer some questions. We consider this an expression of interest in the Soviet document and express our gratification and thanks to those delegations for that interest. We have repeatedly explained our position on key questions of the convention, including, we hope, at today's meeting.

The delegation of the Federal Republic of Germany, in its document of 26 July, referred to our working paper CCD/539 of 3 August 1977, which stated that the main purpose of monitoring the destruction of stocks of chemical weapons should be to establish: (a) the fact of the destruction of an agent of a certain type; (b) the quantity of the agent destroyed; and (c) the quality of this agent. The delegation asked us: are the systematic international on-site inspections designed to achieve these goals?

We answer this question in the affirmative. It should be explained that in our 1977 document the principle of national verification is taken as the basis, but we see no reason for opposing national verification to international verification. We are in favour of a harmonious combination of the two types of verification.

We have also been asked, and not only by the delegation of the Federal Republic of Germany, to explain what is meant by an "agreed quota". In the "Basic provisions of a convention", the carrying out of international on-site inspections at specialized facilities (of the destruction of stocks of chemical weapons and the production of supertoxic lethal chemicals for permitted purposes) on the basis of an agreed quota is proposed as one — I repeat, one — of the possible forms of such inspections. This does not mean that we are not prepared to consider other possible forms too. Obviously when agreement has been reached on procedures which are acceptable to all, we shall then have to

work out in detail together the contents of such procedures. On a number of other specific issues the Soviet delegation intends to give a reply in the Working Group during the consideration of the relevant provisions of the future convention. I will say, however, at once, that in our opinion many questions call for joint answers, especially when they concern such matters as systematic international on-site inspections, on which in the past many different proposals have already been put forward by quite a large number of States.

We prefer the method of bilateral and multilateral consultations with interested delegations in a joint search for answers to the questions which arise in the course of negotiations. For the information of members of the Committee I will say that the Soviet delegation has already conducted a series of such extremely useful bilateral consultations, in the course of which we ourselves asked questions and we answered the questions of our partners, and we intend to continue this practice. We think that this is far more effective than something more like a quiz game -- you know: question, answer, question, answer. Anyone really interested in finding joint answers will find a constructive partner in the Soviet delegation. I repeat, we are ready to search for answers to any questions which arise in the course of the negotiations, including those concerning the Soviet draft.

I should like to refer to another matter. Every now and then an attempt is made to steer negotiations into the labyrinth of secondary questions at a time when agreement has not been reached on the major questions. Take, for example, these problems of verification. While there is quite a high degree of agreement on the question of scope and, as we believe, the outlines of possible formulations on the scope of the prohibition are emerging, this is not yet the case with regard to verification issues. Nevertheless we sometimes get bogged down in a discussion of highly specialized aspects of verification. We propose that agreement should be reached on basic approaches, where this is possible, of course, and then on the basis of such agreed approaches -- general approaches -- we can work out the details.

CD/PV.178

pp.34-37

UK/Middleton

12.8.82

CW

In examining the report of the experts' meeting, I would like to reiterate the view which my delegation expressed at the spring session that the work on toxicity criteria has now been taken as far as is useful for the present, although at a later stage in our work it will be necessary to return to the protocols prepared during the spring session to see whether they meet the needs of the convention. We would suggest that work should not focus on the other topics mentioned in the report, that is, on the technical methods for verification, and we hope that experts will come to the next meeting ready to contribute to the discussion.

I should now like to offer views on some substantive aspects of a convention on chemical weapons, and in particular on the question of the declarations which will need to be included in such a convention. As work on the convention has evolved over the last few years, it has become clear that the filing of detailed declarations by States parties will have a keyrole to play in ensuring confidence in the treaty regime. Without detailed declarations, adequate verification of the convention will be almost impossible, since it is clear that checks cannot be made, for example that all chemical weapons have been destroyed, unless we first know what chemical weapons a State holds.

In our view, declarations will fall into three categories. The first category will comprise those declarations which should be made soon after the convention enters into force. Such declarations should cover the following key areas:

- (a) Whether or not a State possesses chemical weapons and facilities for their

production;

- (b) The stocks of chemical weapons and facilities for the production and filling of such weapons held by States;
- (c) Plans for the destruction or, where appropriate, diversion for permitted purposes of declared stocks of chemical weapons;
- (d) Plans for the destruction, dismantling or, where appropriate, conversion of declared facilities for the production and filling of chemical weapons.

These declarations should be detailed and accurate, and should include information on, inter alia:

The number and location of stockpiles;

The number and location of production facilities for both chemical agents and munitions, as well as munition-filling facilities;

The quantity of individual agents held and their concentration categorized by named agents;

The type and quantity of munitions, including any stocks of empty munitions specifically designed for chemical charges;

The capacity of production facilities and the agents or munitions which they produce.

The above declarations should, in our view, cover both single-purpose chemical agents, and dual-purpose chemical agents above a certain level of toxicity, together with key precursors, including those for use in binary munitions. If stockpiles of dual-purpose agents are held for commercial rather than military purposes, the commercial purpose should be stated. In addition, it will be necessary to declare in detail the plans for the destruction or diversion of stocks and production facilities.

The second type of declaration, which will need to be made at periodic intervals until all stocks and production facilities have been destroyed, will contain progress reports on the destruction process, and should give details of the timing of destruction programmes, the place where the destruction will take place, the quantities of munitions and individual named agents to be destroyed, and so on.

The third type of declaration will be required throughout the life of the convention, since a number of activities will continue to require monitoring. These declarations should cover any production of supertoxic agents for permitted purposes such as medical and protective measures. Details should be given of the quantities of specific agents produced, the location, capacity and capability of the production facility, and the purpose for which the agents are intended. Declarations will also need to be made about the production for civilian purposes of dual-purpose agents above a certain level of toxicity, giving details of the number, location, capacity, capability and turnover of production facilities for such dual-purpose agents. If possible, details of transfers of these agents should also be given, together with declarations on the number and nature of commercial research programmes into toxic agents for peaceful purposes. States must, of course, protect the interests of the commercial industries, but it would build confidence if parties had some idea of the research taking place in other countries.

I should now like to offer some preliminary comments on document CD/294, tabled at the beginning of the session by the Soviet delegation. My delegation welcomes this serious contribution to our work, and appreciates the detailed exposition of the ideas contained in it which was given to us this morning by the distinguished representative of the Soviet Union. We should, however, like to place on record some of the points which occurred to us in studying this document.

Firstly, on the section entitled "Scope of the Prohibition". Whilst recognizing that toxicity parameters have yet to be set for the various categories of agents, I should record here our view that irritant agents intended primarily for civil law enforcement should be excluded from a convention. There would then be no need for declarations of

annual production as proposed in section II, paragraph 7, or for the negotiation of a ban on their transfer to non-States parties. To attempt to cover these materials in this Treaty would, we believe, complicate the discussion excessively and reduce the prospect of agreement.

On another point of detail, paragraph 2 of the section entitled "Elimination or temporary conversion of facilities which provide capacities for production of chemical weapons" does not make clear that all chemical weapons production facilities, except those authorized for permitted production, should be made inoperative for production purposes soon after the treaty comes into effect for any State. For practical reasons there will, however, be a time-lag between the cessation of production and the destruction or dismantling of the production facilities. My delegation would therefore ask the Soviet delegation what arrangements it envisages for the mothballing of all chemical weapons production facilities, apart from those intended for the destruction of stockpiles, until their final dismantling or destruction takes place.

My delegation would also welcome clarification from the Soviet delegation of the verification provisions included in CD/294, since some of the ideas contained in this document have not previously been put forward by the Soviet Union. Delegations will no doubt recall the detailed paper on verification and the monitoring of compliance tabled by the United Kingdom delegation in the Committee on Disarmament on 18 February. This document, read in conjunction with similar papers tabled by the delegations of the Netherlands and the Federal Republic of Germany, outlines many of the detailed procedures we consider necessary in order adequately to ensure the compliance of States with a chemical weapons treaty.

Although this subject is not addressed in our own paper, the United Kingdom can certainly accept the setting up of national committees to oversee internal compliance as proposed in document CD/294 but a decision to set up such a committee would in our view lie with each State party. We would also reiterate our view that greater emphasis should be put on international verification measures controlled by the consultative committee. The text of a convention should emphasize in this connection the need for effective measures for systematic inspection of the destruction of stockpiles and production facilities. The Soviet draft mentions quotas for such inspections. The distinguished representative of the Soviet Union touched on this point this morning, but my delegation would still welcome further clarification. It seems to us that depending on circumstances, representative of the consultative committee may need to maintain a permanent presence at destruction sites and a "quota" may not be sufficient. Furthermore, we believe that a convention should provide for challenge inspection of general industrial chemical facilities which have a capacity for chemical weapons production, even if they are not declared as chemical weapons plants, and also for measures to check the declared volumes of accumulated stockpiles. It would also, in our view, be necessary to agree on the machinery by which States parties could assess, within the framework of the consultative committee, whether the explanations of an accused party which declines on-site inspection were sufficiently convincing.

As outlined in our own paper on verification, we consider that the consultative committee should be a permanent body established at the entry into force of the chemical weapons convention. Such an arrangement would help to ensure early investigation by the Committee of alleged contraventions of the treaty. We note that the Soviet Union has refrained from elaborating on many of the functions and powers of the consultative committee. It is, for instance, not altogether clear from document CD/294 whether, in cases of suspected violations, requests for information and for on-site inspection can be made to the consultative committee itself, so that its representatives might carry out inspections on behalf of one or more States parties, or whether the role of the Committee would be limited simply to passing on bilateral requests for such

visits. In our view, only after the consultative committee has itself been directly involved in making at least one request for on-site inspection, and these requests have been refused, should the matter be taken to the Security Council of the United Nations.

CD/PV.179

p.10

Nigeria/Ijewere

17.8.82

CW

My delegation again listened with interest to the United States intervention on 12 August 1982, and we agreed with the view expressed that the verification and compliance arrangements of a future chemical weapons convention should be truly effective in order to ensure a complete and verifiable prohibition of chemical weapons.

We have stated on a number of occasions our position on the verification provisions of a future chemical weapons convention, and we would like to say once more that a chemical weapons convention should provide for a combination of national and international means of verification which should complement and supplement each other. Strict reliance on national verification measures in our view is not realistic and cannot generate international confidence in a chemical weapons convention. On the issue of verification, there are fundamental differences of approach and only by narrowing the differences can any real progress be made in elaborating a convention. My delegation therefore welcomes the USSR draft general provisions which obviously is a basis for further concrete work. At this juncture, we would only like to stress that we feel that the future chemical weapons convention must ensure the destruction of chemical warfare agents, munitions and devices, as well as the destruction and dismantling of chemical weapons means of production. While we have generally agreed that this should be completed within ten years after the convention has entered into force, we would support a mechanism to conclude this earlier, in order to ensure wider and quick adherence to the convention, which would enhance international confidence and contribute to the disarmament process. While the verification provisions are still a major hurdle to be crossed, the problem of the scope of the convention still deserves some attention. While my delegation noted the views expressed by the Soviet Union, we continue to hold the view that there is no legal difficulty in including a provision relating to use, since such a provision will strengthen the 1925 Protocol by adding measures of verification to it, and since even if a ban on the production of chemical weapons is immediate, the weapons will still be retained in the period between the coming into force of the convention and the time-frame for total destruction. All the same, only a significant change in the political will of certain States will ensure the required progress on this question. The important element for my delegation is that there should be an effective provision in the convention recalling the provisions of the Geneva Protocol that chemical weapons should not be used and for an effective mechanism for verification of the use of chemical weapons.

CD/PV.179

pp.12-13

Italy/Alessi

17.8.82

CW

It is in the matter of chemical weapons that the Committee most nearly fulfils its institutional role as a multilateral negotiating body. Our great appreciation goes to the Chairman of the Ad Hoc Working Group, Ambassador Sujka. We endorse the objective of completing, by the end of this session, the elaboration of a document which can next year serve as the basis for the drafting of the text of a convention. The discussion in the Ad Hoc Working Group clearly shows that the success of our efforts depends essentially on agreement on an adequate system of verification. In this connection, we would like to express our appreciation to the delegations of the Federal Republic of Germany

and the Netherlands which have made very useful new contributions in this area during this session. For the same reason, we share the interest aroused by the proposals submitted by the Soviet Union during the second special session of the General Assembly devoted to disarmament. The comments to which they have given rise and the replies awaited thereon could be of considerable assistance in our efforts.

On a specific point, that of the use of chemical weapons, I should like briefly to recall our position, which has already been explained in the Working Group: it is that a solution to the question of the use of chemical weapons should be sought within the framework of an adequate procedure for dealing with complaints. To this end, the future convention should include a clause expressly endowing the consultative committee with competence to investigate any complaint concerning the use of chemical weapons, and this, independently of the 1925 Geneva Protocol, the validity of which should be explicitly reaffirmed. Such a clause should be based on recognition of the fact that any use of chemical weapons would necessarily imply the violation of one or more of the obligations included in the field of application of the Convention.

It is, however, essential that a rapid investigation into the use of chemical weapons should be possible. For this reason, provision should be made for the fairly automatic initiation of an investigation after the receipt of a documented complaint. The consultative committee's competence in this sphere should apply not only to cases of the use of chemical weapons by a State party to the convention, but also to cases of their use with the assistance of a State party. Last year, my delegation proposed a formula which is included among the comments on Element XIII, covering these two possibilities: we have noted that several delegations have expressed similar views this year; we therefore hope that our proposal can form the basis of a compromise to resolve this delicate issue.

CD/PV.179

pp.15-18

Netherlands/van Dongen

17.8.82

CTB

The appeal I made just now should not be conceived as indicating that we are entirely satisfied with the mandate of the Ad Hoc Working Group as it stands. We do attach the greatest importance to adequate verification as is well known, but we do not consider verification to be an aim in itself.

Paragraph 31 of the Final Document states that the form and modalities of the verification to be provided for in any specific agreement depend upon and should be determined by the purposes, scope and nature of the agreement. Verification requirements can vary substantially, depending on the decision whether the envisaged ban is going to prohibit all nuclear tests in all environments or only nuclear weapons testing. We should, we believe, aim at a combination of two items: first, a good definition of scope -- in the view of the Netherlands Government this would mean that the envisaged ban would also apply to so-called peaceful nuclear explosions -- and secondly, an adequate and reasonable system of verification. In this context I may perhaps repeat what my predecessor had to say on 2 April 1981: "We should not overreach ourselves when dealing with each of the separate elements of the draft convention. We should not become prisoners of perfection."

For a sensible discussion of verification, the question of scope will have to be addressed. In this respect we endorse what the distinguished representative of Sweden, Mrs. Inga Thorsson, had to say at the 175th meeting of the Committee, on 3 August 1982: "The Working Group now established should be utilized to the full to investigate all relevant aspects of a CTBT."

The subject of verification in the nuclear field transcends, of course, the mere test ban. Eventually, however far away this may seem, it will come into play when a halt in the production of nuclear warheads and the destruction of stockpiles are being con-

sidered. Compared to the intrusive verification measures needed for these purposes, those necessary for an effective and adequately verifiable test ban are in all likelihood modest in scope.

There would be a less direct, but in the end probably effective way of halting the production of nuclear weapons, i.e. by the cessation of the production of fissionable materials for weapons purposes. This idea, first proposed by the late President Eisenhower, has always been attractive to the Netherlands, primarily because a cut-off is one of the few nuclear arms control measures for which an international verification system has already been worked out in principle: I refer, of course, to the IAEA safeguards.

But let me now turn to the tools presently available to handle the subject in hand.

It is a matter of satisfaction to the Netherlands delegation that thanks to your good guidance, Mr. Chairman, the Ad Hoc Working Group established under item 1 of the Committee's agenda has started smoothly on its course of action. We are happy to see our distinguished and respected colleague Ambassador Kurt Lidgard of Sweden chairing it. We trust that under his dynamic leadership the Ad Hoc Working Group will accomplish whatever its present limited mandate allows for. We also welcome the announced participation of Dr. Ulf Ericsson as a special adviser.

The present mandate of the Ad Hoc Working Group requests it to discuss and define, through substantive examination, issues relating to verification and compliance with a view to making further progress towards a nuclear test ban. Before the conclusion of the 1982 session, the Ad Hoc Working Group has to report to the Committee on the progress of its work. Thereafter the Committee on Disarmament will take a decision on subsequent courses of action with a view to fulfilling its responsibilities in this regard.

It is clear that we have to act with some speed to carry out this mandate in time. We would therefore suggest that the Ad Hoc Working Group be accorded as many meetings as it needs, irrespective of meetings of other ad hoc working groups.

Netherlands working document CD/312 which I have already briefly presented in the Working Group and which I take pleasure in introducing now to the Committee, contains a draft programme of work for the Ad Hoc Working Group's activities.

The first part contains some general observations indicating our approach to agenda item 1. We believe that the paramount importance of a nuclear test ban lies in its effective contribution towards stopping both vertical and horizontal proliferation. A nuclear test ban would thus be an important step in the direction of nuclear disarmament.

The test ban to be agreed upon should be comprehensive and of worldwide application. Given this scope, the Ad Hoc Working Group established under item 1 should certainly draw on the reports of the trilateral negotiations, but should not take those negotiations as the only basis of its work. With respect to so-called peaceful nuclear explosions, we contest that they can be distinguished from non-peaceful ones. They should be covered by the test ban, but we might eventually be willing to consider dealing with them in a separate protocol.

The establishment of an international monitoring system should be envisaged. If it is to be comprehensive, it should be an integrated monitoring system, comprising both atmospheric and seismic detection methods.

A second activity of the Ad Hoc Working Group would be the elaboration of the technical prerequisites for the establishment of an integrated international monitoring system by acting upon the work performed under its traditional mandate by the Ad Hoc Group of Scientific Experts on seismic events and the integration of atmospheric detection methods into the envisaged monitoring system.

Provisions relating to compliance with the test ban are identified as a third item on

the programme of work as we see it.

The final item on the draft programme is the obvious category of final clauses to a comprehensive test ban. If, and I admit that it is a big if, a programme of work as outlined could be completed, conditions would be ripe for the conclusion of a multi-lateral CTBT.

It follows from the outlined programme of work that the Ad Hoc Working Group would be in need of expert advice. The work of the seismic experts would have to continue and an advisory body on atmospheric detection methods could probably not be dispensed with.

In the third and last part of our working document we suggest that this aspect be adequately dealt with by an enlargement of the mandate of the presently functioning Ad Hoc Group of Scientific Experts to include advice on atmospheric detection methods. The name of the new body would have to be readapted accordingly. To avoid unnecessary loss of time, this new Ad Hoc Group of Experts should be established as a subsidiary organ of the Ad Hoc Working Group and report to that body. It would, of course, be master of its own procedures; it might decide e.g. to establish two or more subsidiary bodies, one consisting of seismologists, thus not disrupting the present fruitful co-operation in the seismic group.

I may perhaps add one specific remark about the co-operation of the seismologists. So far the expert Group has not been able to absorb all relevant technological advances made in the recent past. In our view, particular attention should be given to setting up procedures which would ensure that all stations in a global network would be equipped with modern digital recording devices and that computers with adequate capacity for handling the seismometer recordings should be installed and linked to an international communication system.

CD/PV.179

p.22

GDR/Herder

17.8.82

CTB

Secondly, the discussion and definition of verification issues should take place in a practical and rational manner, having in mind that it is the aim of this Committee to elaborate a comprehensive test-ban treaty. The Group should therefore concentrate its work on the main political and legal questions of verification connected with such a treaty but not hold academic discussions on verification in abstracto. At this session, which is actually the first phase of its work, the Group should take up all relevant proposals and define the issues which would constitute the basis of a verification system. Next year, on the basis of a new mandate, the Group could then proceed to the actual drafting of the treaty as a whole.

Thirdly, my delegation will resist all attempts to convert the Ad Hoc Working Group into another technical group. In our view, the Group is not the right place to discuss the administrative, financial and legal aspects of a so-called international seismic monitoring system. These undoubtedly important questions can be solved when there is an agreement on the basic provisions of a CTBT. Then an appropriate body for these highly organizational and technical issues may be set up. To go the other way round would mean to put the cart before the horse. What can be discussed in this regard if we do not know what will be the scope of the treaty and which countries will take part in it and provide data for the international exchange? Moreover if, owing to the position of some countries the treaty is concluded only in the distant future, technology will have further developed and today's technical and organizational considerations may be obsolete.

Fourthly, there should be a clear understanding that a perfect, foolproof verification system is not and will not be possible. Here as in other cases one should not look

for the wishful verification system but for the system which is attainable and will provide sufficient assurance that clandestine tests will be detected. Existing technical means of verification, an international exchange of seismic data as well as some procedures of international co-operation, including verification by challenge, make the likelihood of the detection of such tests very high. It is the considered view of my country that the threat caused by the absence of a complete prohibition of nuclear-weapon tests far outweighs the low risk posed by a not-foolproof verification system.

CD/PV.179

pp.27-28

China/Tian Jin

17.8.82

CW

Now I would like to offer some observations on the following questions:

1. On the scope of prohibition:

We have maintained all along that the use of chemical weapons should be included in the scope of the prohibition in a future convention, and we have repeatedly reiterated our position both at plenary meetings and at meetings of the Working Group. Together with four other delegations, we put forward at the spring session an alternative text on this issue. In the discussions since 20 July, the importance of this question has gained more attention. Here I would like to express our thanks to the Romanian representative for his useful work as co-ordinator of the consultation group on the question of "scope of prohibition". He has provided us with a list of possible solutions on this question which will facilitate our further discussions.

2. On declaration:

Declaration is one of the key elements in a future convention. A declaration should include detailed and accurate items and contents in its provisions; otherwise, the effectiveness of the convention could not be ensured. In this connection, I would like to point out that in annex II of document CD/CW/WP.33, it is laid down that the contents of declarations should include the capacity and location of chemical weapons production facilities. We consider this very necessary. We are also of the view that the production facilities for chemical weapons referred to here should comprise both factories set up solely for producing chemical weapons as well as specialized facilities affiliated to other chemical industry enterprises (such as a chemical weapons workshop set up within a civilian chemical industry enterprise).

The delegation of the Soviet Union put forward recently the "basic provisions" of a convention on the prohibition of chemical weapons. We shall study them further. The Soviet paper contains provisions relating to declarations and confidence-building measures. According to those provisions, a country might postpone its declaration to the international community of the location of chemical weapons production facilities till seven years after it becomes a party to the convention. We feel that it is rather difficult to understand such a prolonged postponement. It is our view that the adherence of a State to a convention means that it is willing to undertake the obligations laid down in the convention; consequently, the location of production facilities to be dismantled should not be kept secret for such a long time. Otherwise, it would run counter to the purpose of the confidence-building measures.

3. On verification:

Verification is another key element in a future convention. Strict and effective verification would serve as an important guarantee that the convention may not become a mere scrap of paper. In this regard, suffice it to refer to the historical lessons of the 1925 Geneva Protocol. It is precisely because the Protocol lacks the necessary verification provisions that over the past 50 odd years since the signing of the Protocol it has not been possible to conduct any fair international investigations into complaints about the use of chemical weapons, including complaints and reports on chemical warfare in

Afghanistan and south-east Asia in recent years. This state of affairs cannot but jeopardize the authoritativeness of the Protocol.

Therefore, we hold that emphasis should be put on international verification and, in particular, necessary on-site inspection. In fact, many States have advanced constructive proposals. Document CD/CW/WP.33 also embodies a number of very good provisions. However, there are also evident shortcomings, i.e. no on-site investigation is provided for in regard to complaints or reports on the use of chemical weapons. We deem it indispensable to include such a provision, if we are to attempt to elaborate a credible convention for the international community.

We have noted that the Soviet Union, in submitting the "basic provisions", has accepted the principle of on-site inspection. In the "basic provisions", reference has been made to the possibility of carrying out on-site inspection in two kinds of situations. Some representatives have made comments in this regard. As I mentioned earlier, we will study the Soviet proposal further. However, I would like to offer a preliminary observation. We feel that to ensure the effectiveness of the convention, more necessary on-site inspections are required, such as on-site inspection on the dismantling of production facilities and on allegations of the use of chemical weapons, etc.

CD/PV.179

pp.31-32

Norway/Vaerno

17.8.82 CTB,CW

Under the able chairmanship of Dr. Ericsson of Sweden, the Group has proposed the establishment of a global seismological network to assist in the verification of a potential CTBT. The Ad Hoc Group is pursuing its work by elaborating in detail how such a global system should be operated. A problem of particular importance in this regard is how to achieve rapid, reliable exchange of the large volumes of seismic data which would be accumulated. In the years that have gone by since the Ad Hoc Group first proposed the global system (in 1978 in document CCD/558), there have been rapid technological advances with respect to computer and data communication technology. This has opened up new possibilities to improve the effectiveness of the global data exchange, and Norway considers it important that the work of the Ad Hoc Group take advantage of this new situation.

As a Norwegian contribution to the work of the Group, a low-cost computer system has been developed for the purpose of rapid international exchange of seismic data. The system would be suitable as a prototype which could be further developed for future installation at any station in the global seismic network.

In this connection I have the honour to introduce the Norwegian working paper contained in document CD/310 on a prototype system for the international exchange of seismological data under a comprehensive test-ban treaty. Such a prototype has been developed by scientists at the Norwegian Seismic Array (NORSAR) as a result of a research project which was initiated in 1980 under the sponsorship of the Norwegian Ministry of Foreign Affairs. This afternoon a demonstration of how such a system functions will be staged by representatives of NORSAR.

It is our hope that this national contribution will prove to be of value to the further studies of the seismic expert Group and the negotiations in the Working Group on a Nuclear Test Ban, which in its first phase will focus on verification.

As we have pointed out before, the Norwegian Government is prepared to make NORSAR available as a monitoring station within a global seismic verification system. With this in mind, Norway will continue to take an active part in the seismic expert Group. We shall also participate in the Working Group on a Nuclear Test Ban as an observer.

According to the Final Document of the first special session on disarmament and

several resolutions adopted by the General Assembly at its regular sessions, the conclusion of a chemical weapons convention is one of the most urgent tasks of multilateral disarmament negotiations. Norway welcomed the decision taken at the beginning of this year's session on a revised mandate for the Ad Hoc Working Group on Chemical Weapons. Based on document CD/CW.WP.33 and under the energetic leadership of Ambassador Sujka, the negotiations are now entering a new phase, aimed at reaching compromises on the main outstanding questions. In this regard, Norway has with interest studied the proposals concerning verification contained in the basic provisions of a chemical weapons convention which were introduced by the Minister of Foreign Affairs of the Soviet Union during the second special session.

The Norwegian Government is of the opinion that a ban on chemical weapons is one of the most important issues on the international agenda for disarmament.

Today, I have the pleasure to introduce document CD/311, which is a Norwegian working paper on verification of a chemical weapons convention. The working paper is based on a research programme on sampling and analysis of chemical warfare agents under winter conditions. This research programme, which is also sponsored by the Ministry of Foreign Affairs, was initiated in 1981 as a Norwegian contribution to the work of the Committee on Disarmament. The working paper contains a summary of the research report. The full report is annexed to the English version of the working paper.

This working paper describes the results of field experiments of sampling and analysis of supertoxic nerve and mustard agents under winter conditions. Field experiments have been undertaken in order to avoid the artificial conditions of a laboratory set-up. The samples were left outside in the prevailing weather conditions of changing temperature, wind and relative humidity, which are hard to simulate in a laboratory exercise.

Within the framework of the research programme we have studied the various factors determining the loss of chemical agents, in order to evaluate the probability of making a negative or positive conclusion. We have also investigated the penetration and diffusion of the chemical agents in snow, problems of the utmost importance for sampling procedures. In addition, we have looked into the problem of transporting samples from the field to an internationally recognized laboratory. The field experiments showed that identification of chemical agents can be made by analysis of snow samples taken as long as two weeks, and in some cases even more than four weeks, after possible use. Verification of nerve agents such as Vx and Soman can be achieved over a longer period than is the case of Sarin and Tabun.

In the last part of the working paper we have made some concluding remarks concerning the consultative committee to be established within the framework of the convention.

The committee should be authorized to conduct on-site inspections in order to fulfil its responsibilities. In our view, the committee should establish a pool of well-qualified international experts from whom a multilateral team of experts could be selected in each case.

As soon as possible after its establishment, the committee should adopt verification procedures flexible enough to take account of any new scientific achievement. In elaborating the procedures for on-site inspection it is necessary to take into account the time element.

In the second phase of the Norwegian research programme which will take part during the winter of 1983, we intend to study problems related to storage of samples until they can be analysed by an internationally recognized laboratory. We shall also investigate the behaviour of other agents such as irritants and precursors. Efforts will also be devoted to the possibility of using the decomposition products of chemical agents under winter conditions as additional evidence of identification, since this may

significantly extend the possibility for drawing firm conclusions for a long period after possible use.

CD/PV.180 pp.18-19 Romania/Datcu 19.8.82 CTB

The Romanian delegation believes that, despite the limited mandate it was possible to agree on, the discussions in this Group should be such as to facilitate the initiation of negotiations on the subject of nuclear tests. We share the view that a broad understanding on the scope of the prohibition is needed before we can begin discussing questions of verification.

With regard to the discussions on verification, we should like to make the following observations:

First, our discussions should concentrate on underground tests, since a prohibition has been in operation in the other areas since 1963 without any complaints being formulated, so far as I know.

Secondly, we believe it has already been proved that it is technically possible to establish an effective monitoring system for detecting possible violations of an agreement banning nuclear weapons tests throughout the world. The methods for the detection of nuclear explosions that now exist, namely, the collection of samples of radioactive waste, the recording of seismic, acoustic and hydro-acoustic waves and the radio signal method, together with recourse, if necessary, to on-site inspections, are entirely adequate for the detection and identification of nuclear explosions.

The third observation I should like to make concerns the substantial amount of work that has already been done in the field of verification. Starting with the 1958 Conference of Experts to study the possibility of detecting violations of a possible agreement on suspension of nuclear tests, up to the last report of the Ad Hoc Group of Scientific Experts on Seismic Events, there is a goodly number of technical and scientific studies available to us.

For all these reasons, we are inclined to consider that the Ad Hoc Working Group on a Nuclear Test Ban should not start from the beginning again and rediscover things that have already long since been discovered. It ought rather to review the activities that have been carried out and decide whether, at this stage, we have available what is needed to set up a system for the verification of compliance with an agreement on the halting of nuclear tests, taking account of its field of application. We believe that the delegations of the nuclear-weapon States taking part in the Group's work should play not only an important but also a very active role in this process, given their technological capacity and their experience.

CD/PV.180 pp.21, 22 Venezuela/Navarro 19.8.82 CW,CTB

The Working Group on Chemical Weapons, which has been meeting since 20 July, offers fairly encouraging prospects since a minimum degree of consensus has been reached on some points on which there diverging views.

Working document CD/220, submitted by the Chairman of the Group, has given rise to comments and specific proposals from countries which are active in the discussions on the revision of the Elements (document CD/CW/WP.33).

This stage is a positive one in the preparation of a draft convention on the prohibition of chemical weapons. However, in that connection, it must be borne in mind that the future convention should not merely be a tenuous supplement to the Geneva Protocol of 17 June 1925, but an instrument which extends the scope of its content and

eradicates once and for all the inhuman use of such weapons. At the same time, it should be an agreement which prohibits the development, production, stockpiling and/or transfer of chemical products for military purposes. In addition, it must provide effective machinery for the elimination of existing stocks and installations for non-peaceful purposes.

With regard to the controversial aspect of verification of the implementation of the provisions of the future convention and subsequent compliance with its provisions, my country considers it appropriate to provide adequate means for national measures of verification using modern methods selected by the sovereign State. Provision should be made for scientific international verification where necessary, provided that this does not prejudice the security of any State and that it forms an element of international aid and co-operation in ensuring strict compliance with the convention by the nations which adhere to it, in the cause of peace.

Agenda item 1, entitled "Nuclear test ban", is also a matter of concern to my country, the more so, despite the fact that almost 20 years have passed since the partial test-ban treaty was signed and this very important international legal instrument is therefore in force, nuclear explosions have increased in intensity and magnitude, with the result that fulfilment of the commitment by the parties to negotiate and conclude an agreement on the complete prohibition of nuclear tests is becoming increasingly unlikely.

As for the arguments in support of the various opinions concerning verification, we have to admit that they are very weak and insubstantial in their content.

As my delegation has stated on an earlier occasion, verification and confidence are not the same thing; the first is mechanical whereas the second is human. But confidence has the valuable property of being able to achieve -- to create if you like -- the desired solutions, which cannot be partial solutions because that would imply not so much progress as restrictions on the scope of progress, which would needlessly conflict with the demands of reason.

That is why, as we see it, the present mandate of the Ad Hoc Working Group on a Nuclear Test Ban is basically unsatisfactory to the Group of 21, which would like to see a mandate that would permit the drafting of a treaty prohibiting all nuclear tests, which would mean obligations and responsibilities on the part both of nuclear-weapon States and of non-nuclear-weapon States.

CD/PV.180

pp.32-33

Cuba/Solà Vila

19.8.82 CW,CTB

It must be recognized that the advent of binary weapons, as many experts in the various groups of States have said, particularly complicates the two aspects of determination of toxicity and verification, which must be dealt with in any agreement.

As far as verification is concerned it is obvious that, in the first place, it cannot be talked about in general and abstract terms. It must necessarily be linked to the scope of any prohibition. In the case of chemical weapons, the prohibition must be broad enough to take into account the enormous range of lethal and supertoxic chemical substances, as well as other harmful substances and their precursors, the range of which has been considerable expanded with the advent of binary weapons.

Similarly, we must not allow ourselves to be distracted by the sterile debate which opposes national means and international forms of verification. Every verification measure applies to a concrete agreement, and both national means of verification and the international system of verification that is to be established should be taken into account. The two things should be interrelated, and this idea must be accepted if we

are really interested in making progress in our work.

The situation with regard to a nuclear test ban is in some respects similar.

From 1979 onwards, the Committee on Disarmament was unable to establish a working group to deal with the first item on its agenda because two States (the United States and the United Kingdom) were opposed to its doing so.

When it finally succeeded in establishing a working group, and all the indications were that we were about to begin consideration of this item, it was suddenly claimed that negotiations could not be initiated for the time being, thus removing all credibility and effectiveness from the Group's work.

Moreover, it should also be recalled that the Group of 21 accepted the present mandate only conditionally, and that its views as to the best way of dealing with the item are set forth in document CD/181. While we are disappointed in the present mandate, we should also be dissatisfied with any other action short of negotiations.

At this moment, one nuclear-weapon State has affirmed that there will be no negotiations on a nuclear test ban for the time being, and another two have declared that they will not take part in the work of the Working Group that has been set up. This undoubtedly creates an unprecedented situation in this Committee's work and jeopardizes the attainment of tangible results and their universal application.

On this item, too, the problem of verification arises; and here again, verification must be seen in relation to the scope of the prohibition, and national means of verification and an international verification system must be interrelated. It must be recognized, however, that there is a danger that when we are all ready to embark on actual negotiations on a nuclear test ban, we must have to reconsider everything that has already been achieved with respect to verification because we are confronted with new techniques that are differently applied. Hence the absurdity of talking solely about verification instead of seriously considering the real measures of disarmament that the international community demands.

CD/PV.180

p.42

Indonesia/Sutresna

19.8.82

CW

It is generally agreed that any convention prohibiting chemical weapons will not achieve the desired effect if it does not contain adequate provisions on verification. We consider that the verification regime constitutes one of the most essential elements of the convention. It is our duty to elaborate a regime which will include a viable and effective verification system and mechanism. They should reflect a balance between national and international verification. The verification regime should also include a verification mechanism for every important stage of implementation of the obligations under the convention, including the verification of declarations of possession or non-possession of chemical weapons as well as the verification of non-use.

CD/PV.181

p.9

Yugoslavia/Vrhunec

24.8.82

CTB

Thirdly, my delegation thinks that it is of outstanding importance that, after long-standing requests, the Working Group on a Nuclear Test Ban has been created by the Committee. We would like to extend a particular greeting to its Chairman, the distinguished Ambassador Mr. Lidgard of Sweden, a long-standing and consistent champion of general and complete disarmament who we know will successfully lead this Group. Although this Group starts to work with a limited mandate that satisfies us only in part, we consider that the present mandate could still allow for the consideration of a programme of work which should not be too narrow and limiting in nature. A good basis

for such consideration is contained both in the draft outline of the work of the Ad Hoc Working Group on a Nuclear Test Ban submitted by its Chairman and that submitted by the distinguished Ambassador Herder of the German Democratic Republic. What is important at this stage is to make as clear guidelines as possible, leading to the final goal, that of a treaty on a nuclear test ban. My delegation considers that such a treaty should prohibit all nuclear test explosions in all environments for all times by all States and should be based on a verification system that is non-discriminatory and universal in nature, which would guarantee equal access for all States and would attract universal adherence to the treaty.

CD/PV.181 p.17 USSR/Issraelyan 24.8.82 CTB

The Ad Hoc Working Group on a Nuclear Test Ban has started its meetings in this — to put it bluntly — not very favourable situation.

As far as the Soviet Union is concerned, we are ready, in spite of this situation, to participate constructively in the activity of the Ad Hoc Working Group, which is of course in the first instance required to define, in relation to the subject under consideration, "issues relating to verification and compliance", as the Group's mandate states. There should be a clear understanding that the issues relating to verification and compliance will be examined as applying to a treaty which would prohibit all test explosions of nuclear weapons in any environment, would be of unlimited duration, would provide for a solution acceptable to all parties of the problem of underground nuclear explosions for peaceful purposes and would include among its participants all nuclear-weapon States.

CD/PV.181 p.23 Mexico/Garcia Robles 24.8.82 CTB

"The political advantages of a comprehensive test ban are considerable. As this committee is aware, the United States in the Limited Test Ban Treaty, signed by President Kennedy, pledged itself to continue negotiations to ban all nuclear weapons test explosions. This commitment was reaffirmed in the Non-Proliferation Treaty, negotiated under President Johnson and ratified by President Nixon. Thus, three administrations have undertaken this commitment.

It is clear to me that other countries of the world take this commitment of ours quite seriously. In the particular context of the Non-Proliferation Treaty I have grave doubts that it will have any success in persuading certain potential powers to seriously consider the Non-Proliferation Treaty as long as we are conducting an extensive series of underground tests...

We have heard a good deal about verification and doubtless will hear more. But let's put things in proper perspective: verification of a comprehensive test ban has always been only a part of the problem. The main question which existed in 1958 and exists today, 14 years later, is really this one: do we want to continue testing nuclear weapons? Is our over-all security better with a comprehensive test ban even though there is some risk of a few small clandestine tests, or without a ban, which allows the Russians to test at all yields, encourages additional nations to acquire nuclear weapons and continues indefinitely the arms race? If we decide that it is in our best interest to ban tests, I do believe that our present

capability to distinguish earthquakes from explosions at very low magnitudes should be satisfactory to permit us to move towards a comprehensive test ban treaty...".

That is what Ambassador Fisher said in 1972 at the Senate hearings.

The Ad Hoc Working Group which has just been set up will undoubtedly be able to find in the testimony that I have just reviewed a rich source of inspiration, which will help it to carry out its work in such a way as to ensure that it is in keeping with the aims which have been pursued in vain by all the peoples of the world since the middle of this century. Those statements may also help members of the Group to have a clear understanding of the need to ensure that the question of verification is not used as a "smoke-screen", as it was put in one of those statements, and also of the need for the United Nations General Assembly and world public opinion to be fully informed of developments on this issue to which, quite rightly, for so long now "the highest priority" has been attached among the various nuclear disarmament issues.

CD/PV.181

p.24

Ad Hoc Group of Scientific
Experts/Hyltenius

24.8.82

CTB

Mr. Chairman, I have the honour to introduce today document CD/318, containing the fourteenth progress report of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events. The Ad Hoc Group met from 9 to 19 August 1982, under the chairmanship of Dr. Ulf Ericsson of Sweden. Experts from twenty countries took part in the session.

The Ad Hoc Group considered the draft chapters for its third formal report on a global system for a seismic data exchange, designed to assist States to monitor a nuclear test ban.

The Group considered a number of national investigations on seismographic stations and networks, and the extraction of data from the stations, on the world-wide transmission of such data through the WMO Global Telecommunication System, on the transmission and use of whole records (so-called Level 2 data), and on the tasks of international data centres designed to assist participating States in analysing all the data seismologically.

As before, the Ad Hoc Group enjoyed excellent co-operation with the WMO and plans further experimental transmission over the WMO network. In order to obtain full efficiency in such a transmission, the WMO has advised the Ad Hoc Group that arrangements could be made to send the Ad Hoc Group's transmissions on a regular basis. I understand that this advice is essentially an offer of even further co-operation, and I think that use should be made of this generous offer. I also understand that the distinguished representative of Japan will speak on the substance of this matter today.

In preparing its progress report in March this year the Ad Hoc Group had difficulties in finding a way to report on national investigations on the exchange and use of so-called Level 2 data (i.e. of whole records). Recent advances in computer and telecommunication equipment have made it possible to exchange, without much effort, many more Level 2 data than was foreseen in the two formal reports submitted by the Ad Hoc Group in 1978 and 1979. In addition, recent advances in scientific understanding have made it possible to exploit Level 2 data also in the analysis foreseen for international data centres, thereby significantly increasing the quality of their calculations. These were initially foreseen to be made only on the basis of Level 1 data (i.e. bulletin-like extracts from the records). This latter result, based on national investigations in Sweden and elsewhere, is still under debate in the Ad Hoc Group with respect to the manner of reporting on it. I am confident that a constructive outcome of this issue will

be found in due course.

The other matter — how to report on modern possibilities for the exchange of Level 2 data has, however, been resolved — a good omen for the third formal report of the Ad Hoc Group, expected to be submitted next year.

CD/PV.181

p.26

Japan/Okawa

24.8.82

CTB

With regard to the exchange of Level 2 data, I referred in March to the considerable progress achieved in recent years in the technology for data exchange of this sort and said that efforts should be made to apply such new technology to the exchange of Level 2 data. We welcome the progress reported from the Ad Hoc Group in this regard. Last week, the Norwegian delegation demonstrated a prototype system for seismic data exchange initiated by the Norwegian Seismic Array (NORSAR) and we are grateful to the Norwegian experts for showing us how wave-form or Level 2 data can be rapidly transmitted under their system. We also thank them for their document CD/310. We hope that consensus may be achieved in the Ad Hoc Group on the application of agreed procedures for analysing Level 2 data in the context of the envisaged global exchange.

The new progress report once again refers to the third report of the Ad Hoc Group, the completion of which seems to be postponed from year to year. Again we are told that the Ad Hoc Group will need to conduct additional work before submitting a full, complete report in compliance with its present mandate.

It should be recalled that the Ad Hoc Group was set up by the Conference of the Committee on Disarmament on 22 July 1976. In the ensuing six years we have been provided with two valuable reports which are contained in documents CCD/558 of 9 March 1978 and CD/43 of 25 July 1979. While looking forward with anticipation to receiving the third report of the Ad Hoc Group, my delegation, as a member of this Committee, would like to know how the Chairman of the Ad Hoc Group sees the prospects of his Group's work in the future. In my layman's mind, I cannot quite grasp the extent of the work that remains to be done and how much longer it is going to take; and whether the Ad Hoc Group's work is not being overtaken by the yearly progress in technology, and whether this does not mean that the Ad Hoc Group will need to be in permanent session simply to catch up with such technological progress. I simply hope that at each stage in the Ad Hoc Group's labours the results can be put to practical application without seeking further sophistication; and that additional technological advances can be taken up and incorporated into the exercise as they become available.

CD/PV.181

p.27

Australia/Steele

24.8.82

CTB

Mr. Chairman, the Australian delegation welcomes the progress report on the fourteenth session of the Ad Hoc Group of Scientific Experts and considers that the Committee on Disarmament should take note of this useful document, CD/318. It is more evident than ever that international co-operative measures to detect and identify seismic events are of direct importance to our work. Now that the Committee on Disarmament has established an Ad Hoc Working Group on a Nuclear Test Ban, this relevance will become apparent to all. The Chairman of that Working Group, Ambassador Lidgard, and his adviser, Dr. Ulf Ericsson, have already emphasized this. Dr. Ericsson, as Chairman of the Group of Scientific Experts, continues to oversee an activity deserving of our fullest support; he himself similarly earns our appreciation.

I would like to draw the Committee's attention to a number of important points in document CD/318, but before doing so I wish to remind the Committee of the considera-

tion it gave to the previous progress report, as recorded in CD/PV.164 of 18 March. Differences of opinion, not reflected in that progress report, were aired in our March debate over the issue of how far the Group of Scientific Experts was able to apply to its work, within the terms of its mandate, many startling related technological advances, including those being demonstrated in national experiments. Those differences of view to some extent remain but they are being frankly acknowledged and addressed, and compromises sought. Proof of this can be found in document CD/318 itself, which was put together without great difficulty. Although paragraph 7 of that document concludes by noting certain matters not yet resolved, it is clear that the issue in question will be thoroughly considered in future and the results of this consideration will be brought to the Committee's attention.

National investigations are a fundamental aspect of the Group's further development of the scientific and technical aspects of the global system envisaged for use in international co-operative measures to detect and identify seismic events. At the fourteenth session Norway put on a display of hardware, impressively flexible and low in cost, which could form the basis of an international data centre. Norway has shown how Level 2 data (i.e. detailed records of wave forms) can be readily transmitted and has invited participation in an experimental multilateral exchange of such data by, for instance, telephone-linked computers. This experiment deserves support.

Other valuable work relating to the use of Level 2 data at International Data Centres has been done by Sweden and the United States. This remains controversial or at least unresolved. Nevertheless, if vastly more information can now be used by data centres than was envisaged when the expert Group's mandate was first framed, it is time for that mandate to cope with such a development: this may or may not in itself require formal revision.

The Ambassador of Japan has today pointed out to the Committee that there is a need to formalize the exchange of Level 1 data over the World Meteorological Organization's Global Telecommunications System, for example by a request from the Chairman of the Committee on Disarmament to the Secretary-General of WMO. In this connection he has taken this initiative and tabled document CD/319. Australia is co-convenor with Japan of study group 3 considering data exchange over the WMO/GTS and strongly urges that steps be taken to follow this proposal through. The Ad Hoc Group of Scientific Experts itself in paragraph 7 of document CD/318 notes the benefits of a more regular basis to the Ad Hoc Group's relationship with the WMO/GTS. It sees "the need for additional exchange of data". We can therefore anticipate some large-scale experimentation in 1983 of data exchange over this system. The urgency of the matter is apparent.

The concluding paragraph of document CD/318 envisages that the Ad Hoc Group's third report will be submitted during the 1983 session of the Committee on Disarmament. My delegation welcomes this first specific indication of a date for the report and hopes that the Ad Hoc Group of Scientific Experts will have no difficulty in adhering to it. There is no doubt that the Committee as a whole would greatly benefit from a detailed account next year of the work of the Ad Hoc Group.

CD/PV.181

pp.28-29

Ad Hoc Group of Scientific
Experts/Ericsson

24.8.82

CTB

There were four questions put to me by the distinguished Ambassador of Japan. The first question relates to the experiments which the Group of Scientific Experts has been performing on the WMO network and the question is: "My delegation would like to know how many such additional tests are going to be needed before the global system of seismic data transmission on the WMO/GTS can be consolidated."

I take it that a final consolidation of what the data exchange should be, in detail, would have to wait for thorough experience on the WMO lines on a regular basis. The WMO world-wide network is a patchwork of national parts; each country operates the part on its own territory, from neighbour to neighbour. This makes the reaction time of that system to changes rather long. We have, in the past, asked for permission to transmit on these lines some three months before the actual test and that has proved to be insufficient to obtain a complete, positive reaction from the whole system. If ever we obtain a regular transmission situation then we would obtain full operation in regard to our needs in, let us say, 6 to 9 months and that would then be, I would not say final, but a very major step towards a final understanding of how the system would work.

Here, and also in response to the second question, I would like to say that the Group of Scientific Experts now meets twice a year and produces its results at a certain pace. So far, that pace has been faster than that of the nuclear test ban so there is, all the time, ample room for improvement while waiting for political developments. The second specific question of Ambassador Okawa was: "My delegation would like to know how the Chairman of the Ad Hoc Group sees the prospects of his Group's work in the future", and he went on to add questions about the extent of the work that remains to be done and how much longer it is going to take, and whether the Ad Hoc Group is not being overtaken by the yearly progress in technology. As I said, so far, we think that we have been faster than the test ban. If we sit and wait, then there will be a gap. Science does not develop very quickly; technology, however, does, especially in the aspects of telecommunications, where development is very rapid. There we have simply been overtaken, since 1978, by the progress of technology and this is why we have devoted some years of effort to finding out how we could best accommodate these new developments. The matter of Level 2 data, of how to deal with complete records, is first of all an important and difficult technical question. It is also a question of whether participants are in a position to exploit these possibilities. It is a very rapid development and it is understandable that these developments proceed at a different speed in different places on this globe. The positions of participants, therefore, to take advantage of these developments right now, say today, are very different indeed. On the other hand, it is quite clear that this kind of new technology, in due course, will penetrate, I would say, all countries. This then makes it necessary that the system of global data exchange which the Group of Scientific Experts is exploring, describing and investigating, should contain a feature of renewal, a feature of taking into account the new significant developments in science and technology. Again, this is an important aspect of any system which we might propose to you, and it is certainly our responsibility to see to it that some suitable feature of renewal is included also. This is why we have taken our time in preparing a third report, because it is this very question which is before us in this discussion on what we call in jargon Level 2 data. I hope that this is a sufficient answer to the questions posed by the distinguished Ambassador of Japan.

CD/PV.181

p.36

India/Saran

24.8.82

CTB

Mr. Chairman, through you I would like to express my gratitude to Dr. Ericsson for the clarifications he has given to some of the questions I raised. I must confess that what he has stated, in fact, has confirmed some of the suspicions that we had to begin with. From what Dr. Ericsson has stated, it would appear that progress on the elaboration of a global seismic monitoring system has been held up precisely because of the lack of political will on the part of certain States -- that if there was a genuine desire on the part of these States to conclude a treaty on a nuclear test ban, the work of the Group would be brought to a conclusion with a greater sense of urgency.

The second comment I would like to make concerns the incorporation of recent technical and scientific advances in the work of the Group of Experts. It would appear from what Dr. Ericsson has said that technical advances in this field in fact make the results achieved obsolete at a rather rapid pace and it would appear to us that this creates a situation where the better may become the enemy of the good. As far as we are concerned, all that we require is a system which is adequate for our purposes, that is, adequate to verify compliance with a treaty on a nuclear test ban. I think that the Group of Experts, if they are to operate within clearly defined limits, must have a rather good idea of what the Committee on Disarmament considers adequate, because if we do not have this kind of clearly defined limit, the work of the Group will become open-ended in character and I must say that my delegation does not agree that the mandate of the Group in fact gives this kind of an open-ended character to its work. If this is the kind of interpretation which is given to the mandate of the Group, then this Group would in fact not be one which is elaborating international co-operative measures for the detection and identification of seismic events, but rather a Group which is keeping a watching brief on scientific and technical developments in the seismic field, and if the latter is what it is doing, then my delegation sincerely and very seriously would doubt the value of such a Group to our negotiations on a nuclear test ban.

CD/PV.181 p.42 Senegal/Sene 24.8.82 CTB

It is, moreover, difficult to understand how, 20 years after their undertaking to ensure the discontinuance of all test explosions of nuclear weapons for all time, the three depositaries of the partial test-ban treaty are still in the negotiating stage. After several years of trilateral discussions these Powers, despite their undertakings, adjourned their talks sine die. It is greatly to the credit, therefore, of the other members of the Committee on Disarmament that they should have proposed the setting up of an Ad Hoc Working Group whose limited mandate should not impede the consideration, at the appropriate time, of matters such as the scope of the treaty. Verification is, of course, an important matter but it should not make us forget that the essence of the problem is primarily political.

As the report prepared in pursuance of General Assembly decision 34/422 states, verification of compliance with a complete prohibition of nuclear tests no longer seems to be an obstacle. It is necessary, therefore, in my delegation's opinion, that the question of verification, the importance of which is recognized, should not be used as a pretext for failing to fulfil certain commitments solemnly undertaken before the international community. The conclusion of a comprehensive nuclear test ban treaty has this kind of priority and it would be politically dangerous to delay it any longer.

CD/PV.182 pp.7-8 Czechoslovakia/Vejvoda 26.8.82 CTB

Czechoslovakia pays special attention to the cessation of nuclear weapon tests. Its representatives already in 1958 took part in the first conference of experts at which the feasibility of detecting violations of a possible ban on nuclear explosions was discussed. Already then the experts came to the conclusion that it is possible to create a practical and effective system in this regard.

Both in the Committee on Disarmament and in its preceding bodies we have fully supported all proposals aimed at the early elaboration and adoption of a treaty prohibiting nuclear-weapon tests for all time in all spheres and with the participation of all States, including, of course, all nuclear-weapon States. We have always added our voice

to that of those who have called for the initiation of business-like negotiations in this respect and for the creation of a working group on this subject.

We welcome the fact that the Ad Hoc Working Group on a Nuclear Test Ban has started its deliberations. However, it is the considered view of our delegation that the mandate of the Group is not wide enough. And we note that this view is widely shared in this room. We believe that it would not be wise to unduly restrict our discussions and to focus only on some particular aspects of the given problem. An approach to the mandate of the Working Group whereby other vitally important aspects than those of verification and compliance would be completely ignored could become a serious obstacle to our work. It seems rather obvious that verification and compliance cannot be discussed in isolation from other related aspects, in particular the scope of the prohibition. Our approach to the activity of the Ad Hoc Working Group on a Nuclear Test Ban is based on the assumption that anything the Group will deal with must contribute to the early elaboration of a draft agreement on a nuclear test ban. It would be highly useful if the Committee on Disarmament could adopt measures which would ensure the elaboration of such an agreement in all its aspects.

Our opinion as to the orientation of the Ad Hoc Working Group's activities under its existing mandate is expressed in the document of the group of socialist countries introduced on 16 August of this year by the delegation of the German Democratic Republic. We consider that the seven items proposed, namely:

National technical means of verification;

International exchange of seismic data;

Committee of experts;

Procedures for consultation;

On-site inspection;

Procedures for complaints, and

Possible relevance of arrangements between two or more parties,

create a logical and complete structure which could serve as the basis for effective and fruitful negotiations.

For several years the Ad Hoc Working Group of Scientific Experts has been dealing with technical aspects of international co-operative measures to detect and identify seismic events. Our experts have been taking part in the work of this Group from the very beginning. The experts have done a lot of useful work for the effective solution of the problem of the identification of seismic events by national means. The detailed reports in documents CCD/558 of 1978 and CD/43 of 1979, containing instructions for the exchange of seismic data, testify to the fact there are no basic, insurmountable difficulties for the elaboration of a realistic system, based on existing possibilities of seismological practice.

Permit me in this connection to make a few remarks on the relation of a possible test ban to the technical assurance of verification. We all agree that seismological detection and identification would be an effective instrument of the verification system of a future nuclear test ban. However, from the purely technical point of view it is quite clear that 100 per cent reliability of detection is not attainable. Hence, all debates about the so-called threshold of detection and efforts to define it with maximum precision might be interesting but at the same time they do not serve the purpose. One cannot avoid taking into account that seismological methods do not represent the only way of verification and that verification and compliance will be ensured through a set of various procedures. We also proceed from the understanding that the verification of a nuclear test ban should be carried out by national technical means. An international exchange of seismic data should also be ensured in such a way that each member State would have access to seismic data, while the identification of events would be undertaken by member States through their own national means. Inter-

national data centres will have to be built in order to ensure the smooth, reliable and prompt exchange of seismic events data. The functions of these data centres are now under detailed discussion.

The results achieved so far by the Group of Experts demonstrate that the system of international exchange of seismic data obtained through national means has reached a high level of reliability with some of its aspects being tested on the basis of international experiments. These results also support the opinion that each verification system must be in accordance with the technical capabilities of all States parties to the future treaty with the equal rights and obligations of all ensured. We consider this a very important aspect if we are to create a realistic and effective system. And let it also be noted that even where some technical problems persist, it is always possible to overcome them provided that all parties concerned exert good will and readiness to find an acceptable solution.

Present developments lead unequivocally to the conclusion that the technical aspects of verification must be subject to an overall concept of the future agreement in all its aspects. We cannot decide on verification before we know what the scope of the agreement will be, without knowing whether it will be unlimited in duration or whether all States, especially nuclear-weapon States, will participate in it. The needs of verification and compliance can only be derived from a thorough consideration of the future agreement in all its aspects. Even if we wish to abide strictly by the present mandate of the Ad Hoc Working Group it is hardly possible to discuss verification and compliance with any seriousness in isolation from other basic provisions of the future ban.

CD/PV.182

pp.11-13

Sweden/Hyltenius

26.8.82

CTB

Some countries have repeatedly claimed that the lack of adequate verification methods is the main obstacle to a comprehensive test-ban treaty. This is the time and place to start resolving these important verification issues in a multilateral context. My delegation therefore expects that all countries are now willing to undertake sincere discussions of these matters.

I should now like to dwell upon some important aspects of the questions regarding verification of compliance with a nuclear test ban, which in the view of my delegation should be dealt with under the mandate of the Ad Hoc Working Group.

One of the matters of verification to which my country attaches great importance is the question of an international verification system. It is the right and duty of all parties to participate in the verification of a nuclear test-ban treaty. Countries might, however, owing to their geographical locations, available technical means and other circumstances, have quite different technical possibilities to monitor a treaty by national means alone.

The purpose of an international verification system is to even out such differences and to assist all parties in the monitoring of a treaty. By providing easy and rapid access to compiled and pre-analysed data and to recordings obtained on a global basis, an international verification system gives all parties essentially the same possibilities of monitoring a treaty. To fulfil these general requirements an international verification system must have a capability of providing information, data and recording sufficient as a basis for verifying the treaty. An international verification system should, therefore, be an advanced and modern system having technical equipment and capabilities which are not inferior to those available to individual countries. The international verification system must also have a capacity to provide information and data in a form which is useful to all parties.

Most global verification systems are likely to produce such a large amount of basic

data that, for most countries, the handling and analysis of all such basic data would be an unreasonably heavy and expensive task. There are, further, no political or technical reasons why these basic and standardized analyses — necessary in any case — should not be carried out at international data centres (IDCs). A few such centres will be needed in order to give all countries a fair chance to monitor a nuclear test ban. The analyses at IDCs, therefore, have to take advantage of the most recent technical and scientific developments and be based on all data produced and made available within the international verification system. Any limitation of the data to be used at IDCs would considerably reduce the efficiency of the international verification system. For those countries which are dependent on the services of IDCs such discrimination within the international verification system would hardly be acceptable.

On several occasions the Swedish Government has stated its readiness to establish, operate and finance an international data centre in Sweden. As part of the national research work in Sweden on test-ban verification, an experimental data centre has been established with the aim of further developing methods and procedures to be used at IDCs. Detailed presentation of the results of this work has been given to the Ad Hoc Group of Scientific Experts.

Co-operative seismic measures to be part of an international verification system have been considered in depth by the Ad Hoc Group of Scientific Experts. In the view of the Swedish delegation, the work of the expert group will provide a good basis for the design of the seismological part of an international verification system. It is, however, most important that recent scientific and technological developments and results be taken fully into account in all the components of the global system. A further modernization of the global seismological system is thus an important task for the Ad Hoc Group of Scientific Experts within its present mandate.

Last spring Sweden raised the question of whether an international verification system should include also a network for the global detection of airborne radioactivity, supplementary to seismological means, to look for clandestine nuclear explosions in the lower atmosphere (CD/257). Such explosions, which are prohibited under the partial test-ban treaty of 1963, have so far been monitored by national technical means alone.

Sampling atmospheric radioactivity is the obvious method for detecting nuclear explosions in the atmosphere, and it is also a method which should very much benefit from international co-operation, as it is difficult for any nation to establish by itself a network with sufficient, global coverage. The Swedish delegation, therefore, feels that the possibilities of establishing a global network for the detection of airborne radioactivity, similar to that for seismological detection, should be explored. Such a network would give all parties essentially the same capability of detecting radioactivity in the atmosphere from nuclear explosions.

Other technical means can provide additional valuable information for test-ban monitoring, for example, recordings of low-frequency sound and gravitational waves in the atmosphere, electromagnetic measurements similar to those conducted to record strokes of lightning, and hydroacoustic measurements of soundwaves in the deep oceans. Such hydroacoustic recording might also improve the capability to monitor underground explosions in oceanic areas where few seismological stations exist.

The introduction of verification measures in addition to the generally recognized seismological means should not be looked upon as an attempt to prolong the verification discussion or to make the verification issues more difficult to resolve. The purpose is merely to explore potential benefits from all technical means of verification and to make such means, if deemed useful, available to all parties to a future test-ban treaty and not only to a limited number of well-equipped countries.

Finally, I would like to briefly touch upon some institutional aspects of verification and compliance.

In the implementation of a treaty, a number of political and technical issues will arise, and it is, therefore, important to have a mechanism that can handle such issues at appropriate levels of authority and competence. In addition to arrangements for bilateral and multilateral consultations between parties, two committees with a common secretariat should, in the Swedish view, be established.

One of the committees would be a technical committee entrusted with the task of overseeing the operation of the international verification system and of solving any technical problem that might arise in the operation of that system. It should also follow the scientific and technical developments within fields of relevance to the international verification system. Further, it should be entrusted to propose the technical modernization of that system. Another task would be to provide a forum for technical discussions of observed events, about which countries might seek further clarification. The Committee could also be responsible for the technical conduct of on-site inspections.

The other committee, to be entitled the consultative committee, would be a political body entrusted with the task of overseeing the operation of the treaty as a whole. That committee would be a forum for political discussions of issues related to the implementation of the treaty, including its verification. It would in this respect, *inter alia*, receive requests for and results of on-site inspections. It would also supervise the work of the technical committee. The consultative committee could also plan and prepare for necessary review conferences.

CD/PV.182

pp.15-18

Belgium/Onkelinx

26.8.82

CTB

My delegation also considers that we should base our work on a political and legal approach rather than go into pseudo-technicalities which would not help us at all and would give rise to pointless discussions, for example on the acceptable level of verification. Experience has shown that, in this area, the level of verification becomes established at some intermediary position after negotiations but not before them.

The Group of Scientific Experts on the detection and identification of seismic events clearly provides the necessary technical support for our work. Relations between this expert group and the Working Group ought to be close but flexible, without any need for one group to be subordinate to the other. The participation of the Chairman of the Group of Experts in the discussions of the Working Group -- a participation which we all welcome -- should be enough to ensure the co-ordination of the two bodies' activities.

As I have already said, verification requirements for a complete ban are naturally more stringent than those for a partial ban.

The Secretary-General's report to which I have already referred states, that, in the case of a comprehensive ban, "it may not be possible to obtain, through the parties' own means alone, assurance that the prohibition is being observed. Provision for verification by both national and international means must therefore be made".

Verification by national technical means might possibly, in a given case, satisfy the nation which possesses them. But that is rather an optimistic hypothesis, as we know. Furthermore, States which did not possess such national means would then be reduced to resorting to the judgement of a third party. Lastly, the use of these national means is hardly compatible with detailed international co-ordination, since each State would have the sovereign right to make such use of them as it saw fit. Generally speaking, therefore, we can confine ourselves, in an international convention, to agreeing that the parties may use national means and mutually undertake not to interfere with the use of such means. Provisions relating to access by third States to information collected by national means could also be the subject of possible agreements. But no provisions of

this kind can ever replace an international system of verification. Such a system at present appears essential. For, assuming that there is a complete ban on tests, it will not longer be possible to substitute underground nuclear explosions for explosions in other environments, as was the case after the adoption of the 1963 Treaty. The latter did not in fact provide for any international system of verification, mainly because of the high cost of concealment and the risk of the detection of clandestine explosions in the atmosphere, in outer space and under water. But a complete ban on explosions will have to be verified, and precise measures of international verification, including the possibility of on-site inspection, will be essential at all stages, both for routine checking and for the determination of the facts in cases of doubt or suspicion.

Obviously, seismological verification will be one of the key elements in a global system for verifying compliance with a ban on underground tests. In this connection, we attach the greatest importance to the activities of the Ad Hoc Group of Scientific Experts, of which Belgium has been a member from the outset. One of our first concerns, when Belgium became a member of the Committee on Disarmament in 1979, was to strengthen the links between the Committee and the Group of Experts. This resulted in the informal meeting of the Committee on 18 July 1980 with the participation of the members of the Group of Experts.

As regards the work of the Group of Experts, it seems to me essential that the value of international data exchanges should be verified further by experiment. We therefore hope that it will at last be possible to carry out a global data transmission experiment, with the widest possible participation by States.

The forthcoming Congress of the World Meteorological Organization ought also to provide an opportunity for clarifying the role which that organization -- and particularly its global telecommunications system -- could play in the matter of an international data exchange. The document submitted by the Japanese delegation that was recently circulated contains useful suggestions in this connection and we believe that the Committee should take a decision on them as soon as possible.

The distribution of the seismological stations which would participate in the data exchange network is another matter to which we should continue to give the utmost attention. Here, too, we have noted broad agreement in favour of the widest possible geographical representation, bearing in mind in particular the insufficiency of seismological stations in the southern hemisphere, but also the political advantages of associating a large number of States with an international verification system. We realize, however, that the attainment of this objective will pose considerable problems as regards access by States to the requisite technology, particularly in respect of the automatic extraction of seismic parameters.

The status of the exchange of waveform -- or level 2 -- data, also needs to be clarified.

Since the new techniques now available for the extraction of such data make it easier to identify the location, depth and magnitude of seismic events and thus make these data as necessary as the level 1 data, that is the basic parameters of detected seismic signals, ought we not to contemplate the routine transmission of level 2 data rather than their transmission merely "on request"?

We ought likewise to give thought to the "international" status of the national seismological stations participating in the network as well as that of the international data centres.

Document CD/95 submitted by Australia could form a useful basis for consideration in this connection.

But it is possible that seismological verification is not sufficient to meet the needs of international verification. This is something which we should try to determine.

Ought we, for example, to provide for additional methods of verification, such as

surveillance of atmospheric radioactivity?

Is such surveillance capable of identifying with certainty radioactive emissions in the atmosphere resulting from underground explosions?

Would this method be effective in the event of the miniaturization of explosions?

Ought we perhaps to reserve this means of detection for the discouragement and verification of possible clandestine atmospheric explosions or the clearing up of doubts such as those surrounding the incident of 22 September 1979 off the coast of South Africa?

Our attempts to give a preliminary answer to questions of the kind I have just mentioned will inevitably have implications for a review of the mandate of the Group of Experts as well as for the expansion of its membership, if the use of other methods of detection in addition to the seismic method is deemed to be necessary.

Further methods could also be contemplated, if they would make verification more credible without, however, rendering the provisions of an international agreement needlessly complicated.

For example, the difficulty of distinguishing between small nuclear explosions and large chemical explosions could perhaps be overcome through a process of prior notification and verification of the latter.

On-site inspection is another essential aspect of international verification. Political attitudes in this regard seem to have evolved in recent years. The Protocol to the 1976 Soviet-American Treaty on Underground Nuclear Explosions for Peaceful Purposes marked an important development in that respect.

Other indications of this development have recently been given to us in other fields, in particular in respect of chemical weapons and the verification of the civilian part of the nuclear fuel cycle.

On-site inspection should form part both of routine control procedures and of the procedures for the determination of the facts in cases of doubt or suspicion.

Here again we shall have to specify these procedures in detail while paying heed to what appears to be a new and useful principle in respect of verification, that of the minimum necessary degree of intrusiveness.

CD/PV.182

pp.21-22

FRG/Wegener

26.8.82

CTB

At its plenary meeting of 24 August, the Committee had an occasion to discuss the progress report of the Ad Hoc Group of Scientific Experts. The report, and the supplementary information so readily provided by its competent Chairman, Dr. Ericsson, have done much to show the Committee where the Group stands in its work. My delegation, as others, is particularly indebted to Ambassador Okawa for his probing and incisive questions as to where the Group should direct its further endeavours. I would like to join many other delegations who refuse to see the work of the Group go on forever as a purely academic exercise. My delegation would encourage the experts to terminate their next progress report as early in 1983 as they can, preferably by springtime. At the present juncture, the seismic experts have accumulated a wealth of written material. They are lacking on the experimental side. Especially in view of the work the NTB Working Group is now embarking upon, this Committee should give serious thought to enlarging the mandate of the Ad Hoc Group of Scientific Experts and rendering it more precise. Such an amplified mandate should, in our view, contain such assignments as the following:

All aspects of an international seismic data exchange system should be investigated experimentally with the aid of every available scientific and technical method;

Within a time-frame to be specified, the automatic and/or interactive extraction of

all Level 1 parameters over a test period of at least two weeks;

The transmission of this complete set of parameters via the GTS/WMO system on the basis of an official recognition of the Group of Experts by WMO;

Examination, by practical tests, of the possibility of the transmission of Level 2 data over WMO lines as well as other data channels; the elaboration of standard formats for this purpose;

The development and experimental verification of analytical procedures in data centres, using modern evaluation methods, and leading to a comparison of results of Level 1 and Level 2 data respectively.

I would like to stress that a more experimental orientation of the work of the experts would provide results which would be particularly valuable for those countries which are not seismologically equipped themselves and which could use the exchange system as a basis for their own verification efforts in the field of nuclear testing. In any event, my delegation feels that both the work of the Group of Experts during this year and our debate in plenary on 24 August have demonstrated the necessity of building into the mandate the assumption that all participating countries are politically and technically prepared to apply the most recent insights of science and technology, and make the fullest conceivable use of them.

CD/PV.183

pp.10-11

Bulgaria/Tellalov

31.8.82

CTB

I wish to turn now to some of the issues discussed in the Ad Hoc Working Group on a Nuclear Test Ban.

First. As all of us know, the great majority of the delegations in the Committee on Disarmament accepted in a spirit of compromise a limited mandate with the hope that discussing and defining issues relating to verification and compliance would help us prepare for the actual drafting of a CTB treaty. However, one cannot but notice a clear-cut attempt to draw the Group into a kind of abstract exercise, which has nothing to do with the purposes of evolving common ground for negotiating a CTB treaty. And if the responsibility for the Working Group's inability to start right away its substantive work should be attributed, as suggested at the last meeting by the distinguished Ambassador of the Federal Republic of Germany, Mr. Wegener, we have to point to those delegations which have persisted in their opposition to the Working Group's defining an understanding on the relationship of the verification examination to the scope and other related issues of the future CTB treaty. Referring to one or another working assumption just does not suffice if we are to carry out a political rather than an academic examination of the problem. I need not elaborate now on our ideas of the main elements of the future treaty, since this has already been eloquently done in the statements of the distinguished representatives of the German Democratic Republic and Czechoslovakia.

Second. The Group is facilitated by the fact that the outlines of a realistic system of verification providing a satisfactory degree of assurance that clandestine tests will be detected have emerged for quite some time. The tripartite report referred to its basic components -- national technical means of verification, international exchange of seismic data, other provisions for consultations and co-operation, including on-site inspections on challenge, procedures for complaints and possible additional arrangements between two or more parties to the treaty. A balanced combination of these elements may form the skeleton of a reliable system of verification. The discussion being carried out in the Working Group has strengthened the conviction of the majority of delegations that the present technical means of verification are sufficient to ensure compliance with a comprehensive test-ban treaty.

Third. We highly appreciate the work done so far by the Ad Hoc Group of Scientific

Experts. The Bulgarian delegation will continue to contribute to the efforts aimed at fulfilling the tasks assigned to the Group by the Committee on Disarmament. Here we should like to be very clear in respect of what the scientific experts are requested to do. We agree that following closely all new technical developments is an attractive goal for scientists. The seismic expert Group should, however, concentrate on the elaboration of an international seismic data exchange system serving strictly the purposes of a CTBT -- no more, no less. The basic elements of such a system, in our opinion, were already formulated in the consensus reports contained in documents CCD/558 and CD/43. At the same time we should like to underline that such a system can be of practical value only in the context of a clearly defined course of international action towards drafting a CTBT treaty. The extent to which the international data exchange procedures might be developed and utilized by States parties to the treaty could be finally determined when, and if, the scope, the potential parties, the duration and all other political and legal aspects of the future treaty are known.

CD/PV.183

p.21

Italy/Alessi

31.8.82

ASAT

With regard to ASAT weapons, a basic issue would appear to be that of the scope of the prohibition. It would be necessary to consider carefully which of the various stages -- development, testing, deployment, acquisition, use, etc. -- should be included in the scope.

Destruction of existing ASAT systems would also be a major issue to address.

The question of verification should be considered simultaneously since it would be relevant to a definition of the scope of the prohibition. In the case of ASAT systems, verification would be as important an issue as ever. Even a limited ASAT capability, retained or acquired in evasion of an international agreement, could be of significant military value. For this very reason the question of destroying existing ASAT systems and their component parts, and providing for verifiable dismantling procedures, could not be avoided in the course of discussions.

Outer space is still a medium mainly free from kill-mechanisms. Existing ASAT systems seem to be effective only against low altitude orbiting satellites. The full testing in space of operational ASAT weapons against high-altitude space objects might foreclose the possibility of arriving at an adequately verifiable ban on anti-satellite weapons. Such an eventuality can only be regarded with apprehension: an ASAT world is a more dangerous world. The human and material resources which are available should be used to promote our security and well-being. Satellites today perform a fundamental role in this respect, and the previous contributions that satellites have made to international co-operation and peace have been eloquently underlined by the speaker who preceded me.

We no longer live in an age when a world war would stem from the assassination of an archduke; it is the instability of the situation and not the instigating event which is likely to be responsible for such an eventuality and which must be avoided.

An effective and verifiable treaty banning ASAT systems would be an important contribution towards this objective.

CD/PV.183

p.28

Ethiopia/Terreffe

31.8.82

VER,CW

I would now like to say a few words regarding the question of verification. The Ethiopian delegation has no intention of underestimating nor downgrading the importance of an effective verification mechanism for a given disarmament measure. The importance

and the necessity of verification for disarmament measures are widely recognized by all. Lately, however, the issue of verification has been used by a few delegations in the Committee in a disproportionate manner. We do not question at all the legitimate concerns expressed by those seeking adequate measures of verification to ensure compliance with any agreement to be concluded. We believe this concern is shared by all. However, to engage the Committee in discussing and negotiating on detailed procedures for verification without regard to the scope or the nature of each particular measure is to make negotiations contingent upon and hostage to the structures of the verification process. It would be appropriate, therefore, as expressed by the majority of the members of this Committee, rationally to address the issues of scope and its commensurate compliance procedures.

We express the hope that the Ad Hoc Working Group of Chemical Weapons will show progress corresponding to its current intensified work. In this context I would like to express the admiration of my delegation for the able and dynamic leadership that Ambassador Sujka has provided to the chemical weapons Working Group. The emphasis placed on working out a composite text on the various elements needs to be urgently reinforced by a new demonstration of a strong political input so as to generate meaningful progress. In this regard, the Ethiopian delegation would like to reiterate its satisfaction, already expressed at the second special session, at the initiative undertaken by the Soviet Union in submitting a draft document on the basic provisions of a chemical weapons convention.

The provisions relating to international on-site inspections to verify the destruction of chemical weapons stockpiles and to control the production of those chemicals permissible under a future convention are most notable. The Soviet draft, in our view, provides an impetus for serious negotiations on chemical weapons. We would appeal to and encourage those delegations which have addressed their legitimate inquiries to the Soviet delegation and sought clarification on the Soviet provisions, to undertake likewise a corresponding bold initiative on this urgent and important subject.

CD/PV.183

pp.30-35

GDR/Herder

31.8.82

CTB

In the course of this session, my delegation has already on several occasions explained its position concerning some basic as well as current problems with regard to a comprehensive test ban. Since the newly established NTB Working Group is now in an advanced stage of its work, allow me to make some further comments in this connection.

My country attaches great importance to the solution of the verification problems connected with a CTB. Appropriate verification measures should ensure compliance with the obligations of the treaty, enhance confidence in it, and thereby induce countries to adhere to it. At the same time, it stands to reason that issues concerning verification cannot be discussed and solved in a vacuum, but only in close connection with the basic question of the treaty -- the scope of the prohibition. Concrete verification measures are only to be agreed upon if it is known precisely what is to be prohibited and, thus, to be verified.

This relationship between scope and verification was clearly spelled out in paragraph 31 of the Final Document of the first special session on disarmament. Concerning the work of this Group, my delegation, like the delegations of other socialist countries, proceeds from the understanding that issues relating to verification of compliance with a CTBT will be examined as applied to a treaty which would prohibit all test explosions of nuclear weapons in any environment, which would be of unlimited duration, would provide for a solution, acceptable to all parties, of the problem of underground explosions for peaceful purposes, and would include among its participants all nuclear-weapon

States. In close connection with such an understanding on the scope of a CTB, the socialist countries proposed a list of seven items relating to verification to be discussed in the NTB Working Group.

Unfortunately, it was not possible to agree at the beginning of the work of this Group on an outline of its programme of work based on a clear understanding on the scope of the prohibition.

An abstract discussion on verification questions, i.e. without relevance to a specific scope, could hardly lead to concrete conclusions with regard to CTB verification.

My delegation highly appreciate the efforts of the Chairman of the NTB Working Group, Ambassador Lidgard of Sweden, and his alternate, Mr. Hyltenius, to fulfil the mandate of this Group. The Working Group has so far had an interesting exchange of views on the scope of the prohibition as well as on basic questions of verification. We appreciate the contributions made in this regard by the delegations of the Soviet Union, India and Sweden, among others, as well as by the Chairman of the seismic experts Group, Mr. Ericsson.

At the same time, we cannot but express our concern at the tendency shown by some delegations to involve the Working Group in academic debates on verification questions having no other purpose than to make the Committee forget all the useful experience accumulated during more than 20 years of negotiations on CTB issues. Those delegations even seem to neglect the results of the trilateral negotiations in which some of them participated. In those negotiations, a multilateral verification system for a CTBT was elaborated. It was a matter of great satisfaction to my delegation that the USSR only recently re-emphasized that it regards this verification system as adequate.

In the judgement of my delegation, the NTB Working Group seems to be now at a turning point: either, it might proceed from the assumption that all the technical means necessary for verifying compliance with a CTBT with a sufficient degree of certainty exist and it is now time to elaborate the political and legal framework or elements of such a verification system; or, it might go the other way round, and start a new detailed debate on highly technical issues, and study all pros and cons of the means of verification with the hope of obtaining in the distant future an idea of a possible verification system. This alternative is not new: both trends determined also the discussions held in the 1960s and 1970s in this Committee on a CTB.

But should we not take into account the experience gained in order to avoid the failures of the past?

In the 1970s two main views were in the centre of debates on CTB verification.

The first view was that the verification problem could be resolved on the basis of national means, i.e. remote control, supplemented and improved upon by international co-operation and procedures. These two methods would complement each other. This opinion was expressed in 1971 by nine non-aligned and neutral countries in working paper CCD/354. A similar position was held by the socialist countries. The second view was that seismic methods of detecting and identifying underground nuclear explosions would not be capable of providing adequate national technical means of verifying a CTB. The conclusion was drawn that there was a continuing need for study and research into seismic methods of detection and identification of underground events. This view was held, *inter alia*, by the United Kingdom on document CCD/492. A similar position was taken by the United States delegation which declared, for example, in 1974: "For us, the most promising approach to achieving a CTB lies in continuing serious work on the technical issues that must be resolved, specifically those involved in the problem of verification" (CCD/PV.604).

It is, of course, important to clarify and solve technical problems connected with verification of a CTB. However, at some point a political decision should be taken. Otherwise, there would be a danger of converting negotiations into technical delibera-

tions, and their purpose -- a CTBT -- would be buried under a heap of technical papers.

In view of the actual importance of this question, my delegation has discussed this "technical approach" already in detail in the NTB Working Group. It especially dwelt upon the questions of evasion techniques which in the 1970s were advanced by the delegations of the United States and the United Kingdom and which, in their view, could very much hamper the efficiency of seismic means.

Of course, such possibilities may theoretically, and even practically, not be excluded. But here again, should one not first of all take into account the political aspect of this matter? It is only too obvious that a would-be violator of a CTBT would have to weigh up the possible military advantages gained by cheating using the above-mentioned methods against the political disadvantages in the event of the violation being detected. Moreover, the Government concerned must take into account the capability of an international seismic network to detect the violation. Furthermore, would it then not be advisable to look for an appropriate political solution of this problem? This could be an obligation by each State party to a CTBT not to impede the national technical means of the other parties, including the prohibition of the use of concealment measures, inter alia, evasion techniques.

Another question which played an important role in the CTB discussions was the problem of on-site inspections. In scientific literature it is broadly emphasized that those inspections could only marginally add to the efficiency of a seismic network. This view was also broadly shared by many delegations in the discussions on CTB questions which have taken place in this Committee over the years. In this regard, I would like to draw your attention to document CCD/481 tabled in 1976 by the Swedish delegation. On the other hand, the United States delegation in particular stressed the importance of on-site inspection. It stated for example in 1976 that "adequate verification of a CTB continues to require some on-site inspection" (CCD/PV.704). However, that delegation never provided a clear answer to the question of what is meant by "adequate verification" and what special purpose on-site inspection would serve. In 1976, the USSR declared its support for the "verification by challenge" concept and included an appropriate provision in its draft treaty on the complete and general prohibition of nuclear weapon tests (CCD/523). Thus, one might have thought that United States concerns had been met. However, the course and the actual state of the trilateral negotiations, as well as the work of this Committee, provoke the question: what is given more importance in the position of the United States -- the search for "adequate verification", or the interest in continuing nuclear weapons tests to develop the new nuclear warheads necessary for the implementation of their new nuclear warfare doctrines?

When considering issues of CTB verification, we should not allow ourselves to be bogged down in a wealth of technical details and unreal questions. The overriding questions are political ones and we must find political answers to them, corroborated by certain technical methods, e.g., in the field of verification. Moreover, existing technical means already provide a sufficient capability for CTB verification. Therefore, I cannot but agree with the former representative of Canada to the Committee on Disarmament, Ambassador Pearson, who stated in 1979:

"The establishment of a fully-tested world data exchange system to which all of us can contribute could be one of the most effective methods available to the international community for setting up a comprehensive test ban regime. Let us be clear, however, that problems of verification are a matter of judgement, not of technical perfection". (CD/PV.4)

It would also be difficult not to agree with the conclusion contained in the already quoted Swedish working paper, CCD/481: "It would be impossible to create a verification system that would secure the timely detection of any violation of a treaty at any time". To look for such a "perfect" verification system could only indefinitely postpone the

elaboration and conclusion of a CTBT. With all seriousness we should rather face the question: which danger is greater -- the threat caused by the absence of a CTBT, or the low risk posed by a not 100 per cent verification system? Given the present state of seismic art, no country could realistically expect to conceal clandestine tests except perhaps tests of small yield weapons of little military value.

Thus, my delegation shares the opinion expressed already in 1972 by the United Nations Secretary-General:

"While I recognize that differences of views still remain concerning the effectiveness of seismic methods of detection and identification of underground nuclear tests, experts of the highest standing believe that it is possible to identify all such explosions down to the level of a few kilotons. Even if a few such tests could be conducted clandestinely, it is most unlikely that a series of such tests could escape detection. Moreover, it may be questioned whether there are any important strategic reasons for continuing such tests or, indeed, whether there would be much military significance to tests of such small magnitude.

When one takes into account the existing means of verification by seismic and other methods, and the possibilities provided by international procedures of verification such as consultation, inquiry and what has come to be known as 'verification by challenge' or 'inspection by invitation', it is difficult to understand further delay in achieving agreement on an underground test ban.

In the light of all these considerations, I share the inescapable conclusion that the potential risks of continuing underground nuclear weapon tests would far outweigh any possible risks from ending such tests".

This view was also broadly shared among experts in the United States. In a statement made in 1976, the Arms Control Association said the following:

"The combination of improvement in seismic detection systems and satellite surveillance capabilities has led many arms control experts to conclude that a CTB could be adequately verified at the present time by national means. They stress that the verification question is not whether an extremely small nuclear test (a few kilotons) can go undetected, but rather whether the risk of not being able to detect such small tests would be of any military significance. Furthermore, the country contemplating such a violation of a CTB would also need to examine whether a weapon test of such a small yield would produce military benefits worth risking detection and the abrogation of the treaty".

Last but not least let me quote from a statement delivered in 1972 by the former United States representative to the CCD and this Committee, Ambassador Adrian Fisher, before the Senate Foreign Relations Committee:

"We have solved many of the problems of discriminating between earthquakes and explosions; we can identify explosions down to yields of a few kilotons. There will always, no matter how much research we do, be some events of low yield that cannot be identified. This doesn't mean, however, that a comprehensive test ban is undesirable.

But let's put things in proper perspective: verification of a comprehensive test ban has always been only part of the problem. The main question which existed in 1958 and exists today, 14 years later, is really this one: do we want to continue testing nuclear weapons? ...

If we decide that it is in our best interest to ban tests, I do believe that lack of a precise capability to distinguish earthquakes from explo-

sions at very low magnitudes will not stand in the way of our moving toward a comprehensive test ban treaty. We do not need to deploy a single new piece of equipment or await the development of still more data to be in a position to start negotiations.

We should continue research in the means of seismic discrimination. It is likely to result in more reliable, more efficient and probably still more accurate means of discrimination, but it is not now the real obstacle to the comprehensive test ban treaty that I hope this administration will now decide seriously to pursue".

I think that these questions, touched upon by Ambassador Fisher in 1972, have not -- after 10 years -- lost their importance and topicality. On the contrary.

Let me summarize: in discussing verification questions relating to a CTB, we should carefully take into account the experience of the past. We cannot neglect the basic ideas which were already developed with regard to CTB verification. Efforts to start the whole exercise from the very beginning -- "from scratch" -- would not serve any practical purpose. They would rather led to a new protracted verification debate.

In joining the consensus on the -- frankly speaking -- modest mandate of the NTB Working Group, it was the understanding of my delegation that this mandate could not be any long-term solution. The Committee should, rather, at the end of this session or at the beginning of the 1983 session, decide on a new, more forward-looking and action-oriented mandate.

CD/PV.183

pp.40-42

USSR/Timerbaev

31.8.82

CTB

The Soviet Union attaches great importance to the work of the Group of seismological experts. The two reports submitted by the Group in documents CCD/558 of 1978 and CD/43 of 1979 form a good basis for the elaboration of an international seismic data exchange system in connection with a treaty on the general and complete prohibition of nuclear weapon tests, the drafting of which is one of the priority tasks of our committee.

The international exchange system proposed by the Group, including a global network of approximately 50 stations, communications channels and international centres, is designed to provide States parties to the future treaty with such information as will substantially increase the reliability of verification that nuclear weapon tests are not being carried out.

It is extremely important that such an international system should be easily accessible to all States parties to the future treaty and that every State party should have the right not only to provide data from the seismological stations designated by it for purposes of the international exchange, but also to receive all the seismological data made available through international exchange. This is particularly important for countries possessing a poor seismological network or no seismograph facilities at all.

It was agreed in the Group that for purposes of national verification it would be entirely sufficient to have a Level 1 parameters system which would reduce to the minimum the number of seismic events remaining unidentified after the process of identification at national centres. Such a system of parameters has been worked out by the Group of seismological experts and is suitable for the determination of the co-ordinates of epicentres, the origin time of events and their depth and magnitude.

It is envisaged that whenever the use of Level 1 parameters is not sufficient to clear up doubts about the nature of events, Level 2 data will be drawn upon for more thorough analysis, at the request of any party to the treaty.

Thus we, like many other delegations, recognize the expediency of using Level 2

data. They are in fact useful, but in practice they will be needed only in a small number of cases and only in a volume sufficient to permit identification of the nature of a given event.

The scientific Group's mandate, as Dr. Ericsson observed, is unlimited. This is perhaps also its shortcoming, for with such a mandate any State can, without restriction, present the outcome of its national investigations for discussion. All the same, however, the seismological experts must complete their work at some stage and sum up its results on the basis of the principle agreed on for the designing of the system as a means of facilitating national verification.

The representative of India rightly observed that the scientific Group ought not to go to the extreme where the better becomes the enemy of the good. We fully share this view.

The suggestions made recently by certain experts concerning an increased role for Level 2 data (as regards the volume of such data transmitted and the degree of processing) represent their national assessments, which are their prerogative. We are not trying to impose our views on this matter on any one but at the same time we see no justified technical need for departing from the principle already agreed on for the designing of the system. There already exists in the world today a sound technological base consisting of means available to many States for the receipt and exchange of seismological information. Furthermore, the Group's recommendations in that respect offer a sound basis for the establishment of a realistic seismological exchange system.

Of course we are in favour of further technological progress, but that is an endless process and the adoption of recommendations by the Group of Experts at the present stage of its work ought not, therefore, to be delayed. As regards the further improvement of the system, that was to be one of the tasks of the committee of experts proposed by the participants in the tripartite negotiations in document CD/130. The parties to the future treaty were to exchange technical information in that committee and to co-operate in promoting the effectiveness of the international exchange as a whole.

Dr. Ericsson, replying to questions on the work of the Group of Experts, said that the tempo of its activities had somewhat slowed down. One cannot but agree with this statement. The work of the Group was at its most successful at the time when the negotiations on a treaty were in progress. The lack of political will on the part of certain countries in favour of the conclusion of a treaty and the continuation of the negotiations naturally has a direct effect on the success of endeavours with respect to other aspects of this problem, including the purely scientific aspects. The work of the scientific Group is not taking place in a vacuum. It is likely to suffer further in the future from the effects of the political decisions of certain Governments. It is precisely for this reason that it is necessary to adopt a critical approach also to the inclination of certain countries to engage in an endless improvement of the system, at the same time rejecting what was only recently approved and demands immediate completion in the form of the third regular report of the Ad Hoc Group of Scientific Experts and, more important, its putting into practice through the elaboration and conclusion of a treaty on the general and complete prohibition of nuclear weapon tests.

In conclusion, we wish to support the proposal of the distinguished representative of Japan that a letter should be sent to the World Meteorological Organization requesting that the Ad Hoc Group of Scientific Experts should be allowed to continue to use the WMO Global Telecommunications System on a regular basis for the transmission of seismic data for purposes of the detection and identification of seismic events.

Considerable interest was expressed in the section of the draft basic provisions devoted to verification.

On the question of verification of the destruction of stocks, in particular, we assume that in addition to national verification, declarations, etc., a number of international procedures will be applied also. One of these might be when an additional exchange of information is necessary between interested States concerning the factual state of affairs. Another procedure might be the conduct of on-site inspections upon request if an exchange of information has not provided a satisfactory solution. Another, and independent -- and I would repeat, independent -- measure envisaged is that of systematic international verification of the destruction of stocks at converted or specialized facilities, for example, on the basis of an agreed quota.

Questions were put to us about certain particular aspects of this form of inspection. But it would surely be better for the participants in the negotiations to reach an agreement in principle that during the period of the destruction of stocks of chemical weapons or their diversion to permitted purposes there should be provision for the possibility of the conduct of systematic international on-site inspections of the destruction of stocks at converted or specialized facilities. If such a provision for inclusion in the convention were agreed on in principle, which unfortunately is not the case at present, that would constitute a great step forward and we could then consider methods of implementing that agreement -- and I repeat, agreement. Such an agreement does not yet exist.

The same applies to verification that the permitted production of supertoxic lethal chemicals at specialized facilities does not exceed the upper limit of one tonne. We propose that such a facility should operate under national verification with very strict registration of amounts of initial products consumed and chemicals produced, that its location should be declared and that provisions should be made for the carrying out of international on-site inspections (for example, on the basis of an agreed quota) to verify the production of supertoxic lethal chemicals for permitted purposes at such a facility. But, it may be asked, have we reached agreement in principle on this question too? I think not, although there would not seem to be any obvious insuperable obstacles to our doing that.

We are also in agreement with those delegations which, judging by their questions, are concerned about how verification can be conducted with respect to the possible production of the precursors of supertoxic substances and, in truth, of binary weapons, at commercial enterprises. As for arguments that binary weapons and their production can be dealt with in the same way as other types of chemical weapons, we do not find them very convincing. Such arguments do not eliminate the problem of verifying that precursors for binary weapons are not being produced, in particular at commercial enterprises.

I should also like to stress one other point. Whatever types of activity we may consider and whatever obligations under the Convention may be involved, in practice, according to the Soviet draft basic provisions international verification in the form of on-site inspection upon request would in general be applicable. We were asked about the procedure for carrying out this form of verification. In this connection I should like to point out that such a procedure has been worked out in detail in the course of negotiations on other international agreements and treaties and the experience gained in the course of those negotiations, in particular the Soviet-Anglo-American negotiations on the prohibition of nuclear weapon tests, could obviously be applied also to the convention on the prohibition of chemical weapons.

It is also useful to examine the contribution which the use of outer space makes to the implementation of arms control agreements generally by providing a means whereby monitoring and verification can be carried out. It is abundantly clear that those arms control agreements which rely in part or in whole on national technical means of verification would probably otherwise have been impossible. At least, such agreements would have required intrusive verification measures, measures that no State wants to adopt lightly, especially if a better or more easily available alternative can be found. It is safe to say that given the reluctance of some States to agree to so-called "intrusive" means of verification, man's ability to make use of outer space for verification and monitoring purposes has in many cases made the difference between effective agreement and no agreement. It is interesting to note that a recent article on monitoring arms curbs in the 19 May issue of Mezhdunarodnaya Zhizn pointed out that reconnaissance satellites "produced a real breakthrough in means of observing and monitoring arms limitation measures."

In addition to the specific arms control functions served by outer space, the great potential of outer space for peaceful purposes serves us in a great and ever-increasing variety of important ways. We are all aware of the just completed UNISPACE '82 conference, and of the many applications demonstrated and discussed in that forum. These show just how intimately connected with our daily lives the utilization of outer space for civil purposes has become. From the use of meteorological satellites to improve weather forecasting and warning of severe storms, to communications satellites which make possible the global transmission of live television coverage of both historical and recreational events, it is evident that outer space plays an important role in maintaining the structure of our international society. The United States has taken the lead over many years in making available to the world at large the technology and benefits from its space programme, which is dedicated to placing outer space in the service of peace, and to strengthening the bonds that link nations together.

A ban on chemical weapons will enhance the security of the contracting parties, but it can fulfil this task only if all parties to the treaty share the conviction that contractual provisions will be fully complied with. The problem of verification is thus of crucial importance. This is a complicated but in no way insoluble issue. National means, as all of us are aware, are not enough. The solution has to be found essentially on the basis of international co-operative, non-discriminating and at the same time effective methods. International on-site inspections to be initiated by a permanent multilateral body of competent experts are an essential part of such a co-operative international verification system. The importance of a chemical weapons ban for my Government is such that I have felt constrained, now that the 1982 session of the Committee on Disarmament is drawing to a close, to stress a certain number of general points, even though some of them are widely accepted and often also stated by others in this Committee.

Moving on now to specifics, my authorities have studied with great care the "basic provisions" for a convention on the comprehensive prohibition of chemical weapons which the Soviet Union has recently submitted. They have come to the conclusion that these Soviet proposals, although in a number of areas they fail to provide satisfactory solutions, constitute progress insofar as they acknowledge, in principle, the necessity of systematic on-site inspections.

As delegations will remember, during the spring session the Federal Republic of

Germany presented a working paper (CD/265) which outlined our concept of a realistic and efficient verification system.

I have the honour today to introduce a new working paper which elaborates on the ideas contained in document CD/265, taking into account contributions by other delegations and giving further precisions. The main purpose of this new paper, which is numbered CD/326, is to suggest possible formulations for those sections of the chemical weapons convention which are directly linked to the problem of verification. This is to say that the paper suggests language for the chapters dealing with "verification" and the "Consultative Committee" and thereby gives a clear picture of the obligations States will have to undertake in the field of verification.

We propose an effective, practical and reliable verification system which, at the same time, requires only limited personnel and financial resources for its implementation. Our main considerations in this respect are as follows:

A chemical weapons verification system would aspire to provide the highest possible degree of assurance that the treaty obligations are being met by all participants, while not requiring an outsized supervision apparatus.

We propose a solution which establishes a high detection risk for any possible violator by introducing two different types of checks:

(a) One which provides for investigations in case of allegations that treaty obligations are not being observed, are being neglected or are being circumvented. Such "checks on special grounds" must be binding upon the State against which an allegation of breach is levelled. Confidence in the observance of treaty obligations could indeed not develop if it were left entirely to the discretion of the suspected State to admit or refuse a special check, on the grounds that the checks were of a mere voluntary nature. An exception might be made in the event of the request being totally devoid of foundation in the opinion of the overwhelming majority of the parties.

(b) Secondly, we propose regular checks upon compliance with key treaty obligations namely: destruction of existing stocks of chemical weapons, dismantling and destruction of chemical weapons production and filling facilities, observance of the permitted maximum amount for the production of supertoxic lethal chemicals as defined by the treaty and compliance with the obligation not to produce chemical weapons. In order to keep the verification system practicable, it is our conviction that regular checks with regard to non-production are indispensable only for that part of the chemical industry which could potentially produce supertoxic chemical agents, and specifically for the producers of organophosphorus compounds. Coverage of this segment of the chemical industry by regular checks would at the same time provide a practical and effective solution to the problem of verifying the non-production of key precursors for binary weapons. On the basis of present technological standards, no major industrial country can be ruled out as a producer of such materials.

There is no need to carry out on-site inspections at all relevant factories as a continuous operation. An adequate degree of confidence will develop if the international Consultative Committee annually decides on a quota of such factories to be inspected, and selects the individual installations by casting lots.

I appeal to all delegations to work towards a solution of the unresolved issues of a convention on the total ban of chemical weapons. As the use of chemical weapons is already proscribed, it should be possible to ban these weapons in a complete and comprehensive manner, and to reach this aim soon. It appears that the main argument for retaining chemical weapons is the fear that others might possess and use them. It is now possible to break this vicious circle.

Before leaving the field of chemical weapons, may I offer a brief comment on Ambassador Issraelyan's statement of 2 September on the subject.

My delegation is grateful for having obtained some further clarification on the

questions put to the Soviet delegation, jointly with the Netherlands, in document CD/308, and we are looking forward to replies on the remainder of our queries. As a preparatory step towards the requested formal answers, my delegation would welcome, and be readily available at all times for, the kind of bilateral or trilateral informal exchanges suggested by the Soviet Ambassador.

Ambassador Issraelyan in his statement made references to old stockpiles of United States chemical weapons on the territory of the Federal Republic of Germany. These stocks are not within the domain of the Federal Government. At the moment of entry into force of a chemical weapons convention, they would have to be declared and destroyed by the United States of America. The implementation of these obligations would be subject to the treaty clauses on verification, which would mean, in our view, to systematic on-site inspections under the auspices of the consultative committee of experts. Although verification would thus take place on German territory, my Government would readily admit these measures in the interest of enhancing international confidence. Needless to say, the very same declaration and verification procedures would have to apply to the substantial stockpiles of Soviet chemical weapons on the territory of East European States and the German Democratic Republic.

CD/PV.186

pp.7-8

India/Saran

14.9.82

CTB

The Ad Hoc Working Group on a Nuclear Test Ban was unable to draw up any conclusions for our future work, primarily because it was unable to reach agreement on an appropriate work programme. While every delegation in the Group agreed that issues relating to verification of compliance cannot be considered in isolation, it did not prove possible to reach consensus on a working hypothesis concerning the nature and the scope of the multilateral treaty that we envisage will eventually emerge through a process of multilateral negotiations. As far as my delegation is concerned, we have consistently taken the position that a treaty on a nuclear test ban should aim at the general and complete cessation of all nuclear weapon tests by all States in all environments for all time. Along with other members of the Group of 21, we have repeatedly stated that such a treaty should be able to attract universal adherence and should include a verification system which is universal in its application, non-discriminatory in character and which provides for equal access by all States.

While we regret that we were unable to reach a consensus on a work programme, we should not lose sight of the very interesting and fruitful exchange of views that took place on several key issues related to a nuclear test ban in the Working Group. Certain important queries were addressed to the three nuclear-weapon States participating in the negotiations, concerning their approach to verification. In response to queries from my delegation, one of the parties which had participated in the trilateral negotiations until they were suspended in the Autumn of 1980, i.e. the Soviet Union, confirmed unambiguously that the trilateral negotiators had reached complete agreement on all the elements relating to the verification aspects of a multilateral treaty on a nuclear test ban. That delegation informed the Working Group that the questions awaiting solution related to certain additional measures which would be applicable only to the three parties engaged in those restricted negotiations. This is an extremely significant statement and should be taken due note of by the Committee.

The Soviet Union also confirmed that it considered the means of verification at present available, using both national technical means as well as international co-operative measures for the detection and identification of seismic events, to be more than sufficient to verify compliance with a treaty on a nuclear test ban.

It is unfortunate that the two other parties which had been engaged in the trilateral

negotiations have not been as forthcoming as the Soviet Union in providing the Working Group with details relating to those negotiations which could be of considerable use to the Working Group.

The United States and the United Kingdom were also asked to specify what they regarded as adequate with respect to verification of a nuclear test ban. These two nuclear-weapon States have in the past taken the position that the means of verification at present available are not capable of giving sufficient assurance that the provisions of a general and complete prohibition of nuclear weapon testing are being complied with. They have held that the main obstacles in achieving the successful conclusion of a treaty on a nuclear test ban are technical in character and more specifically the inability to detect yields below a certain threshold. These delegations were asked, therefore, what they consider to be an adequate level of detection with respect to a nuclear test ban. Instead of giving us a direct reply to this question, both delegations have expressed the view that adequacy is not a matter which can be defined in terms of numbers and yield levels alone but rather involved a whole complex of issues, both political and technical. This view is, of course, one which the non-aligned and neutral countries have espoused for a number of years now. We are happy that the States which have in the past considered the question of verification purely from the point of view of overcoming certain technical obstacles have now come closer to the viewpoint that has been held by a majority of countries.

The complex of political and technical issues relating to verification of compliance with a treaty on a nuclear test ban must of course be the subject of negotiations. This we are prepared to engage in within the Working Group if and when it is set up next year. In the meantime, it would be useful if the delegations of the nuclear-weapon States concerned could give us a clear-cut idea as to what, in their view, constitutes the complex of political and technical issues which they have referred to.

CD/PV.186

pp.11-13

UK/Summerhayes

14.9.82

CTB

During the summer session which is now drawing to a close, my delegation has welcomed the chance to give particular attention to the work of two of our subsidiary bodies, those dealing with chemical weapons and with a nuclear test ban. I would like this morning to review briefly the progress we have made on the important issue of a nuclear test ban, for which we had a new Working Group with a mandate agreed and adopted in April this year. My delegation took part in the work from the start in the belief that the mandate of the Group was clear and precise and that it would permit us without delay "to discuss and define, through substantive examination, issues relating to verification and compliance with a view to making further progress toward a nuclear test ban". Whatever interpretation some delegations may like to put on this mandate, there is no doubt that it places verification and compliance in the centre of discussion. Some delegations nonetheless went on to argue that we must define the scope of a nuclear test ban before verification and compliance could be discussed; this attitude regrettably was a major factor in preventing us from adopting a work programme and undertaking the substantive examination of the issues expected of us.

It is of course true that, as paragraph 31 of the Final Document says,

"The form and modalities of the verification to be provided for in any specific agreement depend upon and should be determined by the purposes, scope, and nature of the agreement."

But that does not, in the view of my delegation, mean that at this present stage we must narrowly define these parameters. It is quite sufficient to make broad common-sense assumptions on which our consideration of a verification system is based. To

concentrate the discussion on scope is to divert the attention of the Group from the substantive issues set out in its mandate. Nevertheless, we have been drawn into a discussion on scope and this has served to emphasize one difference of view, the resolution of which would be crucial to the successful negotiation of a nuclear test-ban treaty. I am referring, of course, to the treatment to be accorded to nuclear explosions for peaceful purposes (PNEs). Some delegations have argued that PNEs should be excluded from the scope of a nuclear test-ban treaty; it has even been argued that only the State carrying out a peaceful nuclear explosion must decide whether it should be classified as such. This is not the time to answer these arguments in detail; but in my delegation's view the overriding consideration in this respect is to ensure that the purposes of a nuclear test-ban treaty are not frustrated; there would certainly be grave danger of this happening if nuclear explosions, labelled as being for "peaceful purposes", were freely allowed and their classification left to individual States. Whatever recourse is made to legal argument or to negotiating history, there remains the inescapable fact that nuclear explosions for peaceful purposes would provide information of potential military value and that in the system set up to monitor a test-ban treaty PNEs would, from a seismic verification point of view, be indistinguishable from nuclear-weapon test explosions. Is it conceivable that States would have confidence in a treaty with a loophole as large as this? And for those who seek support from negotiating history I would point out that while the trilateral negotiations envisaged a separate protocol covering nuclear explosions for peaceful purposes, that protocol would also have established a moratorium, and that the parties agreed that they would refrain from "causing, encouraging, permitting or in any way participating in and carrying out of such explosions until arrangements for conducting them are worked out which would be consistent with the treaty being negotiated." The problems involved in making such an arrangement have not yet been solved.

I will revert now to the central issue of verification. In our view the key element in discussing the verification of a test-ban treaty is whether it is possible to elaborate a system for detecting and identifying nuclear-weapon test explosions which would give adequate confidence of compliance with the treaty for all parties. As far as the seismic detection of nuclear-weapon test explosions is concerned, we already have available to us the proposals in documents CCD/558 and CD/43 for a global network of seismic stations, an international exchange of seismic data and the establishment of international data centres. The Group of Scientific Experts has done much valuable work and the experimental interchanges, although not entirely satisfactory, have demonstrated the potential of the exchange system. Our seismic experts are continuing to work on a number of unresolved problems. Some delegations, however, talk as though a global detection system were in existence already and as though it were of established rather than potential worth. They tend to brush aside all questions relating to technical matters and tell us that it is now "time to elaborate the political and legal framework and the elements of the verification system". They suggest that we must choose either to accept that all the technical means necessary for verifying compliance with a test ban already exist, or start a new detailed debate on highly technical issues.

My delegation does not think that the choice before us is as simple as this picture presents. We do not believe that the discussions we have had so far enable us to conclude that the means necessary for verifying compliance with a test ban treaty already exist. There are some important points, e.g. on-site inspection, which we have hardly touched upon. As the first practical step in the Working Group, we need to examine the proposals put forward by the Group of Scientific Experts and to establish what points of difference still remain. We do not see this as an "abstract" exercise. In our view, no amount of study of the "political and legal framework" will enable us to reach a successful conclusion unless we first agree on the technical basis of our detec-

tion and identification system. Examination of the records of the experts Group will show that there are important differences of view between delegations, particularly with regard to the use of Level 2 data. The distinguished representative of the USSR, in commenting on the report of the Group of Experts (CD/318) on 31 August, claimed that there was no technically proved need to exchange Level 2 data on a regular basis. He argued that the system proposed in document CCD/558 involving the exchange of Level 1 parameters was quite adequate. In the view of my delegation, Level 2 data are essential for identification purposes. For this reason it is necessary that we try to resolve the differences of view about how these data might be handled.

It has been suggested that in respect of a seismic network we should not let the best, or the better, be the enemy of the good. But I would remind the Committee that one of the purposes of a verification system, as has been pointed out, for example, in a thoughtful working paper distributed by the delegation of Sweden (CD/NTB/WP.2), is to provide confidence that the parties to a treaty are observing its obligations. Does it help to build confidence amongst potential parties to a treaty if one group of States insists that an adequate detection and identification system can be based on ideas and technology which many other delegations consider to be out of date? We would not quarrel with the suggestion that the system should be "no more and no less" than is needed; but such a statement does not solve the problem of what would constitute that optimum level. We would certainly not suggest that we should buy a Rolls Royce if another form of transport would serve our purpose equally well, but at the same time we want to be sure that we construct a vehicle that will take us to the end of the road.

There is one further issue which has so far been only briefly touched upon. This is the problem of possible evasion techniques, and here I should like to comment on the proposal advanced by the distinguished representative of the German Democratic Republic that we should look to a political solution of this problem and on his suggestion that a treaty might contain an obligation to prohibit the use of evasion techniques. It seems to us that when a State undertakes an obligation in a treaty, for example, not to carry out nuclear explosions, it is implicit that it will not evade those obligations. An additional obligation not to evade the main provisions of the treaty seems to add little of substance. And of course it could in no way remove the concern of other States parties over the possibility of evasion since it would not overcome the technical problem of verifying whether or not evasion had occurred. Some of the technical background to this was given in document CCD/492, to which reference has been made in the Working Group recently. We regard the assessments in CCD/492 as still generally valid and note that the seismic data on which they were based have been endorsed by the Group of Scientific Experts.

CD/PV.187 p.10

Burma/U Maung Maung Gyi

16.9.82

CTB

With regard to the test-ban issue, we wish for the present to confine our remarks to the work of the Ad Hoc Working Group under its given mandate and shall not be commenting on the issue as a whole.

The absence of a work programme has not made possible a systematic and structured discussion, and the exchanges of views which have taken place so far have been more or less of a general nature. However, two different fundamental approaches have once again emerged from the discussions held so far. One approach is that existing technical and scientific means are sufficient to identify a system for verification of compliance with a test ban. To our mind, this approach would make it possible to define the modalities relating to verification.

However, the other approach contends that it cannot be presumed that all technical problems have been resolved with regard to verification. We are apprehensive that this approach will lead the work of the Group into a labyrinth of technical details which will make it difficult to attain our objective of defining the modalities for the verification of compliance.

CD/PV.188

p.12

USSR/Issraelyan

17.9.82

VER

Third. A tendency to drag out negotiations is becoming more and more apparent in the Committee. We have already mentioned this in connection with the question of the prohibition of chemical weapons. This is done under a variety of pretexts. It is claimed, for example, that it is necessary to carry out careful and thorough investigations of various technical issues, to make use of the latest achievements of science and technology in devising a system for the verification of compliance with agreements, and so on. We have seen cases where some of the methods proposed had not only not received international recognition but had not even been fully worked out by their authors.

Here are some samples. The Group of seismological experts, after doing some worthwhile and rather detailed work, submitted reports proposing the institution of a system for the verification of compliance with a nuclear test ban agreement based on an international seismological network using both Level 1 and, in certain cases, Level 2 data. The scientists of many countries, including the United States of America, Sweden, the United Kingdom, the USSR and others, have authoritatively confirmed the effectiveness of this system, but here in the Committee we are told: no, let us start again from the beginning; let us elaborate a new system, a more complex one, a system for which there is no need and, moreover, one with which, as the authors of these proposals know full well, many delegations may not agree. Evidently that is precisely what they want.

What is particularly abnormal is the practice of a number of delegations of, so to speak, putting the cart before the horse. Before agreement has been reached on the main questions of principle of a future convention, these delegations insist upon the solution of secondary and often very debatable issues. Such an approach is contrary to the usual practice in conducting international negotiations.

CD/PV.189

p.21

Canada/MacEachen

1.2.83

CTB

Another promising avenue is the Ad Hoc Group of Scientific Experts on seismic events. Since its inception in 1976, it has been developing an international seismic data exchange system which will be an international verification mechanism forming part of the provisions of an eventual comprehensive nuclear test ban treaty. At the second United Nations special session on disarmament last year, Prime Minister Trudeau called for it to become fully operational at an early date and in advance of a treaty. Canada has committed resources to enable us to become a full participant in the exchange. We are convinced that the early entry into operation of the data exchange would be an effective way to make progress towards the objective of a comprehensive test ban.

This step-by-step approach can ensure that key elements of a treaty are in place even before the final political commitment to a comprehensive nuclear test ban treaty. This process can develop a momentum toward the conclusion of a treaty and can be complementary to the necessary negotiations among nuclear-weapon States.

We advocate transparency with regard to world-wide expenditure on armaments and to the relationship between arms spending and expenditure on economic and social development. For this reason, I proposed to the General Assembly several years ago that the United Nations establish a twofold register showing how much each industrial country spends per capita, on the one hand, on armaments and, on the other, on development aid. I also suggested setting up a register on world-wide weapons exports and imports so as to be able to make this "grey area" of world-wide armaments activities more transparent. The Federal Republic of Germany has up to now contributed data in three successive years to the register that already exists at the United Nations in the form of a standardized reporting system on defence expenditure. However, this system can only prove a success if the Warsaw Pact countries participate as well in future. At its thirty-seventh session the General Assembly therefore adopted a resolution calling upon all States once more to participate in this first major step towards the reduction of defence spending.

Confidence-building measures are not an end in themselves; they considerably facilitate progress towards the attainment of tangible and balanced results in the field of disarmament and arms control.

In particular, this also applies to verification of the observance of treaties. If countries that sign a treaty do not possess the national means of monitoring its observance, the treaty must provide for an impartial body of experts to examine any doubts or unclarified incidents. If necessary, the countries must also be willing to grant this independent body of experts access to their territory for the purpose of its examinations.

The Federal Republic of Germany has urged reliable verification simply for the purpose of placing arms control agreements on a firm basis and hence contributing to the success of the respective treaty and of the subsequent disarmament and arms control efforts in general. I therefore welcome the remark in last month's Prague declaration to the effect that the Warsaw Pact countries proceed on the understanding that all arms control agreements must, where necessary, provide for international verification of their implementation.

I note with satisfaction that the negotiations on a chemical weapons ban have been greatly intensified during the past year. This affords a good basis for the Committee's work this year.

The indispensable prerequisites for such a ban are reliable verification procedures. As we all know, national technical means are absolutely insufficient for verifying a weapons ban. Consequently, decisive importance attaches to an international committee of experts with autonomous competence, including the right to carry out on-site inspections.

My country is the only one to have directly experienced international inspections in connection with the renunciation of the production of chemical weapons. Proceeding from this experience, we presented specific, practical suggestions in 1982 both at the second special session devoted to disarmament and in the Committee on Disarmament. I appeal to the Committee to examine these proposals carefully and to use them as a basis for its subsequent deliberations so that the negotiations can be brought to a successful conclusion as soon as possible.

As regards a comprehensive nuclear test ban, the Government of the Federal Republic of Germany welcomes the fact that a working paper is now dealing with questions of verification and observance of such a treaty. Great importance attaches to a comprehensive nuclear test ban in connection with article VI of the Non-Proliferation

Treaty dealing with the obligation of nuclear disarmament.

Precisely because a test ban is particularly sensitive in both military and security terms, its strict observance by all contracting parties must be ensured by means of reliable verification. We advocate an exchange of data from existing seismological stations; the seismological institutions in the Federal Republic of Germany are fully available for this purpose.

CD/PV.191

p.13

USA/Bush

4.2.83

CW

The key to an effective convention — one that could eliminate the possibility of chemical warfare for ever — is the firm assurance of compliance through effective verification. I think we would all agree that this principle is absolutely fundamental. Effective verification, as the world's recent experience with the use of chemical and toxin weapons shows, is an absolute necessity for any future agreement that could be entered into. This is why we seek a level of verification that will protect civilization, our allies, and indeed humanity itself from this terrible threat. For today, the threat of chemical warfare has increased. And until an effective agreement can be achieved, the United States, just as others, must continue to ensure that it can deter the use of chemical weapons against its citizens and friends. If we are to expect nations ever to forgo the ability to deter chemical warfare, those nations must have confidence that others who accept the prohibition cannot circumvent their obligations and later threaten the peace with chemical weapons. They must be certain that they will not be attacked with such weapons by any State which has likewise forsworn chemical warfare. In short, for us, the verification and compliance provisions of a comprehensive chemical weapons treaty have got to be truly effective.

We know that most of the members of this Committee, like ourselves, are dedicated to accomplishing this important task. To do so will require more than our dedication. It will require greater willingness and flexibility on the part of the Soviet Union and its allies to work seriously and constructively on resolving these key outstanding issues — especially those pertaining to the verification and compliance side. And such issues must be resolved if we expect to make progress. For although some may argue that progress could be made by concentrating on the "easier" issues, or even by drafting treaty texts on them, this would be a fruitless exercise if the verification issues cannot be addressed, cannot be resolved. We will not support a diversion of effort here.

I urge all members of this Committee to begin negotiation in this session to resolve the key issues that face us in this area, and to join with us in achieving a complete and verifiable ban on chemical weapons.

CD/PV.192

p.10

Belgium/Onkelinx

8.2.83

CW

The Working Group will no doubt be obliged simultaneously to give attention to some more technical issues relating to certain aspects of the convention. I am thinking in particular of certain problems concerned primarily with the procedures for verification of compliance with the convention. Useful work was done during the last technical consultations with the participation of experts, especially in the matter of determining which precursors of chemical warfare agents will call for specific verification procedures during the chemical production process. The same applies to the definition of requirements as regards verification of the destruction of stockpiles of chemical weapons and the dismantling of facilities. However, it seems to me that it should be clear to everyone that these technical discussions ought to lead to arrangements that

can be incorporated in the convention. In other words, we must not lose sight of the ultimate object of such exercises, and see to it that overly technical or academic considerations do not unnecessarily add to the complexity of these talks. It will be necessary, at an appropriate time, to consolidate the elements which have formed the subject of convergencies of views during these consultations into draft annexes to the convention.

CD/PV.192 p.22 GDR/Herder 8.2.83 CW

We noted with interest the recent announcement that a new comprehensive proposal will be tabled by the United States delegation. It is our hope that it will further our work in drafting the convention. But how can one reconcile this announcement with news reports coming these days from the capital of the same country that additional funds -- the figure of \$150 million is mentioned -- will be allotted to the development and production of new chemical weapons? This is certainly a counterproductive measure, and at the same time, it would be counterproductive perpetually to bring up new verification demands. From the history of negotiations on a comprehensive test ban and other disarmament issues we know what this may lead to.

We stand for a realistic verification system, based on a combination of national and international procedures, including certain on-site inspections. This would correspond to the legitimate interests of all sides in enhancing confidence that the convention is being complied with. So, we do not believe that it is necessary to preach to us the virtues of verification.

CD/PV.192 pp.26-28 Australia/Sadleir 8.2.83 VER,CTB,CW

My second point concerns verification. We have in the Committee at last begun to face up to the implications of this concept, which is central to disarmament. Verification is no smoke-screen, as some have alleged. On the contrary; it is the clearing and checking process by means of which everyone may see that a treaty commitment is being honoured. It is a sine qua non -- quite simply there can be no more disarmament treaties without it. The days of non-verifiable conventions (the 1925 Geneva Protocol, the Biological Weapons Convention and the Enmod Convention) are over.

I want to say two other things about verification. First, technology has revolutionized verification, making it less intrusive and, thus, more acceptable. This development made possible the bilateral agreements reached on strategic arms limitation. Secondly, technology is becoming more flexible and, equally important, less expensive. As we look at ways to verify a nuclear test ban or a chemical weapons convention, we should explore the possibilities that exist. We do not have to wait forever or to keep up with the state of the art. But we would be irresponsible if we ignored any means to achieve a relatively non-intrusive, politically satisfactory, inexpensive and verifiable agreement.

I turn now to our agenda. In doing so I address only the issues of special importance to my delegation. The first of these is the nuclear test-ban item. That is an item to which, in particular, my earlier remarks apply, because it is verification that is the focus of the Committee's work on a CTB in not one but two of its subsidiary bodies, namely, the NTB Working Group and the Group of Scientific Experts.

The conclusion of a comprehensive test-ban treaty has been a long-standing objective of Australian policy. Over many years the Australian delegation in the First Committee of the General Assembly has taken the lead in preparing the annual CTB resolution -- the only resolution calling for a comprehensive ban on all nuclear test

explosions. A CTB agreement which would prohibit all nuclear testing by all States in all environments could, in our view, contribute significantly to impeding both the vertical and the horizontal proliferation of nuclear weapons. But we have also always recognized that verification is the crux of the matter. We have therefore taken an active part in the work of the Group of Scientific Experts and in the discussion of issues on verification and compliance in the newly established NTB Working Group.

While we recognize that the establishment of the NTB Working Group under a mandate limited to issues of verification and compliance was not perceived by anyone as more than a beginning, nevertheless the discussions in the Group during the last session revealed how complex that beginning really is. In our judgement, verification and compliance require more attention than the Working Group has so far been able to give them during its short summer session last year. Accordingly, we support a continuation of the current work on verification and compliance and stand ready to contribute.

As to the other Group dealing with CTB issues, i.e. the Group of Scientific Experts, Australia is impressed at the work done so far and looks forward to its continuation under a new Chairman at this session. May I halt at this point to pay tribute to the late Dr. Ericsson for his dedication, his imagination and his tireless efforts. I and my delegation wish his successor well in the demanding task before him.

As the seismic Group prepares to issue its third progress report, there have been murmurs that, perhaps, the mandate of the Group should be updated or even terminated altogether. We consider such rumination to be premature and would prefer to await the outcome of the session which is to begin this week. We do, however, make the general point that verification is so important to negotiation of a comprehensive test ban that this Committee needs to study every avenue. While the Committee should not pursue the state of the art as an end in itself, neither should it close off important opportunities.

The Australian delegation has been encouraged by the progress that the Group of Scientific Experts has made, but if it is to continue to help our work it needs to be encouraged rather than discouraged. This is particularly the case now that the question of international data centres is coming under study. I recall, in this context, that Australia has offered to give favourable consideration to any proposal to situate one of the international data centres on its territory. Australia and other States that have made offers of this kind will need to have access to continuing work by the Seismic Group, and in the Committee as a whole, if an international seismic monitoring network is ever to be realized.

The conclusion of a chemical weapons convention is, in Australia's view, one of the most important tasks before the Committee on Disarmament. Under successive dynamic chairmen the Ad Hoc Working Group has tackled the task well at the past three sessions. Key issues have been identified; broad agreement has been reached on the main problems; alternative formulations for elements of the future convention have been advanced. Novel approaches have been successfully tried. These approaches have included resort to highly informal sessions and periods of intense concentration with experts strengthening delegations. The Soviet Union last year submitted "basic provisions" for a chemical weapons convention. The United States is shortly to table its own detailed ideas. My delegation greatly welcomes this development. We welcome, too, the steady stream of new ideas and technical papers from many quarters, as well as the active involvement demonstrated by all delegations. In view of the promise generated by the work of the Working Group on Chemical Weapons, I urge that no hiatus and no hesitation be allowed to damage its prospects and that it be permitted without faltering speedily to continue its operations under a new Chairman.

The key problems before the Working Group relate to scope and to verification. On scope, my delegation believes that the case of including a ban on the use of chemical weapons is stronger than ever. Ambiguities remain as to the existing prohibition; it is

also the case that the use of chemical weapons reportedly continues. Moreover, the concept at the heart of the future convention -- that there must be a ban on the use of chemicals as weapons -- is a concept of use; and the so-called "general purpose criterion" which all agree should define this concept is a use criterion. Having said that, my delegation will carefully examine any alternative ways to meet our central concern. It may prove possible, for example, by providing in the convention for strong verification mechanisms which would be triggered by evidence that these repugnant weapons have been used, decisively to end the prospects of that ever happening.

Verification is the central issue. The international community must have some way of ensuring that treaty commitments are being honoured. National arrangements can certainly simplify the task but they can never be a substitute for verification measures of international scope. The Ad Hoc Working Group has recently gone into greater depth on what chemical stocks States should declare when they become parties to the convention, and on what procedures are necessary to destroy stocks: the conclusion which seems increasingly inescapable is that a strong system of international checking is essential to these and other aspects of the future treaty. Such a system, it is clear, must provide for a measure of on-site inspection under international auspices. How much, how intrusive and how often are questions awaiting answers and elaboration, but the principle is a fundamental one. On-site inspection, strengthened as necessary by remote sensors and other non-intrusive technological means, is the key to achieving a chemical weapons convention. If agreement is reached here, the outstanding issues will almost certainly fall into place.

CD/PV.193

pp.34-35

USA/Fields

10.2.83

CW

Many different approaches to the verification of a chemical weapons ban have been discussed in this Committee. We share the view of the majority of delegations, which have emphasized the importance of systematic international on-site inspection. Only an independent, impartial system responsible to all the parties can provide the necessary confidence that the provisions of the convention are being faithfully observed. National technical means alone are not sufficient, as they are available only to a few and are of extremely limited utility for the verification of a chemical weapons ban. Nor can so-called systems of "national verification", which would be tantamount to self-inspection by parties, be taken seriously when one considers the vital import of such a convention.

In our view, the following should be subject to appropriate forms of systematic international on-site inspection on an agreed basis:

Declared chemical weapon stockpiles and the process of their elimination;

Declared chemical weapons production and filling facilities and the process of their elimination;

Declared facilities for permitted production of chemicals which pose a particular risk.

To avoid misunderstanding, I want to emphasize that we do not believe it necessary to subject the entire chemical industry of States to inspection, nor do we seek to have inspectors roam throughout the territory of a party. Systematic international on-site inspection is necessary only at a limited and carefully-defined group of facilities, which must be declared.

An effective mechanism for dealing with compliance issues is essential. This is one of the key lessons to be drawn from the compliance problems encountered in recent years with respect to the Geneva Protocol and the biological and toxin weapons Convention. My delegation believes that the mechanism must promote prompt resolution

of issues at the lowest possible political level. At the same time it must be flexible, and allow issues to be taken to higher levels, including the Security Council, whenever that may be necessary. We believe that States must undertake a strong commitment to co-operate in resolving compliance issues. This should include a stringent obligation to permit inspections on a challenge basis.

The United States delegation is putting forward this document to help advance the work of the Committee. We believe that the verification approach it described is tough but fair and practical. I want to emphasize that we are not seeing absolute verification. We recognize that some risks will have to be accepted. However, we do insist that these risks be minimized in order to safeguard our security and that of all other countries. We must have a level of verification which meets that objective.

I want also to emphasize that we are continuing to explore possibilities for new and more effective means of verification, for example, possible use of on-site sensors. We have invited others to join us in a co-operative evaluation of such sensors. I wish to reaffirm that invitation. Furthermore, we are prepared to explore seriously any suggestions by others for achieving an effective level of verification. Our views are subject to modification and further refinement....

CD/PV.194 p.12 UN/SecGen Perez de Cuellar 15.2.83 VER

Let me also touch on one of the fundamental dilemmas that you often face. In dealing with the specific disarmament issues before you, the technical problems can usually be overcome, but problems that have a bearing on confidence between nations are more difficult to surmount. Differences of opinion over the adequacy of measures for verifying compliance with disarmament agreements are really reflections of deep-seated suspicions. Verification is certainly essential to disarmament arrangements, but in the absence of mutual trust, it can assume an importance beyond its original purpose.

CD/PV.194 pp.14-15 Norway/Berg 15.2.83 CTB,CW

Norway hopes that the establishment in 1982 of a Working Group on a Nuclear Test Ban can pave the way for further progress in this field. The present mandate of the Working Group is far from exhausted. In particular, more work should be done with regard to the establishment of a global seismic network which can verify compliance with a nuclear-test ban. My Government believes that a proposed global seismic network will play a central role in verifying a comprehensive test ban. The establishment of such a network should take full advantage of recent technological advances in this field. As a result, we should be much better equipped than before to deal conclusively with the substantive issues involved.

In this connection I would like to recall to the Committee that representatives of the Norwegian Seismic Array (NORSAR) last year demonstrated for members of this Committee a prototype system for international seismic data exchange, using regular telecommunications and a low-cost microprocessor-based system. At present, NORSAR is planning an international experimental exchange of level II data. An invitation has in fact been extended by NORSAR to all experts represented in the seismic expert Group of the Committee. A working paper will be presented later to the Committee on the basis of the results of this experiment.

Norway recognizes the importance of the progress which was made during the 1982 session of the Committee on Disarmament in the negotiations concerning a multilateral

convention on chemical weapons. We are indeed encouraged by recent developments and would like to welcome the new United States initiative announced in this Committee by Vice-President Bush on 4 February. In a statement on the same day, the Norwegian Foreign Minister expressed the hope that this move would provide a new impetus in these negotiations. The document which Ambassador Fields presented on 10 February certainly provides the Committee with a fresh opportunity to intensify the negotiations on such a convention. Given this document, together with the basic provisions which Foreign Minister Gromyko of the USSR introduced during the second special session of the General Assembly devoted to disarmament, it seems that a sound basis has now been established for real negotiations with a view to concluding a convention containing adequate provisions for on-site inspection. Energetic efforts should now be made to prepare a draft convention at the earliest date, while solving all outstanding issues.

CD/PV.194 pp.19, 20-21 Pakistan/Ahmad 15.2.83 CTB,CW

The absence of negotiations on a comprehensive test-ban treaty is due entirely to the lack of political will. The technical problems of verification and compliance with a nuclear test ban have been resolved. Only last week the Swedish representative gave us a detailed count of the underground test explosions carried out by each of the nuclear-weapon States in the past two years. The purpose of the restricted mandate which the Working Group on a Nuclear Test Ban was given late last year was to investigate a comprehensive verification regime. But the verification provisions of any disarmament instrument have to be related to the purpose and scope of that instrument. The Group was, therefore, destined to make little progress from the very start. We would strongly urge that this deficiency in the Group's mandate be removed to allow the commencement of negotiations on a test ban treaty itself. The mandate suggested by the Group of 21 in document CD/181 in our view provides the most suitable guideline in this respect.

We are satisfied that 1982 was a productive year at least for the elaboration of a convention on chemical weapons. The contact groups have painstakingly worked out substantive details of the draft elements of a convention. Various views and perhaps all possible alternative approaches, ideas and proposals have been taken into account. The work, however, has now reached a plateau, and unless the major Powers display a degree of foresight and political will at this point, we may run the risk of sliding back to irreconcilable positions. On the question of verification, there was evidence late last year of a growing realization that a measure of least intrusive yet on-site inspection is inescapable for ensuring mutual compliance with a future convention. National verification measures alone are an insufficient and unacceptable guarantee. We need to build upon this in the Working Group this year.

CD/PV.194 p.25 Czechoslovakia/Vejvoda 15.2.83 CW

There is no doubt that the verification issue remains one of the most important unresolved problems. It would seem unwise, however, to press for the inclusion in the treaty of political views bearing so much the mark of the present political atmosphere of mistrust and suspicion and of such evident efforts to gain a unilateral military advantage.

This is why my delegation supported, and is going to support, the concept of international verification underlying the basic provisions for a chemical weapons convention submitted last year by the USSR. May I recall that, according to this concept, different

phases with different amounts of information and of verification measures have been foreseen for the substantial period of time needed for the complete destruction of chemical weapons stocks and facilities. This period has been understood as a sui generis process of international co-operation, in the course of which the States parties will be given an increasing opportunity to prove mutually their serious commitment to a strict compliance with all the provisions of the convention.

This concept has fully taken into account the existing international situation and provides for a dynamic process of permanently increasing confidence as well as an increasing mutual exchange of information, satisfying all legitimate demands of States for the necessary security guarantees. At the same time we are of the opinion that the concept of a systematic international verification on the basis of agreed quotas could be further elaborated in a more detailed form.

CD/PV.194

p.35

France/de la Gorce

15.2.83

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....Then there are the security conditions, as set forth in the Final Document of the first special session of the General Assembly devoted to disarmament: the maintenance of the balances that are necessary to security and the verification measures that are essential to create confidence and to ensure compliance with disarmament agreements -- measures which can only be credible if they are international in character.

The peoples of our countries, if they are well informed, will understand -- they understand already to a very large extent -- that acceptance of these conditions -- balance, the very basis of security, and international verification -- constitutes the real test of the political will of governments in the matter of disarmament. These fundamental principles are at the very heart of our debates and our negotiations.

The first is inseparably linked with that of the prevention of war, and thus the prevention of nuclear war, which we have been discussing in connection with the new item proposed for our agenda. The President of the French Republic, in the statement to which I referred a moment ago, described this link in the following terms: "One simple idea governs the thinking of France: war must remain impossible, and those who might think of unleashing it must be deterred therefrom. It is France's conclusion and conviction that nuclear weapons, the instruments of this deterrence, are still, whether one likes it or not, the guarantee of peace, provided there is a balance of forces. Only such a balance, furthermore, can lead to good relations with the countries of the East, our neighbours and historic partners. It was the sound basis on which what is called détente was founded... It made the Helsinki agreements possible."

As regards international verification, the United Nations General Assembly, at its last session, confirmed the principle thereof in three resolutions. We regret that these resolutions encountered a certain amount of opposition, for we do not think that a principle which is as basic as it is indisputable, and the concrete applications which it necessarily implies with respect to any measure concerning the reduction or use of weapons, should give rise to polemics, suspicion or exploitation. We find it difficult to understand how States which intend to respect a treaty can have any substantial reasons for objecting to compliance with the clauses of that treaty being ensured principally by international measures of verification. We therefore hope that where this question arises in our negotiations, it will finally be possible to formulate and adopt satisfactory solutions.

CD/PV.195 p.19

Burma/Maung Maung Gyi

17.2.83

CTB

This Committee also has the task of intensifying its efforts on a comprehensive test-ban treaty. After many persistent years of efforts it was only last year that we were able to form an ad hoc working group with a limited mandate which is far short of what we feel is necessary to conduct negotiations on a comprehensive test-ban treaty. Discussions during last year showed that owing to lack of consensus on the drawing up of a work programme the Working Group was not able to conduct discussions in a structured manner. My delegation therefore feels that a broader mandate will be required for the Working Group this year if we are to deal with the test-ban issue in a substantive manner.

Burma became a party to the partial test-ban Treaty as it was considered that the Treaty would constitute the first step towards the achievement of a comprehensive test-ban treaty. Records of the negotiations on a comprehensive test-ban treaty within the Eighteen-Nation Disarmament Committee show that there was a time when the differences in the approach by the two sides to the subject of verification of compliance was so close that the prospects for an agreement were almost within reach. However, the necessary political decision to bridge that narrow gap was not taken, and the result is the situation we are in today. Some 20 years ago, no party said that verification of compliance was not possible because the then existing technology was not sufficiently advanced to permit the setting up of an effective verification system. We believe that after 20 years the technology for the detection of seismic events must have made further progress. For this reason we feel that what is needed is a definition of the parameters necessary for an effective verification system on the basis of existing technology, and merely discussing the possible verification capabilities of existing technology would only be an exercise in procrastination.

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USSR/Issraelyan

17.2.83

CTB

Resolution 37/72 further points out that "whatever may be the differences on the question of verification, there is no valid reason for delaying the conclusion of an agreement on a comprehensive test ban", and recalls that "since 1972 the Secretary-General has declared that all the technical and scientific aspects of the problem have been so fully explored that only a political decision is now necessary in order to achieve final agreement".

This widely held opinion is shared by many politicians, scientists and experts. In this connection I would like to refer to the views of such well-known American seismologists as Lynn R. Sykes and Jack F. Evernden who wrote in the October 1982 issue of Scientific American that "networks of seismic instruments could monitor a total test ban with high reliability even if extreme measures were taken to evade detection". These scientists came to the conclusion that "the problems of negotiating such a treaty (on a comprehensive nuclear test ban) are overwhelmingly political rather than technical and must be recognized as such".

In fact Mrs. Theorin, the head of the Swedish delegation spoke in the same spirit in this Committee on 3 February last when she said: "I believe it is fair to say that to a very large degree the technical problems have been solved as regards the methods for monitoring a test ban, although further progress is still possible. It is now mainly the lack of sufficient political will which is preventing the Committee on Disarmament from elaborating the complete text of a comprehensive test-ban treaty".

The session of the Ad Hoc Working Group on a Nuclear Test Ban held last year, during which the questions of verification and compliance were discussed, once again

convinced the majority of delegates that the problems of verification are basically resolved and that political will alone is needed to achieve an agreement.

But let me refer once again to resolution 37/72.

The General Assembly considered it necessary to draw attention to the fact "that the three nuclear-weapon States which act as depositaries of the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water undertook in that Treaty, almost twenty years ago, to seek the achievement of the discontinuance of all test explosions of nuclear weapons for all time and that such an undertaking was explicitly reiterated in 1968 in the Treaty on the Non-Proliferation of Nuclear Weapons".

Lastly, resolution 37/72 urges all States members of the Committee on Disarmament (and we would like to draw the particular attention of the members of the Committee to this provision of the resolution) "To assign to the Ad Hoc Working Group on item 1 of the Committee's agenda (nuclear test ban) a mandate which should provide for the multilateral negotiation of a treaty for the prohibition of all nuclear-weapon Tests, to be initiated immediately after the beginning of the session of the Committee to be held in 1983", and "To exert their best endeavours in order that the Committee may transmit to the General Assembly at its thirty-eighth session the multilaterally negotiated text of such a treaty".

This is an absolutely clear and unambiguous instruction given to our Committee by the world community represented by the most authoritative and influential international forum -- the General Assembly of the United Nations. The Soviet Union, always faithful to its international undertakings, is ready to spare no efforts in order to promote in the most active way the implementation of this instruction of the United Nations, the entire world community.

Desiring to make a constructive contribution to bringing about the cessation of nuclear-weapon tests, the Soviet Union submitted to the General Assembly at its thirty-seventh session the "Basic provisions of a treaty on the complete and general prohibition of nuclear-weapon tests". The Soviet delegation wishes to submit the "Basic provisions" for consideration by the Committee on Disarmament, the text thereof having now been issued as an official document of the Committee (CD/346).

The document submitted by us takes into consideration the extent of agreement achieved during the discussion of the problem of the complete cessation of nuclear tests in recent years. It takes into account the observations and wishes expressed by many States, in particular in the Committee on Disarmament, on many aspects of the treaty, including questions relating to verification of compliance with it.

The Soviet delegation expresses its full readiness to comment in detail on the "Basic provisions" and to reply to the questions which other delegations may raise on the text of this document, in the Ad Hoc Working Group when it starts its work with an appropriate mandate for elaboration of the treaty, a decision on which will, we hope, be taken by the Committee without delay. We would consider it useful, nevertheless, to draw the attention of the distinguished delegates already now to some very important provisions of our document.

The first of these is the question of the scope of the prohibition. The "Basic provisions" provide that every State party to the treaty will undertake to prohibit, prevent and not to conduct any test explosions of nuclear weapons in any place under its jurisdiction or control, in any environment -- in the atmosphere, beyond its limits, including outer space, under water and underground.

In accordance with the provisions of the 1963 Moscow Treaty, it is proposed that the treaty on the complete and general prohibition of nuclear-weapon tests should be of unlimited duration. It is also proposed that it should enter into force upon the deposit of instruments of ratification by 20 Governments, including the Governments of all the

States permanent members of the Security Council. At the same time we also provide for the possibility that the States parties may agree on the Treaty's entering into force for an agreed limited period and with the participation in it of only three States permanent members of the Security Council -- the USSR, the United States and the United Kingdom.

The Soviet Union consistently upholds the importance of verification as a means of ensuring compliance with international agreements in the field of arms limitation and disarmament. The Soviet Union has authoritatively stated a number of times that we are no less interested in verification than other States and that we shall not enter into any agreements on disarmament which would not give us due assurance that such agreements are being implemented as scrupulously by other States parties as they always have been, are being and will be implemented by ourselves. At the same time the Soviet Union has never and will not put forward the verification problem as a reason for not achieving agreements on arms limitation. Unfortunately, in discussing certain arms limitation questions our Committee has repeatedly faced in the past and continue to face now a situation where the verification problem is deliberately used as a pretext for thwarting agreements.

The attitude of the Soviet Union towards verification is convincingly shown by the fact that as an act of goodwill it has expressed its readiness to place some of its peaceful nuclear installations -- several atomic power plants and some research reactors -- under IAEA control. It was declared recently in Vienna that appropriate negotiations between the IAEA secretariat and the Soviet side will start in May-June of this year.

The verification system envisaged in the "Basic provisions", which is based upon many years of consideration of the means, methods and procedures for verification with the participation of competent experts from many States, is in our view an adequate one, fully ensuring compliance with a treaty on a complete nuclear-weapon test ban.

This verification system is based on a combination of national and international measures. It would like to emphasize particularly that while recognizing the importance of the use of the national technical means of verification possessed by States, we realize that at present only a limited number of States have such means. We are convinced that in the future -- and the proposed treaty should of course be of unlimited duration -- other States, too, will have at their disposal their own national technical means of verification. However, in order to give these States the possibility of having at the initial stage of the implementation of the treaty some access to the information obtained with the help of national technical means, we propose the inclusion in the treaty of a provision stating that "parties which possess national technical means of verification may, where necessary, place the information which they obtained through those means, and which is important for the purposes of this Treaty, at the disposal of other parties".

Another very important and fully international component of the verification is the international exchange of seismic data, which would function on the basis of recommendations prepared by the Ad Hoc Group of seismological experts of the Committee on Disarmament. The Soviet delegation considers that the work done by the Group, as reflected in its first two reports, is extremely useful. The global network of seismic stations proposed by the seismological experts for the transmission of the so-called Level 1 data and, if necessary, Level 2 data to international seismic data centres offers an effective means of increasing confidence in compliance by States with their undertakings under the future treaty.

We propose further the establishment of an international committee of experts of the States parties to the treaty which would consider questions relating to the international exchange of seismic data and facilitate more extensive international consultations and co-operation, the exchange of information and assistance in verification in the

interests of compliance with the provisions of the treaty.

Moreover, we propose that it should be agreed that if a State party to the treaty has doubts regarding an event on the territory of another State which might have been a nuclear explosion, it may send that party a request for an on-site inspection. The party which has received the request, being aware of the importance of providing assurance of compliance with its obligations under the treaty, will state whether or not it is prepared to agree to an inspection. If the party which has received the request is not prepared to agree to an inspection on its territory, it will communicate the reasons for its decision to the requesting States and inform the committee of experts of them.

In order to increase confidence in compliance with the treaty it is also provided that if the requesting State is not satisfied with the explanation received and the information provided on a bilateral basis, it may ask the committee of experts for additional information and consultation regarding that request and for assistance in ascertaining the facts in the form of scientific and technical expertise.

Naturally, for the purpose of the conduct of inspections on the territory of States parties which give their agreement thereto, procedures will be elaborated for such inspections and the manner in which they are to be conducted, including the list of rights and functions of the inspecting personnel and the definition of the role of the receiving party during the inspection.

In addition to all these provisions concerning verification, the "Basic provisions" provide that any State party which has reason to believe that any other State party has acted or may be acting in violation of the obligations deriving from the provisions of the treaty shall have the right to lodge a complaint with the Security Council. At the same time, each State party undertakes to co-operate in the conduct of any investigation which the Security Council may initiate.

These are the basic provisions of the system we propose for the verification of compliance with a treaty on the complete and general prohibition of nuclear-weapon tests. I would like to reiterate that the Soviet delegation will be prepared to display a constructive approach during their discussion in an ad hoc working group which has the necessary mandate for practical negotiations on the elaboration of a future treaty. Of course, we shall be ready to consider also other proposals for a treaty on a complete nuclear test ban. We understand that a draft of such a treaty may be submitted shortly by the delegation of Sweden.

CD/PV.195

p.44

Egypt/El Reedy

17.2.83

CW

A few days ago our Committee received the proposals mentioned by Vice-President George Bush in his statement. We heard them presented by our colleague Ambassador Louis Fields. Last summer we also received Soviet proposals on basic provisions for a chemical weapons convention. We believe that all of this constitutes a development of paramount importance which should enable the Committee to proceed in an efficient manner towards the drafting of a chemical weapons convention.

At the outset, we wish to emphasize that such a convention should provide for an effective system of verification. As a developing country, we regard international verification as indispensable.

We also attach the greatest importance to provisions that would deter any party from violating the Convention. Provision should also be made to ensure a collective response by States parties to the Convention in the event of any violation.

....There are signs of undeniable progress in this respect. The conditions for an advance in verification problems relating to arms limitation may further improve in the coming years. Progress in the field of detection seismology has, in our view, largely improved the possibilities for solving the verification problems associated with a comprehensive test ban, a long-standing priority issue on the international disarmament agenda. Recently, views on prohibiting chemical weapons appear to have converged significantly. Both technically and politically, the problems related to the verification of a possible chemical weapons convention may have come closer to their solution.

Chemical weapons are universally considered particularly repugnant. Recent controversies relating to the development, manufacture, storage and use of these weapons are proof of this. Possibilities for progress towards the elimination of chemical weapons exist perhaps now more than before. I have in mind certain statements made in this Committee in the past days as well as proposals put forward in other forums. We look forward with some optimism to the possibilities of negotiated results to ban chemical weapons.

The Finnish Government has for its part devoted particular efforts towards facilitating international negotiations for a comprehensive ban on chemical warfare agents. As is well known to members of the Committee, Finland in 1971 initiated a research project for the analytical verification of chemical warfare agents. The goal was to create a comprehensive monitoring system which would apply equally to all areas covered by an eventual agreement. This would be achieved through a detailed verification manual and an automatic method of analysis to be used by the signatories of an eventual agreement in carrying out reliable analysis in a standardized manner. The same method could also be used by international monitoring organs, should such be created.

The Finnish project started in 1972 in the form of laboratory research aiming at creating sufficient scientific experience and methodological capacity in the field of chemical weapons. The first substantial report with concrete laboratory results was published in 1977 with the title "Chemical and instrumental verification of organo-phosphorus warfare agents".

In 1979 a large handbook was presented to the Committee on Disarmament with the title "An approach for the standardization of techniques and reference data". This study introduced the application of several highly sensitive instrumental techniques and described the possibility for their automatization in order to improve the reliability of the identification of individual compounds. Further, the identification of the degradation products of all important nerve agents was studied in 1980.

The following year, in 1981, an approach for the environmental monitoring of nerve agents was presented in a more comprehensive manner. In 1982 the same automatic methods were applied to 20 of the most important non-phosphorus agents.

Together, the three parts on systematic identification published in 1979, 1980 and 1982 form an identification handbook in which the collection and concentration, retreatment and analysis by five instrumental methods are presented. In these three handbooks more than a hundred chemical warfare agents or related compounds synthesized by the project are analysed and detailed analytical results are presented.

Among the central areas for future research is first of all the identification of possibilities for remote monitoring, on which we will publish a detailed report. In remote monitoring a moving laboratory unit is used. It will be transported to the required locations for the collection of examples of air or water and their analysis.

Another area is automatic "black-box" monitoring of installations for the destruction of chemical agents and suspected production establishments. This issue is best discussed by experts. Finnish research in this area concentrates primarily on methods of automatic

identification of agents and their application in the monitoring of the above installations.

A third central area is the improvement of the reliability of the methods published in the Finnish reports, the testing of these methods with simulation and unidentified samples as well as comparisons of results obtained by various laboratories.

If I have elaborated at considerable length the technical aspects of the Finnish verification project, it is because my Government considers it important that all efforts be devoted to the crucial issue of banning chemical weapons. In our mind, all approaches should be explored. It is a fact that much interest has been vested on all sides in coming to grips with banning the development, production and stockpiling of chemical weapons.

CD/PV.195

p.48

Canada/McPhail

17.2.83

CW

The Deputy Prime Minister during that address on 1 February said: "The time is right for progress this year toward a treaty on the prohibition of the development, production and stockpiling of chemical weapons and the destruction of existing stocks. We intend to participate vigorously, along with others, in seeking to realize the maximum from the present opportunity". With that reference I need not take the time of this Committee to reiterate that the Government of Canada attaches high priority to the negotiation of a chemical weapons convention. Nor do I intend to discuss today the various negotiating elements of this issue -- these are well known to the Committee. Rather, I want very briefly simply to say why Canada considers that this session has the potential to lay the groundwork for the conclusion of a chemical weapons convention, building upon the progress achieved in the chemical weapons Working Group over the past three years.

We must first look back to the words of USSR Foreign Minister Gromyko at the second special session of the General Assembly on disarmament last June when he suggested that Soviet proposals about to be placed before the special session held the potential of a breakthrough on the issue, particularly in the area of verification. Those proposals were submitted to the special session and subsequently were tabled here as document CD/294. At the time of the special session, the Prime Minister of Canada stated that he was encouraged by the positive approach to verification procedures contained in the remarks of the Soviet Foreign Minister. I think we all look forward to discussing the Soviet proposals in detail, and to receiving amplification of them this year in the Committee.

Of equal significance was the intention, indicated by Vice-President Bush in his address to us on 4 February, of the United States Government to submit a detailed paper on the same issue early in this session. That document has now been tabled as CD/343. It is both wide-ranging and forthcoming, and it constitutes a valuable addition to our search for a convention. Not since the joint USA/USSR Report of 1980 tabled as document CD/112, I believe, have we had the opportunity to assess and compare positions which documents CD/294 and CD/343 now afford us. Indeed the parallelism between these documents in a great many areas, ranging from objectives to destruction of stocks, is striking. Both accept, for example, the principle of systematic international on-site inspections, although there are differences on implementation. Nevertheless, it is the common recognition of the principle of and the need for such inspections which is significant. From the Canadian perspective, verification procedures based upon equity, non-discrimination, reciprocity and preservation of national sovereignty can be, and should be, acceptable to all.

....Besides, paragraph 31 of the Final Document states clearly that the forms and modalities of verification depend upon and should be determined by the purposes, scope and nature of the agreement. Moreover, should we now in the field of chemical weapons take the same dangerous approach as we were asked to do last year with regard to a comprehensive test ban? Should it be a rule from now on, first to agree on a verification system which would be acceptable to one delegation, and then, perhaps, start working on the disarmament agreement?

Experience has shown that it is not a serious approach to expect one side to accept the demands of the other side on a take-it-or-leave-it basis. Here again we should bear in mind paragraph 31 of the Final Document which provides that verification measures should be satisfactory to all parties concerned. So, our aim cannot be absolute verification or a verification system which might be perfect and not leave any doubts or risks. It is common knowledge that taking into account the complexity of the modern chemical industry, we have to live with certain risks. What is necessary, however, is a system which creates the necessary confidence and ensures that the relevant agreement is observed by all parties.

In this we share the view, expressed two years ago in the Committee on Disarmament by the Indian delegation: "Let us not pursue verification procedures which may be 'intrusive' but not necessarily effective in ensuring compliance. There is a tendency in the Working Group to assume that on-site inspection or other intrusive methods of verification necessarily ensure compliance. When we are dealing with as complex a field as chemicals, we cannot be so sure. Our debate should not concentrate merely on whether or not to have on-site inspection. Rather we should try to determine what methods of verification are (i) feasible and (ii) optimal in ensuring compliance." (CD/PV.142, p.31).

On several occasions my delegation has outlined its basic approach to verification. In the Working Group we have expressed our viewpoint about a verification system consisting of a combination of national and international procedures, including different kinds of systematic international on-site inspections and inspections by challenge.

It is the aspect of combination that we miss in the United States document. Virtually nothing is said concerning implementation and monitoring at the national level, that is, on the level of the States parties which, after all, would be responsible for carrying out the obligations of the convention and overseeing national enterprises and other bodies in order to guarantee compliance. This is common practice in international law and has been recognized by many delegations in this Committee. I would only like to refer to working papers CD/203 tabled by the Netherlands, CD/167 and CD/313 by Canada, CD/CW/CRP.35 by Australia and CD/326 by the Federal Republic of Germany. Our approach does not imply a "confrontation" of national and international verification. They should be considered two sides of the same medal. It certainly does not mean the establishment of a so-called self-verification. In calling for sound national procedures we start from a purely practical viewpoint, since a well-functioning national implementation and monitoring system is a sine qua non for international verification. Where should the consultative committee send the inspectors, if there is no point of contact at the national level which keeps track of national activities concerning the implementation of the convention? Who should keep the records to provide the consultative committee with the required information?

In this connection we would like to refer to the experience gathered by the International Atomic Energy Agency. The safeguards applied by this Agency are largely based on national systems of accounting and control.

Furthermore, I would like to mention the national experience of my country in the

chemical field. The improved Law on the Handling of Poisons adopted five years ago, for example, provides for a full inventory of all poisonous substances, which applies to all branches of the national economy and covers the whole process, beginning with the production and ending with the disposal of poisons. A system of national agencies oversees the implementation of the law. To our knowledge, similar laws exist in other countries as well.

It is the intention of my delegation to express at a later stage of our work more detailed ideas with regard to the co-operation between the national and international bodies of the verification systems.

In our view it is exactly the co-operation aspect which counts, namely, activities based on mutual trust, not an atmosphere of distrust. Moreover, suspicions should be eliminated by verification activities. But how can this be achieved when even the declarations of parties who voluntarily entered the agreement are not trusted and should be verified?

In the course of the Committee's work on a chemical weapons convention we have seen, like many other delegations, that the problems connected with banning chemical weapons are, indeed, quite complicated. One particular reason is that it is sometimes rather difficult to draw a line between what is connected with chemical weapons and what does not belong to it. That is true of chemicals forming the basis for chemical weapons, as well as of facilities producing these chemicals.

Such difficulties arise not only with regard to the scope of a chemical weapons convention but also concerning verification of compliance. These problems are further complicated by differences in the organization of the chemical industry in various countries. The production of binary chemical weapons and their introduction into military arsenals will bring about serious additional problems. This "latest achievement" in chemical weaponry would be more closely connected with the commercial chemical industry than the so-called unitary chemical weapons. This applies both to the chemicals involved and to the facilities concerned.

CD/PV.196

pp.15-16

Ad Hoc Group of Scientific
Experts/Lidgard

22.2.83

CTB

In preparing its report the Ad Hoc Group noted that significant technical developments have taken place in the past few years with regard to seismograph facilities worldwide. The many advantages of digitally recording seismograph systems are now widely recognized, and in consequence many such systems have been installed.

It is a continued concern that few high-sensitive stations have been established in the southern hemisphere. The Group considers it essential that more high-quality stations be established in that part of the world, especially in Africa and South America.

National investigations have shown that Level 1 data extraction imposes a heavy work-load when carried out manually. Promising results have been achieved using automatic procedures, which would greatly facilitate such data extractions, but it is recognized that this is a complex problem.

As in the past, the Ad Hoc Group enjoyed excellent co-operation with WMO and plans further experimental transmission over the WMO network. In order to obtain full efficiency in such a transmission this Committee, through a letter from its Chairman to the Secretary-General of WMO, had requested WMO to make the necessary arrangements for the Ad Hoc Group's transmission on a regular basis. The WMO representative informed the Ad Hoc Group that the Commission for basic systems of WMO, at its eighth session, held in Geneva from 31 January to 11 February 1983, had adopted a recommendation which will be submitted for confirmation to the WMO Congress in May

1983. The Commission was of the opinion that the Global Telecommunication System (GTS) should be used for the global exchange of seismic Level 1 data and that the implementation date should be 1 December 1983. In accordance with this positive decision, which is a most significant step forward, the Group received a proposal for a new experiment concerning the exchange and analysis of Level 1 data, using the WMO/GTS, to be held after WMO has completed the arrangements for the transmission of such data on a regular basis.

As to the exchange and use of so-called Level 2 data (i.e. of whole records), recent advances in computer and telecommunication equipment have made it possible to exchange, without much effort, many more Level 2 data than was foreseen in the two formal reports of the Ad Hoc Group which were submitted in 1978 and 1979. There is a general agreement in the Group that all authorized requests for Level 2 data should be fulfilled, but different views exist as to the amount of data expected to be exchanged.

Experimental data centres have been established in some countries, and some large-scale experiments have been conducted to test and develop procedures for data handling and analysis.

Some of these experiments are aimed at developing standardized processing routines to be used at international data centres.

Other national investigations presented to the Group have also shown that as a result of recent technical advances, the application of agreed analysis procedures to Level 2 data for the estimation of the origin time, location, magnitude and depth of seismic events at data centres is now technically possible. So far, however, no agreement in the Group has been reached on the assessment of the results of these national investigations with regard to their relevance to the envisaged global system, in particular at international data centres.

The Group decided to compile what might be called operational manuals containing detailed instructions for station operation, Level 1 data extraction and exchange, Level 2 data exchange and international data centre operation. These documents, which will be annexed to the third report, will be of great value for the testing and implementation of the global system.

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USSR/Issraelyan

22.2.83

CW

Other proposals, too, have been made for the solution of this problem, in particular, the inclusion in the convention of a provision or provisions extending the mechanism of verifications envisaged by the convention for unclear situations to cases of the use of chemical weapons. Ideas have even been put forward, although not here in the Committee on Disarmament, to the effect that the strengthening of the regime of the non-use of chemical weapons could be achieved through procedures suitable rather for the adoption of resolutions than for the elaboration of effective measures in the sphere of the limitation of the arms race and disarmament, and which would have practically no links either with the 1925 Geneva Protocol or with the future convention.

I am thinking of resolution 37/98 D of the thirty-seventh session of the United Nations General Assembly. Soviet representatives have already had occasion to state their basic attitude to this resolution which provides, contrary to the principles generally recognized in international law for the drafting and review of international agreements, that the elaboration of a mechanism for the verification of compliance with the Geneva Protocol should be carried out not by States parties to the Protocol but by all the States Members of the United Nations, including, therefore, States which are not parties to the Geneva Protocol. Moreover, it is proposed that the adoption of the mechanism for the verification of compliance with the Geneva Protocol should be

carried out, not after the reconciliation of the various viewpoints in the course of negotiations and on the basis of consensus, as is always done at disarmament talks, but through simple voting. It is clear that should we follow this resolution an unprecedented situation would be created. In short, one cannot but see that resolution 37/98 D, which was supported, by the way, by only approximately half of the States parties to the Geneva Protocol, can bring nothing but harm, and of course it will not solve the problem of strengthening the regime of the non-use of chemical weapons.

As you see, quite a number of proposals have been made on the question of the non-use of chemical weapons, but up to the present time no mutually acceptable solution has been found. It is clear that the time has come to tackle this problem seriously, the more so as, in spite of the fact that the use of chemical weapons was prohibited de jure long ago, de facto such weapons have been used, and more than once. We have no desire to turn back now to this unattractive page of history, but since we are on the subject, distinguished delegates, let us dot all the "i's".

First of all we would like to emphasize very firmly the positive significance of the 1925 Geneva Protocol, the parties to which number more than 100 States. Whatever attempts are made by some critics to find weak points in this instrument, with references to its lack of this or that provision, its brevity, etc., the main thing is that the Geneva Protocol placed an effective barrier in the way of the use of one of the most barbarous types of weapons. The Geneva Protocol, as we have already pointed out, has become an irrevocable part of international law. Given the lack of a comprehensive system of international disarmament treaties and agreements, it is even more valuable as a corner-stone for the creation of such a system.

In these conditions the Soviet Government, having carefully weighed all the circumstances connected with the question of the prohibition of the use of chemical weapons and guided by the desire to speed up the elaboration of an international convention on the prohibition and elimination of such weapons, has decided to agree with the proposal of a number of non-aligned and neutral States members of the Committee on Disarmament for the inclusion in the future convention of a provision prohibiting the use of chemical weapons. The Soviet Government considers that the procedures for the verification of compliance with the provision on the prohibition of the use of chemical weapons should envisage the use of the verification mechanism of the convention, including on-site inspection on a voluntary basis.

In what manner might this new Soviet proposal be reflected in the text of the future convention?

First of all, its preamble should forcefully emphasize the great importance of the 1925 Geneva Protocol. By prohibiting the development and production of chemical weapons and the retention of stockpiles of such weapons, the convention would in fact eliminate the whole class of chemical weapons, thus providing a serious material foundation for the Protocol.

The convention would, further, contain a provision stating that nothing in it should be interpreted as in any way limiting or diminishing the obligations assumed by any State under the Geneva Protocol. In other words, the future convention would be organically incorporated into the fabric of already existing international agreements, not destroying but, on the contrary, strengthening it. Should any State not be a party to the future convention, it would in no way be released from its obligations under the Geneva Protocol. As far as the parties to the convention are concerned, they would be bound by the obligation not to use chemical weapons under both international agreements at the same time. There is nothing wrong with that.

Of course, it would be necessary to amend the wording of the main prohibition contained in the Soviet "Basic provisions of a convention on the prohibition of the

development, production and stockpiling of chemical weapons and on their destruction". This should read as follows:

"Each State Party to the Convention undertakes never, under any circumstances, to develop, produce, otherwise acquire, stockpile, retain, transfer or use chemical weapons and undertakes to destroy or divert to permitted purposes the accumulated stocks of such weapons and to destroy or dismantle facilities which provide capacities for the production of chemical weapons."

Lastly, the section of the convention devoted to verification should envisage appropriate procedures for the verification of compliance with the provision on the prohibition of the use of chemical weapons.

CD/PV.197

pp.11-12

Czechoslovakia/Vejvoda

24.2.83

CTB

On 15 February of this year the State Secretary of Norway, Mr. Eivinn Berg, spoke of the recent technological advances in the field of seismology. He expressed the view that more work should be done in regard to the establishment of a global seismic network which can verify compliance with a nuclear test ban. He also said that the present mandate of the Working Group on a Nuclear Test Ban was far from being fulfilled. My delegation cannot share this conclusion.

Czechoslovak seismologists have been taking part in the expert negotiations in Geneva since 1958. Enormous scientific and technical progress has been achieved since that time. The last quarter of a century has witnessed significant progress in all spheres of human activity, including seismology. In spite of the progress achieved, even today we have to realize that the day of elaborating and adopting a nuclear test-ban treaty has not come yet. What is the reason for this unjustified delay? Are we supposed to believe that even today's level of scientific and technical progress does not permit the creation of a reliable network for the detection and identification of seismic events?

Let me stress that our approach to this problem is a realistic one and it is based fully on existing possibilities. Our experts, and I believe also the experts of many other countries know full well that even today's seismic network, although not an ideal one, is capable of identifying overwhelming majority of underground explosions in spite of the fact that the network's main purpose is to detect the possible danger of earthquakes, from which mankind has been suffering for centuries. In the reports of 1978 and 1979 (CCD/558 and CD/48) the experts formulated the instructions and requirements for the reliable functioning of the envisaged global system concerning the transmission of seismic data to international data centres and through them to member States, while the identification of an event, whether it was an underground explosion or not, was to be decided by the States parties to a nuclear test-ban treaty. It was also agreed that such a system should be based primarily on the exchange of Level 1 data.

It is also clear that a global network taking into account present technical possibilities would undoubtedly represent a completely satisfying solution to the problem of the detection and identification of seismic events.

The great majority of the provisions of the third report, which we hope to obtain this year, have in fact met with a consensus. This also testifies to the fact that the main obstacle to the elaboration and adoption of a nuclear test-ban treaty is the lack of political will on the part of some nuclear-weapon States. In my last statement in the plenary I already had the opportunity to express the regret of my delegation at this unfortunate development.

As far as the further activities of the seismic experts Group are concerned, we proceed from the assumption that these should be closely linked to the progress of

negotiations on all basic aspects of the future nuclear test-ban treaty. The prospects, as of today, are not very bright. In this respect my delegation will also study carefully the third report of the seismic experts Group.

A week ago we had the opportunity to hear a substantial, fundamental statement by the delegation of the Soviet Union on the problem of nuclear-weapon Tests. We fully share the views expressed in it and we draw the attention of all delegations, and especially of those of the nuclear-weapon States, to this statement.

CD/PV.197

pp.12-15

FRG/Wegener

24.2.83 CTB,CW

Mr. Chairman, the main thrust of my statement today will be in the field of chemical weapons. However, I would like to preface my remarks with a brief comment on the report of the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events (CD/348). My delegation had planned to put some questions to the new Chairman of the Group, and I regret that time pressure did not allow for the normal question and answer period to take place during our preceding plenary. Instead of the questions which my delegation had, I would now like to make some general comments. The statement by the Czechoslovak delegation which I have just heard with careful attention does not give me any reason to deviate from my prepared text. We join other delegations in deploring the premature disappearance of Dr. Ericsson and pay tribute to the excellent work he has done over so many years. Likewise, we are pleased to welcome the new Chairman, Dr. Dahlman. Dr. Dahlman is unjustly served by the fact that the report which his group has adopted is exceptionally poor in substance. Strangely enough, and in contrast with previous reports, it does not even contain the name of the new chairman. An over-all evaluation of the recent session of the Ad Hoc Group of Scientific Experts shows that a fundamental contradiction has now emerged between the affirmation by some delegations that, technically, all verification problems for a nuclear test ban are solved, and the reluctance of the same delegations to participate in the systematic extraction of data with the assistance of every technically available means. In the previous report, of 19 August 1982 (CD/318), we saw with regret that some delegations had objections against a systematic exchange of Level 2 data. The present report is even more preoccupying. It makes clear that similar objections even exist in relation to Level 1 data. I can rely on Dr. Ericsson's authority, who told us at the last session when he was present that "advances in the relevant fields of science and technology should be fully taken into account ... there can be no question but that we can share waveform data on a wide scale". Unfortunately, when making the statement, Dr. Ericsson also had to tell us that those countries which hesitated to share fully in such an activity were, in his view, closing this option partly on political grounds. This is a strange and regrettable development. Exactly those countries which persist in affirming that all the technical prerequisites for a fully verifiable nuclear test ban have been solved, and invoke the very advanced analysis of authors like Sykes and Evernden, block the fullest use of modern insights and technology to create the technical framework in which such verification modes could be further tested and elaborated. Indeed, it appears that the representatives of these countries aim at freezing the work of the Ad Hoc Group of Scientific Experts at a technical level already attained in 1976! It should, however, be stressed that the findings of the American scientists Sykes and Evernden are predicated upon the use of the most modern technology and on the existence of an operational network of modern seismic stations. In the view of my delegation, this contradiction in statements leaves a credibility gap that has yet to be filled.

My delegation hopes that the reluctance which some delegations have shown to

maintain the dynamics of the Group of Scientific Experts and to chart its further course will prove to have been a temporary phenomenon. We are looking forward to a rapid conclusion of the third report of the Ad Hoc Group, and to constructive negotiations on the elaboration of a new enlarged mandate enabling the Group to bring the fullest possible contribution of science and technology to the conclusion of an adequately verifiable comprehensive test ban at the earliest possible time.

May I now turn to the subject of chemical weapons. My delegation, with others, regrets the lengthy and largely unnecessary procedures which have prevented the working groups of the Committee from commencing their annual work. However, in the field of chemical weapons some delegations have already made important contributions to the negotiation process. In the first place, I would like to refer to document CD/343, entitled "United States detailed views on the contents of a chemical weapons ban".

The Federal Government welcomes the introduction of this document which contains the essential substance of a future chemical weapons ban. The great value of this document is that it reflects the actual state of negotiations and that it has richly absorbed suggestions from other delegations. Its comprehensive nature, but also the professed flexibility of the authors on many of its positions, will make this document an essential tool for our future joint work. It also testifies, in a welcome manner, to the determination and good faith of its authors in their quest for a rapid conclusion of a chemical weapons convention. The document places particular emphasis on the key issues of international verification.

My delegation is particularly pleased to state that the suggestions which the Federal Government submitted throughout the year of 1982, and most particularly in document CD/326, have been largely incorporated into the United States text. Some delegations, on the other hand, have already voiced initial criticisms vis-à-vis these verification proposals. They should, however, recognize the great advantage that the clear views and precise formulations on the part of the United States delegation on a crucial issue of the chemical weapons convention allow us to sharpen our focus on the key decisions negotiators will have to take. The document will undoubtedly stimulate a dialogue between the United States, the Soviet Union and other interested delegations on the key provisions of an international verification system and will hopefully facilitate a narrowing of differences.

Last year my delegation, together with others, formulated a certain number of questions designed to clarify those parts of the Soviet "Basic provisions" document which relate to international verification issues. While our patience has been somewhat taxed in waiting for a satisfactory response, we are pleased that replies to our queries are now imminent. They will certainly fertilize our further work. We continue to hope that the Soviet Union, pursuing further the promising course on which it had embarked in its Basic provisions document, will soon come to the insight that an obligatory on-site inspection clause in the case of on-challenge cases will be an indispensable feature of the future convention. As regards such on-site inspections, my Government reiterates its full preparedness to contribute to the rapid success of the chemical weapons negotiations and to make its territory available for international controls like those it already practises in connection with its unilateral renunciation of chemical weapons of 1954.

Another important proposal that is certain to have a substantial bearing on our negotiations is contained in the statement of Ambassador Issraelyan of Tuesday (22 February 1983). The suggestion that a non-use provision be incorporated into the scope of the prohibition of a future convention is of the highest interest to my delegation. A number of factual and legal arguments why the scope of the prohibition should be so defined has been adduced by the Soviet delegation. My authorities have already initiated a thorough examination of the Soviet proposal, and I hope that I will soon be in a position to provide more substantive comments on it. One of the criteria which my Govern-

ment will apply in analysing the legal complexities which the proposal entails is whether it is likely to render the future convention, including its verification provisions, more effective.

In the last months, and specifically at this session, several proposals have been formulated for the creation of chemical-weapon-free zones in Europe. These proposals come in two variants: some speak of a narrower chemical-weapon-free zone covering only a strip of territory in central Europe, while others call for a zone comprising all of Europe. Objections against the former, more limited concept may be even greater and come to mind even more readily, but in principle both concepts appear to offer similar problems. On 19 November 1982, my delegation had the opportunity to spell out some of our doubts on these concepts before the First Committee of the General Assembly. The fact that the idea of a chemical-weapon-free zone has nevertheless been reiterated with some insistence prompts me to clarify our viewpoint further.

In the first place, we should see the negligible military relevance of such zones. Chemical ammunition is easily transported and can readily be reintroduced into a free zone, if indeed it has not remained hidden there in the first place. In the meantime, the threat from chemical weapons from outside the zone would remain totally undiminished -- the more menacing the smaller the zone. The mere fact that stocks have been removed from one part of a territory does not contribute to protecting it from being fired into (by ordnance or from airplanes) with the same kind of ammunition.

Any agreement on a chemical weapons ban in a particular zone would of course require the solution of the problems of verification. In fact, in comparison to a world-wide ban on chemical weapons, an even greater number of problems would have to be solved, since it would be indispensable (and very difficult) to control access to the limited area which the zone would comprise. We all know that verification questions in the chemical weapons field are technically complex. Any negotiation on a limited territorial chemical weapons ban would require a negotiation effort which would not only duplicate but in fact undercut the serious negotiations on a world-wide ban in which we are here engaged.

My Government attaches absolute priority to the world-wide prohibition of all chemical weapons and is working actively towards the rapid conclusion of this endeavour. A universal chemical weapons convention would automatically make a chemical-weapons-free zone in Europe superfluous. Why, then, lose time with the elaboration of limited zones which would only exist to be superseded by the larger, world-wide prohibition? I cannot escape the suspicion that those who purport to promote the concept of geographically limited chemical-weapon-free zones of smaller or larger dimension are less concerned about the rapid conclusion and effective implementation of a world-wide ban on chemical weapons.

Even if, by a miracle, a chemical-weapon-free zone within Europe could be negotiated and implemented more rapidly than a world-wide prohibition, there would be negative consequences. Possibly, two verification systems with different obligations, and two contractual systems with divergent consequences would exist side by side; and again, much effort would have to be wasted to clear up the situation. These are cogent arguments for all of us at the negotiating table in Geneva to erase the concept of geographically limited chemical-weapon-free zones from our vocabulary, and to concentrate our full effort on the world-wide interdiction.

First of all I should like to say that the Soviet delegation has no objection to the progress report submitted by this Ad Hoc Group and is in favour of the Committee's

taking note of it. I should like to take this opportunity to stress once again the importance of the work being done by the Ad Hoc Group of Scientific Experts towards the establishment of a system for the international exchange of seismic data as an effective means of increasing confidence in States' compliance with their obligations under a future treaty on the complete and general prohibition of nuclear-weapon tests. The Soviet delegation considers that the two reports prepared by the Ad Hoc Group on the basis of consensus and approved by the Committee in 1978 (CCD/558) and 1979 (CD/43) respectively, constitute an adequate basis for the completion of the drafting of a third report during the 1983 summer session. We understand that both the Committee on Disarmament and the Ad Hoc Group of Scientific Experts itself are of the same opinion as regards the time for the submission of the Group's third report.

The international exchange system proposed by the Group, including a global network of seismological stations which would transmit to international centres over agreed communication channels so-called Level 1 data and also, where necessary, Level 2 data, is designed to provide States parties to the future treaty with seismological information which will substantially increase the reliability of verification that nuclear-weapon tests are not being conducted.

It is extremely important that such a system should be accessible to all States parties to the future treaty and each State party should be entitled not only to furnish data from the seismological stations located on its territory but also to receive all seismological information that may be made available through the international exchange. This is very necessary for those countries which have either a fairly undeveloped seismological network or none at all.

It was also agreed in the Ad Hoc Group of Scientific Experts that for purposes of national verification a system involving Level 1 parameters would be entirely adequate. The system of such parameters worked out by the experts is entirely suitable for purposes of identification at national centres and permits the determination of the co-ordinates of the epicentres and the origin time, depth and magnitude of the overwhelming majority of seismic events. Only in certain exceptional circumstances, when the use of Level 1 parameters fails to clear up doubts about the nature of an event, is it contemplated drawing upon Level 2 data for more thorough analysis, at the request of one of the parties to the treaty. Thus we recognize the advisability and desirability of using Level 2 data also. However in practice, as the experience of many years of seismological research has shown, the need for such data will arise only in special cases in connection with weak events.

Certain experts have of late been putting forward proposals for an increased role for Level 2 data, to the point of suggesting that such data are needed virtually in respect of every event. But this would mean the transmission to the international centres of a huge quantity of numerical data, far exceeding the extent of the information actually required, and the subsequent processing thereof. We believe that from the technical point of view there is no need to go beyond the principle already agreed on for the establishment of the international data exchange system, for there already exists in the world today a sufficient technical basis for the implementation of that system, which relies on the means available to many States for the receipt and exchange of seismic information. The recommendations of the Ad Hoc Group of Scientific Experts which are in line with these possibilities offer a firm basis for the establishment of the actual seismic data exchange system. This is very important for those States which are ready here and now to conclude a treaty on the complete and general prohibition of nuclear-weapon tests.

As regards the detailed measures for the establishment and operation of the international seismic data exchange system, such practical matters should be arranged by a committee of experts to be set up by the States parties to the future treaty, as was

proposed by the participants in the tripartite negotiations in their report to the Committee on Disarmament of 1980 (document CD/130), and as is suggested now also in the Soviet draft "Basic provisions of a treaty on the complete and general prohibition of nuclear-weapon tests", which were put before the United Nations General Assembly for consideration at its thirty-seventh session and submitted by us to the Committee on Disarmament on 17 February 1983. The committee of experts should make use of all the recommendations contained in the reports of the Ad Hoc Group of Scientific Experts and it should promote co-operation between the States parties towards increasing the efficiency of the seismic data exchange, including the further improvement of the system during the process of implementation of the future treaty.

The Soviet Union is consistently in favour of the introduction of effective measures of verification consonant with the aims and scope of the prohibition of any agreement in the sphere of arms limitation and disarmament. As has been authoritatively stated a number of times, the Soviet Union is no less interested in verification than other States and will not subscribe to any disarmament agreements which would not give adequate assurance that they are being complied with by all States parties without exception. We are convinced that the Ad Hoc Group of Scientific Experts has already provided a sound technical basis for its subsequent implementation by the committee of experts to be set up by the parties to the future treaty.

As was observed at the Committee's last session by Dr. Ericsson, the former Chairman of the Ad Hoc Group, who contributed so much to its successful activity for six years, the rate of advance of the Group's work has of late noticeably slowed down. The Group worked most successfully during the period when active negotiations on a treaty were under way.

In recent years, when one State has taken the problem of the prohibition of nuclear-weapon tests out of the category of first-priority matters in which it was placed by the United Nations, and put it among the long-term or, to be more precise, second-category tasks, the work of the Ad Hoc Group of Scientific Experts has suffered more and more from the consequences of this political decision by that State. It is only natural that the work of the Ad Hoc Group should take place not in a vacuum but in the context of the actual political situation. In this connection it is inevitable that some alarm should be caused by the desire of certain countries to seek to improve the seismic data exchange system essentially through a rejection and revision of the principles already agreed on. Upon the specious pretext of taking account of the latest technology, some are attempting to introduce a fundamental change in the system that was agreed on by all and unanimously adopted by the experts. But the process of the technological improvement of the system can go on for ever. And no one is justified in saying that that is why the nuclear-weapon States depositaries of the Moscow Treaty of 1963 have for 20 years failed to fulfil the obligation they assume to seek "to achieve the discontinuance of all test explosions of nuclear weapons for all time".

In this connection, my delegation has noted with satisfaction the development in the position of the Soviet Union, as expressed in the statement of Ambassador Issraelyan of 22 February last, in which he agreed expressly to the inclusion in the future convention of a prohibition on the use of chemical weapons. We appreciate this decision as a contribution to ensuring that the scope of the convention is complete and that its provisions complement those of the Geneva Protocol of 1925; it thus at the same time shows a willingness to negotiate which my country hopes will be reflected in important achievements during the Committee's present session.

My delegation likewise considers the submission of document CD/343, entitled "United States detailed views on the contents of a chemical weapons ban", a valuable contribution by the United States delegation, which has been supplemented by an interesting preliminary exercise in the clarification of positions. This document has been transmitted to the competent authorities of my country for consideration and study, and for that reason I shall make no comment on its contents, but the very fact that delegations have set forth their basic positions in writing undoubtedly represents a step forward in the process of negotiation.

Certainly, a key issue in the negotiations will be the question of a verification system which will adequately ensure compliance with the provisions of the future convention.

In that connection, we believe that the essential element on which agreement should rest consists in a real commitment and in the political will on the part of the States parties never in any circumstances to use or to hold chemical weapons. On such a basis, verification should be simply a mutual reassurance for States and not a mechanism of such complexity that by its very nature it will entail endless negotiations.

In my delegation's view, the verification system should be such as to meet the needs of the international community and it should make use of simple, accepted and recognized methods that will make it possible to obtain speedy and conclusive results. It should in addition use suitable procedures, such as random visits to the facilities of the various countries, which will serve to reinforce mutual confidence and ensure compliance with the convention. It should also serve for the investigation of any complaints of non-compliance that may be made and permit the settlement of disputes through some effective machinery in which all States parties have equal rights.

The future convention should provide for the possibility of investigating reports of activities prohibited under the Geneva Protocol of 1925, activities which, it is to be hoped, will also be covered by the convention. This would make it unnecessary to resort to abnormal procedures such as those envisaged in resolution 37/98 D adopted by the General Assembly at its recent session, a resolution about which the Argentine delegation has serious reservations of a juridical nature.

CD/PV.199 p.14 Bulgaria/Tellalov 1.3.83 CTB

Another example: the verification system elaborated in the "Basic provisions", which is based on a realistic combination of national and international verification measures, provides for the accessibility of a State party to the relevant technical information gathered by the national means of another State party.

The content of the verification provisions proposed by the Soviet Union, as well as their mechanism of application, is yet another illustration of the straightforwardness and realism of the document.

My delegation welcomes the readiness of the Soviet delegation to comment on the "Basic provisions" in detail. There is no doubt that the Soviet proposal, together with other proposals and ideas aimed at drafting a treaty on a CTB offer a sound basis for the proceedings of an Ad Hoc Working Group with a revised mandate.

CD/PV.199 p.16 China/Li 1.3.83 CW

Thirdly, on the question of verification: this is a matter of general concern. My delegation has always maintained that the future convention should include strict and effective provisions on verification in order to make up for the lack of verification

provisions in the 1925 Protocol. Verification measures should be based mainly on international measures, including the necessary on-site inspections, such as the on-site inspections of destructions of chemical weapons, stocks and production facilities. Prompt on-site inspection should be carried out in any case of a complaint of the use of chemical weapons. Our study of the papers submitted by other States on the question of verification is under way, and we shall submit our paper on the subject at an appropriate time in the future.

At present, despite the acceptance in principle by all parties of the concept of international verification and on-site inspection, there still exists a wide divergence of views on specific issues. We hope that this session of the Committee will see some progress in seeking a convergence of opinion.

CD/PV.200

pp.13-14

Spain/Laiglesia

3.3.83

CW

The importance of this report which suggests an agenda for the meeting of experts to be held this spring, has led us to study it very carefully and to comment on certain of the points contained in it. It is our view that the principal obstacles to the completion of a draft treaty on the prohibition of the manufacture and stockpiling of chemical weapons are technical in nature, for we believe that the political will exists and that on many aspects — for example that of on-site verification — considerable progress has been made. We therefore feel that the most useful thing to do at this stage of the negotiations is to make a more thorough study of valid methods which would enable us to determine with absolute precision which substances should be prohibited and consequently destroyed. It is likewise important to determine the most effective methods of establishing the degree of toxicity of certain substances capable of being used for the manufacture of chemical weapons. It is also important to clarify ideas about the instruments that could be used to verify the destruction processes and, where necessary, to check possible violations of the treaty as regards the non-production of chemical weapons or their precursors. The latter also give rise to technical problems which should be investigated and we ought, so far as possible, to differentiate between those which can be used for various purposes — among them chemical weapons, including binary weapons — and those which have virtually no other purpose but the production of chemical weapons. In this connection we must not overlook the problems connected with the so-called additives, which help to improve the quality of this type of weapon. Lastly, the degree of toxicity by aerosol inhalation and the methods for the protection of the environment during the carrying out of the procedures for the destruction of stocks of component substances of chemical weapons, are also important.

The working paper which I have the honour to submit to the Committee for its consideration is based on the content of the report of the Chairman of the Working Group on Chemical Weapons on his consultations with experts on technical issues, which was circulated as document CD/CW/WP.41. Our working paper consists of four parts. The first part refers to aspects to be taken into account with respect to the lists of agents in the category of "other harmful chemicals" and the list of important precursors. In this connection we stress the complexity of the chemical industry as well as the work of certain national bodies which study the harmfulness of chemical substances. We also suggest the possibility of establishing a system of "open lists" the contents of which could be changed in accordance with developments in the technological capabilities of the States signatories of the treaty.

The second part is concerned with the formulation of recommendations concerning methods for the determination of toxicity by aerosol inhalation. In addition to mentioning a number of systems that are used in various countries, this section refers to certain

aspects which should be studied separately in order to determine the toxic effects produced, using, as is suggested, a standardized method for the purposes of the treaty, while recognizing various other methods that might be used by States, which would be contrasted with the former.

The third part deals with the technical evaluation of the use of specialized information-gathering systems (black boxes) as components of a chemical weapons verification system. It suggests a new definition of the black boxes, one which, we believe, is stricter than that appearing in paragraph 13 of document CD/CW/WP.41.

Lastly, the fourth part of the document deals with methods for the protection of the environment during the destruction of chemical weapons, and it refers to various matters connected with air quality and the parameters of pollutants.

We hope that this document will contribute to the success of the work being done by the Ad Hoc Working Group on Chemical Weapons and that the Committee on Disarmament will be able to put before the United Nations General Assembly as soon as possible the text of a draft treaty on the prohibition of the development, production and stockpiling of chemical weapons which the international community will be able to adopt. More than half a century has passed since the adoption of the Protocol which prohibited the use of such weapons in war. Nevertheless, and despite the fact that for a fairly lengthy period such weapons appeared to have been abandoned by the major of a number of powers. It is therefore urgently necessary to adopt the proposed treaty in order to remove the risk of the violation of the provisions of the 1925 Protocol. Although most States are signatories of the Protocol, there is no doubt that the existence of chemical weapons always constitutes a great danger, for the possibility cannot be excluded that they may be used through miscalculation or as the result of an unforeseeable accident. If this is one of the risks in the sphere of nuclear weapons, there is no reason why the same thing could not happen as regards chemical weapons, and if, as far as nuclear weapons are concerned, an escalation is probably inevitable, the same is also true if someone uses toxic gases in a conflict. It is therefore important that no one should be in possession of them.

CD/PV.200

pp.26-27

GDR/Herder

3.3.83

CTB

Statements delivered in the Committee during the past month have shown that with regard to CTB verification, two different approaches still exist in this Committee.

Firstly, the overwhelming majority of members of the Committee advocate a sound and balanced verification system, for which all the necessary technical prerequisites exist. The practical arrangements for setting up such a verification system should be elaborated in the course of and as part and parcel of actual treaty negotiations.

Secondly, some other countries are asking us to concentrate our efforts on a priority discussion of verification questions, while CTB negotiations themselves should be a "long-term goal". Sometimes it is proposed to put certain key elements of a verification system into place, even if there is no chance of having a treaty proper in the foreseeable future.

My delegation adheres to the first approach. We would like to see this Committee take up its negotiating role with regard to a CTBT as soon as possible. Therefore, we advocate that the relevant working group should be provided with a new, extended mandate. In document CD/259 my delegation made a specific proposal in this regard.

Last year, when we joined the consensus on the limited mandate for the nuclear test-ban Working Group, it was our aim to explore all possibilities which could promote the commencement of real negotiations.

As a matter of fact, the Working Group held rather interesting discussions on

questions connected with the verification of compliance with a comprehensive test ban. Unfortunately, not all sides contributed actively to the work of this Group. In particular, those delegations which had originally proposed its limited mandate took a reluctant attitude and refrained from submitting constructive proposals. Now it is high time for the group to deal with all aspects of a comprehensive test ban, since verification questions can only be solved if it is known to what scope of prohibition the verification system should apply. Thus, it cannot be the aim to discuss verification per se, but to elaborate a treaty containing, of course, pertinent verification provisions. This assessment was corroborated by the work of the Group last year. Even the proponents of the limited mandate seemed to recognize the senselessness of a mere verification debate when they stated in the report of the Group that "in their opinion, a determination of adequacy involved a whole complex of issues and was a matter for political decision by each Government in the light of its national requirements and the circumstances prevailing at the time the decision was called for".

In the view of my delegation, this statement leads to two conclusions:

Firstly, the countries which, on the one hand, asked for a verification debate, opposed, on the other hand, a substantive discussion and were not ready to provide ideas on an "adequate" verification system.

Secondly, referring to the "time the decision was called for", they made clear that as long as a CTB is for them only a long-term goal they might use verification discussions to fill the credibility gap created by their negative attitude towards a CTB.

The conclusion for the 1983 session of the Committee on Disarmament can only be to proceed to actual negotiations, to give the Working Group an appropriate mandate and to waste no more time on abstract discussions. This view was clearly expressed by the overwhelming majority of United Nations Member States in resolution 37/72. Moreover, resolution 37/78 G on the "Report of the Committee on Disarmament" contains an explicit appeal to the Committee to provide all working groups with negotiating mandates. Now, the Committee should act accordingly. This view has been shared in the Committee by the socialist countries as well as by many other members, including Mexico, India, Algeria, Burma, Sri Lanka and Pakistan.

Some words about the Ad Hoc Group of Scientific Experts. My delegation highly appreciates the work of this Group which should promote the establishment of an international system for the exchange of seismic data to contribute to verification of a CTBT. Having this useful role of the Group in mind, and taking into account the propitious circumstances for a CTB prevailing at that time, my country sent an expert to the Group in 1977 and the years thereafter. Obviously, this situation has changed. After one major nuclear-weapon State had declared a CTB a "long-term goal", a tendency became apparent in the Group of Scientific Experts endlessly to prolong the work of the Group by bringing in ever newer technical issues. So one might ask if here again technical questions are not being used to cover the lack of political will to achieve an agreement.

In our view, the two reports tabled by the Group in recent years (CCD/558 and CD/43) contain sufficiently clear ideas on the establishment of an international system for the exchange of seismic data. We hope that the forthcoming third report will provide further concretization in this regard.

So, there is enough material for setting up the international data exchange system within the framework of a treaty on the complete and general prohibition of nuclear-weapon tests, and I underline "a treaty". The Group of Scientific Experts should contribute to such a treaty. It does not work in an "ivory tower", neither should its work be regarded as an exercise in "art for art's sake". It is the purpose that counts. Consequently, we have grave doubts as to the seriousness of an approach asking us to proceed indefinitely with the work of the Group while no treaty negotiations are taking place.

How is the perpetual and emphatic preoccupation with verification, which that country's allies bring up at every moment as the essential and universal criteria for every disarmament measure, compatible with this total absence of any possibility of verification of an obligation assume?

It is clear that we are not talking about a simple harmless passage of nuclear weapons, the mere routine transport of them -- although even in this connection there would be much to say -- but of weapons installed on ships that are going on a combat mission, which in fact engaged in combat and which have continued to remain stationed in the region.

The conclusion to be drawn from what I have related is, then, of overwhelming importance. What is the point of many countries in all parts of the world making efforts to establish nuclear-weapon-free zones if the nuclear-weapon countries, those which ought in the first place firmly to undertake to respect such zones absolutely -- for if they did not, the zones would make no sense -- if those countries in reality maintain, immune from any possibility of verification, the utmost liberty to introduce nuclear weapons into the zone and carefully to hide the fact, involving reasons of national security? What degree of peace, what measure of security will the countries of the region have achieved by assuming, in order to establish the zone, a series of obligations which themselves are subject to maximum verification? The safeguards agreements have to be signed by the non-nuclear-weapon States, but as always, the nuclear-weapon States take good care not to do so. This is the same old story once again: for the nuclear-weapon powers, all rights and no obligations; for the non-nuclear-weapon countries, all obligations and no rights, and all this, for the latter, with the net result of remaining in exactly the same situation as before the establishment of the denuclearized zone.

Total and unarguable respect for denuclearized zones is the essence of the meaning of such zones. Paragraph 33 of the Final Document says so quite clearly:

"The establishment of nuclear-weapon-free zones on the basis of agreements or arrangements freely arrived at among the States of the zone concerned and the full compliance with those agreements or arrangements, thus ensuring that the zones are genuinely free from nuclear weapons, and respect for such zones by nuclear-weapon States constitute an important disarmament measure".

The same ideas are reflected in paragraphs 60-63 of the Final Document, and especially in paragraph 62.

Significant progress has been made in the last year with regard to the question of compliance and verification. However, further development is necessary. For my own delegation it is clear that international on-site inspection is necessary in order to monitor the destruction of chemical weapons and of facilities for their production. The questions of levels of verification and methods to be used require further consideration. My delegation attaches great importance to this question. I would like to underline that countries like Sweden, which do not have any chemical weapons, but are situated in regions where such weapons exist, have a particular interest in ensuring that those weapons and their production facilities have actually been destroyed. We must, like any other country, safeguard our own security.

Likewise, international means have to be found to monitor the non-production of supertoxic lethal chemicals and key precursors. This might be best ensured through

routine monitoring on the basis of agreed on-site visits according to a random selection system. In this particular case it would thereby be possible to avoid a politically cumbersome system based on verification by challenge.

On the other hand, a system of verification by challenge would be necessary in the future, when the destruction period has expired. Situations can then be foreseen in which consultations, either bilaterally or in the consultative committee, will not clarify the issues. In such cases the parties will have to resort to on-site inspection. It is particularly important to note that once a question of a possible violation of the convention has been brought before the consultative committee, it is no longer the concern merely of the parties directly involved but of all parties to the convention. This fact should encourage a challenged party to admit on-site inspection rather than to refuse it. We cannot accept as an argument for a refusal the contention that allegations of a violation of the convention were made primarily or for that matter solely in order to embarrass the challenged party. That party would rather have an excellent opportunity to expose such inadmissible aims simply by allowing inspection. Turning down the request would, on the other hand, be perceived as a tacit admission of a violation. Likewise, the excuse that the challenging party would get a chance to explore conditions unrelated to the convention would not hold water either. If there is willingness, on-site inspection can no doubt be arranged in ways to preclude disclosure of unrelated sensitive knowledge to the challenging party.

CD/PV.202

pp.15-18

UK/Hurd

10.3.83

CW

The specific proposals made by Vice-President Bush and developed by the United States delegation in its working paper, document CD/343, seem to us sensible. The readiness of the United States delegation to explain its proposals in detail has been of great help to other delegations. The acceptance by the Soviet Union of the principle of international, on-site inspection in the verification regime of a chemical weapons convention was also an important step forward. We hope that the Soviet delegation can soon elaborate on its proposals and enter into detailed negotiations.

We were also interested to learn that the Soviet Union is now prepared to include the use of chemical weapons in the scope of a convention. We need to discuss how a convention which covered use would relate to the Geneva Protocol of 1925. A convention would have to provide adequate means for investigating any allegations that chemical weapons were being used. If evidence were found to that effect, it would have to be regarded as evidence of a breach of the convention.

Now some have argued, I know, in this Committee and elsewhere, that the problems of chemical weapons are so complex that we shall never agree. I believe that we need to step back from our detailed discussions to analyse what is really important in this field. The most important and immediate task is to rid the world of the existing arsenals of chemical weapons. We might begin with substances in the supertoxic category, of which by far the most important are the so-called nerve agents. No one can contemplate their use without revulsion. No commercial use is made of these substances. This should make it easier to agree on a convention which effectively proscribes them and which incorporates means of verification to give confidence to other parties.

While concentrating attention on the nerve agents, we should recognize that there are many other less toxic but nevertheless lethal substances which have been, or could be used as chemical weapons, but which also have extensive civil applications. For example, we know that hydrogen cyanide and phosgene are widely used in the chemical industry as synthetic intermediates. We believe that a less stringent regime of verification would be acceptable for such substances than that which could be achieved for the

nerve agents. We cannot and should not want to police in detail the civil chemical industries of the world, when good progress can be made by focusing on the products of a very narrow and particular dangerous category.

My Government believes that the verification regime for the convention should combine routine international on-site inspections with the possibility of fact-finding procedures to investigate any doubt which may arise about compliance with the convention. Agreement must be reached on a procedure for handling complaints. Without such a procedure, confidence would be weak, because there would be no established machinery for resolving questions on which doubt remains. We believe that the need for its invocation could be lessened, though not eliminated, by the system of routine inspections which we have in mind. Such inspections would carry no implication that the convention was being violated by the country inspected. We have a model for a world-wide system of international inspections in the safeguards system of the International Atomic Energy Agency. Many features of this system might not suit chemical weapons, but I believe that there are valuable lessons to be learned from the Agency's long and respected experience.

Routine international on-site inspection would be required for four activities set out in the provisions envisaged for a chemical weapons convention. These are:

First, destruction of stockpiles;

Secondly, destruction of production facilities;

Thirdly, production of supertoxic agents for permitted activities; and

Fourthly, monitoring to make sure that chemical weapons are not being produced after the destruction of existing stockpiles.

We are encouraged that agreement in principle already exists on the need for the first and third categories, i.e. destruction of stockpiles and monitoring of permitted production. But we are puzzled at the seeming reluctance of some States to contemplate international inspection to verify the second activity, namely, the destruction of production facilities. It is clear that once stockpiles have been destroyed, parties to the convention must be confident that the means to build them up again have also been removed. This is particularly true for the supertoxic nerve agents. As in the case of destruction of actual stocks, Governments should have nothing to fear from letting the world see that they are destroying permanently their production facilities in fulfilment of their obligations under a convention; indeed, they should be happy to do so.

I should like to recall that in 1979 the United Kingdom invited representatives of Member States to visit the pilot nerve agent production facility at Nancecuke in Cornwall which was then being dismantled. This was not, of course, intended as a detailed model for the procedure for inspection of destruction of production facilities, which will need to be worked out here in this Committee. It was designed rather as a confidence-building measure. We showed that we were willing to accept visitors at such a facility. I hope that there will soon be agreement in principle on this aspect of verification.

The fourth type of on-site inspection which I mentioned is particularly important. This is designed to verify that States are not starting to produce chemical weapons again once their stockpiles have been destroyed. As a contribution to the consideration of this subject, my delegation has circulated a working paper entitled, "Verification of non-production of chemical weapons", which I introduce today. This is the latest in a series of initiatives which successive British Governments have taken in seeking a ban on chemical weapons. We gratefully acknowledge the important contributions in this field already made by other delegations, particularly that of the Federal Republic of Germany. The proposals we make have as their objective the development of a system of non-discriminatory routine inspections, to provide confidence that those substances which pose the greatest threat are not being produced in violation of the convention.

Although this type of inspection would, in our judgement, have to continue indefinitely, we aim to show that the regime required for this purpose would not be anything like as onerous to the chemical industry as has sometimes been suggested. We know that that has been a cause of comment and concern in some countries. We are examining the problems that might arise with the help of the British chemical industry and hope to be able to report to the Committee in due course on the results of these discussions.

We look forward to hearing detailed comments from other delegations on our working paper, and, indeed, on all the other substantive contributions that have already been made. Because we really believe that an opportunity now exists for serious, detailed negotiation, we have tabled this paper. The commitment of other governments to these negotiations will be judged by their disposition to grapple with difficult but necessary detail.

I have spoken earlier of the need for a practical and realistic approach. One of the important tasks of this Committee, if I may turn to it briefly, is the study of verification of and compliance with a nuclear test ban. Verification is of course a crucial element in any arms control agreement. The question of nuclear test ban verification has been debated now for 25 years. It is not, therefore, surprising that the first session of the Working Group here should have exposed a wide difference in views among delegations. There is broad agreement on the capabilities of a possible world-wide system of stations for the detection of seismic events. But there has been some confusion between the limits of detection and the limits of identification, which are rather different. There is, moreover, less agreement on the relationship between the magnitude of a seismic event and the size of a nuclear explosion.

Those who argue that a world-wide network of seismic stations would be enough to monitor a nuclear test ban appear to base their belief on the assumption that nuclear test explosions would always take place in hard rock. This is not necessarily the case; and we need to consider the limits of detection and identification for explosions in other conditions and also the possibilities of conducting explosions so as to minimize the risk of detection. Our own calculations suggest that it would be possible to conduct tests with yields of some tens of kilotons in such a manner as to avoid detection. And obviously explosions of this magnitude cannot be disregarded.

We note that some governments continue to claim exemption from a test ban for nuclear explosions for peaceful purposes. These claims create further difficulties, because they would oblige us to find a way of distinguishing in practice between nuclear-weapon tests and explosions for peaceful purposes, and of ensuring that the latter do not bring military advantages to the country which performs them. We came to the conclusion some years ago, after careful study, that there was in fact no practical way of making such a distinction. My Government would be prepared to renounce permanently the right to conduct nuclear explosions for peaceful purposes as part of an agreement on a comprehensive test ban on all nuclear explosions in all environments. In our view, those who seek an exemption for peaceful nuclear explosions, which Britain does not seek, should tell us in detail what practical system of verification they propose, to give us confidence that the nuclear explosions they might carry out were exclusively peaceful and brought them no military advantage of any kind.

Beside the prohibitions contemplated, special attention should be given to the obligations which are an integral part of the scope of the future instrument. Such commitments would require those who now possess chemical weapons in their arsenals to destroy their stocks and their facilities for the production of chemical weapons. Verifi-

cation procedures should ensure that destruction is carried out in accordance with the obligations entered into. My delegation considers it important to bear in mind that verification does not constitute an end in itself, but rather a means to ascertain that both the prohibitions and the obligations are respected by each of the parties to the convention. International procedures, including on-site inspection, should aim at the minimum degree of intrusiveness necessary to satisfy all parties that the provisions of the convention are being adequately observed. Special care must be taken to devise a set of procedures that allows ample opportunity for consultation and co-operation between parties to clear any doubts about the implementation of the convention, before the mechanism for international verification is set in motion. In carrying out agreed verification procedures, the appropriate international body to be instituted by the convention must take into account the preservation of the sovereign rights of States parties, in order to avoid the utilization of allegations as a tool for the exacerbation of tensions or for increasing confrontation between States. National institutions and internal legislation should function in co-operation with the international body and in accordance with the provisions of the convention.

Provisions dealing with the procedures of verification should aim, in our view, at establishing a multilateral, non-discriminatory regime in which all parties have equal rights and obligations. Nothing can prevent any State from utilizing its technological advancement to gain private knowledge about facts and events taking place in another State, provided that the use of such methods does not violate existing principles and practices of international law. The convention should not, however, become a means of condoning or legitimizing such practices, nor should parties be required to give their consent in advance for the use of so-called "national technical means", the nature and scope of which is necessarily covert. Whenever information obtained by a party is introduced to substantiate claims of a possible violation, all parties should have equal access to the available data through the international body charged with the verification of the convention. By the same token, the composition of the international body should not be based upon any form of discrimination, by granting to some parties special rights and responsibilities which are denied to others. Nor should the convention refer the solution of such claims to any existing international organ whose rules permit a few privileged parties effectively to block action. Under the Charter of the United Nations, all Member States are already entitled to bring to the attention of the Security Council any situation which might endanger international peace and security. Action by the Security Council should not be confused with or become a substitute for action by the mechanism provided for in the convention.

CD/PV.202

pp.27-28

USSR/Issraelyan

10.3.83

CW

As we understand it, this is the essence of the German Democratic Republic proposal aimed at a certain equalization of the positions of the future parties to the convention through the introduction of a special, very strict regime for the prohibition of binary weapons. As we see it, such a proposal does not create any significant difficulties for future parties to the convention. It assumes, of course, that if by the time of the conclusion of the convention, one or another State has created specialized facilities, belonging to military agencies, for the production of the components of binary or multi-component weapons, or concludes contracts for the production of such components with commercial firms, then, after the convention has entered into force it should, as a matter of priority, declare the location of these facilities, and their capacity and then eliminate these facilities. Naturally, this proposal also means that we should already now be thinking about and envisaging for the convention a provision determining how the

elimination of such facilities should be carried out, particularly those belonging to commercial firms — whether they should necessarily be physically eliminated "down to the foundation", as is proposed by the United States delegation, or whether their dismantling or reorientation for commercial production could be allowed.

In the light of the proposal of the German Democratic Republic, the appeal of the United Nations General Assembly contained in resolution 37/98 A to refrain from the production and deployment of binary and other new types of chemical weapons is particularly relevant.

Of course, the proposal of the German Democratic Republic does not solve the entire problem. There still exists the possibility of circumventing the convention through the covert production of the most dangerous types of prohibited chemicals for the manufacture of chemical weapons at commercial enterprises, and not only to create stockpiles of binary weapons but also to increase the stocks of traditional chemical weapons. In order also to eliminate this possibility of upsetting the balance, we would like to propose another solution. We suggest that the parties to the convention should not only close and then eliminate the facilities specially designed to produce chemicals for the manufacture of chemical weapons, but in addition should refrain from the production, at their commercial enterprises also, of products the molecules of which contain the linking of the methyl group with the phosphorus atom. We believe that this proposal would eliminate the material basis for the covert production of chemical weapons on the basis of organophosphorus compounds. As is known, these compounds serve as the basis for obtaining the most dangerous supertoxic lethal chemical nerve agents such as, for example, GB, GD, GF, VX, both in industrial conditions and in binary systems. Since they are not widely used in the commercial chemical industry, the economic damage resulting from the cessation of their production would not be significant.

No less important is the fact that our proposal would facilitate verification of the non-production of prohibited chemicals, especially for binary weapons, at commercial enterprises. In particular, it would eliminate the need "to make an inventory" of the entire organophosphorus industry and to identify those enterprises capable of producing chemical weapons. Detection of the fact of the production of organophosphorus compounds containing the methylphosphorus link in the commercial industry would constitute proof of the violation of the relevant provision of the convention.

The question of the undiminished security of all sides has other aspects. The military capability of States possessing chemical weapons of course comprises not only chemical weapons but also other types of weapons. It is improbable that even two States could possess completely identical components of their capabilities, including also the chemical components, from the point of view of their qualitative and quantitative parameters. Finally, it is difficult to imagine that the States which will have to eliminate stockpiles of chemical weapons would elaborate, if there is no previously agreed order, even approximately similar plans for the destruction or reorientation of these stockpiles according to such indicators as, for example, uniformity, dates, rates of destruction of various categories of chemicals, etc. And that being so, the question arises what to do in order not to diminish the security of States but on the other hand to give them confidence that the convention is effective and that they should not postpone the destruction of stockpiles to the last moment.

Our anxiety is all the most justified as the good pace of work which characterized this Working Group in the past has thus been stopped and the momentum which it gained at the end of the 1982 session and in January 1983 is being lost. Lacking the negoti-

ating body, we are not in a position to make use of a number of documents which constitute a real, good basis for the consolidation of the results already achieved, as well as for reaching out to new ones. Among these documents, mention should be made of the "Basic provisions of a convention" (CD/294) presented last year by the Soviet Union. The reports on the activities of the Working Group (CD/334 and CD/342) and the views of the Chairman of the Working Group on its 1982 session (CD/333), constitutes a collective effort of all delegations. This year, detailed views on the contents of a chemical weapons ban were presented by the delegation of the United States (CD/343). The USSR delegation announced in the statement by the distinguished Ambassador Issraelyan on 22 February its agreement to the inclusion in the future convention of a provision prohibiting the use of chemical weapons. Most recently, the USSR has proposed the giving up of the production of organophosphorus compounds containing the C-P bond with the methyl group, while the delegation of the German Democratic Republic has submitted specific proposals on banning binary weapons. The delegation of the United Kingdom, for its part, has proposed detailed procedures concerning the "verification of non-production of chemical weapons". Many other delegations, through their interventions in plenary, have also contributed to the common effort in this respect.

In other words, we are of the opinion that, provided the possibilities for negotiations exist, further, real progress can be achieved in quite a number of important issues. This relates, to a high degree, to the scope of prohibition. But it may also facilitate the initiation of a debate on other problems, on which we have not so far been able to achieve a convergence of views, that is, on verification procedures. As is well known, there exists a general agreement that on-site inspections will constitute, under determined and agreed situations, a permanent feature of the international verification system. My delegation would like to emphasize, however, in this connection, that if some delegations continue to insist on discussing the verification procedures only, as if other questions were already solved, we shall not be able, for a long time yet, to elaborate the draft convention. In other words, in the negotiations we are speaking about, there is not only one and unique problem -- international verification procedures -- which should receive serious treatment. There are also other proposals concerning verification procedures which should be treated equally seriously. I am sure that only with this approach can more propitious conditions be created for going speedily ahead.

Secondly, my delegation has always been of the view, and I am ready to repeat it again, that it is high time to start the drafting process. Otherwise, we shall become involved again in a general discussion around any given problem. But for the time being, as I said earlier, our most important task is to re-establish and set to work the Working Group on Chemical Weapons, to ensure the maximum number of its meetings and, if need be, to organize contact groups with the assistance of interpreters.

While speaking about the favourable climate for the activities of the Working Group I cannot help taking up the question of the Chairman's consultations with delegations on technical issues which were held for three weeks last January and February.

The delegations of socialist countries, like many others, actively participated in consultations, according to the agreed schedule, on:

The precursors of the toxic chemicals;

Verification of the destruction of existing stocks of chemical weapons, and

Verification of the destruction of facilities producing chemical weapons (other technical issues).

The work was carried out in a constructive spirit and quite good results were at hand. However, the motives advanced by some delegations, with no direct relevance to the consultations, went beyond the substance of the discussed problems and even beyond the discussion on the summary of the results of the consultations on verification. This fact was noted with particularly deep regret by my delegation, which headed these

consultations. Let me state that the Polish delegation spared no effort, informally, to terminate successfully these consultations on technical issues. My delegation is of the opinion that in spite of the fact that the final report was not adopted, the time devoted to these consultations has not been wasted and the results of the discussions have not been lost. They could be appropriately taken advantage of in the work of the Working Group.

CD/PV.204

pp.8-10

USA/Fields

17.3.83

CW

In this regard my delegation has noted statements by many delegations which reflect both an understanding and an acceptance of the need for effective international verification of a chemical weapons ban. The United States believes that timely agreement on the elements of a verification regime is necessary in order to realize progress on elements of the over-all convention. Vice-President Bush said during his appearance before this Committee on 4 February: "The key to an effective convention -- one that could eliminate the possibility of chemical warfare for ever -- is the firm assurance of compliance through effective verification". He further pointed out what we all know -- the key outstanding issues impeding agreement on a chemical weapons ban are those pertaining to verification and compliance.

In an effort to facilitate the work of the Committee on the verification and compliance issues, I would like to focus today on some of those key issues and, specifically, to elaborate our views on several points made recently by other delegations.

Two delegations, those of the German Democratic Republic and the Soviet Union, in their respective statements on 22 February and 10 March, made several points and offered proposals relative to the potential for evasion of obligations under a chemical weapons ban. These proposals were set in the context of what was characterized as the principle of undiminished security of any party. It was proposed that the location of one type of chemical weapons production facility, those involved in the production of binary weapons, be declared during the first year after the Convention enters into force, and that during the first two years of the Convention only this type of facility be eliminated. Although their statements were silent on verification provisions regarding the declaration and elimination of binary production facilities, judging from their expressed concerns, we must conclude that they would consider systematic international on-site inspection to be essential.

Based on other standing proposals made by the Soviet Union and its allies, we note that the location of other types of chemical weapons facilities, however, would not have to be similarly declared nor their status relative to closure ascertained until some time later, but within 10 years after the Convention enters into force. The effect of their proposal, therefore, would be to require early detection and destruction of some facilities while others would remain unaffected for a much longer period of time. This outcome is not consistent with the principle of undiminished security.

The United States shares the belief that the Convention should not result in undiminished security or unequal obligations for any party. Indeed, the principle of undiminished security is one of the pillars of any effective arms control agreement. This approach is reflected in our "detailed views" paper. We have proposed in our paper that the location, nature and capacity of all chemical weapons production and filling facilities be declared within 30 days after the Convention enters into force. This includes dual-purpose facilities designed or used in part for civilian production. As well as other facilities designed, constructed or used for the production of certain commercial chemicals deemed by the Consultative Committee to pose a particular risk. These chemicals would include all key precursor chemicals potentially useful for all types of

chemical weapons, including binary weapons.

We have also stated our view that all activity, except that required for closure at all chemical weapons production and filling facilities, be immediately ceased upon the entry into force of the Convention; that all such facilities be closed according to agreed procedures which render the facilities inoperative; that all parties permit systematic international on-site inspection of each such facility promptly after declaration and, subsequently, at agreed intervals until the facility is destroyed; that parties permit the monitoring of all facilities by agreed appropriate types of sensors installed at the facility, and that all such facilities be destroyed by razing them, employing agreed procedures which permit systematic international on-site verification, and according to an agreed schedule.

It is obvious that our own views take fully into account the concerns expressed and, if adopted, would preclude any possibility of evasion such as was envisaged by the distinguished representatives of the German Democratic Republic and the Soviet Union. Indeed, our views are designed to prevent any continuation of production of all types of chemical weapons at production and filling facilities by all parties to the Convention regardless of the technical nature, design or fabrication of such facilities or the type of chemical munition produced.

Concerns have also been raised regarding the possibility of evasion of the Convention through covert production of dangerous chemicals for the ultimate creation of chemical weapons at commercial or non-military facilities. We share these concerns, which have been expressed by many others as well. The group of chemical weapons technical experts and the Working Group have spent a great deal of time on this particular issue, and we believe a solution is at hand that does not present unreasonable demands on commercial chemical industries or otherwise put in jeopardy the production of those legitimate chemicals or synthetic substances on which so much of our basic existence depends.

The proposal of the German Democratic Republic and the Union of Soviet Socialist Republics for the banning of all production of all methyl-phosphorus bond compounds, regardless of any future, potential peaceful benefit to mankind, seems to my delegation to be unnecessary and, more importantly, would provide only a partial solution to the problem. There are many other chemicals which have similar potential importance not only for supertoxic compounds useful for chemical weapons purposes but also for incapacitants as well. To ban only one of them and not place controls on the others would in reality lessen the degree of protection which all parties require against possible covert chemical weapons production at commercial facilities. The United Kingdom working paper, document CD/353, presented just last week, contains elements of a better approach, which closes this loophole, and seems to offer a sound approach for dealing with this aspect of the verification problem. The United Kingdom paper suggests that all commercial facilities producing any of a listed group of chemicals having potential for chemical weapons purposes would have to be declared and made subject to an agreed mandatory international inspection regime to ensure that they are not being used for the production of chemical weapons. The components of such a verification regime could easily be designed so as not to be unnecessarily intrusive but still provide the necessary degree of assurance to all parties that such chemicals are not being diverted for the fabrication of any type of prohibited chemical weapon.

Another point which I will address today relates to the concern expressed with regard to the destruction of stocks of chemical weapons under the Convention. It has been rightly pointed out that if one party purposely delays the destruction of its chemical weapons stocks until the latter part of the period allowed for destruction, while another party commences the destruction of its stocks immediately after the Convention enters into force, a unilateral military advantage can be legally gained

under the Convention. It has also been pointed out in this respect that parties may have different chemical weapons capabilities — components as well as total stocks — in being at the time the Convention enters into force. This is a legitimate concern. We welcome Soviet acceptance of our suggestion that procedures must be worked out during negotiations in the Committee on Disarmament with regard to the timing and rates of destruction of chemical weapons stocks on an agreed basis. Specifically, we believe that an arrangement for effective and verifiable reductions of chemical weapons stocks to equal levels between parties, or groups of parties, in the early phase of the destruction period is necessary to ensure the mutual security of all parties. We look forward to further discussion on this and other aspects of this most important issue.

In conclusion, let me say that my delegation considers the flexibility indicated by the Soviet Union delegation on the inclusion of a ban on the use of chemicals prohibited by the Convention as a constructive development. We welcome the Soviet statement that appropriate, effective verification procedures regarding alleged use should be provided. We are carefully assessing the legal implications of a new ban on use. It is essential to ensure, however, that the 1925 Geneva Protocol remains fully effective. In this context, the development by United Nations experts of more effective procedures for investigating alleged chemical weapons use, in response to General Assembly resolution 37/98 D, is particularly important as a complement to the Committee's work on a chemical weapons ban and to provide a mechanism for dealing with this problem until that agreement comes into effect.

CD/PV.204

pp.13-14

Bulgaria/Tellalov

17.3.83

CW

We would like to stress once again that the correct and mutually acceptable solution of the problem of verification can be found only on the basis of combining and supplementing with each other all known types of verification: national legislation, national technical means and international verification on the basis of motivated challenge and on a systematic basis. In this connection the corresponding section of document CD/343 seems to us to be rather far from the best proposals on this issue tabled in the Committee. The role of national means of verification is diminished practically to nil in this document. This hardly helps to advance the negotiations but rather holds them back and represents a retreat from the stated positions of other Western countries contained in their documents and formal proposals. We would hope that this is not the last word of the United States delegation on this issue.

CD/PV.205

pp.23-24

Czechoslovakia/Vejvoda

22.3.83

CTB

In the opinion of the Czechoslovak delegation the Soviet "Basic provisions" contain all the elements necessary to meet the requirements of the overwhelming majority of States.

It is envisaged that nuclear tests would be prohibited in all environments, that the treaty would be unlimited in time and would enter into force after its ratification by 20 governments including those of the permanent members of the Security Council. At the same time, the possibility of the treaty entering into force for an agreed limited period of time with the participation of only three States permanent members of the Security Council — the Soviet Union, the United States of America and the United Kingdom — is not precluded.

I would also like to note that the Soviet proposal pays special attention to verification provisions. Let me point out just some of them.

Firstly, it is the presumption that verification within the future treaty would be based on national as well as international procedures, while the "States parties which possess national technical means of verification may, where necessary, place the information which they obtained through those means, and which is important for the purposes of this Treaty, at the disposal of other parties".

This provision is of particular importance for those States parties to the treaty which as yet do not possess national technical means of verification.

The "Guidelines for the international exchange of seismic data", taking into account the recommendations of the Ad Hoc Group of Scientific Experts on seismic events, represent an important element of verification of an international nature. We also regard as useful the proposal to create a committee of experts which would consider questions relating to the international exchange of seismic data. In this connection, the "Basic provisions" state:

"The Committee shall elaborate, in accordance with Guidelines, detailed arrangements regulating the establishment and operation of the international exchange; it shall facilitate its implementation and co-operation between States parties to enhance the effectiveness of such exchange.

The Committee shall facilitate more extensive international consultations and co-operation, the exchange of information and the provision of assistance in verification in the interests of compliance with the provisions of this Treaty."

Another important element of verification is reflected in the part of the document dealing with on-site inspection. It defines the procedure for the assessment of compliance with the treaty and the procedure for sending requests for an on-site inspection and replies to them. The elaboration of procedures for on-site inspections, including the list of rights and functions of the inspecting personnel and the definition of the role of the receiving party during the inspection are also envisaged.

My delegation also welcomes the fact that the Soviet delegation expressed its readiness to offer any necessary clarifications on its document and to answer questions which might be raised in connection with the "Basic provisions" in the Ad Hoc Working Group on a Nuclear Test Ban. We hope that this Group will be accorded a mandate which will enable it to undertake without any delay negotiations for the elaboration of a treaty banning all nuclear tests in order to respond to the call by the United Nations General Assembly to the States members of the Committee on Disarmament "To exert their best endeavours in order that the Committee may transmit to the General Assembly at its thirty-eighth session the multilaterally negotiated text of such a treaty".

CD/PV.206

pp.10-12

Belgium/Onkelinx

24.3.83

CW

The third consequence of the regime of the prohibition of chemical weapons concerns the verification of compliance by States parties with the obligations they will have contracted under the convention.

This verification has two distinct aspects.

The first, and we believe the most important, is that of routine inspections, namely, those which will give States parties the security which they have decided not, or no longer, to ensure by means of chemical weapons.

Such security can basically only be provided by international means of verification, including, when necessary, on-site inspection.

The papers submitted, such as that of Canada in 1981 (document CD/167) and more recently that of the United Kingdom on the subject of the verification of the non-

production of chemical weapons, have clearly indicated the widely differing needs as regards verification according to the different activities to be verified.

In the intentions it has expressed as regards verification of the destruction of stocks and of the production of supertoxic lethal chemicals, the Soviet Union implicitly recognizes the need for such differentiated verification. The concept of general on-site inspection is thus now accepted. We still have to agree on the range of activities for which such inspection is needed and on the procedures for such inspection.

The work we did at the beginning of this year in the course of the technical consultations were particularly useful in this connection, and it is to be regretted that it did not prove possible to submit a report on them.

We made important progress in the identification of the key precursors which will call for special attention in the process of verification of non-production.

The recent contribution of the United Kingdom constitutes a very logical sequel to that work.

Similarly, the needs in the matter of verification of the destruction of stocks have certainly been made clearer. However, we have some doubts about the proposal made by the Soviet Union in document CD/CW/CTC/37 suggesting that the methods of verification of the destruction of chemical weapons should vary according to the type — the Soviet Union proposes six categories — to which they belong.

In our view, the first stage in the process of verification of the destruction of stocks should consist precisely in the identification, through on-site inspection, of the different types of chemical substances in question. This first stage could not, therefore, be predetermined, as the Soviet proposal implies.

At the same time, since a growing conceptual convergence appears to be developing in the sphere of the verification of the destruction of stocks, it seems to us necessary to make a similar effort with regard to the procedures for the verification of the destruction or dismantling of facilities.

I have just spoken about the routine aspect of verification. The other aspect concerns that part of the process of the settlement of disputes which the convention can organize before States resort, if necessary, to the machinery of the United Nations Charter. There will be fewer chances of this aspect of verification being employed the more routine inspections permit the removal of suspicions between the parties.

There will be fewer reasons to have doubts about the activities of a State party if the routine verification methods are sufficiently extensive to create confidence.

I would add that it would no doubt be useful for the convention to define the nature of the co-operation necessary between international means of verification, as represented by the consultative committee, and the organs for national implementation measures, which ought above all to form a point of contact for the activities of the consultative committee in the various States parties.

As regards national technical means of verification, we ought to ensure that, like the international verification means, they are not hampered.

I should like, in conclusion, to make some comments on the subject of the prohibition of use.

As we see it, the inclusion in the convention on chemical weapons of a general prohibition on development, production and stockpiling corresponds to the general prohibition of those same activities enacted under the 1972 Convention on bacteriological weapons.

As regards the prohibition of the use of weapons, whether chemical or bacteriological, this, in our view, has become a prohibition of a general nature deriving from the Geneva Protocol of 1925. It is because we consider that the regime of the prohibition of use is common to bacteriological and chemical weapons and that international customary law has established it sufficiently clearly that we have reservations as regards the

repetition of that prohibition within the framework of the convention on chemical weapons. We believe that the real problem lies in the verification of compliance with the prohibition enacted by the Geneva Protocol of 1925 and subsequently enlarged by international customary law.

It was for that reason that Belgium last year submitted to the Committee on Disarmament a proposal concerning the verification of compliance with the prohibition of the use in combat of chemical and bacteriological or toxin weapons.

I should like to note in this connection that our proposal seems to me to meet the conditions put forward by my colleague from the Soviet Union, Ambassador Issraelyan, in his statement of 22 February last, regarding the establishment of machinery for verification of compliance with the Geneva Protocol. Those conditions can be summed up as follows: the States parties to the international instruments concerned should negotiate about such machinery, and reach agreement through negotiation and on the basis of consensus, as is usual in matters of disarmament.

In the particular case of the convention on chemical weapons, we have noted with great interest all the new proposals and positions which have been expressed on this point. They bear witness to a conciliatory spirit which we fully share.

I should nevertheless like to make certain comments in this connection.

The first concerns the proposals suggesting that we should simply incorporate the prohibition of the use of chemical weapons within the scope of the convention.

If we were to do that, could we be sure that such a prohibition of use would be as general in application as that resulting from the customary international law deriving from the Geneva Protocol? Would there not, on the contrary, be a risk of creating a lacuna in the matter of the prohibition of bacteriological weapons? For if it is accepted that the regime of the prohibition of the use of both chemical and bacteriological weapons derives from the 1925 Protocol, would not a partial repetition of that prohibition, that is, solely in the context of chemical weapons, cause doubts with regard to bacteriological weapons?

Again assuming the inclusion of a prohibition on use in the convention on chemical weapons, will it be necessary to provide for specific machinery for the verification of compliance with that prohibition, or shall we be able to rely on the terse formula that any use of chemical weapons would constitute proof of the violation of the convention, and will its verification provisions apply also to such situations?

In the latter event, how would the fact of the use of chemical weapons be established? Ought there not to be some special machinery for the establishment of the facts, given the special nature of the verification procedures necessary in the matter of allegations of use?

My second observation concerns the proposals suggesting that with respect to chemical weapons alone we should extend the sphere of application of the Geneva Protocol of 1925. Would there not be a danger that this would affect the customary character of the general prohibition of the use of chemical and bacteriological weapons?

Would that not seem to imply that the prohibition of the use of bacteriological weapons is not absolute as regards the interpretation which international custom has given to the 1925 Protocol?

It is precisely because we have not up to now found adequate answers to these questions that my delegation has envisaged specific machinery for the verification of the prohibition of the use both of bacteriological and of chemical weapons.

As I have already said, these proposals were intended to stimulate our thinking on the subject. My delegation would be perfectly prepared to amend them if there was a possibility that they might then meet with the approval of all members of the Committee.

Contrary to some others, this particular freeze concept can be adequately verified by the indiscriminate application of the safeguards system of the International Atomic Energy Agency. Since four of the five nuclear-weapon States — and why should the fifth not follow? — have now accepted some kind of safeguards, a cut-off agreement seems easier to achieve.

In this context, I may recall the announcements made in the Eighteen-Nation Disarmament Committee by the United States and the Soviet Union on 20 April 1964, later joined by the United Kingdom, that these countries would take unilateral steps to restrict the production of fissionable material for weapons purposes. The footmarks of these steps seem to have been obliterated. Perhaps the distinguished representatives of the countries involved could shed some light on the fate of these unilateral measures.

On the subject of yet another category of weapons of mass destruction, chemical weapons, I should like to say the following.

I reiterate that the Netherlands armed forces do not possess chemical weapons, that the Netherlands Government does not consider introducing those weapons into its armed forces and that it also rejects the stockpiling of chemical weapons on Netherlands territory.

Awareness has grown that the question of chemical weapons is not merely an East-West problem. These weapons can effectively be used against technologically less developed countries, which virtually lack any protection against such a threat. Though little proliferation in this field has taken place thus far, they can be also used by countries from the third world. A treaty must be concluded, before developments get out of hand.

One of the main obstacles to a chemical weapons treaty is the question of verification. I fully realize that. In the past year the Committee has started to tackle that problem seriously. This momentum should not be allowed to peter out.

I therefore welcome the recent important contribution by the United States. On verification we think along the same lines; individual elements, in particular regarding routine inspections, are of course in need of further refinement.

It is encouraging to note that the Soviet Union has somewhat modified its position regarding on-site inspections. Essential gaps, however, continue to exist and differences remain on the conditions for challenge-inspections. In our view, systematic international inspections are necessary both with respect to the destruction of stockpiles and to the closing and dismantling of chemical weapons plants. The full use of modern technical equipment can help to decrease the degree of intrusiveness of such inspections. Some random inspections to deter clandestine production in the civilian industry of the most dangerous chemicals can likewise not be dispensed with. In many respects, such inspections are preferable to a system of challenge inspections alone: it will often be difficult to acquire enough information to justify a request for a challenge inspection. In addition, the procedures regarding a challenge inspection could easily lead to mistrust and reciprocal reproaches of a dubious nature.

Verification is not an end in itself but a tool to strengthen confidence in the implementation of and compliance with a treaty, and to deter violations. Many ideas have been put forward to promote this verification. Perfect verification is neither possible nor wholly indispensable. And so a trade-off between scope, verification and protection against chemical attack could create the necessary confidence.

As for the question whether a chemical weapons treaty should include a provision against "use", we have always believed that any use would indicate a violation of the treaty and would therefore trigger an investigation. We have no objection at all, however, in accepting a specific ban on use in the convention itself. This seems to be

the view of the majority of States in the Committee on Disarmament. Naturally, we must see to it that such a ban will not in any way detract from the obligations under the Geneva Protocol of 1925. Much to the contrary, the treaty should build on the Protocol and strengthen it.

We will study with interest the proposal made by the Soviet Union for a complete ban on all chemicals related to nerve agents with a particular structure.

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....In the consideration of verification matters, we have always proceeded from the standpoint that this problem should be solved in such a way as to inspire confidence in the implementation of an agreement banning chemical weapons. The discussions on verification procedures in the Committee's Working Group have indicated the complexity of this problem, both from its technical and political aspects. We also consider that it would not be practicable to devise verification procedures which would provide an absolute assurance that the convention is not being violated. At the same time, we share the view that a chemical weapons convention must provide for sufficient verification to deter the would-be violator and to provide a degree of assurance against violation by one party which is accepted as adequate by others.

The verification of chemical weapons should, in our opinion, be implemented on the basis of national and international procedures, where we consider that national verification does not preclude international verification but rather that they complement each other. In order to increase confidence among countries, it is possible that both national and international verification be based on an agreed, generally acceptable and unified identification system -- methods that would be standardized for particular chemical warfare agent categories. This, of course, does not preclude a separate national approach, especially when a country has qualified personnel, equipment and organization for the gathering of samples, data processing, etc. The standardizing of the methods of international verification can greatly facilitate the national verification system and chemical defence measures, in those countries as well which have no experience in developing their own verification methods. The standardizing of verification methods presupposes their periodical modification in accordance with scientific and technological progress. It is understandable that the introduction of new methods and procedures should be subject to agreement and acceptance on the part of an international organ created by the States parties to the chemical weapons convention. In our view, arms reduction and disarmament agreements must be founded on reasonable confidence, as is the case with some existing agreements. If there is a decrease in confidence or if there is doubt concerning the violation of agreements, then only verification measures can restore confidence among States parties to the agreements. This is particularly true for the countries which possess production facilities and stockpiles of chemical weapons.

Acknowledging the importance of the verification system in agreements concerning arms reduction and disarmament, we nevertheless deem unacceptable the condition that agreement should first be reached on verification provisions and that only then should we proceed to the elaboration of other parts of the convention. We accept, of course, and consider it useful to accord due attention to verification as well, parallel with the consideration of all relevant issues. However, we see no reason for emphasis to be placed exclusively on this question while all other equally important ones are left aside. Because important progress has been made in the consideration of some other issues, it is realistic to expect that they can easily be finalized with an added effort. After all, it would be difficult to consider in isolation only verification issues without having previously reached a firm agreement on what should be subject to verification.

The system of work applied so far in the Ad Hoc Working Group on Chemical Weapons has proved itself useful. Within the contact groups that simultaneously considered particular elements of the convention, fundamental material which ought to make up the future convention has been categorized. Alternative possibilities have been put forward for those questions which have not yet been cleared up, or indications have been made as to what direction should more or less be looked at in seeking solutions. It has also been shown to be necessary, in the process of examining particular proposals and, respectively, the views expressed by particular delegations, to require some clarification in order to accelerate even more the process of the harmonization of views. In this connection, we would consider it useful if the United States delegation were to explain certain questions which have emerged in the course of our preliminary examination of the United States paper. Perhaps some of the questions that will be posed in the meantime have already been clarified at informal meetings between the United States and interested delegations. We would be grateful if the United States delegation would find it possible to furnish further explanations at an appropriate time.

The first question concerns the basic prohibition, as stated on page 1 of document CD/343. Riot-control agents and herbicides have been excluded from the prohibition. Why is this so, when it has been previously stated that the provisions of the convention should cover super-toxic lethal, other lethal, other harmful chemicals (such as incapacitating chemicals) and their precursor chemicals?

The next question refers to the non-transfer/non-assistance under (b). The prohibition of the transfer of super-toxic lethal chemicals is envisaged only in relation to non-parties to the convention and not for the parties to it as well. What are the reasons for this and also for setting the limit at exactly 100 grams?

We understand the expression "permitted purposes" (page 2 of CD/343) to refer to the use of any toxic chemical and its precursor chemical in smaller concentrations for medical purposes as well as the protection of plants. If used in greater concentrations, then appropriate protective measures should be applied. Have we understood the meaning of "permitted purposes" correctly? Is not a metric ton too large a quantity for such purposes?

The proposed preparatory commission, which would come into existence soon after the convention is opened for our signatures and which should remain in existence until the convention comes into force and thereafter until the first meeting of the consultative committee, is given an important role in facilitating prompt implementation of the provisions of the convention. In view of the fact that it is uncertain when the convention will enter into force -- in unfavourable circumstances this could take some time -- would the preparatory commission in that case continue working without interruption or would another procedure be envisaged?

What is the relationship of the fact-finding panel to the consultative committee? Both organs could, for example, carry out on-site inspection, but it is not clear whether the panel has any obligations toward the consultative committee. Can it be assumed that this is a direct organ of the depositary, which appoints ten of its members and serves as chairman of the panel?

With regard to the panel's composition, we wish to state that we consider the proposed procedure for the election of permanent and non-permanent members as being unacceptable, as it introduces differentiation between permanent and non-permanent members, according greater rights to a small group of States.

Apart from the confidence-building measures referred to, are any other confidence-building measures considered?

Does the United States envisage -- and if so, what kind of role is envisaged for -- national technical means of verification, given that there is no mention of it whatsoever in the paper?

In the section on "Additional provisions", it is recommended under (a) that the convention should also contain a preamble and provisions regarding international co-operation in the field of chemistry. Would you also consider the possibility of international co-operation including the field of toxicology? We consider this also to be an important field of international co-operation.

The USSR proposal entitled "Basic provisions of a convention on the prohibition of the development, production and stockpiling of chemical weapons and on their destruction" (CD/294), apart from the many common points it has with other proposals, contains some differences as well. We would also appreciate it if the Soviet delegation would offer some additional information in order that we can better understand the proposal submitted.

In the part referring to the elimination or temporary conversion of facilities which provide capacities for the production of chemical weapons (page 3), under paragraph 1, there is mention of the elimination or dismantling of facilities which provide capacities for the production of chemical weapons. However, no mention is made of filling facilities as well, which are part of the prohibition mentioned in the "United States detailed views". We assume that this has to do with separate technological production processes. On the one hand, chemical warfare agents and, on the other, filling facilities in which the final product -- i.e. the chemical weapon -- is obtained. If this is correct, we think that the Convention should encompass such filling facilities as well, bearing in mind particularly the binary weapons.

The Soviet proposal does not mention specifically the closure of production facilities which would have to precede their elimination or dismantling. In our view, each State party to the convention should start with activities in order to destroy or divert its stock of chemical warfare agents, munitions, devices and equipment specifically designed for chemical warfare immediately after it becomes a party to the convention, and complete them no later than ten years after that date.

The question previously raised whether one metric ton of super-toxic lethal chemicals which may be left for "permitted purposes" is an excessive quantity also applies to the proposal of the USSR.

Our last question concerns the part having to do with the fact-finding procedure relating to compliance with the convention. To be more precise, it refers to the second paragraph of item 2 on page 8 of the proposal, in which it is said, *inter alia*, that "The States Party to which such a request is sent may treat the request favourably or decide otherwise". In view of the fact that this related to requests for on-site inspection concerning the destruction of accumulated stocks of chemical weapons and concerning the destruction and dismantling of facilities, we would like an explanation of what particular situation is envisaged that would give a justification to the State party so requested to "decide otherwise".

We would also be grateful to the Soviet delegation if it would provide the necessary clarifications at an appropriate time.

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CTB

Rather, I would like to explain fully the position of my delegation regarding the mandate and what it requires: offer our views as to the relationship of the verification and compliance issues to other aspects of any future treaty banning nuclear explosions; discuss briefly the verification and compliance issues themselves; and finally make some suggestions as to how the Working Group might proceed.

First, let me speak about the mandate. It calls on the Working Group "to discuss and define ... issues relating to verification and compliance". This is clear and unambiguous

language. It does not call for the negotiation of comprehensive test-ban treaty. Rather, it requires the Working Group to bring issues relating to verification and compliance into sharper focus.

What do we mean by "issues relating to verification and compliance"? Last year concerns were expressed by some delegations that our proposal was too restrictive to allow substantive work to be done. But from the outset my delegation has viewed this language rather broadly. Clearly, any information relevant to the verification and compliance problem is within the mandate and is pertinent to our work. Although we would not like to see the Working Group diverted from its main task, in so far as any delegation holds a national position on a particular issue which affects its own view of verification and compliance, then it should bring these views forward and discuss that relationship. We will have no objection. I hope one thing is clear in the minds of all delegations. When the United States proposed last spring a mandate on verification and compliance, it was out of a genuine desire to have the Committee on Disarmament undertake discussions on these issues. And while it is true, as we have often stated, that we are not prepared to negotiate a CTBT now, we did not then, nor do we now, have any ulterior motives of avoiding reference to or discussion of other aspects of a test ban. So in all respects the mandate is broad enough for a full examination of the problem.

Perhaps I could share with you our own view of the relationship of verification and compliance to other aspects of any future treaty. We clearly see a relationship between verification and compliance questions and the scope of, the objectives of and participation in any comprehensive test ban. But does that mean that we must first decide on the scope of a future treaty before we can engage in meaningful work regarding verification and compliance? We do not believe that to be the case. The very term comprehensive test ban is self-defining when considered in a multilateral context. A CTBT is an agreement not to carry out any nuclear explosions, and therefore the problem is to verify the absence of nuclear explosions on a world-wide basis. By taking this broadest possible view of scope, the Working Group can begin discussing the problems surrounding the creation of a verification system in which any and all States parties can participate and in which all States parties will share both benefits and obligations. It has always been a United States objective that any future CTBT should be designed so as to attract universal adherence, and we need a verification and compliance system which will be effective on a world-wide basis.

Viewed in this context, it is clear what direction our discussions in the Working Group should take. The Group should undertake a serious examination of issues relating to the multilateral verification of compliance with a total ban on nuclear explosions on a world-wide basis. We envision a system that all States parties will be able to participate in, both in terms of the right to share in the system as well as the obligation to make it work. By its very nature, such a system will accomplish two purposes: first, it will verify the cessation of testing by all who have tested nuclear explosives, and, secondly, it will verify the absence of commencement of testing by those who have not done so. That is what we have in mind.

Let me now be a bit more specific as to what the Working Group might do during this session of the Committee on Disarmament. There are two broad categories of issues. First, the degree of verifiability and how it might be raised to a level that each State party might consider to be acceptable; and, secondly, mechanisms for ensuring compliance. In the area of seismic means of verification, we would suggest a focus on four general topics:

International monitoring networks and how to fill gaps in existing systems;

The problem of identifying -- as opposed to detecting -- the origin of seismic signals;

Further needs regarding the detection of nuclear explosive signals in areas of high seismic activity; and

Seismic data exchange and analysis mechanisms.

In the second category of issues, compliance, the purpose of any compliance mechanism is to ensure confidence in a legal regime by establishing a workable means to resolve disputes and eliminate misunderstandings.

Some elements of compliance which we believe should be examined are:

Obligations to ensure compliance with data-exchange provisions;

The role of fact-finding bodies or commissions;

The handling of allegations of violations; and,

The possible role of experts groups as advisers.

An additional issue which the Committee should address relates to the role of on-site inspection. This is an issue which cuts across both verification and compliance. Obviously, particular attention will have to be paid to the role of on-site inspection in any future CTBT.

CD/PV.209 p.22 Czechoslovakia/Vejvoda 5.4.83 CTB

The Czechoslovak delegation has on numerous occasions expressed its firm belief that verification provisions, if they are to be taken seriously and be meaningful, can only be considered inseparably with other basic provisions of a given treaty. Some delegations speak against the elaboration of a nuclear test-ban treaty in the Working Group, saying that the envisaged verification provisions are insufficient. My delegation fails to understand this approach since as I said last time in my statement on this subject, the tripartite report on this subject matter addressed to the Committee on Disarmament in 1980 contains a verification system elaborated to a great extent. And the representative of two of the countries which signed the tripartite report lament today over the insufficiency of verification procedures. To be more specific I mean paragraph 19 of the report which states:

"The three negotiating parties believe that the verification measures being negotiated — particularly the provisions regarding the International Exchange of Seismic Data, the Committee of Experts, and on-site inspections — break significant new ground in international arms limitation efforts and will give all treaty parties the opportunity to participate in a substantial and constructive way in the process of verifying compliance with the treaty".

The Soviet "Basic provisions" show rather clearly that the understandings achieved at the tripartite negotiations are taken into account. In this connection we would like to ask whether the delegations of the United States and the United Kingdom continue to adhere to the conclusion contained in the tripartite report.

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In my statements of 8 and 22 February I dwelt at some length on an important area of nuclear test-ban verification, namely, seismic monitoring. In particular, I drew attention to the steady and very relevant technical work being done by the Ad Hoc Group of Scientific Experts. As Ambassador Herder, in his statement of 3 March, pointed out:

"There is enough material for setting up the international data exchange system within the framework of a treaty on the complete and general prohibition of nuclear-weapon tests, and I underline 'a treaty'. The Group

of Scientific Experts should contribute to such a treaty. It does not work in an 'ivory tower', neither should its work be regarded as an exercise in 'art for art's sake'. It is the purpose that counts".

I can agree with much of this. While I do not consider that the international seismic monitoring network can be swiftly set up on the basis of present material, I am convinced that work to that end must be linked to the objectives of the Committee as a whole. This indeed was the essence of my remarks on 22 February, when the report of the Group of Scientific Experts was tabled: I said then that "the Committee should begin to focus more acutely on the work done by this Group, and to consider its medium- and long-term relevance to the Committee's own work". Thus, I now formally propose, Mr. Chairman, that the Working Group on a Nuclear Test Ban debate the future of the Group of Scientific Experts before the experts meet again in July, under the existing NTB mandate.

There is much more to be done under the existing mandate. Last year, as others have pointed out, numerous items were put forward in the Working Group and were not fully addressed. At the same time the Working Group witnessed several interesting interventions and exchanges on matters which fell within its mandate. My delegation for example is ready, as no doubt is the Indian delegation, to investigate further the verification problems of peaceful nuclear explosions. More can be said, a lot of it technical, about low-yield detection.

I have already mentioned that Australia submitted a working paper in 1980 setting out some institutional, financial and legal questions that the Committee on Disarmament should address. Much of that paper remains relevant. However, developments since then, particularly the presentation of the trilateral report to the Committee and the tabling of a draft treaty by the Soviet Union, have raised new and different questions. My delegation is looking, therefore, towards issuing a revised version of document CD/95. Some of the major new questions that come to mind are precisely those which have to do with the institutional arrangements for a verification system. Both the trilateral report and the Soviet draft treaty mention a committee of experts. Will this committee concern itself only with the seismic system? Would it also deal with other means of detecting nuclear tests? Would a separate group be required, say, for atmospheric detection? And what about alleged violations and complaints? Would they be channelled through the expert group, if only in the first instance? Or would it be a purely scientific body? Would a consultative committee be established to handle compliance matters? Who, then, would organize on-site inspections? What role would the Security Council or other United Nations bodies or the Committee on Disarmament itself have in all this? Would a separate CTB secretariat be required? And how would it be established? There is a rich field here for further exploitation.

On the other hand, my delegation is not willing, although we are prepared, if necessary, to participate in a tedious political discussion which revolved around the question of "will". The matter before us is quite a simple one. Adequate or not, rich or poor, the mandate of the NTB Working Group is the only one we have, by unanimous agreement, and it is one which offers us a chance to do some real work. Some day we will probably feel its limitations, and wish to have broader terms of reference. We can hasten that day by getting down to work or we can put it off by choosing another approach.

The Working Group is at present mandated to discuss and define issues relating to verification and compliance. These issues have two dimensions, technical and political.

The technical aspects of a nuclear weapons test ban have already been adequately

explored and examined by the seismological Working Group. The contours of an international verification system based on fully modern techniques of data collection and its proper evaluation have been very well defined. Of course we can endlessly argue on its capabilities. Each new day that dawns outdates the preceding day. The other option is to seize the hour and relate our present knowledge to the problems of the day. As a precaution, the CTBT could include provisions for an updating of its verification and compliance procedures in the light of later technological developments through review conferences or any other agreed universally non-discriminatory procedures.

Other aspects of verification and compliance issues relating to a comprehensive test ban cannot be fully defined, as called for in our existing mandate, let alone negotiated, without a prior agreement on the scope of the ban. That is the political aspect which indeed falls squarely within the competence of the Working Group. Nuclear technology has its peaceful uses and military application. Contrary to the recent Dutch suggestion, a fair agreement on the scope and purpose of the ban, keeping in view the requirements of the developing countries in taking full advantage of the peaceful uses of nuclear energy to narrow the immense technological gap between them and the rest of the world will quickly pave the way to and help in the evolving of a mutually satisfactory verification and compliance regime for the CTBT.

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India/Saran

5.4.83

CTB

In the Working Group, we asked the delegations concerned, particularly those of the United States and the United Kingdom to elaborate for us what they regarded as "adequate" verification for a nuclear test ban. We also pointed out that the Ad Hoc Group of Scientific Experts on Seismic Events has been operating so far on the assumption that the global seismic monitoring network they had been mandated to elaborate should be able to detect with 90 per cent probability events of bodywave magnitude 4 or greater in the northern hemisphere and bodywave magnitude 4.3 or greater in the southern hemisphere. We asked these delegations whether this capability and the probability of detection, which lies at the base of the work of the Ad Hoc Group of Scientific Experts, is considered sufficient by them in conjunction with national technical measures to ensure compliance with a treaty on a nuclear test ban.

These questions, as will be recalled by those who participated in the work of the Ad Hoc Working Group, went unanswered. Instead, the Group was told that the "adequacy" or "sufficiency" of verification was a complex question involving a whole host of political and technical factors. Despite repeated questioning, no attempt was made to clarify what this "whole host of political and technical factors" consisted of.

It may also be noted in this connection that the delegation of India attempted to elicit from the erstwhile trilateral negotiators information concerning the progress achieved by them in their negotiations on issues relating to verification of compliance with a nuclear test ban. The Soviet Union stated that all aspects of verification and compliance relating to a multilateral treaty on a nuclear test ban had been agreed upon among the three negotiators, and that only certain additional measures that would be applicable only to the three parties remain unresolved. The delegations of the United States and the United Kingdom challenged the Soviet contention but did not deem it fit to inform the Working Group of the specific aspects on which agreement could not be reached among the trilateral negotiators in the field of verification of a multilateral convention on a nuclear test ban.

In the absence of such clarification from the United States and the United Kingdom, the Working Group was naturally denied an opportunity substantively to explore unresolved issues relating to verification and compliance.

Let me mention a few of the differences of view that became apparent in the Working Group. It has been claimed that the mandate is too restrictive. My delegation have never believed that this is so. It has been claimed that the mandate must be enlarged to allow us to consider the scope of the treaty. We would say that if we are to discuss verification, we must begin by deciding what it is we are going to verify. If some delegations want to say that is discussing the scope, we have no objection; but we do not need to change the mandate to do it. We suggested last year that we avoid getting bogged down on this point by making an assumption that we should verify the absence of all nuclear explosions. But it quickly became apparent that a fundamental difference of view existed between delegations on this subject. These differences have again become apparent in our debate today. We believe that to try to reconcile these viewpoints is a matter of primary importance. It is one thing if we have to construct for ourselves a verification mechanism to ensure that no nuclear explosions are occurring anywhere. But it quite another problem to ensure that nuclear explosions described by their authors as peaceful do not in fact provide a military advantage to those carrying them out. This does not seem to my delegation to be a peripheral issue. If other delegations have ideas how such verification might be possible, let them tell us. We see no problem in discussing this issue within the framework of the present mandate.

There was also discussion in the Working Group of verification using seismic methods. There was a general agreement on the need for a world-wide system of seismic stations with an international exchange of data, but not on many points of detail. The Working Group did not complete its examination of the characteristics of the system and its technical capabilities. It did not agree on the need for the use of modern methods of data exchange, nor on whether such a system should be set up before or after a treaty enters into force. My delegation had hoped that the spring meeting of the Ad Hoc Group of Scientific Experts would help us to resolve some of these problems, but we are all aware of the attitude taken by some delegations at that meeting and of the procedural problems that hampered the Group's work. Other aspects of verification, for example, the need for more systematic measurement of airborne radioactivity, were hardly touched upon in the Working Group; nor were questions relating to on-site inspection, nor was the role of a consultative committee considered in detail. This is by no means to say that we wish to confine the Group to technical discussion, as has been alleged by some delegations; but we cannot see how we can make progress without a clear agreement on the technical foundations of our work.

My delegation is gratified by the positive interest shown in our document (CD/343) containing detailed views on the contents of a chemical weapons ban. We have had fruitful and constructive informal exchanges with many delegations and have welcomed the questions of our colleagues. We have tried to respond promptly and clearly to such questions in whatever forum they were asked.

At the plenary meeting on 29 March we were pleased to have several thoughtful and serious questions put to my delegation by the distinguished representative of Yugoslavia, Ambassador Vidas. Such interest in our paper is deeply appreciated and deserves an equally serious response, which I am pleased to provide today.

The United States holds the view that riot-control agents and herbicides should not be covered by this convention. Let me say at the outset that, although we hold this view, our objective is not to retain an option for waging chemical warfare with such

chemicals. We ruled this out years ago. This fact is certainly well known. Most importantly, we do not see that including these chemicals in a ban on development, production, stockpiling and transfer would promote the ultimate objective of preventing their use in combat. In contrast to the military nerve gases, for example, herbicides are not developed, produced, or stockpiled for chemical weapons purposes but can easily be obtained through commercial channels. In fact, military forces may well have substantial quantities of herbicides readily available for vegetation control at bases, a perfectly legitimate purpose. Commercial spraying equipment, such as spray aircraft, can be quickly requisitioned. Quite probably, a State could be in full compliance with a provision banning the development, production and stockpiling of herbicides for chemical weapons purposes and yet be able to use herbicides for prohibited purposes within a few days.

A similar situation exists for riot-control agents. In many countries, military and paramilitary forces are equipped with substantial amounts of such agents for the purposes of maintaining internal order. We do not see how a provision against the development, production, and stockpiling of riot-control agents for military purposes could be effective in preventing their use for prohibited purposes when the substances are already available in significant quantities for permitted purposes.

Ambassador Vidas also dealt with the permitted transfer of super-toxic lethal chemicals for protective purposes. It is well known that many countries use small quantities of such chemicals for research purposes to develop protection against chemical attack. In many cases the State obtains the necessary chemicals from an ally, rather than producing the chemical itself. It seems desirable to permit such arrangements to continue once a treaty comes into force. A ban on small-scale transfers could have the clearly undesirable effect of encouraging many States to set up production facilities in order to have super-toxic chemicals for protective research purposes. Of course, transfers should be permitted only under appropriate controls, which necessarily can apply only to parties. Thus, we can agree that even small-scale transfers to non-parties should be banned.

The proposed limit of 100 grams is a nominal one for purposes of discussion. We would welcome comments as to whether it is reasonable or not.

We have also been asked to clarify our understanding of the term "permitted purposes" as used in our document. This is a very broad term which covers industrial, agricultural, research, medical and other peaceful purposes, law enforcement purposes and protective purposes, as well as military purposes -- such as the use of chemicals as rocket fuels -- which are not related to chemical weapons. The one-ton limit would apply specifically to super-toxic lethal chemicals for protective purposes, a legitimate activity which is closely related to chemical weapons. Again, one ton is an approximate figure for discussion purposes. We believe the one-ton limit is low enough to preclude waging chemical warfare on any militarily significant scale. In assessing whether it is reasonable, it should be kept in mind that one ton is a ceiling, not a quota. States should be required to justify whatever amount they used, even small quantities. Also, the one-ton figure is an aggregate for all super-toxic lethal chemicals used for protective purposes.

The Yugoslav delegation also asked if in our view the proposed preparatory commission would continue working without interruption until the treaty entered into force, whether this occurred quickly or only after some time. Our hope is that the preparatory commission would be able to complete promptly the tasks assigned to it by the convention. But certainly it should work as long as necessary. As a legal matter, it would exist until the consultative committee was established, shortly after the entry into force of the convention.

A question was raised regarding the relationship between the fact-finding panel and

the consultative committee. Our suggestion is that the fact-finding panel should be a subordinate body to the consultative committee, established for the specific purpose of looking into compliance questions. The intent is that the depositary would be involved only as the chairman of the consultative committee. In this regard, we would note that we simply assumed that, as in the case of the ENMOD Convention, the depositary should be the chairman of the consultative committee.

With regard to our views on any confidence-building measures beyond those mentioned in our paper, the subject has certainly not been exhaustively treated. Constructive suggestions have already been made by the delegation of Sweden and many others. We have an open mind on the question and would welcome further ideas from our colleagues.

It has been noted that national technical means are not mentioned in the United States paper. To our way of thinking, it was not necessary to include such a reference. Of course, States will continue to acquire information using whatever national technical means are available to them. But such means are not accessible to many States and, in any case, are hopelessly inadequate for verification of a ban such as is envisaged in this convention. The principal means for verification must be international in nature to ensure effectiveness and political acceptability and to inspire confidence.

Finally, Ambassador Vidas raised the question whether the provisions for international co-operation would include the field of toxicology. My delegation feels this would be entirely appropriate. Knowledge of the toxic effects of chemicals is becoming increasingly important.

I hope I have been successful in clarifying our position in response to the questions put by our Yugoslav colleagues and others. We hope that by doing so we have facilitated negotiations on a chemical weapons convention. We look forward to similar clarifications from other delegations. Only if delegations clearly explain their views on the key issues shall we be able to move fruitfully ahead.

CD/PV.211

pp.16-20

USSR/Issraelyan

12.4.83

CW

We should go along the tested road of international negotiations. On the one hand, we should agree upon, formulate and draft those provisions, and first and foremost the key provisions relating to the general scope of the convention, the necessary definitions, verification and other subjects, on which there is a coincidence or similarity of positions. On the other hand, in close connection with this work, we should continue intensive negotiations in order to find the solutions to the problems on which there are still differences. We believe that the recording of similar positions on the key problems should keep ahead of the phase of finding solutions to unsolved questions. I will explain this idea. For example, what is the need to conduct negotiations on specific methods of conducting international on-site verifications of the destruction of chemical-conducting stockpiles, on the basis of quotas or the drawing of lots or on any other basis, if there is no recorded agreement, even of a preliminary nature, on the mandatory conduct of systematic international on-site verifications of the destruction of stockpiles and on the method to be used? To be brief, we wish to construct the building starting from its foundation and not from the roof.

Now I would like to touch upon the comments on our proposals and the observations made by various delegations both at plenary and at other meetings. We shall also reply to the questions addressed to the Soviet delegation.

Our agreement with the proposal of a number of non-aligned and neutral States to include in the future convention a provision prohibiting the use of chemical weapons in general met with a positive response in the Committee. Some delegations at the same

time stressed the need to be cautious so as not to prejudice the 1925 Geneva Protocol. We fully share this view and believe, like the delegations of Indonesia, Sweden and of many other countries, that the task is not merely to avoid unfavourable consequences for the Geneva Protocol, and in particular not to allow a limitation of the general scope of the prohibition in it, which covers also bacteriological weapons, but to make the regime of non-use of chemical weapons established by it even stronger, more reliable and more universal.

The Soviet delegation wishes the future convention to provide a regime of the non-use of chemical weapons that is unique and strictly mandatory for all States and based on the idea that there can be no justification for the use of chemical weapons either in war, in military conflicts or as a first or retaliatory strike, with the use of the completely prohibited supertoxic chemicals or the so-called "other lethal chemicals" which are and will always be produced in huge quantities for peaceful purposes.

Together with an agreement on the use, within the framework of the convention, of the verification machinery for the verification of compliance with the provision on the non-use of chemical weapons also, this would lead to a substantial strengthening of the non-use regime, and we believe that it should be our main goal.

The delegations of the United States and France have spoken here in favour of a "provisional" solution of the problem of verification of non-use based on resolution 37/98 D of the United Nations General Assembly. We believe that the earliest possible conclusion of the convention would be the most effective and complete guarantee of the non-use of chemical weapons. Proceeding from this premise, it is necessary to make every effort in order to speed up the elaboration of the convention, avoiding actions which might complicate the negotiations. By proposing the verification of compliance with the 1925 Geneva Protocol, the resolution enlarges the obligations of the States parties through a vote in the United Nations, with the participation also of States which were not signatories of the Protocol. We have already noted that slightly more than half of the States parties to the Geneva Protocol voted in favour of the resolution. Thus, a dangerous precedent could be created of the revision of an international agreement without taking into account and contrary to the opinions of a significant number of the parties to it. Such a practice would be in flagrant contradiction with the 1969 Vienna Convention on the law of international treaties, and in particular with article 39 thereof, which allows the amendment of a treaty only on the basis of an agreement between the parties.

That is why the Soviet Union will not take part in the implementation of the above mentioned resolution and we have stated so recently to the United Nations Secretary-General. We appeal to every delegation to think about the negative consequences that would result from an attempt to impose the solution of disarmament problems through a majority of votes.

I shall now pass on to another question. A number of the Committee's members put questions on the Soviet proposal for a renunciation, by the States parties to the future convention on the prohibition of chemical weapons, of the production of methyl-phosphorus bond compounds. We were asked whether such a decision is really necessary, whether it might not be harmful to progress in the sphere of the peaceful chemical industry in the distant future, and what is the point of such an action if there are other chemicals which are also used for chemical weapons production.

Unfortunately I cannot, in the present statement, reply in detail to these and similar questions. That will be done in the Working Group. For the moment I will make some general observations on our approach.

A number of delegations in the Committee believe that even after the convention on the prohibition of chemical weapons enters into force, every State will in effect be entitled, if it so wishes, to produce supertoxic lethal chemicals and any other chemicals,

including those capable of being the key precursors for chemical weapons, as well as particularly dangerous organophosphorus compounds with the methyl-phosphorus bond, provided that States intend to use them all, not for arms production but for peaceful purposes. We have been told that such facilities will be declared and be subject to verification — to verification by the drawing of lots, what is more.

In this event, apparently, the sword of Damocles would be hanging over any declared facility in the form of the possibility of its becoming unexpectedly subject to verification. But this requires as a minimum that all such facilities be really declared, both those producing and those capable of producing such chemicals. If we follow this way proposed by some delegations, then the lists of the declared facilities will contain hundreds or even thousands of facilities of kinds various, both large and small, and the element of chance in the carrying out of verification by the drawing of lots will be so great that the potential violator of the convention is hardly likely to be disturbed by such a method. I do not even have to say that such a system, whereby the special lists would contain almost all chemical enterprises, might cause them to be discredited in the eyes of the consumers of their products. Thus the proposed approach is very complicated, vulnerable and, what is more, ineffective.

As far as our approach is concerned, it narrows down the range of the industrial facilities capable of producing any supertoxic lethal chemicals, as well as those chemicals — "key precursors" (with the methyl-phosphorus bond) which are the most dangerous from the point of view of their use for chemical weapons production, practically to a single special facility in any State party. Regardless whether 30 kg or 300 kg of such chemicals are needed, they should be produced at the special facility subject to systematic international on-site verifications by quota, and nowhere else. The detection of the production of these chemicals by other enterprises on the basis of verification by challenge would prove the violation of the convention.

Now I come to the questions of distinguished Ambassador Vidas of Yugoslavia addressed to us on 29 March.

The delegation of Yugoslavia was interested in whether according to the Soviet position, facilities for filling chemical weapons should be eliminated or dismantled and enterprises producing the chemical weapons should be closed immediately after the convention enters into force. Naturally, our reply to both questions is positive.

One thing should be explained however. The verification procedure proposed by the USSR for the closing and elimination or dismantling of chemical weapons production facilities, as well as the timing for their declaration considerably differ from the approach contained, for example, in the "United States detailed views on the contents of a chemical weapons ban" and in the statement by the United States delegation in the Committee on 17 March, upon which we shall dwell in greater detail in the Working Group.

The delegation of Yugoslavia requested us to explain our position on specialized facilities for the permitted production of supertoxic lethal chemicals.

The Soviet Union believes that the upper limit of the production of supertoxic lethal chemicals for permitted purposes, i.e. for industry, agriculture, research, medicine and any other peaceful purposes, for the purpose of protection from chemical weapons as well as for military purposes not connected with the use of chemical weapons, should be one metric ton for any State party. This means that the total quantity of such chemicals produced at the special facility, transferred from stockpiles or acquired in some other way every year or at the disposal of the State party at any moment should not go beyond this limit. It may be less, be only a part of this amount, but it should not be superior to it at any time. Taking into account all these features of our position, the one-ton limit does not seem to us to be too high.

Finally, the delegation of Yugoslavia was interested in how the Soviet Union under-

stands the verification of a justified request on a voluntary basis. We confirm that we see this form of verification as universal and one which could be used especially for the verification of the non-production of chemicals for chemical weapons at commercial enterprises. As to the verification of the destruction of stockpiles, we believe that its main form will be systematic international on-site verifications on the basis of an agreed quota at a transformed or special destruction facility.

The decision of the State in the case of a request for verification by challenge will depend, to a large extent, on the nature of the request, the specific circumstances which provoked it, and so on. The request should be prompted by the real interests of compliance with the convention by all States, and not by any other reasons; it should be justified. It is only natural that a completely unjustified request submitted on the basis of considerations which are far removed from the convention's purposes will be met accordingly. Let us be realistic and ask ourselves -- can we demand from a State to which a request is addressed that it should accept verification automatically? That would mean that verification could cover any enterprise which has nothing to do with the production of chemicals for the purposes of chemical warfare but which, let us say, is directly connected with military production, for example, the production of missile fuel, explosives, various types of armaments, military equipment, etc., since at present chemistry is used everywhere. Those who state that they are ready automatically to permit an international on-site verification in response to any request, even if unjustified, are demagogues. We have no doubt about it.

It is sometimes said that the Soviet Union, in proposing the prohibition of the production of methyl-phosphorus bond compounds at commercial enterprises, wishes to exclude the entire commercial industry from the scope of verification under the convention. Of course, this is a flagrant distortion of our position. We in no way eliminate the problem of the verification of the so-called key precursors. We are in favour of the elaboration of criteria and definitions for such precursors and the setting up of appropriate lists on the basis of these. We believe that the States parties to the convention should annually submit information on the precursors included in these lists that they have produced, acquired, retained or used for permitted purposes. We in no way eliminate, either, the question of the verification of chemicals which are particularly dangerous from the point of view of their possible diversion for purposes connected with the use of chemical weapons. We propose a similar approach to them. In both cases the system of on-site verification on the basis of a justified request could be applied.

Distinguished delegates, the Soviet delegation would now like to make some general comments on the prospects for the negotiations on the prohibition of chemical weapons.

The Committee is on the eve of the decisive stage of the negotiations aimed at the elaboration of a convention on the prohibition of chemical weapons. Of course, a lot will depend on the proper organization of the negotiations, on the time allocated for them, on the activity of all delegations and on other questions. But in the final analysis, success will be determined not by these factors but by the readiness of every delegation to search for mutually acceptable solutions and compromises, to display flexibility. It will also depend on whether attempts will continue to be made artificially to heat up the atmosphere at the negotiations and to turn them into an arena for various political speculations, or whether a business-like situation will prevail.

In this context I should like to draw your attention to the following. Since 7 July 1980, when the USSR and the United States submitted to the Committee their "Joint report" (document CD/112), the Soviet Union has repeatedly improved its approaches to certain aspects of the problem of the prohibition of chemical weapons, come out with various initiatives, meeting half-way the other participants in the negotiations, including the Western countries, in order to achieve an early agreement. It is enough to recall that the Soviet Union, while believing that for the purposes of verification, national

forms of verification, national technical means and international on-site verification on the basis of a justified request are adequate, nevertheless agreed that the verification of the destruction of stocks and of the production of supertoxic lethal chemicals for permitted purposes should be conducted on the basis of mandatory international on-site verifications. Quite recently, we agreed that the position of the non-aligned countries on the inclusion of a provision on the non-use of chemical weapons in the convention.

And what has happened during this time to the United States approach to the key questions of the prohibition of chemical weapons? Using as a cover the allegations invented by them in respect of the USSR and other socialist countries, the United States has moved away from some of its earlier positions, has toughened them, in particular on questions of verification, etc. Such a movement does not inspire great optimism, but on the contrary leads to the sad conclusion that what we are dealing with is no more than another political game. We cannot leave out of our reckonings the fact that chemical weapons have an important role to play in the Pentagon's plans for the next decade. Various American statesmen have said a great deal about this in recent times.

CD/PV.213

p.10

Viet Nam/Nguyen Thuong

19.4.83

CW

Allow me, on the basis of the result of the Symposium, to put certain thoughts before the Committee. In my view, the prohibition of chemical weapons should be universal; each State party to the convention should undertake never and in no circumstances to develop, produce, acquire in any way, retain, transfer or use chemical weapons, and to destroy its stocks of them or redirect them into authorized purposes as well as to destroy or dismantle facilities for the production of chemical weapons.

As regards the question of what chemical substances should be prohibited, my delegation considers that the future convention should prohibit all chemical substances for purposes of war without, however, placing unnecessary difficulties in the way of the development of the chemical industry for peaceful purposes.

Certainly, the future convention ought to contain provisions giving an assurance of its strict application. As regards the question of what specific methods of verification should be used with respect to the various aspects of the activities prohibited, my delegation is of the view that verification measures should be effective but should not be such as to lead to interference in the internal affairs of sovereign States or the creation of obstacles to the development of the chemical industry for peaceful purposes; in other words, they should be very carefully thought out from every point of view. Thus what is needed is a rational and effective combination of national and international means of verification.

CD/PV.213

p.14

Sweden/Hyltenius

19.4.83

OS

The SALT I and II agreements between the Superpowers acknowledged the right of the parties to use national technical means to verify compliance with their provisions. In addition the Soviet draft treaty on the prohibition of the stationing of weapons of any kind in outer space refers exclusively to national technical means of verification. However, it is hardly likely that such a limitation would be accepted by the international community. If a treaty on the prevention of an arms race in outer space is to stand a chance of being universally adhered to, it must have a system of international verification. A first step in this direction was taken by France in advancing the idea of an international satellite monitoring agency. This is a matter of principle to many countries. Moreover, it must also be realized that the present virtual duopoly of the two

Superpowers in this technology is about to be broken.

CD/PV.214 p.14 India/Dubey 21.4.83 NU

There is one last argument put forward against the proposed ban on the use of nuclear weapons which should also be disposed of. It has been said that a legal commitment not to use nuclear weapons is not verifiable and hence cannot be enforced. This, I submit, is an absurd argument. There are indeed very few legal commitments which are verifiable. If this argument of only verifiable commitment being enforceable is applied strictly, then most of our treaties, conventions and contractual commitments would have to be declared infructuous and the whole body of international law will be shorn of its substance. I shall cite just one example to bring out the absurdity of this argument. The nuclear-weapon States, which have been resorting to this argument, are also the ones which have loudly trumpeted the solemn assurances that they have given to non-nuclear-weapon States, selectively and conditionally, of course, against the use or threat of use of nuclear weapons. Are these assurances verifiable? Even if these assurances, or the negative security guarantees, are embodied in legal instruments, could they possibly be verified? Where is, then, the question of only verifiable legal commitments being enforceable? In another context, under the terms of the Additional Protocols to the Tlatelolco Treaty, nuclear-weapon States have undertaken legal obligations not to use nuclear weapons against the Latin American Nuclear-Weapon-Free Zone. No provisions have been made to verify such obligations. Does this mean that the nuclear-weapon States do not regard the commitments they have made in the context of this Treaty as valid or enforceable?

CD/PV.214 p.18 Australia/Sadleir 21.4.83 CW

Of all the arguments, verification is the main one. Let me assure those delegations which have expressed the fear lest the verification cart be put before the convention horse that the correct order is being observed. The chemical weapons area is a good example of the proposition that disarmament and arms limitation conventions aim to increase security, and that verification contributes to this as a consequence. States give up partially and/or temporarily some of their national security when they adhere to a convention so that they might benefit from a general consequential improvement in security. The reassurance that the process is worth it comes largely through the methods available to them of verifying that all States are complying. In the sphere of chemical weapons, there will have to be an extended and delicate period during which States reduce their chemical weapons profile, actual or potential. There will be asymmetries and uncertainties. There will be a need to ensure -- in stage or phases -- that complex obligations are being honoured. How this verification is achieved will require continuous regulation in the course of negotiating the convention, but it will of course be subordinated to the objectives of the convention itself.

There has been a wide measure of agreement that the future convention must provide a means to verify that chemical weapons have not been used. The basis of this agreement is that the 1925 Protocol's prohibition on use has no verification mechanism. It might be possible to verify something under one convention which is prohibited in another but, to put it mildly, that would be untidy. My delegation argues a simple proposition: let the future convention ban the possibility of the use of chemicals as weapons, and let it provide a verification mechanism to ensure compliance with this ban.

I do not need to re-emphasize here the importance of verification procedures in any disarmament agreement. Without proper arrangements in this respect, it is very difficult to work out effective and credible disarmament accords. In this sense, verification is an integral part of any such agreement. At the same time, verification is a complex matter, as many of us who have had experiences in either its formulation or its implementation have been made painfully aware.

There are a number of reasons for this situation, and one might enumerate some of them in the following manner. For one thing verification is most closely connected with the specific prohibition and/or other commitments undertaken in an agreement, which, needless to say, are the main theme of any such agreement. Secondly, verification measures, which are often heavily technical, are the actual interface between the letters of the agreement and the functioning real world. As such, verification measures have to encounter various restraints and limitations, of a technical, legal and other nature. In other words, and in most of the cases, there have to be strong feedbacks from viable and effective verification possibilities to the main body of the text, especially with regard to scope. Here, I would like to recall a very fine working paper on the subject presented to the Committee on Disarmament by the Canadian delegation in 1981, namely, document CD/167 and its appendix. Although the paper was presented in connection with chemical weapons, it also represented one of the most comprehensive descriptions of the various methodologies involved. That paper with its appendix stated that absolute verification, or 100 per cent effectiveness of verification, although desirable, is extremely difficult, if not impossible, to achieve. The problem then is: "how many per cent uncertainty may be acceptable in what case?", and here, in addition to the consideration of political judgement, one has to exercise a certain amount of cost/effectiveness judgements as well. What complicates the matter further is that different techniques of verification have different curves of so-called diminishing returns vis-à-vis the input of increasing costs and efforts. One has to work out a delicate balance between priorities and the relative importance of particular provisions of treaty commitments against the cost/effectiveness of the associated verification measures, and here, obviously, I am not talking only of monetary cost, but include in this concept social and political costs.

The third reason for the complexity arises from the somewhat philosophical approaches to the verification exercise themselves. Within the community of verification experts, there has been a long-standing debate as to whether or not the exercise in question is a game played in a hostile atmosphere between the two adversaries. This is the so-called zero-sum approach, in which the verification side's loss is a gain on the side of those who carry out violation strategies. Of course, this game theory approach has problems of its own, in that loss and gain may not be assigned the same value. Another approach is to focus our attention on that aspect of verification which is related to the confidence-building measures. This idea has a number of merits; for example, in reality, the effectiveness of verification will greatly increase with good co-operation from those whose activities are being verified. This is the basis on which national activities, including record-keeping and report-making and, if and when appropriate, some measures of national self-inspection, can be very useful. Although it is obvious that these national measures cannot take the place of international on-site inspection, they can nevertheless greatly facilitate international inspection, if carried out in good faith. It will allow us to plan random-based international on-site inspection more effectively, and may contribute to reducing the number of such inspections required. In some cases, such international co-operation is a prerequisite for fact-finding. The minimum stipulation along the line of such co-operation is an undertaking

not to wilfully obstruct the employment of national technical means. One can realize also that the effective discharge of verification measures would greatly increase the co-operative atmosphere and would be conducive to the furtherance of the cause of disarmament in general.

This leads us to another and possibly more basic reason for the confidence-building measures type approach, namely, that any disarmament agreements have to be based on a measure of mutual confidence among the contracting parties, and that verification is a means to maintain such confidence, and to restore it whenever there arises a case of suspicion of violation of the agreement by any one of the parties. Unless there is this basic element of confidence, in other words, if an agreement is to be based on deep suspicion among the parties, it is difficult to see that any disarmament agreement could be workable. In this sense, verification is often conceived of as a means to deter violation by providing credible technical means to detect possible violations. This means that verification measures should be able to deal with various scenarios of possible violations and, I should add, with an adequate level of confidence of detection capabilities. It also means that the text of an agreement should be very clear as to what activities are prohibited and, as the case may be, what specific actions are promised with regard to, say, the disposal or destruction of the existing stock of prohibited material or weapons. This is because the scenarios for possible violations are different from one prohibited item to another, and thus different concepts of verification approaches should be already in the minds of those who write the text of an agreement. When one takes this confidence-building measures approach to verification, then there are two things that stand out very clearly. They are: (a) a trend of suspicious events, including continued attempts to avoid verification application, may be a more serious symptom of violation of confidence than an isolated case of suspicious evidence, and (b) the parties should co-operate toward quick restoration of confidence by accepting ad hoc on-site inspection whenever sufficiently well-established challenges are presented.

Another pertinent question is what happens when and if violation has been definitely proven to have taken place. This is undoubtedly a very delicate issue, for one thing because it means that the basic confidence upon which the disarmament agreement has been built may no longer hold. One may talk about retaliation or abrogation, but that means that the agreement itself was a failure, although such measures will obviously have to be retained as the last resort of deterrence. One may be able to talk about the application of sanctions, but historically, sanctions under such circumstances are a very complicated matter, including the institutional problems of their implementation. What complicates the situation further is the question whether one can talk about conclusive evidence of violation or not. Some problems regarding the use of prohibited weapons, or their deployment, may be easier to handle, because these are often cases of counting a number of discrete events. I would, however, not overly discount the difficulties involved in these cases either. More troublesome are the cases in which measurement of material plays the major role.

Here, allow me, Mr. Chairman, to indulge in a bit of technical discussion. In any scientific exercise of measurement of bulk material, one has to first take a representative sample from the bulk. Whether or not this sample represents the chemical or other composition of the entire bulk is an issue in which a certain degree of uncertainty is inevitable. The sample is then put to measurement or analysis in which various instruments are employed. There is no such thing as absolutely accurate measurement or analysis, and they are always associated with a certain error band or range of uncertainties. The compound effects of instrumental and human uncertainties can become of considerable order, especially with those instruments actually employed in the field. Then, again, verification procedures carried out on random sampling bases can provide confidence only on a probability basis. One makes such statements as "the material

produced (or destroyed) was so many tons plus or minus so many kilograms, and I make this statement with 90 per cent certainty". Similar problems of the representativeness of samples have been raised a number of times regarding the use or after-effects of certain chemicals in the actual areas of hostilities.

I have no intention of over-emphasizing the technical problems of this nature, and indeed in many case, or, I should say, most cases, arrangements have been devised adequately to circumvent these particular problems. But all solutions worked out have accepted this uncertainty range and probability statement, and therefore the need for international co-operation to keep the uncertainties to the minimum as the starting point. It might be important to be always aware of this point when we talk about various modes of verification.

The above discussion about inherent uncertainties associated with random on-site inspection does not necessarily lead us to the need for continuous and resident on-site inspections all the time, which is undoubtedly very costly and very cumbersome. The "black box" approach is one of the devices to circumvent this difficulty, and can be very effective in certain cases. I will merely mention the case of a tamper-proof camera employed as part of IAEA safeguards, which takes a picture of plutonium-containing fuel movements (but nothing else) as an effective black box actually in use.

In fact, there are many cases in which direct access to the material, equipment or facilities in question is genuinely not recommended. I would mention only four examples. The object in question may contain militarily sensitive information, the revelation of which might endanger national security or invite an undesirable proliferation of such technology. The arrangement adopted in the SALT negotiations regarding MIRVed ICBMs is an example of how to solve this type of problem. Secondly, the material or facility may involve grave safety hazards. Highly radioactive nuclear material can be an example. In this case, the measurement of radiation energy and calculation back to the composition of various isotopes in the nuclear fuel takes the place of direct measurement. The third example is when the material or facility is located in the middle of an industrial complex, in association with other activities which are not included in the disarmament agreement, and often full of proprietary information. The problem can be solved, for example, by designating a limited area of permitted access and designing the plant in such a way that all the necessary measurements may be taken in these access-permitted areas. The fourth and last example is the well-known one of underground nuclear testing, where seismic signal analysis is adopted as the major instrument of detection.

I do not want to plunge the Committee into any further technical issues. The whole purpose of exposing distinguished delegates to the above brief discussion is to emphasize certain types of complications which the verification procedures may involve, so that when the job is given to the technical experts to work out the details, the original agreement should have sufficient clarity in defining the scope of the prohibition and its interaction with verification procedures to allow the technical community to proceed with the given assignment with as clear and objective an approach as possible. For one thing, the most important characteristic of effective verification is that it is objective and can keep the extent of reliance on subjective human judgements to the minimum possible.

In our working paper, we have also taken up the problem of undeclared or clandestine activities, as follows:

"On the first instance, only those activities that are meaningfully verifiable may be included in the scope. In this context, in most of the cases only those materials and facilities declared by a State party may effectively be taken up for the purpose of verification activities. Undeclared or clandestine activities, materials or equipment do not usually

come into the picture except when they happen to affect visibly the portion under verification activities, or happen to be detected through national technical means.

At the same time, verification should be so designed that effects from clandestine activities, if any, are bound to become as visible as possible so that by-challenge verifications may be triggered. It is the basic assumption of the arms control and disarmament agreements that any undeclared or clandestine activities are also prohibited".

In summarizing the considerations regarding clandestine activities, there are all the more reasons why (i) routine, random on-site inspections have to be carried out, preferably based on records and reports to be prepared by the national control system, (ii) national technical means have to be encouraged, and (iii) whenever a plausible challenge has been made, the parties in question should arrange for an ad hoc on-site inspection so that the particular issue may be dealt with immediately and, as I said at the outset, so that the basic confidence embodied in the original disarmament agreement may be quickly restored.

In our working paper we have also touched upon the question of an international body which would be given the task of co-ordinating the various verification activities. To what extent such a body should be authorized to conduct various verification-related activities, including checking national reports, dispatching international inspectors, receiving information obtained by national technical means, carrying out an analysis of collected data, and making a preliminary evaluation of the results of such analysis, may depend upon the nature and scope of individual disarmament agreements.

There is one thing that needs to be emphasized, however, and it is that the existence of such an international body is very much desirable and may indeed be necessary in order to maintain any particular verification scheme as a viable, effective and ongoing component of the disarmament regime.

It was based upon this firm conviction that Japan proposed, during the second special session of the United Nations General Assembly devoted to disarmament, the formation of an international verification unit within the framework of the United Nations, which should, as a first step, begin to accumulate all available information and knowledge on verification techniques and applications. And I would like to remind the distinguished delegates that Japan at that time submitted a working paper entitled "Strengthening of the role of the United Nations in the field of verification".

In an attempt to introduce our working paper on the subject of verification, I have taken the liberty of emphasizing some of its salient points. This is because we believe that verification is a very important subject, and that it probably forms the central issue in our negotiations both on chemical weapons and on a nuclear test ban, and on whatever other disarmament measures the Committee on Disarmament may take up in the future. One cannot talk about verification in the abstract because, as I said earlier, the subject is so closely interlinked with the specific commitments. At the same time, it is very difficult to talk about disarmament measures which are not linked with specific measures of verification. None of us are naive enough to claim that by solving the issues of verification and compliance we have almost finished the work on a disarmament agreement. At the same time, it seems to me that by looking very closely at these issues and achieving agreement on a substantial portion of them, we shall indeed make very major progress towards the achievement of the goal.

tomorrow will tell whether this agreement is achieved. If this is the case, my delegation will be prepared to participate in our summer sitting in an active way on work towards a nuclear test ban. In this regard, I want to address a closely related matter — the seismic experts Group, also scheduled to meet this summer. I want to recall that Canada has made new funding available for the acquisition of computing and seismograph facilities, and for recruitment of new staff to take a full part in the data exchange experiments devised by the seismic experts Group: Canada will be expanding further its work in the general field of seismic verification research. As the Canadian Deputy Prime Minister indicated, we believe that the next important step in the work of the seismic experts Group is the planning and implementation of a large-scale experimental global exchange of seismic data. We are looking forward to participating in this further work this summer.

Mutual security is also a critical theme in this Committee's consideration of the prevention of an arms race in outer space. Outer space has been defined as a Canadian priority for 1983. For a number of years in the General Assembly, Canada has urged that attention be given to this subject. Let me be clear. Our objective is the prohibition of all weapons for use in outer space. Mr. MacEachen called on this Committee to begin as soon as possible its essential task of defining the legal and other issues necessary to build upon the existing outer space regime. Perhaps one of the most logical issues to treat first is that of defining what a future treaty or treaties would include. Presumably the definition should encompass space-based and ground-based systems, and should include any type of weapon not prohibited by the outer space Treaty. The definition should presumably be as broad as possible, and be sufficiently precise so as not to conflict with other categories of armaments. As we progress, it may be decided that we should concentrate initially on one category of weapons, if a broader definition would unduly delay progress toward our objective.

The main problem the Committee will face, however, will undoubtedly be that of verifying any prohibition on which we may wish to agree. The technical problems involved are daunting, for example, in determining whether a vehicle in space — or a system on the ground apparently designed for use in space — does in fact contravene the prohibitions of an agreement. Canadian experts are attempting to determine how the problem can be dealt with, and we shall share any promising results of their research with other delegations in this Committee.

The Canadian delegation will co-operate fully, Mr. Chairman, with the contact group that will be consulting under your guidance and that of your successor in this regard. This contact group is charged with clarifying the objectives and tasks of an eventual working group on arms control and outer space, with a view to reaching consensus on the creation of a working group and its mandate. The objective is to reach agreement during the course of our summer session, and we intend, in co-operation with others, to work actively toward this objective so that the option of arming outer space may be closed off.

Like many other delegations, the delegation of the Mongolian People's Republic has repeatedly declared that the Ad Hoc Working Group on a Nuclear Test Ban ought to be given a mandate permitting it to conduct negotiations. The Working Group ought not, we think, to occupy itself with fruitless discussions on questions of verification. In saying this it is not our intention to minimize the importance of considering and agreeing on questions of verification. As was shown by the work of the Ad Hoc Working Group in 1982, the overwhelming majority of States consider that the existing means are entirely

adequate to ensure verification of compliance with the provisions of the future treaty on the complete and general prohibition of nuclear-weapon tests.

Consequently, questions of verification can no longer be used as an excuse for blocking practical negotiations in the Committee. We are again wondering what is the ultimate objective of those who are deliberately using discussions on questions of verification as a cover for their unwillingness to reach agreement on the complete prohibition of nuclear-weapon tests.

CD/PV.216

pp.32-34

France/de la Gorce

28.4.83

CW

I should like to say a few words about the subjects so far dealt with by these groups: the declaration and destruction of stocks of chemical weapons; the procedure for on-site inspections by challenge, and the question of the prohibition of the use of chemical weapons.

As regards the verification of the destruction of stocks, the position of the French delegation is well known; we believe that such verification should in the first instance guarantee that the nature and the quantity of the products destroyed in fact correspond to what has been declared; then, that there is no possibility for the diversion or substitution of products during the process of destruction, and lastly, that the destruction is carried out in a manner that is irreversible or very difficult to reverse and that the final products are unusable as chemical weapons.

We believe that in order to guarantee all these things, international verification should be carried out continuously throughout the period of the operations of destruction. In the present state of technology, this means that international inspectors must have access at all times to every part of the destruction facility. The development of automatic verification systems will perhaps one day make it possible to reduce these constraints, but it will still be necessary for any equipment installed to be reliable and guaranteed against any manipulation.

In the contact group concerned with the procedure for on-site inspections by challenge, the discussion has centred mainly on the way a State forming the subject of a request for an inspection by challenge should react to it. According to the consensus which appears to have emerged in the contact group, a State forming the subject of such a request could not refuse to accede to it arbitrarily and without explanations. We believe that it is necessary to go much further. Once the destruction of stocks and facilities is complete, confidence between the parties can be assured only by a guarantee that none of them will subsequently resume the manufacture of chemical weapons. This requires, on the one hand, that the industrial establishments manufacturing products capable of being diverted for use in chemical weapons — for example, products containing the methy-phosphorus bond — should be subject to systematic international verification of a strictness dependent on the potential danger of the products in question. In that connection, verification by the drawing of lots appears to offer an appropriate method. On the other hand, it is essential that any suspicion of a possible violation of the convention should be investigated promptly after the addressing of a "challenge" to the State suspected, by means of an on-site inspection conducted by an international team. This kind of inspection is so important that acceptance of it ought to be the rule — it would, moreover, be to the benefit of the innocent State and would embarrass any dishonest accuser — and refusal ought to be the exception. What the contact group ought to consider, therefore, is not the conditions that should be met by a request for inspection by challenge, but in what very limited cases a State so challenged could refuse such an inspection, and what justification it would then be required to provide.

The third contact group has been dealing with the question of the possible inclusion

in the convention of a clause prohibiting use, and the question of verification of compliance with that clause. As we explained on 8 March last, we are not convinced of the need for such a provision. We consider that the prohibition of the use of chemical weapons is already ensured in as complete a manner as possible by the Geneva Protocol of 1925, both as regards the products to which that prohibition would apply -- "asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices" -- and as regards the circumstances in which use is prohibited. The expression "use in war" ought not to be interpreted as having a restrictive meaning: in 1925 the idea of armed conflicts other than formally declared wars had not made its appearance in international law, and it is clear from the terms of the Protocol itself that its authors had no intention whatever of restricting its application to formally declared wars.

However, if a consensus emerges in favour of a repetition of the prohibition of use in the future convention, it would be essential, and I think we are all agreed on this, to avoid anything which would prejudice the authority of the Geneva Protocol. As the French delegation has already stressed, the preamble to the convention ought to contain a paragraph reaffirming the validity of the Protocol. Such a text ought also to state that the Protocol forms part of international law and that the prohibitions it contains apply to all. The future convention ought also to stipulate that none of its provisions can be interpreted as derogating from the obligations flowing from the Protocol.

If more is felt to be needed, the States parties to the convention which are parties to the Geneva Protocol could recall the commitments they had assumed under the latter, and those States which were not parties to the Protocol could declare their acceptance of the prohibition of the use of chemical weapons embodied in the Protocol. Such a solution, which is very near to that suggested by Mr. Ackerman, the co-ordinator of the contact group responsible for this question, would have the advantage of avoiding both duplication with the Geneva Protocol and the risk of instituting regimes for the prohibition of use that were different for States parties to the Protocol and States not parties to the Protocol.

As to verification of compliance with the prohibition of use, as was proposed by the delegation of the Soviet Union and other delegations, this should form the subject of appropriate provisions in the part of the convention devoted to verification. These provisions should take account of the specific conditions -- state of war or armed conflict -- in which a violation of the prohibition of use might be committed. They ought to be based essentially on on-site inspection by challenge and to provide in particular for speedy and unhampered access by inspectors to the locations of alleged violations. The French Government attaches particular importance to this matter of the verifications of violations of the Geneva Protocol and more generally to the rule of international law it embodies. It was for this reason that at the United Nations General Assembly session of last year the French delegation, along with others, worked to secure the adoption of a procedure for that purpose. We have already replied here to the objections raised that the resolution adopted violates the law of treaties. We shall, if necessary, revert to this matter. But we should like to repeat that an action designed to ensure respect for a provision of international law cannot be presented as being contrary to international law. In adopting resolution 37/98 D of 13 December 1982, the General Assembly in no way exceeded its competence. It merely provided for the adoption of provisional procedures designed to uphold the authority of the 1925 Protocol, an authority which would be weakened if such procedures could not be applied when there was an allegation of a violation of the Protocol. The well-known and indisputable rule of international law concerning the useful effect of treaties -- Potius valeat quam pereat (the treaty should prevail rather than perish) -- fully confirms this.

In the event of any lacuna in an international undertaking, it is implicitly within the competence of the body best equipped, both by its composition and by the range of its

general functions, to act on behalf of the international community of States as a whole, to provide for the creation of a mechanism to ensure that that international instrument is in fact respected and that possible violations thereof shall be brought to the notice of international public opinion when such an instrument forms an integral part of general international law, and in the present instance the body of rules of international law applicable in the case of armed conflicts.

CD/PV.217

pp.19-22

Sweden/Theorin

14.6.83

CTB

An adequate verification system is a most important element in a comprehensive test-ban treaty as it is in all arms control and disarmament agreements. The legitimate right and duty of all countries to participate in the verification of international treaties to which they are parties must be recognized. This political recognition must be supported by international technical arrangements that will make it possible for all countries to possess essentially the same verification possibilities. International co-operative measures are also the corner-stone of the verification arrangements of this draft treaty.

These seismological measures, supplemented by surveillance of airborne radioactivity should, in combination with the proposed procedures for consultation and on-site inspection, in our view provide an adequate verification system acceptable to all.

The Swedish government is deeply committed to the work of establishing such international verification arrangements. I take this opportunity to reaffirm the offer of the Swedish Government to establish, operate and finance an international data centre in Sweden and also to contribute data from our Hagfors Observatory to such an international data exchange.

I will now present our draft treaty in more detail.

The purpose is to obtain a comprehensive treaty prohibiting any nuclear-weapon test explosion in any environment, by all countries and for all time.

As to explosions for peaceful purposes, a moratorium should be established until appropriate international arrangements for conducting such explosions have been worked out. It is suggested in the draft treaty that the parties keep under consideration the question of arrangements for conducting nuclear explosions for peaceful purposes on a non-discriminatory basis, including the aspect of precluding military benefits.

The treaty should be open to all States for signature and it is our hope that all countries will find it possible to adhere to the treaty. The treaty will enter into force when at least 20 governments, including the governments of the United States, the United Kingdom and the Soviet Union, have become parties to it. If this treaty has not been adhered to by all permanent members of the United Nations Security Council within five years after its entry into force, each party will have the right to withdraw from the treaty.

In our view, the verification arrangements must be part of the treaty and thus be worked out and ready for implementation when the treaty enters into force. We are therefore presenting three draft protocols containing provisions for an international data exchange, for on-site inspections and for a consultative committee.

The suggested arrangements for the international exchange of seismological and other data are based on the work of the Ad Hoc Group of Scientific Experts. The international system has three basic elements, national recording stations, the data exchange system to be carried out through the Global Telecommunication System of the World Meteorological Organization and, finally, international data centres. Each party should have the right to participate in the international data exchange by providing data from stations in its territory and by receiving all data made available through the exchange. To ensure that from the very beginning the station network has the necessary global

coverage, agreements to contribute data should be made in advance with a number of countries. The stations designated to participate in the international exchange should have the same basic equipment and be operated, calibrated and maintained according to agreed specifications to be given in an operational manual for seismic stations.

Seismic data from designated stations should routinely be reported through the Global Telecommunications System of the World Meteorological Organization or through other agreed communication channels. In addition to data thus submitted, each country should provide any additional data from its designated stations requested by any party to the treaty. The data to be reported, the reporting format and time schedule, as well as the procedures for the international exchange of these data, are to be laid down in an operational manual for data exchange.

International data centres should be established at agreed locations. Each centre should be under the jurisdiction of and financed by the party on whose territory it is located. Each international data centre should receive all contributed data, process these data without assessing the nature of observed events and make the processed data available to all parties. An operational manual for international data centres should also be worked out containing a specification of procedures to be followed at such centres.

In addition to an exchange of seismological data, the exchange of data on atmospheric radioactivity should be established. This exchange could be organized in a way similar to seismological data exchange and utilizing the same international data centres. The possibility of including additional measures such as hydro-acoustic signals in oceans and infrasound and micro-barographic signals in the atmosphere could also be considered. An operational manual must be worked out for such additional measures.

All parties to the treaty should, through the data provided by the international data exchange or through their national means of verification, obtain the technical data needed to verify the treaty. The parties should, further, through bilateral or multilateral consultations, co-operate in good faith to clarify any event relevant to the subject matter of this treaty. Each should, in that respect, be entitled to request and receive information from any other party.

Each party should further be entitled to request an on-site inspection for the purpose of ascertaining whether or not a specified event was a nuclear explosion. A party may also invite on-site inspection in its own territory of large non-nuclear explosions or of any other events where it finds that such inspections might allay unfounded suspicion. The procedures for international inspections, including the rights and functions of the inspecting personnel, are laid down in a separate protocol.

The purpose of an international on-site inspection is purely fact-finding, and the inspection team should not make any assessment as to the nature of the inspected event, but only present a factual report of the observations made during the inspection. We have found that the technical material which is available and compiled today on the various inspection techniques and their potential usefulness is insufficient to propose a treaty text in this respect. The task of compiling such necessary additional technical material should be given to the Ad Hoc Group of Scientific Experts.

A consultative committee should be established to oversee the implementation of the treaty and of the international verification arrangements. The consultative committee should also serve as a forum to discuss and resolve disputes concerning the treaty and its verification arrangements that might arise between parties to the treaty. Any party would be entitled to make inquiries in the committee and receive answers. They could also request an international on-site inspection and receive the factual results of such an inspection.

A technical expert group and a permanent secretariat should assist the consultative committee. The technical expert group, which should be open to all parties, should evaluate the technical performance of the international verification measures and

propose changes in equipment and technical procedures. It should also be a forum for technical discussions of events of which a party seeks clarification through international measures.

The permanent secretariat should assist the consultative committee and the technical expert group. It should, *inter alia*, supervise that the technical components of the international data exchange are operated as specified in the treaty. The secretariat should compile and present operational statistics to the technical expert group. The secretariat should also serve as the point of contact for co-operation with international organizations such as WMO.

It is our hope that this draft treaty presented today will facilitate serious political negotiations in the Committee on Disarmament. As I have mentioned, additional technical material is, however, needed. In our view the task of providing this technical material should be given to the Ad Hoc Group of Scientific Experts.

My Government is presenting this draft comprehensive test-ban treaty in order to give a new impetus to the disarmament negotiations in the nuclear field.

The draft treaty with its protocol demonstrates that a combination of verification measures, such as seismic means, surveillance of airborne radioactivity and on-site inspection, creates the opportunity to establish a sound and reliable verification system.

CD/PV.219

pp.8-9

UK/Cromartie

21.6.83

CTB

Before turning to a detailed examination of one of the problems which we face in connection with a nuclear test ban, I should like to offer some brief preliminary comments on the important statement made by the leader of the Swedish delegation, Mrs. Theorin, on 14 June. I think it will come as no surprise if I say that my delegation is not wholly in accord with all the contents of that statement. Bearing in mind the problems associated with the important negotiations which are going on elsewhere, we would find it difficult to agree with the statement that "no issue is now blocking international disarmament as much as the absence of serious negotiations on the ban on testing of nuclear weapons". Nor do we believe that enough weight is given in the statement to the problems of verification of a test-ban treaty, which have presented such serious obstacles to the conclusion of a treaty in the past and which continue to exist today. We shall, however, study carefully the Swedish draft treaty text. We shall no doubt have many opportunities in the Working Group during the course of the session to discuss detailed aspects of the treaty, especially those related to the problems of verification.

One aspect of the Swedish draft treaty of particular interest to my delegation is the treatment accorded to nuclear explosions for peaceful purposes. Article II of the draft treaty recognizes the incompatibility of an uncontrolled conduct of nuclear explosions for peaceful purposes with the aims of a nuclear test ban, and rightly calls attention to the need for any arrangements which might be made for the conduct of nuclear explosions for peaceful purposes to be consistent with the international obligations of prospective parties. My delegation has today tabled a working paper, document CD/383, in which we have tried to take consideration of this problem a stage further by looking at the difficulties which would face us in designing international agreements for the conduct of nuclear explosions for peaceful purposes in the framework of a nuclear test-ban treaty.

The working paper draws attention to the various points of view which have been expressed in the Working Group. It considers the inferences to be drawn from the wording of the partial test-ban Treaty of 1963 and from General Assembly resolutions, and concludes that the scope of a comprehensive test-ban treaty should be based on

present-day needs rather than on the inconclusive language of these documents.

In the paper it is pointed out that the basic technologies of nuclear weapons and nuclear explosions for peaceful applications are identical. Any organization competent to design one would have a high ability to design the other. If nuclear explosions for peaceful purposes were completely uncontrolled, there would be nothing to prevent a party to a comprehensive test-ban treaty staging nuclear tests and claiming that they were nuclear explosions for peaceful purposes. Seismic signals recorded by a verification network would be of no use in distinguishing between weapon test explosions and nuclear explosions ostensibly for peaceful purposes. In such circumstances any State could carry out tests from which military benefits could be derived. Nuclear-weapon States could use nuclear explosions ostensibly for peaceful purposes for testing the continued serviceability of stockpiled warheads or for proving new warheads. Non-nuclear-weapon States could use the programme to develop basic nuclear explosive technology. All of this could be done without any risk of a breach of the treaty being proven. This would render a comprehensive test-ban treaty completely ineffective.

For these reasons, it is widely recognized that the entry into force of a nuclear test ban would have to be accompanied by a complete ban on all nuclear explosions. The question then arises whether it would be possible subsequently to devise arrangements that would permit nuclear explosions for peaceful purposes nevertheless to be carried out. Any arrangements for this purpose would have to be consistent with the treaty being negotiated and with the non-proliferation Treaty, and would have to exclude all possibility of gaining military benefits from such explosions.

The working paper discusses a number of specific difficulties which arise in this connection, particularly with respect to the prevention of unauthorized access to nuclear explosive technology, and it emphasizes that any nuclear explosive device could be used as a weapon. We have no solutions to offer to these difficulties, and this further detailed study has only confirmed us in our view that there is no practical way of distinguishing between nuclear-weapon tests and nuclear explosions for peaceful purposes. In the view of my delegation, confidence in a comprehensive test-ban treaty could only be assured if all nuclear explosions were banned. As the then Minister of State for Foreign and Commonwealth Affairs, Mr. Douglas Hurd, told the Committee on 10 March this year, the United Kingdom would be prepared to renounce permanently the right to conduct nuclear explosions for peaceful purposes as part of an agreement on a comprehensive test ban of all nuclear explosions in all environments. We again suggest that those delegations which hold different views and seek an exemption from a test ban for peaceful nuclear explosions should tell us in detail what practical system of verification they propose, to give confidence that the nuclear explosions which might be carried out for peaceful purposes were indeed exclusively peaceful and brought no military advantage of any kind.

CD/PV.221

pp.7-8

Australia/Sadleir

30.6.83 CTB,RW

A development which Australia welcomes with enthusiasm is the draft comprehensive test-ban treaty tabled by the Swedish delegation. The detail that the text encompasses is impressive, as is the advent of three draft protocols. The way in which the proposals of others have been included is pleasing and imaginative. In this connection, I have in mind our own suggestions on the need for a CTB secretariat; but there are other examples.

As the distinguished Swedish representative, Mrs. Theorin, remarked in presenting the draft, it is "an honest attempt to find a compromise that should be acceptable to all as a basis for serious negotiations". It is in the nature of compromises that they cannot

satisfy everyone in all respects. Nonetheless, I am confident that the Swedish draft offers the Working Group a rich mine. Australia's approach to it will be positive and helpful. For the moment, I confine my specific remarks to three aspects, as follows:

On the issue of scope, Australia has, as this Committee well knows, consistently been of the view that a comprehensive test ban must ban all nuclear tests by all States in all environments for all time. We are not convinced that article I and II of the Swedish draft constitute the neatest way of achieving this. We remain sceptical on the prospects of regulating the use of nuclear explosions for peaceful purposes. We judge the potential economic benefits of peaceful nuclear explosions to be far outweighed by the risk of nuclear weapons proliferation, both vertical and horizontal, inherent in the development and conduct of such explosions. The safe approach it seems to us, both from the arms limitation and the environmental points of view, is simply to ban all nuclear tests. We doubt whether anyone will seriously miss them. At the same time, we maintain an attachment to the definition of scope canvassed by Sweden in article I of the draft treaty put forward by it in 1977. Distinguished representatives will recall that the key first sentence of that article reads as follows:

"Each party to this treaty undertakes not to carry out any nuclear-weapon test explosion, or any explosion of other nuclear devices, in any environment".

As to on-site verification, the second of the points I want to pinpoint on this occasion, my delegation is impressed by the elaborate verification provisions advanced by Sweden, in the context of a treaty to ban attacks on civilian nuclear facilities, which were tabled last week in the Ad Hoc Working Group on Radiological Weapons. Would it not be appropriate for such stringent provisions to be applied to a CTBT which, after all, is much the more important arms control measure?

As to the three protocols and the roles of the various institutional bodies that will support the comprehensive test-ban treaty, it is essential that clarity prevail. In saying that, I recognize that the Swedish drafts are pioneering efforts and seek further refinement. My delegation is not certain, for example, that so "political" a role -- if I may thus describe it -- should be given to a CTB secretariat. In addition, we should prefer a smaller group of experts drawn from among members of the consultative committee. In the past we have, for instance, suggested that the group of experts, because of its management role in relation to the seismic system, might best be described as an "international management panel" or words to that effect. We shall elaborate further on our ideas in the Working Group.

There is in the Committee a consensus that the key to a successful comprehensive test-ban treaty is a seismic detection system. The Ad Hoc Group of Scientific Experts has made commendable progress towards establishing such a system. As the Swedish representative noted in her statement of 14 June, many technical problems remain, however, to be solved. Ambassador Theorin also pointed out that Sweden was unable to propose a text on on-site inspection procedures since there was little technical material on the various inspection techniques and their relative value. This suggests that the Group of Scientific Experts faces new challenges. Thus, I propose that, before the Committee ends its session for 1983, it should debate the future of the Group of Scientific Experts. Logically, such a debate should take place after the Group next convenes from 11 to 22 July -- perhaps in the immediately following week. Because of the special circumstances bearing on such a review of the Group's future role, it would perhaps be wise for us to ensure that the Group itself does not prejudice or pre-empt any decision which the Committee, as the parent body, might take.

I turn now to the comments I foreshadowed on item 5 of the Committee's agenda, that is, radiological weapons. I address myself, in particular, to current proposals for an international legal instrument on the protection of civilian nuclear facilities.

The Australian Minister for Foreign Affairs, Mr. Bill Hayden, in a statement in Parliament on 24 May, stated that Australia would announce its support for a ban on attacks on civilian nuclear facilities. Many considerations have led us to this position. First, there is the basic need to ensure that resort is not had to radioactive contamination as a method of warfare. Secondly, the relevant provisions of the 1977 protocols to the Geneva Convention of 1949 are inadequate. When the protocols were negotiated, Australia entertained doubts, for example, about the ambiguity and narrow scope, for instance, of article 56 of Protocol I. Thirdly, few countries have, in fact, ratified the protocols, not least, presumably, because of their sheer complexity.

We shall, however, be keeping an open mind on exactly how the ban we seek on attacks on civilian nuclear facilities should be negotiated. We see no bar to the Committee on Disarmament doing so, but we remain flexible on the precise form of an agreement and its standing in relation to other international agreements.

As to a convention on the traditional radiological weapons material, my delegation welcomes the initiative shown by the United States of America in proposing new verification and compliance procedures for a future treaty. We see much merit in a consultative process which encourages compliance problems to be resolved at a low level of what might be described as "political excitability". The verification system for a comprehensive test-ban treaty could, if I may say so, also benefit from such a process.

My delegation is encouraged by the energetic approach to the traditional radiological weapons material shown by the sub-group co-ordinator, Mr. Busby, of the United States delegation. We applaud his efforts to move the Group into definitive negotiations and we urge all delegations to co-operate in a bold attempt to conclude a radiological weapons treaty by the end of this session.

CD/PV.221

p.14

Cuba/Nunez Mosquera

30.6.83

CTB

In my delegation's view, the references to large non-nuclear explosions are out of place in the context of the proposed treaty, which is to be on nuclear weapon tests, and the inclusion of such references could complicate and delay the negotiations and the achievement of the relevant agreements. Similarly, and although we recognize the value of the arguments put forward in the Working Group, we do not believe that it is necessary for the purposes of the treaty we are to negotiate to include provision for a system of exchange of data on atmospheric radioactivity as part of the verification process. As far as the so-called on-site inspections are concerned, the details of these should be considered during the actual process of negotiation of a treaty on the prohibition of nuclear-weapon tests; their complexity is yet one more proof of the need to broaden the mandate of the Working Group without delay so that we may all be in a position to discuss every aspect of the problem. The same applies to the proposed consultative committee. Detailed consideration of such a committee requires actual negotiations and a negotiating mandate for the Working Group.

The documents the Committee has before it on the subject of a nuclear test ban and the valuable exchange of views which took place in the Working Group show that we have already reached the stage at which we should be beginning the process of negotiation. Repeating time and again that it is "necessary" to discuss technical details in no way helps forward the work of this forum. The documents we have before us prove once more that there is in the Committee on Disarmament a sufficient basis for negotiation. The vast majority of States, as was shown by the non-aligned countries at the recently concluded session of the United Nations Disarmament Commission, consider that there are no longer any technical obstacles to the adoption of the treaty, and it is therefore extremely anti-democratic and dangerous to invent new verification obstacles. This

merely reveals the lack of political will on the part of certain delegations.

CD/PV.222

pp.16-17

USA/Fields

5.7.83

CW

Under the able leadership of Ambassador McPhail, the Ad Hoc Working Group on Chemical Weapons has established contact groups on four important problem areas -- stockpiles, the compliance mechanism, a ban on use, and recently, definitions, lists and related verification measures. We applaud the decision to deal comprehensively with each area, to pull together work on related issues of scope, declaration and verification. In each of these four groups there are a number of issues yet to be resolved. While these contact groups have been under way for only a short time, there already seems to be encouraging forward movement. Still, much remains to be done. In particular, it must not be forgotten that there is not yet active discussion of one of the most important problem areas -- the declaration monitoring and elimination of chemical weapons production and filling facilities. Positions are far apart here, and much needs to be done. The chemical weapons Working Group needs to find a way to intensify its consideration of this key area.

Of the existing contact groups, the one on stockpiles has the most complex task. The group's mandate encompasses declaration and destruction, the monitoring of the stocks until they are destroyed and the verification of their destruction. We expect each of these issues to be dealt with seriously in the group this summer. Special attention should be given to issues which have not already been discussed extensively, such as inspection and monitoring of declared stocks. Issues whose resolution appears within reach, such as verification of stockpile destruction, should also be focal points for the group's work and, in that regard, I would like to make some specific comments.

In his statement of 4 February, Vice-President Bush stressed the need to intensify work on a chemical weapons ban and committed the United States to help accelerate the Committee's efforts. Toward this end the United States delegation immediately presented a major initiative, which is contained in document CD/343. We have been encouraged by the constructive response from most delegations.

In order to facilitate progress toward an agreement, today the United States delegation is tabling another major document. The document deals with the critical issue of verification of stockpile destruction.

Verification of stockpile destruction has, of course, been discussed at length in the Committee. These discussions, which have thus far been largely conceptual in nature, have none the less resulted in a significant narrowing of differences. The most important remaining issue -- whether or not international inspection needs to be continuous while stockpile destruction is under way -- has a major technical component. Conclusions about the need for continuous inspection necessarily rest on information about the characteristics of the destruction process, the capabilities of sensors and the functions of inspectors.

In our view, further progress on verification of stockpile destructions can only be achieved if the discussions move now from concepts to real-life situations. The paper we are tabling today is intended to facilitate a realistic consideration of the level of verification needed in a concrete existing situation. It is the product of intensive work during the recess period by members of my delegation in conjunction with United States army experts. Although the paper certainly reflects our own approach, in preparing it we have been mindful of the views and concerns expressed by other delegations. Delegations should be mindful as they study the paper that we have modified our approach at several points to take into account the views of others.

Our paper shows in detail, and in layman's language, how our approach to verifica-

tion of stockpile destruction would actually work, using an existing destruction facility for the purpose of illustration. The first part of the paper describes the operation of the facility, the chemical agent munition disposal system (CAMDS) at Tooele army depot in Utah. This discussion is followed by an outline of the principles which form the basis for the verification plan. The concluding part describes in very specific terms how the destruction process would be monitored at the Utah facility through a combination of sensors and human inspectors. The type and location of sensors is spelled out and the specific tasks for inspectors described. Specific measures are provided to ensure the validity of data used for verification. The exact procedures to be used at another facility could, of course, be somewhat different, but the general scheme would be quite similar.

In our view, a careful analysis of this real-life example demonstrates clearly that effective verification of stockpile destruction can only be achieved through the continuous presence of inspectors while destruction operations are under way. Current sensors are inadequate to permit inspection visits to be put on a periodic basis. But it should be noted that effective verification does not require a throng of inspectors. For the Utah facility, for example, only a handful would be needed, and these only during the destruction process.

We trust that those who take a different position will also explain their approach in specific terms, as we have done. Specifically, it would be helpful for the group working on this issue to know: how would another approach work in practice at a real-life facility? How would it provide effective verification?

CD/PV.222

pp.20-24

USSR/Issraelyan

5.7.83

FRZ

Last spring the USSR, together with other socialist countries, submitted document CD/355 in which they expressed their views concerning the measures which should be taken as a priority matter with a view to the prevention of a nuclear catastrophe.

Among those measures the USSR raised the question of the freezing by all States possessing nuclear weapons, as a first step towards the reduction and ultimately the elimination of their nuclear arsenals, of the production and deployment of nuclear charges and their delivery vehicles, as well as of the production of fissionable material for the purpose of manufacturing various types of nuclear weapons. This proposal was put forward by the socialist countries with one purpose — to stop the process of the building up of stocks of weapons of mass destruction, to place a freeze on them, qualitatively and quantitatively.

Consistently supporting a nuclear arsenals freeze, the Soviet Government on 21 June 1983, on the instructions of the highest organ of State power in the Soviet Union — the Supreme Soviet of the USSR — addressed a formal proposal to the governments of the other nuclear-weapon States — the United States of America, the United Kingdom, France and the People's Republic of China — for the nuclear-weapon States to freeze all the nuclear weapons at their disposal, both quantitatively and qualitatively.

In its proposal, the Soviet Government pointed out that such a freeze would envisage the cessation of the quantitative build-up of all the components of the nuclear arsenals of the sides and their commitment not to deploy new types of nuclear weapons.

In addition to that, each side would declare a moratorium on all nuclear-weapon tests, as well as on tests of new types of nuclear-weapon delivery vehicles.

The proposal also noted that compliance with the freeze obligations could be effectively verified by national technical means. If necessary, some additional measures could be worked out and agreed on, on the basis of co-operation.

Of course, a nuclear freeze would be most efficient if undertaken by all the

nuclear-weapon Powers simultaneously. However, the Soviet Government believes it possible — and this is made clear in the proposal — that this could be done initially by the Soviet Union and the United States, on the understanding that the other nuclear-weapon Powers would subsequently follow suit. The proposal emphasizes that while putting forward this important initiative, the Soviet Union in no way considers the freeze as a goal in itself, but regards this measure as an effective first step towards the reduction and, ultimately, the complete elimination of nuclear weapons and thus towards the total elimination of the threat of nuclear catastrophe.

Setting off the freeze against nuclear arms reduction is no less absurd. From our point of view the freeze is a necessary prerequisite, the first step towards reduction. It is difficult, in fact, to imagine a genuine reduction without a freeze. The reduction of some types of nuclear weapons with the simultaneous building up of others, obviously still more dangerous, would transfer the arms race into the qualitative field.

As for the allegation that the freeze would deprive the USSR of the incentive to reduce nuclear weapons, we regard it as a repetition of the old story about the need to have "bargaining chips" at the talks with the USSR in the form of ever newer and more dangerous types of weapons. History has shown more than once that such an approach to the talks with the USSR and attempts to talk with it from a position of strength do not produce positive results. For example, it is enough to recall the attempts of the United States at the beginning of the 1970s to use as "bargaining chips" the last word in United States military technology of that time — the MIRV systems. As is known, all the attempts of the United States to gain additional advantages for itself at the talks with the Soviet Union using the pressure put with the help of this "chip" gave no results. The only result of this policy was the spiralling upwards of the arms race to a higher and more dangerous level.

As regards the allegation about the "unverifiable" nature of a freeze, we believe that there is no reason to overestimate the difficulties connected with the verification of a freeze. The experience of verification of the SALT agreements can be successfully used for the freeze verification too. Besides, the proposal of the USSR makes it clear that, if necessary, some additional measures could be worked out on the basis of co-operation. In connection with the verification problem Mr. Yuri Andropov, General Secretary of the Central Committee of the Communist Party of the Soviet Union and President of the Presidium of the Supreme Soviet of the USSR, pointed out: "Verification is no less important for us than for others. Our approach to verification problems is a practical one, and not a matter of general declarations. Such an approach was adopted in the SALT agreements. Our verification policy is far-reaching — up to the establishment of general and complete verification when we are dealing with general and complete disarmament. We are against the conversion of the verification problem into a stumbling block at the talks".

Another measure which could considerably reduce the danger of the outbreak of nuclear war is, in our view, the declaration by all nuclear-weapon States of a moratorium on the conduct of any nuclear test explosions up to the conclusion of a treaty on the complete and general prohibition of nuclear-weapon tests. This proposal has been widely supported by the States Members of the United Nations, as is shown by the fact that at the thirty-seventh session of the United Nations General Assembly 115 States voted in favour of the resolution calling for the declaration of such a moratorium.

However, this idea also has opponents. One of the most widely used arguments against the moratorium is that on the one hand such a moratorium cannot be appropriately verified and on the other that it could hamper the conclusion of a treaty on the prohibition of all nuclear-weapon tests by reducing the incentive for States to strive for

its conclusion.

The Soviet Union holds a different point of view on these issues. Concerning the verification of a moratorium on nuclear explosions, we believe that this question is out of place, since what is involved here is not the assumption by States of commitments under the relevant treaty but a step based on the good will of States. Besides, it is absolutely clear that the resumption by anyone of nuclear tests could not remain unnoticed. We believe that the declaration of a moratorium on the conduct of nuclear explosions would create very favourable conditions for the elaboration of a treaty on the complete and general prohibition of nuclear-weapon tests because all States, and in the first instance the nuclear-weapon States which have declared moratorium, will strive for the speediest possible solution of all the questions arising in connection with the cessation of nuclear tests, including questions of verification and compliance with the relevant obligations.

CD/PV.223 p.8

Mongolia/Erdembileg

7.7.83

FRZ

In its proposal on this subject of 21 June, the Soviet Government emphasized that "the Soviet Union in no way considers a freeze to be an end in itself but regards such a measure as an effective first step towards the reduction and ultimately the complete elimination of nuclear weapons and thereby the removal altogether of the threat of a nuclear catastrophe".

Naturally, a nuclear freeze would be more effective with the participation of all the nuclear-weapon States. As the Soviet Union has suggested, verification of compliance with a freeze undertaking could be carried out effectively with the help of national technical means. In the even of need, however, certain additional measures could be worked out and adopted on the basis of co-operation.

CD/PV.224 pp.24-25

Japan/Imai

12.7.83

CTB,CW

The discussions of the Ad Hoc Working Group have also been made more lively thanks to the presentation of the draft treaty by Sweden. We appreciate it deeply as giving a fresh impetus to our deliberations, and take note with great interest of the detailed provisions in its annexed protocols concerning verification, including on-site inspections and a system of international seismic data exchange. We would like to give it serious consideration, and will certainly try to make the most of it in the work ahead of us. The United Kingdom has also made an important contribution by its working paper on peaceful nuclear explosions. And more recently Australia has enriched our deliberations with its revised paper on the institutional arrangements for a comprehensive test ban. The Chairman's annotation is also a helpful guide in identifying the issues of importance.

All these documents, in their own ways, are instrumental in making us realize the complexity of the question we are all dealing with, namely, compliance and verification. And we believe that only by carefully examining all the issues contained in this important question, particularly in the sense I mentioned earlier regarding ranking of considerations, can we ever hope to get closer to a clearer idea of what is to be a future mechanism of verification and compliance in the comprehensive test-ban treaty. These issues have to be addressed in depth both individually and in relation to each others, and where appropriate also in connection with other elements of the treaty, such as its scope. They are to be examined in a substantive manner, and we should not be tempted, in our keen aspiration for the early conclusion of the treaty, to think that we

could take a short cut by going around them or by not looking them in the face. It would seem to me, for instance, that the various detection capabilities are strongly connected with the on-site inspection procedures and techniques, which in turn will have an inseparable relationship with an international body which administers them.

It is with this belief in the need for a substantive examination of the issues in mind, and also with a hope of doing our part in making a contribution to the deliberations in the Ad Hoc Working Group, that we submit today three working papers entitled respectively "Verification and compliance of a nuclear-test ban" (CD/388), "Views on a System of international exchange of seismic data" (CD/389) and "Contribution to an international monitoring system using a newly installed small seismic array of Japan" (CD/390). These three stand in close relationship with the Japanese working paper contained in document CD/379 on verification of compliance in disarmament and arms control, which I presented last April. The first working paper presented today applies the basic thinking contained in document CD/379 to a nuclear-test ban and states our position on verification of and compliance with a nuclear-test ban in accordance with the programme of work of the Ad Hoc Working Group. The second working paper tries, in continuation of document CD/379 and the first working paper, to present what in our view would be the most appropriate system of international seismic data exchange based on the level of the existing and available technology as we understand it. As is stated in that working paper, we are of course well aware that in realizing this system many further questions of a practical and institutional nature remain to be addressed. Some of these questions are pointed out there. What seems important to us is, first, to identify the detection capabilities of the existing seismological observation network world-wide, and then to determine the gap between it and the appropriate system, so that the amount of work needed to proceed from the present to the next step can be more clearly perceived. In this regard, I would also like to draw the attention of the distinguished delegates to the well-thought-out illustrative list of questions in the Australian document CD/384, which I referred to earlier. The third working paper is a technical one relating to improved detection and data reduction capabilities of the Matsuhiro Seismic Observatory Array in the central part of Japan.

On this occasion, let me make a few remarks on the experimental exchange of seismic data which will be undertaken in co-operation with WMO at the end of this year. In order to establish a reliable system of international seismic data exchange, it is necessary to check the feasibility of such a system as much as possible. This will be made possible only by conducting an experiment of greater magnitude in which a larger quantity of data of greater accuracy can be collected. Therefore, our delegation hopes that a still larger number of countries will be in a position to participate in the coming exercise. This, in our view, will constitute an important landmark in establishing the capability of the existing system on which is called an "on-line, real-time" basis. I would hope that the experts would then see fit to recommend the further steps necessary to upgrade it to a system more suitable to serve as an instrument of international verification. Two examples I would like to mention here are the level of confidence with which a specific seismological event can be determined, as well as the radius of the area in which such an event has taken place in various parts of the world. A sufficient body of knowledge and study has been accumulated through the past years dating back to the time of the Conference of the Committee on Disarmament, so that together with the forthcoming report, and as supplemented by the data exchange experiments, the experts should be in a position to make proper recommendations. If the experts are urged to conduct such investigations quickly, and if the Committee on Disarmament finds such recommendations acceptable, then we should definitely be in a position to proceed with the comprehensive test-ban treaty.

Now let me turn to the question of the prohibition of chemical weapons. My delega-

tion is very much encouraged by the fact that the Working Group on Chemical Weapons, under the energetic and able leadership of its Chairman, Ambassador McPhail of Canada, is examining various aspects of a future convention on chemical weapons more intensively than ever. I would like to point out that many active contributions have been made to facilitate the negotiations on a convention, the most recent one being the documentation by the United States delegation on the question of the destruction of stockpiles of chemical weapons. It has long been the strong conviction of my delegation that the ban on chemical weapons should start with the complete destruction of existing stockpiles. In this sense, we highly appreciate the efforts of the United States Government in sharing with the Committee its experiences in the field by presenting in detail the method now in use, as well as the possible procedures for verification of the destruction of stockpiles of chemical weapons. I sincerely hope that with this sort of practical example on our table the Committee will now be able to tackle this difficult yet most basic and important task in connection with banning chemical weapons, namely, destruction and its verification, with a view to coming to an agreement on this question.

CD/PV.225

pp.30-32

Australia/Sadleir

14.7.83

CW

The focus of my statement today is on verification of, and compliance with, the convention. I will concentrate on practical aspects but should like, first, to make a general point. A convention banning chemical weapons will have no meaning at all unless compliance with its constituent elements is verifiable: this requires very careful work on our part. It is simply not possible to begin proper drafting until we have a reasonable idea of how we want to cope with the process. We have all come to realize that different types of verification, within different time-frames, will be required. Clearly, that adds to the unwisdom of starting to draft too soon.

The purpose of the projected convention is to make it impossible to wage war with chemicals. To this end, existing stocks of chemical weapons and their precursors are to be destroyed, and future production will be prohibited. The destruction of existing stocks is to start as soon as possible after the entry into force of the convention, and should be complete within 10 years of that date.

There is broad agreement in the Committee that the destruction of stocks -- a fundamental step in eliminating the risk of chemical war -- entails two other steps. First, existing stocks must be declared. Secondly, there must be a way to monitor compliance, i.e., there must be verification. These steps are mutually dependent. For example, monitoring of destruction will not fulfil the aim of the convention unless it is known that the quantity destroyed corresponds with the quantity stockpiled. Thus, declarations of stockpiles must include specific information on the quantity of the agent, the type of agent, including its chemical structure, and the locations of stockpiles. The monitoring of compliance needs to offer all States parties reasonable reassurance. Such reassurance can only come through a substantial measure of on-site inspection, supplemented by the use of sensors.

It has been suggested that initial declarations could be in less specific terms than those I mention, listed according to a number of categories of chemicals rather than by detailed specification of quantity, type, chemical structure and location. There can, however, be no escape from the logic that at some time prior to destruction, complete and specific information on stockpiles must be given to the appropriate body which, we all agree, should be a consultative committee. Unless such declarations are full and verifiable, the purpose of the convention, which, I repeat, is to prevent chemical warfare, will be vitiated. Thus, if we are to have a workable convention, the only aspect of stockpile declarations that can be negotiated relates to the timing of such

declarations. At the latest, declarations would have to be complete before the commencement of destruction. In the view of my delegation, a substantially earlier declaration would be necessary to provide adequate assurance to parties. It has been agreed that destruction will take place according to a schedule or time-table, so as to maintain a balance of capability between States. Because the rate of destruction will be balanced in this way, there can be no disadvantage to a State party in making frank and complete declarations shortly after the convention enters into force.

Different aspects of the convention will need to be verified in different ways. There will also be differences between the requirement during the 10-year period of stockpile destruction and the time thereafter. During the first 10 years, verification will focus on (a) verification of stockpile declaration, (b) destruction of stockpiles and (c) non-production of chemical weapons and their precursors. A regime permitting verification of use or non-use will also be required.

The analytical procedures necessary for verification of stockpile declarations and destruction will involve quantities of chemicals far in excess of the trace amounts of chemical agents and their residues which are likely to be available in challenge procedures involving use or non-use. Thus the standardized procedures which would be developed will be of two kinds: those designed to determine the chemical nature, breakdown products and other impurities of a sample taken routinely at a facility, and those designed to detect very small amounts of chemicals in environmental samples.

Once stockpiles have been destroyed -- i.e., after 10 years of the convention's life -- the stress will shift to the verification on non-production of new chemical weapons in either civilian industry or possible hidden facilities. Verification of use or non-use will remain an issue.

Controls on the precursors of chemical weapons will be important throughout the lifetime of the convention. During the phase of stockpile destruction, precursors of binary or multicomponent systems should be destroyed, subject to the same verification as the chemicals they precede.

Verification of the adequacy of controls on precursors will require different procedures from those developed for chemical weapons as such, since the toxicity of the precursor will not be relevant to its possible use in chemical warfare. Adequate analytical procedures exist, but the system of control will need to include definitions of precursors and lists of precursors. Thus the problem presented by the precursors of chemical agents relates more to how to define and list them than to appropriate analysis.

It has been suggested that States parties should be allowed to maintain, for non-hostile military purposes, small amounts of super-toxic lethal chemicals. Such purposes would include research into and development of purely protective military procedures. Measures to control this production should, in our view, include:

1. Notification and justification of the type and quantity of chemical;
2. Full recording of the use of the chemical;
3. Notification of the transfer of agreed amounts to another State;
4. Inspection of the facility if annual production exceeds a small given amount;
5. The possibility of challenge inspection.

The civilian use of small quantities of super-toxic lethal chemicals for research purposes should not need any form of control. The licensing for sale of chemicals requiring "key" precursors in their synthesis should be subject to scrutiny. The reasons for such scrutiny would be to ensure that the type and quantity of production is consistent with the proposed use and that the production, for civilian purposes, of chemicals containing the methyl-phosphorus bond should be controlled if such chemicals are seen to put at risk the verification procedures suggested above.

In document CD/CW/CRP.78 introduced this week in the relevant contact group, my

delegation discussed the implications for verification of the widespread civilian dissemination of compounds containing the methyl-phosphorus bond. It will be recalled that this bond is stable, and can be detected analytically at great dilution. Because of this it could serve as a marker for the presence of nerve agents at an on-site inspection. The importance of such a marker during the 10-year period of destruction would be greater than later in the life of the convention, since any clandestine production of super-toxic lethal chemicals would be expected to avoid chemical bonds which have a characteristic breakdown product.

The actual process of verification has not yet been fully addressed by delegations. It may be appropriate to bring together ideas which have been put forward in a number of contexts. Clearly, a secretariat will be needed, to co-ordinate the work of inspectors and carry out the day-to-day work of the consultative committee. However, the inspectors, in addition to formal qualification as chemical engineers, analytical chemists and so on, will need specific training for their tasks. Indeed, we have yet to work out the exact nature of their tasks and the operating procedures that must be set up. The presentation last week by the United States delegation of the document entitled, "Illustrative on-site inspection procedures for verification of chemical weapons stockpile destruction" indicates concretely one set of inspection procedures that could apply at one type of destruction facility. Much work of a technical nature needs to be done to determine how to obtain optimal results from inspection, analysis and the operation of sensors and monitors. Work of that kind is in hand in several countries. Our own discussions, notably in the contact groups, have pointed up the need to co-ordinate such work on an international basis. A co-ordinated effort of this kind will take time to develop, and should proceed in tandem with the consideration of other aspects of a draft convention.

Here, several questions come to mind: should the inspectors be permanent international civil servants? Should a centralized laboratory facility be available to them, or should we look at the option suggested by United Nations General Assembly resolution 37/98 D, of giving them access to national laboratories, perhaps on a roster basis?

Technological progress is particularly rapid in the areas of analytical chemistry, automation and sensors. These areas are relevant to the convention. Consequently, verification procedures may need to be modified after the convention has come into effect. The framework in which control and verification will go ahead needs to be considered.

Verification cannot be carried out on an ad hoc basis. Data collection and data evaluation must be organized in the light of an evaluation of the over-all problem of control. There is no body of knowledge available to the international community against which such evaluation can take place. Much of the necessary information exists in individual countries, but this must be shared and co-ordinated before we can approach the various tasks of verification in an appropriate manner.

Mr. Chairman, in its working paper, document CD/298 of 26 July 1982, the Yugoslav delegation presented its general views on certain aspects of verification in a chemical weapons convention. Specifically, in that paper it expressed its general views on three fundamental categories of international verification as a working hypothesis for the consideration of different levels of international verification.

Today I would like to introduce the new Working Paper of the Yugoslav delegation, document CD/393 of 13 July 1983, which has already been distributed to delegations, and to make some comments related to it. This working paper deals to a certain extent

with some technical aspects of the process of verification having to do with the declaration of stockpiles of chemical weapons, including facilities for the production of chemical warfare agents and filling facilities for chemical weapons, the destruction of stockpiles of chemical weapons and the monitoring of production facilities of super-toxic chemical agents for permitted purposes.

In view of the fact that each stage of the operations in question in itself represents a very complex process with many technological operations, the working paper points to the different procedures which should be applied when they are implemented.

Thus, for instance, production facilities for chemical warfare agents can be diverted to the production of chemicals needed by the chemical industry for permitted purposes, in which case only some of the key elements need be destroyed completely while all other devices, apparatus and measuring instruments can be utilized in a very useful manner. At the same time, the facilities for the destruction of chemical weapons are used only for the destruction of chemical weapons stockpiles and after that they, too, should be destroyed.

The already existing division of chemical warfare agents into three categories according to their toxicity makes it necessary to consider and implement various categories or degrees of verification. Given the considerations so far, the Yugoslav delegation shares the opinion of many delegations that control should be comprehensive when verifying the destruction of super-toxic chemicals, while less rigorous measures may be implemented when destroying the stockpiles of toxic or other harmful agents. This means that on-site inspection should be applied in the former case, which can be systematic or random, while in the case of the destruction of lethal or other harmful agents national measures might be accepted with periodic on-site international verification.

In the consideration so far of the organization and forms of international and national verification measures, the relationship of the former toward the latter and vice versa has been insufficiently clarified. This is also the case with the obligations and competences of the States parties to the future convention with respect to the implementation of national verification measures. While it is generally agreed that international verification must be implemented on the basis of an agreed procedure, there is still a lot of ambiguity concerning national verification procedures.

It is not completely clear, for example, whether the national inspection team is accountable only to its own Government or whether it should also have some direct obligations toward the consultative committee.

The question arises, how would the co-operation between the national team and the consultative committee be carried out? Systematic on-site inspection, on the other hand, is not and should not always be the only solution, especially in view of the fact that this type of control is not always considered to be necessary by some States. However, regardless of the type of verification, it is essential, in our view, that it be based on confidence and a negotiated agreement on verification measures.

It is understood and by now generally accepted that measures of international control should be applied particularly in the case of violations of the convention. If control is to be effective, in such an event on-site inspection should be implemented as soon as possible. It is only then that it can be credible and provide all the necessary information for establishing the facts.

In this process, as we have already pointed out on several occasions, it is also necessary to compile a list of laboratories and to standardize technical methods of verification. The above is the only way to obtain the necessary expertise and objective results.

This would secure the timely control of results and the possibility of controlling the analysis of samples even when there is no on-site inspection. Possibilities for remote

control today facilitate comprehensive and varied monitoring of the process of destruction of chemical weapons stockpiles. However, the results of the implementation of all these measures would be far more successful if there were confidence among the States parties. By this we mean that it is necessary from the very beginning for countries which possess them openly to declare chemical weapon stockpiles as well as all chemical weapons production facilities and key precursors production facilities. In this entire process it is very important that the consultative committee be given precise data on chemical weapons in order that it can determine and propose, in co-operation with the expert sub-organ, the corresponding verification measures.

As has been stressed on numerous occasions, the declaration of existing stocks of chemical warfare agents and chemical weapons should be done immediately or as soon as possible after the entry into force of the convention. It is specified that this should be done within 30 days, which we also consider as realistic and indispensable for the declaration of, inter alia:

The existence of stocks of chemical weapons or of chemical warfare agents in containers;

The location of these stocks;

The location of stocks if they are on foreign territory and under whose jurisdiction;

The type and quality of chemical warfare agents and chemical weapons.

These declarations should also contain;

Proposals regarding the manner in which these stocks should be destroyed;

Proposals as to when the destruction of stocks is tentatively to begin, and

Proposals as to the manner of verification (international, national, method of monitoring the process of destruction).

Declarations should also be made in respect of the stocks of precursors (key precursors and other chemicals) which can be used both for the production of chemical warfare agents and for the filling and production of binary weapons.

The working paper specifies what types of organic compounds of key precursors should be declared, and a similar procedure for their destruction. It also refers to the declaration concerning the production and filling facilities for chemical weapons.

The importance which is accorded to the precision of information contained in the declaration consists in that the proposed verification measures will then be more objective and the consultative committee and the States parties will accordingly be able to assess more realistically the importance of this control.

The chapter which deals with the destruction of chemical weapons stocks points to the basic reasons which call for the application of different methods in the process of destruction of chemical weapons stocks and the destruction of chemical warfare agents in containers.

The principal question which arises in connection with the process of destruction is how to ensure full control of the process and thus be sure that all the declared quantities have been destroyed. The safest control is certainly the constant physical presence of an international team of experts. However, there is another question which imposes itself right away -- whether it is necessary for this team to be in the facility and exercise control all the time, when it is known that the process of destruction of stocks can take several years. In our view, the most acceptable solution in the case of the destruction of super-toxic chemicals is random inspection and systematic international on-site inspection. It is understood that the technological destruction process will be automatic, while the control of the technical process and the recording of parameters (pressure, temperature and other) will be analysed by computer. Moreover, samples of chemical warfare agents and decomposition products should be taken periodically and sent for analysis to certain laboratories.

This entire monitoring system should, naturally, be set up and established by the

international team of experts before the destruction facility is put into operation.

As far as the destruction of stocks of toxic lethal chemicals and other harmful chemicals is concerned, in our opinion, this could be carried out under the control of a national inspection team which should be obliged periodically to send the results of control to the consultative committee and periodically to send samples to be analysed to specific laboratories. In such cases, international on-site inspection would be carried out at random. We hope that this working paper will contribute to the solution of the complex issues of verification. We would like, however, also to express our conviction that the complexity of the question of verification should not serve as a pretext for prolonging the work as a whole, particularly with respect to the long-awaited process of the drafting of the convention.

CD/PV.227

pp.9-10

Italy/Alessi

21.7.83

CW

One conclusion is to be drawn at this stage: the information so far made available by various delegations appears to support the thesis developed in the United Kingdom document, namely, that a system of verification of the non-production of chemical weapons based on routine on-site inspections carried out by a team of inspectors at facilities chosen by lot from among those declared would be both possible and adequate. It has in particular been confirmed that the verification system proposed would affect only a small number of facilities and would not impose an excessive burden on the civilian chemical industry.

The unique experience acquired in this matter by the Federal Republic of Germany and synthesized in many working papers submitted to the Committee also confirms these conclusions and particularly the preferability of a system based on regular checking rather than on special on-site inspections by challenge. The latter possibility would still remain open to the parties through the complaints procedure which, through being brought into operation in particular in cases where there were doubts or suspicions, would complete the system and increase its general effectiveness.

Having touched upon the subject of on-site inspections by challenge, I should like to add one comment: by issuing a challenge, a State would thereby assume a considerable political responsibility, both with respect to the State suspected and with respect to the other parties to the convention. It can be supposed that no State would take such a step lightly; consequently, acceptance of the challenge should be the rule -- it would cause embarrassment to a dishonest accuser -- and refusal should be the exception. It is impossible not to note the basic ambiguity in the attitude of those delegations which demand that the State challenged should be entirely free to accept or reject the request for an inspection (even when filtered through the consultative committee) and at the same time insist that the challenge procedure should be the cornerstone of the entire international verification system under the convention. The pursuit of these two objectives at the same time would have only one result: the general weakening of the system. If it is feared that the challenge procedure could lend itself to abuse, the obvious thing to do is to favour a system of routine on-site inspections, which would not have a political connotation.

To revert to the question of non-production, it has to be recognized that there will still, in practice, remain possibilities for violation. The most difficult problem is that of dual-purpose chemical products or precursors. In this connection, the verification system outlined in document CD/353 could be usefully supplemented -- supplemented and not replaced -- by the periodical publication of reliable statistical data at the national level. The data could give the quantities produced, exported and imported and the quantities consumed in each States. A consideration in detail of the type of information

to be supplied, as well as of the use which the consultative committee would have to make of it, should be undertaken in due course.

On the other hand, we consider that it would be unrealistic to try to prohibit the manufacture of certain categories of products which have some civilian use, subject, of course, to an appropriate monitoring of the quantities produced and their use. Nor would it be practicable to establish quantitative limits or a system of licences to manufacture. The general purpose criterion should suffice in this connection.

The effectiveness of the system for the verification of non-production should be assessed jointly with other procedures introduced for the verification of other activities such as the destruction of stocks and production facilities. The cumulative effect of the various investigative techniques adapted to the forms of concealment and diversion which it is intended to discourage or detect should be sufficient to dissuade any intending offender and to provide, against possible violations by one of the parties, guarantees considered adequate by the others.

In any agreement, the means of verification may be commensurate with the scope of the prohibitions. It is therefore necessary to define precisely both the scope of the prohibitions and the methods of verification.

I shall refer in a later statement specifically to questions concerning the sphere of application of the convention; for the moment, I shall confine myself to making a few remarks on the question of the prohibition of use. The positions of States on this question are known and understanding of them is now infinitely greater, thanks to the thorough work done by the contact group co-ordinated by Mr. Akkerman of the Netherlands delegation. The alternatives that have been identified will prove very useful in our future work. Like other delegations, the Italian delegation has stressed the need not to undermine the Geneva Protocol of 1925 but to reaffirm it in all its lasting value. This approach appears now to have won a consensus. We have also considered the possibility of strengthening the role of the 1925 Protocol; suitable clauses have been proposed by the co-ordinator. The explicit extension of the prohibitions embodied in the Protocol to all armed conflicts (and not merely war) appears no longer to pose any difficulties either: in any case, that is the interpretation which a number of parties, including Italy, give to the scope of the 1925 Protocol. The consensus on the need to safeguard what was achieved by the Protocol, and if possible to reinforce it, facilitates, we believe, our effort to find ways of going beyond the Protocol and even introducing a prohibition on use in the body of the convention. Although we have not yet found a solution to this question, we are certainly much nearer to one. My delegation pledges itself to continue studying the problem in order to help find a solution acceptable to all. One important point appears to me, however, to be accepted: whatever the solution found, the prohibition of use should be supplemented by a verification procedure which would allow speedy and effective investigations of any allegation of the use of chemical weapons.

CD/PV.227

pp.12-13

Spain/de Laiglesia

21.7.83

CW

As regards the declarations States will have to make concerning the stocks of chemical weapons they possess, as well as their production capacities, my delegation considers that those declarations should contain all the information necessary to make it possible to carry out a destruction of stocks and dismantling of facilities that are truly verifiable. The declarations ought in the first instance to refer to all chemical products and facilities whose sole purpose is the manufacture or filling of chemical weapons, including binary weapons. The States parties ought, in addition, to make declarations concerning their stocks of chemical products intended for peaceful uses or permitted purposes which could be considered as precursors or key precursors of chemical

weapons, including binary weapons, as well as the relevant facilities. The declarations ought to contain all the information necessary to permit a verification designed to prevent the declared stocks and facilities being used for purposes not permitted by the convention. All these declarations should contribute effectively to transparency in the matter of the possibilities for an industrial mobilization with a view to the rapid acquisition of a chemical weapons production capability. As far as this question is concerned, we have unfortunately to note that although there is agreement as to the basic principles, there are still considerable differences of view on points of procedure.

As regards the verification both of the destruction of stocks and production facilities and of non-production, the powers of the consultative committee should be very broad so that it can determine the means and methods appropriate to each period in accordance with the prevailing technology and circumstances. Obviously, the verification methods should consist of a combination of national and international systems sufficient to guarantee States parties a reasonable assurance that the convention is being complied with.

The lists of precursors and key precursors should never be considered final and it should, in our view, be one of the tasks of the consultative committee periodically to bring them up to date. The purpose of these lists is to facilitate States' preparation of their declarations and also to facilitate verification both by national means and by international means. The lists ought in no case to be regarded as restricting the scope of the prohibition contained in the convention. For this reason they ought not appear in the text of the convention but in a supplementary instrument attached to it. The prohibition contained in the text of the convention should refer to categories of products the details of which could be given, in order to facilitate declarations and verification, in appropriate annexes periodically updated by the consultative committee.

Verification is undoubtedly the most important and complex aspect of all the problems connected with arms control. In the realm of chemical weapons, this question raises special difficulties. New products in large quantities appear every year, with constant changes of technology. Many of these products are toxic and could be considered as new materials that would be usable in the event of chemical warfare. Furthermore, there are many activities to be verified in connection with a convention: the possession or non-possession of chemical weapons, the destruction of stocks and of production and filling facilities, the clandestine manufacture of chemical weapons and, lastly, the problem of transfer, involving both the purchase and the sale of prohibited products or their technologies. Since transfer could involve countries not parties to the convention, this subject has not been sufficiently studied from the point of view of verification, which presents special difficulties in the case of the multinational corporations. This aspect of verification is as important as regards the countries non-producers of chemical weapons as is the question of ensuring non-manufacture in the case of producers. In the event of conflicts between non-producing countries, the sole possibility for the use of chemical weapons is the illegal transfer of such weapons or their technology.

Although the difficulties posed by verification in connection with the elaboration of a convention prohibiting the development, manufacture and stockpiling of chemical weapons are considerable, nevertheless all the countries taking part in these negotiations are agreed on the need for the establishment of an effective verification system. It should not be forgotten that technological development has made available for purposes of the verification of arms control agreements tools that were unheard-of a few decades ago. It is thus true to say that verification systems can constantly be improved. From all this it can be concluded that if there is political will, the adoption of a given system should not constitute an impediment to the achievement of a draft convention rendering the use of chemical weapons in war impossible and eliminating

them for ever from scenes of combat.

With a view to the effectiveness of the means of verification, both national and international, which should have adequate personnel and equipment, it would be extremely useful if countries which have experience in the analysis and detection of the most modern chemical warfare agents were to organize seminars to train the technicians of States which have adequate laboratories so that they may help in the work of verification, which is rather different from the analyses that may usually be carried out in this laboratories. This would be of particular value in connection with the verification of non-use, the urgency of which would necessitate the utilization of the means nearest to the place of the possible violation of the provisions of the convention.

CD/PV.227

p.19

China/Li

21.7.83

CW

It is generally held that the future convention should strengthen the Geneva Protocol of 1925. All delegations agree that the convention should make up for the deficiencies of the said Protocol by including provisions on verification. It is the view of the Chinese delegation that a better way to achieve this is to include the prohibition of use in the scope of the convention.

There exists a different view which involves resolving the issues related to the prohibition of use without including it in the scope of the convention. Obviously, this is difficult, simply because it is illogical to expect the convention to solve the problems of verification concerning use if use per se is not included in the scope of the prohibition. In fact, we have already encountered such contradictions in discussing such proposals. Therefore, by including use in the scope of the prohibition and verification concerning use in the verification provisions, we will have a consistent, logical and clearer text.

In our view, the inclusion of the prohibition of use within the scope of the convention will serve to strengthen and not to weaken the regime for prohibition of use of the 1925 Geneva Protocol. We understand the misgivings that certain delegations entertain on this point and so we have agreed to the reaffirmation and emphasis both in the preamble and in the operative parts of the convention of the indelible historical role of the Geneva Protocol and its continuing important effect.

Yet another opinion proposes dealing with the chemical weapons convention along the lines of the bacteriological weapons Convention. We think that this is not necessary. Although it is true that the Convention on the Prohibition of Bacteriological Weapons and the chemical weapons convention are to be related in certain ways, they will, after all, be two independent international instruments. The latter can indeed include some of the useful elements of the former, but it should in no way repeat its deficiencies. It would be better to take a forward-looking posture.

We are all aware that the weakness of the bacteriological weapons Convention is its lack of a prohibition on use and of verification provisions. Therefore, if the chemical weapons convention copies the bacteriological weapons Convention in this deficiency, it will be difficult to resolve the question of verification of use of chemical weapons.

CD/PV.227

pp.24-25

Argentina/Carasales

21.7.83

CW

The work of the Ad Hoc Working Group has confirmed that the destruction of stocks would require the virtually permanent presence of inspectors at destruction installations.

We are not opposed to this. We wonder, however, what is the point of strict verification in this respect if the stocks that are declared cannot be verified.

We mention this example simply in order to indicate the differences of views which

still persist in the negotiations and which require clearer political definitions.

At the same time, while we well understand that the convention should not be an obstacle to the development of chemical industries, we consider that commercial operations ought not to contribute to the masking of the production of supertoxic lethal substances or their precursors. On the contrary, the chemical industry should ensure that the levels of such production are not higher than those permitted, including that of the relatively less toxic components of binary weapons or dual-purpose agents.

The elimination of chemical weapons production and filling facilities is an important aspect of the convention. They should be declared, immediately closed, and destroyed within an agreed period.

It goes without saying that the process of destruction should also include those chemical weapons production facilities that are temporarily converted for the elimination of chemical weapons arsenals, as soon as this transitory activity comes to an end.

The presence of international commissions during the process of the elimination of production facilities will serve to increase confidence.

In the matter of ensuring compliance with the convention, it should be pointed out that the timing and characteristics of the verification process will have to vary, depending on what is being verified -- declarations, the destruction of installations, non-production or the destruction of stocks. The verification of each of these will call for special procedures.

We believe that there is a consensus on the need for the complaints procedure and the system of verification adequately to ensure the effectiveness of the provisions of the convention. Nevertheless the basic element on which the agreement should be built consists in the political will and the determination of States not to use or to possess chemical weapons, ever or in any circumstances.

Verification should be based on a combination of national and international measures, including systematic on-site inspections to investigate possible violations of the convention.

Existing means of monitoring have an important but limited capacity for the detection of activities in preparation for chemical warfare.

It is necessary, in our view, during the negotiations, to agree on a balanced system of verification which will offer a reasonable degree of assurance that the provisions of the convention are being complied with, but we should not attempt to achieve perfection, for the very complexity of the interests at stake makes this unattainable and such an attempt would certainly mean the indefinite postponement of the adoption of agreements at a time when they are ever more necessary. What we should seek is the greatest degree of certainty possible in the detection of activities on a sufficiently large scale to constitute a military threat as regards this type of weapon.

The international character of verification will be assured by the presence of the experts of a subsidiary body of the consultative committee, who will be able to act rapidly and effectively within their sphere of competence, without going into aspects unconnected with the scientific technical content of the task they are required to perform.

Similarly, the procedures should be appropriate to each case. In this connection random visits will serve to strengthen mutual confidence and help ensure compliance with the convention.

Several countries have answered the questions put forward by the United Kingdom delegation at the spring session with regard to the production and consumption by

different countries of some possible so-called key precursors, as asked for in the British working paper, document CD/353. Sweden is among those countries. We agree with those who think that this is a very useful approach. This approach will make it possible for us to identify the problems which would arise for the chemical industry if some of those key precursors have to be regulated under a future convention. We look forward to the revised version of the working paper announced by the United Kingdom delegation, and which I understand will contain answers from other countries. We would also like to urge more countries representing different economic systems to provide answers.

Another tangible contribution has been the presentation by the delegation of the United States of the working paper in document CD/387 on the question of the destruction of chemical weapons. Hopefully, the ongoing discussion of this paper will make it possible to solve an extremely important problem for the convention: that of clarifying the concepts of respectively, continuous and systematic on-site inspection of the destruction of stockpiles. Although the final solution to this problem will depend on political considerations, the question nevertheless requires considerable technical studying in all its aspects. This is very clear from the conclusions drawn by the delegation of the United States itself with respect to the need for continuous on-site international verification of the destruction of stockpiles at a large facility. It seems to my delegation, however, that it is necessary to study very closely these conclusions and the premises on which they rest in order to see whether alternative and perhaps less intrusive means might be found. My delegation will revert to this problem later on. In the meantime, we have put some questions to the delegation of the United States in the hope that the answers could be helpful in the evaluation we will attempt.

In this context we would also like to acknowledge the very interesting statement by Ambassador Sadleir on 14 July outlining a "strategy" for verification and indicating a practical and flexible approach.

It should be underlined, however, that this is a problem where all concerned parties have to contribute with constructive proposals and to take part in the discussions, as the distinguished Ambassador of Brazil said in his statement at our last plenary meeting. Progress in the negotiations process will not be advanced if some parties just wait for suggestions to be made by others.

One would hope also that progress regarding the problem of the destruction of stockpiles might pave the way for dealing with the question of the destruction of production facilities. This is the more important since ensuring that no production facilities would remain for future use is crucial with regard to the future validity of the convention we are working on.

CD/PV.227

p.32

Poland/Turbanski

21.7.83

CW

Another important problem, which is the subject of difficult negotiations, is the verification of the destruction of stockpiles. So far no solution satisfactory to all has been found. On the contrary, well-known divergencies of views in this respect persist. The important elements for making an optimal decision on the methods for the verification of the destruction of stockpiles should, in our view, include inter alia the following:

The scope of the duties of international inspectors during on-site inspections;

The scope and nature of the information to be provided by the national verification body;

The scope and contents of the plans for the destruction of chemical weapons;

The degree of automation of the destruction facility and its specifically designed control instruments;

The scope of the detailed information to be provided before the commencement of

each stage of the destruction process;

Reporting on the destroyed stockpiles in the subsequent stages of the destruction process.

The time is ripe for us to deal as intensively as possible with these specific questions. Any agreement on them could bring us closer to the elaboration of the future convention. It seems that it would be very helpful to the negotiations on the destruction of stockpiles if we could reach a common agreement on the definition of the terms chemical weapons and key precursors and a compilation of two lists of such precursors. One of them should include the key precursors to be destroyed and another one should contain key precursors which could be manufactured under supervision, to ensure their use for peaceful purposes. It is our hope and expectation that the work conducted on these issues in Contact Group D will bring tangible results soon.

CD/PV.228

pp.8-9

Ad Hoc Group of Scientific
Experts/Dahlman

26.7.83

CTB

Throughout its two weeks' session the Group has enjoyed a co-operative and constructive spirit and reached agreement on a number of issues. The Group made an in-depth review of a draft of its third report and in the course of the session made significant progress towards achieving consensus on the main body of this report. The Group further agreed -- and this is an important step -- that it should seek to achieve consensus also on the detailed technical instructions contained in the appendices to be annexed to its third report. These detailed instructions contain, *inter alia*, specifications for the processing and handling of data at International Data Centres and procedures to be followed in future experimental tests. An agreement on these instructions would be of great importance for the further work of the Group and for the development of international co-operative measures.

However, in view of the large volume and the complexity of this material, the Group was not able to complete its review during this session. The Group envisages, though, to finalize its third report during the next session and to submit the report to the Committee on Disarmament following that session.

The Ad Hoc Group took note of the letter addressed to the Chairman of the Committee on Disarmament from the Secretary-General of the World Meteorological Organization (WMO) (Committee on Disarmament Working Paper No. 99 of 20 June 1983), in which he informed the Committee of the decision by the WMO Executive Council to approve the inclusion of seismic bulletins in the global exchange programme. Thus the formal approval now exists to regularly exchange Level I seismic data through the Global Telecommunication System (GTS) of the WMO, starting 1 December 1983.

The Ad Hoc Group noted with great satisfaction these new formal arrangements provided by WMO for the regular use of its Global Telecommunication System for seismic data exchange, and the Group discussed a proposal for a new experiment concerning the exchange and analysis of Level I data using the WMO/GTS on this new regular use basis.

The experiment discussed by the Ad Hoc Group should result in the further elaboration of operational procedures for Level I seismic data exchange and of operational procedures at the envisaged International Data Centres. This experiment would also make it possible, for the first time, to test a more extensive flow of Level I data over the Global Telecommunication System of WMO.

The experiment as envisaged will be held in 1984 and would last for about two months, including preparatory operation for about two weeks.

The Ad Hoc Group has over the years enjoyed an excellent co-operation with WMO

and also in connection with this new experiment a close co-operation with WMO is of the greatest importance. It was noted that WMO needs a period of notice of at least three months before the experiment and its preparatory phase can start. The Group therefore recommends that final instructions for such an experiment should be discussed and completed at its next session.

To obtain a comprehensive test of the capability of the WMO/GTS system to exchange seismological data globally, a broad participation with globally distributed seismological stations will be essential. The Group has on earlier occasions stressed the importance of a wider participation in its work, especially from countries and stations in the southern hemisphere, and I will take this opportunity also to encourage countries not at present represented in the Ad Hoc Group to participate in this new experiment. Information on participating stations will be compiled and presented at the Group's next meeting.

CD/PV.228

pp.9-10

Australia/Sadleir

26.7.83

CTB

We are impressed particularly by the decision of the Group to conduct a new experimental exercise concerning the exchange and analysis of Level I data using the WMO/GTS on a "regular use" basis. This will be the first experiment conducted under the new formal arrangements with the World Meteorological Organization, agreed to by the WMO Executive Council earlier this year. It is anticipated that the new experiment will result in the further elaboration of operational procedures for Level I seismic data exchange and of operational procedures for the proposed international data centres.

The Australian delegation was honoured by the invitation to its representative, Mr. Peter McGregor, to act as co-ordinator for the Planning/Management Committee for the new experimental exercise. We are currently examining the possibility of his accepting this position.

The current report of the Group of Scientific Experts also notes that "significant progress" was made towards completion of the third report to the Committee on Disarmament. We look forward to the presentation of the finished product following the next session of the Group early next year. We also note with pleasure that the draft agenda for the next session includes the submission of a further progress report to the Committee on Disarmament. The implication of this is that the Group of Scientific Experts sees a future for itself beyond the presentation of its third report. This would be a development that my delegation would welcome. In our view, work remains to be done, most immediately in pursuing the role that the automatic exchange of Level II data can play in the verification of a comprehensive test-ban treaty.

There is much the Group can do in the way of further refining operating procedures and techniques in anticipation of the day when negotiations on a comprehensive test ban commence. Even after that day, it can contribute in scientific and technical terms to enabling a verification system to be in place and ready to go, upon the entry into force of a comprehensive test-ban treaty. Australia is preparing for that day itself: the Foreign Minister, Mr. Hayden, stated on 7 July that Australia would be seeking to improve its independent capacity to monitor nuclear explosions by developing its seismic monitoring capability.

CD/PV.229

pp.6-9

Norway/Vaerno

28.7.83

CTB,CW

Turning, then, to the working paper in document CD/395, I should like at the outset to underline the importance which the Norwegian Government attaches to a comprehen-

sive nuclear-test ban. Such a ban would represent a highly significant disarmament measure in itself and would be of importance for further achievements in multilateral disarmament negotiations in general. Against this background, we were pleased to see that the Ad Hoc Working Group on a Nuclear Test Ban was able to agree on a programme of work at the end of the first part of this year's session. This has facilitated an in-depth and systematic evaluation of the various means of verification. In this connection, we have studied with interest the draft treaty banning any nuclear-weapon test explosion in any environment, which Ambassador Maj Britt Theorin of Sweden introduced on 14 June and which has been circulated as document CD/381. We believe that this contribution contains valuable material for the Committee's further work on this important matter.

As stated in our working paper, document CD/395, a global seismological network would have to play a crucial role in an international verification system to monitor compliance with a comprehensive nuclear-test ban. Considerable progress has been made in specifying how a global seismological network should be set up. Norway welcomes in this regard the agreement reached in the Ad Hoc Group of Scientific Experts to undertake a new experiment on the exchange of Level I data.

As pointed out in working paper CD/395, Norway is of the opinion that the global seismological network should be equipped with instrumentation of high standards in order to ensure a reliable international exchange of high-quality seismic data. For this reason it is imperative to take advantage of recent technological seismometry, seismic processing techniques, computer technology and telecommunications. The seismological observatories in the global network should have a capability to transmit Level II data immediately upon request. Consequently, the international data centres within the network would need high-quality equipment and software in order satisfactorily to collect, process and distribute seismic data for the use of participating States. This would require further research and international experiments with regard to automatic processing at the data centres. In particular, further work needs to be undertaken in regard to effective data management techniques and methods for the rapid exchange of Level II data.

As pointed out in document CD/395, scientists at the Norwegian Seismic Array (NORSAR) have, during the past 10 years, carried out large-scale research projects on problems relevant to the establishment of a global seismological network. In particular I would draw your attention, Mr. Chairman, to the further improvements which have been made in the prototype system developed by NORSAR, described in document CD/310, which was demonstrated to members of this Committee on 17 August 1982 and which has been developed for the purpose of rapid, flexible and international exchange of Level II data by making use of low-cost, yet modern telecommunications technology.

I would like to reconfirm the willingness of the Norwegian Government to make NORSAR available as a contributing observatory within the envisaged global seismological network. With this in mind, the Norwegian Ministry of Foreign Affairs will continue to support research projects at NORSAR of relevance to a future comprehensive nuclear-test ban.

The other two working papers which I have the honour to introduce deal with problems relating to the elaboration of a chemical weapons convention by the Committee on Disarmament. I should like to stress the urgency which Norway attaches to this matter. In our view this is a priority item on the multilateral disarmament agenda. Definitive progress in this field would be most important on its own merits; but it would also be highly beneficial to other multilateral disarmament efforts. We would urge all parties in these negotiations to take full advantage of the momentum which has been created with a view to achieving early agreement on this highly significant disarmament measure.

Norway has closely followed the progress which has been made in the Ad Hoc Working Group and its contact groups. In this connection, our delegation was strengthened for seven weeks this year by the presence of experts. We have noted the increased support for the proposal to include a prohibition on use in the scope of the convention. It is of vital importance that this should not detract from the obligations of States under the 1925 Geneva Protocol. An inclusion of a prohibition on use in the new convention would have the advantage, however, that the non-use of chemical weapons could be effectively verified.

A primary objective of the Norwegian research programme on the sampling and analysis of chemical warfare agents under winter conditions was to focus on the verification problems which would have to be dealt with in the framework of a future chemical weapons convention. The programme which was initiated by the Norwegian Ministry of Foreign Affairs in 1981 was aimed at using snow samples for verification of alleged use. In particular, the possibility of positive verification some weeks after alleged use has been investigated with a view to finding a realistic time-frame for undertaking on-site inspection under such conditions.

The first part of the research programme was carried out in 1981/1982 and the results were presented in working paper CD/311.

Today I have, therefore, the pleasure to introduce working paper CD/396 on the verification of a chemical weapons convention, which summarizes the results of the second part of the research programme undertaken during the winter 1982/1983. The full report is annexed to the English version of the working paper.

I would like to stress that the programme is based on experiments under field conditions in order to provide as realistic a basis as possible for this research.

As the scientific results of the second part of the research programme were presented to Contact Group C of the Ad Hoc Working Group on Chemical Weapons on 1 July, I shall limit myself to the main recommendations in regard to verification of the alleged use of chemical weapons which can be made on the basis of the results of the research programme.

The results of this programme demonstrate the importance of the time factor and proper collection of samples. The samples should therefore be taken as soon as possible after report of alleged use has been received. Further decomposition of the chemical agents in the samples on the way to the analysing laboratory should be avoided by rapid transport and proper handling. To ensure the integrity of the samples, personnel having the necessary knowledge should do the sampling and transportation and be selected by the consultative committee or a suborgan under that Committee. The laboratory or laboratories where the analyses will be carried out should be selected and supervised by the same suborgan. The chemical analyses would require highly trained and scientific personnel and modern equipment.

Several different analytical techniques will be needed. In addition, to obtain maximum reliability of results, it may also be necessary to apply more than one independent analytical method for each chemical agent.

The regular updating of the procedures for the taking of samples and of analytical methods should be the responsibility of the consultative committee.

The Norwegian Ministry of Foreign Affairs intends to continue to support research in Norway of questions relevant to a future chemical weapons convention and the results of such research will in due course be presented to the Committee.

Finally, I have the honour to present working paper CD/397 on verification of the non-production of chemical weapons in Norway. Such verification should in principle be based on on-site inspections under the auspices of the consultative committee according to a list of key precursors. This list, as well as the criteria for making such a list, should be kept under constant review. The key precursors for super-toxic lethal

chemicals and other super-toxic chemicals, listed in the annex to the working paper, document CD/353, submitted by the United Kingdom, would seem to be sufficient for a system of inspection in order to verify that those substances which pose the greatest threat are not being produced in violation of the future convention. In that working paper, the United Kingdom presented a survey of the British production and civil uses of key precursors. It was suggested that other States should furnish corresponding data concerning their civil chemical industries. The third paper which I am submitting today, in document CD/397, contains similar data as regards civil production and uses in Norway. As can be seen from this document, the civil uses of such substances in Norway are very limited and based on import. I hope that these data will be useful in the Committee's further work in regard to the verification of non-production of chemical weapons.

CD/PV.229

pp.13-14

Czechoslovakia/Vejvoda

28.7.83

CW

As is well known, some delegations proposed for this purpose a complex of sophisticated procedures. Such a complex would include the monitoring of all the steps of the technological process by a number of sensors and automatically operating television cameras, a continuous on-site inspection performed by a whole group of international inspectors, a great number of laboratory tests, and so on.

All this has been suggested in order to verify that the State which has declared its stocks of chemical weapons really destroys them. I must admit that my delegation has some difficulties in seeing why the declared stocks should not be destroyed. It seems more logical to consider the destruction of declared old stocks of chemical weapons one of the most simple tasks for verification.

At the same time, a real danger for international security could be potentially posed, e.g. by the undeclared production of some chemicals, which could eventually be deployed in multi-component chemical weapons systems, by the civilian chemical industry.

There seems to be little doubt that the only verification measure practically applicable with regard to such a very serious situation would be an on-challenge inspection -- that is something, considered by some delegations as "absolutely insufficient and unacceptable" for such a simple task as the destruction of known stocks. An imbalance between these two approaches is evident.

The issue of precursors might serve as another example.

The concept of precursors is needed in the convention for two main purposes: (1) to cover -- as far as declarations and destructions are concerned -- the chemical components of binary and/or multi-component chemical weapons systems, and (2) to cover the commercial production of chemicals which could potentially be misused for creating new chemical weapons in the future.

From a chemical point of view, precursors are all intermediate chemicals participating in the process of the chemical synthesis of the end-product.

It would be not only impractical but virtually impossible to deal with the whole spectrum of potential precursors, which are innumerable. Also, the interference with the interests of the peaceful civilian chemical industry would be enormous, and many delegations have already expressed their principal objections to any measures which could restrict the free development of the chemical industry.

It seems much more appropriate to choose only key precursors, and of those, only the key precursors of supertoxic chemicals to be dealt with in the convention. Our delegation contributed to this problem in document CD/CW/CRP.83, issued on 19 July of this year, in which we tried to define the main areas where the concept of key precursors

sors is relevant and corresponding general criteria for the definitions of key precursors, and proposed a few chemicals which could be included in tentative lists of key precursors to be destroyed and to be manufactured under supervision. We also emphasized that the concept of key precursors should be reserved only for situations of exceptional importance for the security of States.

In this context it is also pertinent to touch briefly upon the issue of lists of chemicals in the convention.

The provisions of the convention reflect different levels of the problem. At the level of scope, for instance, the convention provides for the complete prohibition and destruction of all chemical weapons. Here, the general purpose criterion is sufficient, and by using a list of specific substances its general validity would probably be impaired rather than improved.

In such a specific problem as key precursors, some lists would be appropriate, because they should facilitate the discrimination of areas of the highest importance and the limitation of any unnecessary interference with the peaceful chemical industry.

However, even these lists would be provisional and ought to be periodically revised and brought up to date.

Consequently they should be incorporated in the convention in a way which would (1) give them the necessary authority as an obligatory provision of the treaty, and (2) allow for their appropriate revision in the future.

An annex, revised in the course of the review conference on the convention, might be a reasonable way to meet both requirements mentioned.

CD/PV.230

pp.11-13

UK/Cromartie

2.8.83

CTB

One of the necessary requirements of an acceptable test-ban agreement would be to ensure that the ban would be entirely respected. There would be an unacceptable risk in agreeing to a test ban which did not provide for a verification system that would give adequate assurance against non-compliance with the treaty. The United Kingdom has, therefore, always given high priority to the establishment of an effective system of verification with respect to a comprehensive test ban. Given the very difficult problems inherent in this complex subject, it is not surprising that agreement on verification has proved a major obstacle to successful negotiation in the past.

On 21 June I introduced a working paper (CD/383) which discussed the way in which nuclear explosions for peaceful purposes should be treated in a comprehensive test-ban treaty. The paper emphasized the importance of a satisfactory solution to this problem if a fully acceptable treaty was to be negotiated. The distinguished representative of Brazil made a number of interesting comments on this paper in his statement of 7 July which deserve a reply. But I hope that he will forgive me if this morning I concentrate on another aspect of a comprehensive test ban, namely, verification by seismic means, on which I am introducing a further working paper (CD/402) today.

In the discussions in the working group during the 1982 session, references were made to an earlier statement on this subject which is contained in document CCD/492. My predecessor, Mr. Summerhayes, said on 14 September 1982 (CD/PV.186) that we considered that the assessments made in that paper remained generally valid. We have since carefully reviewed all the existing information and we have incorporated the results of our study in the new working paper.

I cannot do justice to the paper by summarizing its contents in this statement. I will therefore leave delegations to read the full version as distributed. But I should like to draw attention to two important points. Firstly, the paper stresses the importance of being able to identify, not merely detect, seismic events. Failure to make this distinc-

tion has led to over-optimistic assessments of the ability of the proposed world-wide seismic network. Secondly, we conclude that the means of seismic detection and identification of underground events which are at present available to us leave gaps exploitable by a State party to a comprehensive test-ban treaty, which might make it possible to conduct underground nuclear-weapon test explosions at yields up to at least some tens of kilotons without detection. Such explosions could have very considerable military significance. These possibilities could be more easily exploited by some States than by others because of differences in geographical situation, and particularly in size.

These conclusions should not be surprising to other delegations, since they are in line with earlier statements by the United Kingdom delegation on this important issue. They are also in line with the technical information currently available to us, which fully justifies them. In our view other, non-official published assessments have failed to attach due weight to certain technical factors and have made assumptions about the realizability of an effective global seismic network which are not justified.

There is also a certain tendency to speak as if the world-wide network of seismic stations contemplated for the verification of a comprehensive test-ban treaty was already in existence. This is not the case. The capabilities of such a network are, therefore, not yet proven, and the estimate that we make of its capabilities is based on assumptions with respect to the distribution of stations, which cannot at present be determined, since it will depend in part on adherence to the treaty. We can be sure neither of the reliability of the data they would produce, nor of the efficiency of the exchange, although experimental exchanges have been encouraging. The Ad Hoc Group of Scientific Experts has been doing important work in this field; but, while there is broad agreement in the Group on certain principles, there are many points of detail on which agreement has not yet been reached. There is the question of the standards of technical specification of the stations participating in the global network. There is also the important question of the use of Level II data. The United Kingdom delegation believes that the analysis of Level II data in favourable circumstances could provide a way of ascertaining whether there had been a probable breach of the treaty. Given the high number of seismic events recorded each year which could cause confusion in the identification of low-yield underground explosions, it is important that the proposed international data centres should have access to Level II data. We believe that the feasibility of transmitting such data requires further consideration in the Ad Hoc Group of Scientific Experts.

My delegation welcomes the recommendation of the Group of Scientific Experts in its report, document CD/399, which is before us this morning, that its next meeting should be held at the end of February 1984. As will be clear from what I have said already, we believe that there is a great deal of valuable work for the Group to do. We are pleased that the recent session of the Group took place, under the able chairmanship of Dr. Dahlman, in a more constructive and scientific atmosphere, which augurs well for the future. We welcome the plans for a further experiment on the international co-operative exchange of seismic data in 1984. We hope that countries which have not previously participated in these experiments, especially in the southern hemisphere, will do so on this occasion, in order to achieve the widest possible geographical coverage. We look forward to hearing the results of this important experiment in due course.

The conclusions which we have drawn about the use of seismic methods as the sole means of verification point to the need for the consideration of supplementary measures, such as on-site inspection, in order to attempt to fill in those gaps which remain in the verification system, and which could be exploited to the advantage of an individual State. It was with this in mind that we agreed to a mandate for the Ad Hoc Working Group on a Nuclear Test Ban which required the Group "to discuss and define, through substantive examination, issues relating to verification and compliance with a view to

making further progress towards a nuclear test ban". As the submission of two working papers in this summer period of the session shows, the United Kingdom delegation is ready to enter into that substantive examination. We regret that a number of other delegations take a different view. Since the Committee agreed on the mandate for the Working Group, these delegations have made no secret of their dissatisfaction with it, and at each stage of the discussion in the Committee have tried to rush through the work, and to gloss over difficulties, with the transparent objective of claiming that the mandate has been carried out and that a revised mandate is necessary. My delegation does not believe that the substantive examination called for in the mandate has been made, nor that such an examination is not possible because the Group is not "negotiating". The United Kingdom delegation calls upon all delegations to take part in a genuine discussion of the problems facing us in achieving a satisfactory system of verification for a comprehensive test ban. As a first step, my delegation would welcome comments on the two papers that it has put forward.

CD/PV.231

pp.7-8

GDR/Thielicke

4.8.83

CTB

There are documents on the table now which not only identify and define issues of a future treaty but provide sufficient material for treaty negotiations. The "Basic provisions of a treaty on the complete and general prohibition of nuclear-weapon tests", submitted by the Soviet Union at the beginning of this year's session, covers the main elements of a comprehensive test-ban treaty. In June, Sweden tabled a "Draft treaty banning any nuclear weapon test explosion in any environment". With regard to such main issues as the scope of prohibition, a solution for the question of peaceful nuclear explosions and the procedure for the entry into force of the treaty, both documents envisage similar provisions. They have in common the basic approach to verification, i.e. they proceed from a combination of national and international means of verification. On the other hand, there are certain differences with regard to detailed verification questions which, in our view, could be overcome in negotiations.

We face a strange situation now in this Committee: whereas there are a lot of ideas on and even draft provisions of a treaty on the complete and general prohibition of nuclear-weapon tests, the Working Group on a Nuclear Test Ban is confined, under its mandate, to mere discussions. The Working Group is prevented from proceeding to actual negotiations by some countries which consider a comprehensive test ban only a long-term goal.

Until now these countries have not given a convincing answer as to what would be an adequate system for the verification of compliance with a treaty on the complete and general prohibition of nuclear-weapon tests.

To justify their negative attitude with respect to negotiations, they have put forward so-called unsolved technical problems which should be dealt with before the Committee proceeds to negotiations.

This approach is, *inter alia*, characterized by ignorance of the major progress made in the course of the last 20 years in the field of technology for monitoring seismic events. Moreover, the proponents of such an approach sometimes try to single out certain elements of a system for the verification of a comprehensive test ban and to discuss them in an abstract way and allege that their verification potential would not be sufficient. Thereby, the complex character and the capability of the whole conceivable verification system ranging from national technical means up to on-site inspections by challenge is ignored deliberately.

Some delegations deplore that up to now no concise assessment is available as to whether the international exchange of seismic data as recommended by the Group of

Scientific Experts will work effectively. On 2 August the delegation of the United Kingdom pointed to the fact that the world-wide network contemplated for the verification of a comprehensive test-ban treaty is not yet in existence. Furthermore, it argued that the "capabilities of such a network are, therefore, not yet proven, and the estimate that we make of its capabilities is based on assumptions with respect to the distribution of stations which cannot at present be determined, since it will depend in part on adherence to the treaty". We share this assessment. However, we miss the conclusion which should logically be drawn from it. This conclusion can only be to agree on a treaty on the complete and general prohibition of nuclear-weapon tests. Only then will it become known which States will participate and make their seismic stations available for the international network. Only in this way can the vicious circle mentioned by the United Kingdom delegation be broken through.

It was argued that it would not be possible to agree now on a comprehensive test-ban because of methods for the evasion of such a ban. Those techniques were discussed in the predecessor of this Committee already more than 20 years ago. In the Working Group on a Nuclear Test Ban my delegation dwelt upon this question in detail. We drew attention to the fact that the practical potential of evasion methods is highly doubtful. Even those delegations which refer to them again today, confess that these methods are not very likely. However, at the same time, we were asked to study in-depth these and other technical questions before starting negotiations on a comprehensive test-ban treaty. So, we might legitimately ask: how long shall we consider such dubious problems before proceeding to negotiations?

After having discussed the different approaches to CTB verification, my delegation, in its statement of 31 August 1982 in this Committee, drew the following conclusion: "It is, of course, important to clarify and solve technical problems connected with verification of a CTB. However, at some point a political decision should be taken. Otherwise, there would be a danger of converting negotiations into technical deliberations, and their purpose -- a CTBT -- would be buried under a heap of technical papers" (CD/PV. 183, p.32). This conclusion has not lost its topicality.

Verification of compliance with a comprehensive test-ban treaty is very important. However, it must not be misused as a smokescreen for the negative attitude of some countries towards a complete cessation of nuclear-weapon tests. Those countries leave no doubt about their real position relating to nuclear-weapon tests, which they deem necessary for the development of new systems of nuclear weapons that are part and parcel of programmes to achieve military superiority.

CD/PV.231

pp.10-11

Sweden/Hyltenius

4.8.83

CTB

The main obstacles to the conclusion of a comprehensive test-ban treaty are not doubt political, but also some technical issues remain to be resolved. We should at least try to make progress on those issues awaiting a more favourable international situation. Today I would, therefore, like to revert to one feature of the Swedish draft treaty, namely, the proposal regarding the establishment of an international system for the surveillance of airborne radioactivity, which should be complementary to an international seismological monitoring network, and in so doing I shall also have the honour of introducing working paper CD/403, which has just been submitted by Sweden to the Committee today.

A little more than one year ago Sweden proposed, in document CD/257, that the discussions on the verification of a comprehensive test ban, which for a very long time have been focused on the surveillance of underground tests, should also cover the atmospheric test environment and its main verification methods, i.e. the analysis of

atmospheric radioactivity. It is quite natural that when the techniques for the detection and localization of underground nuclear explosions have become so advanced, the means of verification in other test media again emerge to the surface of the discussion. Back in the early 1960s, before the signing of the partial test-ban Treaty, extensive schemes of verification were elaborated for a comprehensive test-ban treaty, which seemed to be at hand at that time. Already then, the technical problems in designing an atmospheric control system seemed to have been overcome. However, as I just said, in the last 20 years, interest has been focused on elaborating other means of international verification. Now that we, from the technical point of view, are rather close to an effective seismological monitoring system, it is time to revive the idea of an international network for the surveillance of airborne radioactivity as a complementary system of verification of a comprehensive test-ban treaty. Sweden, in its draft treaty submitted to the Committee on Disarmament on 14 June 1983 (document CD/381) in article IV included such a system as a means of verification.

I should now like to comment on working paper CD/403 on the international surveillance of airborne radioactivity, which is before you. This paper attempts to answer some of the comments made and the questions asked in connection with the proposal that an international system be established for the international surveillance of airborne radioactivity. My delegation is grateful to those delegations which have shown interest in our proposal, and it is our hope that we shall be able to answer at least some of the questions asked and meet the concerns which have been expressed on this issue.

It has been argued that the partial test-ban Treaty, which did not include any international measures of verification, has worked well for 20 years, and this is mainly true, but it must be noted that that Treaty is primarily a health measure and not much of an arms limitation treaty. It has, all through, been possible to continue nuclear weapons developments through underground tests. If and when a comprehensive test-ban treaty enters into force, the situation will shift significantly. The temptation to make clandestine tests of nuclear devices in the atmosphere is likely to increase drastically, if there is no effective monitoring of the atmosphere. The importance of this loophole in verification is well illustrated by the uncertainty about the event in the South Atlantic in September 1979. It was not possible to establish through international means whether that was a clandestine atmospheric nuclear explosion or not. As there are very few national sampling stations for atmospheric radioactivity in the southern hemisphere with the capacity to detect small amounts of shortlived debris, it was not possible to trace possible corroborative evidence of a nuclear explosion. With an international system for the surveillance of airborne radioactivity operating, the probability of getting that evidence would have been greatly increased.

It has also been said or implied that national systems are quite adequate and that there is nothing to gain from international co-operation in this field. Debris from even small nuclear tests in the Far East has been easily detected in a number of countries at mid-latitudes in the northern hemisphere. This is due to the general circulation of air by strong westerly winds at mid-latitudes. However, this is not the case all over the globe, and the probability of picking up debris from a test very much depends on the location of the test site and the sampling station. The collection of data simultaneously at several sampling stations in a global network, in addition to the time of the explosion, would in addition provide some information that would help to locate the test site. International co-operation would ensure a global coverage with as even as possible a detection capability for all possible test locales. It would also make certain that the surveillance operates continuously, and it would provide data for judgement by all parties to the Treaty without discrimination.

In the working paper now submitted to the Committee, there is a short description of how a possible system for the international surveillance of airborne radioactivity

could be set up, and of the costs involved in establishing and operating it. The paper also contains a short summary of a study carried out by the meteorological authorities in Sweden dealing with methods to optimize, from a meteorological point of view, a global network of sampling stations in a system of international surveillance of atmospheric radioactivity.

As is evident from the working paper, such a system would technically be fairly easy to establish and to operate, and the costs involved would be modest. We fail to see why a verification system should not be improved as much as possible as long as this can be done at reasonable costs. By adding a system for the international surveillance of atmospheric radioactivity to a seismological monitoring network, the effectiveness of verification would be greatly enhanced. As this can be done at modest costs, my delegation is of the opinion that this possibility should be seriously considered.

CD/PV.231

pp.13-15

USSR/Issraelyan

4.8.83

CTB

We wish once more to emphasize that the Soviet Union — and other countries, too, as has become clear in the course of the discussions — has always attached and continues to attach greater importance to the use of nuclear explosions for peaceful purposes, and derives significant economic benefits from such use. Nevertheless, in the interests of the speediest possible conclusion of a treaty on the complete and general prohibition of nuclear-weapon tests, the USSR agreed during the tripartite negotiations to the establishment of a moratorium on nuclear explosions for peaceful purposes. That important step by the Soviet Union was welcomed at the time both by the participants in the tripartite negotiations and by the world community as a whole.

Like many others, we consider that the question of nuclear explosions for peaceful purposes is of secondary importance by comparison with the goal of a complete prohibition of nuclear-weapon tests and can be settled in the context of negotiations after the conclusion of the treaty.

We believe that the position concerning nuclear explosions for peaceful purposes formulated in the Soviet document, "Basic provisions of a treaty on the complete and general prohibition of nuclear-weapon tests", offers a possibility for the solution of the question of the scope of the prohibition within the framework of a treaty on a mutually acceptable basis. It permits on the one hand the attainment of the principal goal, namely, the conclusion of a treaty on the prohibition of nuclear-weapon tests, and on the other the working out, during the period of the moratorium, of procedures for the conduct of peaceful nuclear explosions. Thus there are no insurmountable obstacles in this connection, unless, of course, deliberate efforts are made to create such obstacles.

Another question on which the positions of the two nuclear-weapon powers have undergone a change is that of seismic verification. While earlier they agreed in principle that the system for the international exchange of seismic data would be sufficient for the purposes of an international treaty, they evidently now have a different opinion. Whereas earlier they agreed to include in the text of the treaty only the broad outlines of a system for the international exchange of seismic data, leaving the details of the system to be worked out by a committee of experts, they now insist that all the details should be worked out before the entry into force of the treaty.

Essentially, what the United Kingdom working paper (document CD/402) submitted at our plenary meeting on 2 August implies is that until all the technical problems of verification have been resolved, there can be no negotiations. This applies particularly to seismic verification. This would mean in practice that it would never be possible to devise a verification system that would be 100 per cent satisfactory to the States which consider this essential. All the more strange and incomprehensible, then, is the conclu-

sion reached in the United Kingdom paper that "What is at issue is the political will to recognize that the correct path towards an agreed treaty -- however long it may prove to be -- leads through detailed consideration of the verification issues". This is an upside-down kind of logic. It shows, not a will to negotiate, but a will to block negotiations. It is obvious that no problems can be resolved by mere discussion, however detailed that may be. These problems can only be resolved at the negotiating table, not in a debating club.

Furthermore, as is clear from the tripartite report, the two nuclear-weapon States did not earlier see any need for a supplementary system for the detection of airborne radioactivity. Now they are arguing in favour of such a system for the verification of compliance with a prohibition of nuclear-weapon tests.

Lastly, whereas earlier these States agreed in principle to the carrying out of on-site inspections on a voluntary basis, they are now rushing to support a view put forward by certain delegations in the Ad Hoc Working Group which amounts in effect to the principle of verifications on a compulsory basis.

It is difficult to see how all this can be reconciled with what is stated in paragraph 19 of the tripartite report (CD/130), namely, that "the three negotiating parties believe that the verification measures being negotiated -- the committee of experts and on-site inspections -- break significant new ground in international arms limitation efforts and will give all treaty parties the opportunity to participate in a substantial and constructive way in the process of verifying compliance with the treaty".

I have given these examples because they are extremely characteristic of the approach of these delegations to the work of the Ad Hoc Working Group on a Nuclear Test Ban and, indeed, to the entire problem as a whole. The main purpose of this approach is to play down the agreements reached in the past and to emphasize the divergences of views that subsist, with respect to practically all aspects of the prohibition of nuclear-weapon tests, instead of trying to achieve mutually acceptable agreements on these aspects. The ultimate objective of all this seems to us perfectly obvious -- to try to convince the States members of the Committee on Disarmament and the entire world community that it is not the lack of political will on their part that is the obstacle to the conclusion of a treaty on the prohibition of nuclear-weapon tests but the difficulties of a technical and other nature that are, allegedly, objectively inherent in this problem.

The questions dealt with in the two documents submitted by the United Kingdom delegation, as everyone very well knows, are not problems which have only just arisen. They existed 20 years ago also. But as the history of the tripartite negotiations shows, they can be settled on a mutually acceptable basis if there is a sincere desire for and interest in the conclusion of a treaty. When that desire is missing, then we are presented with such documents, the sole object of which is to put us still further away from a possible agreement.

The position of the Soviet Union on the question of the prohibition of nuclear-weapon tests, including the verification of such a prohibition, has been frequently and sufficiently clearly set forth at the most varied levels.

The Soviet Union belongs to the majority group of delegations which believe that the means of verification existing today, as, indeed, those which existed 10, 15 and even 20 years ago, are entirely adequate to provide an assurance of compliance with a treaty on the complete and general prohibition of nuclear-weapon tests, and that what is required here is a political decision.

If we turn again to document CD/130, we can see that the participants in the tripartite negotiations worked out an extremely well-balanced system for the verification of compliance with the provisions of a treaty on the complete prohibition of nuclear-weapon tests. The participants in the tripartite negotiations reached an agree-

ment in principle not only on all the basic components of such a system but also on very many of its specific technical details. We do not wish to minimize the divergences of views which nevertheless subsisted between the participants in the negotiations. The important thing, however, is that the international verification system established under the treaty should give the parties to it sufficient — I repeat, sufficient — assurance that the provisions of the treaty are being complied with by the parties, that such a system should deter the parties from engaging in any activity prohibited by the treaty and that it should, to the maximum degree possible, preclude unwarranted suspicions arising in connection with events of natural origin.

We believe that such a system is to be found in the Soviet document, "Basic provisions of a treaty on the complete and general prohibition of nuclear-weapon tests" (CD/346) and that it is adequate for the purposes of the treaty.

We are firmly convinced that the only way to achieve progress towards the conclusion of a treaty on the prohibition of nuclear-weapon tests consists in endeavouring, in a constructive spirit, to widen the area of agreement reached over many years of laborious negotiations, instead of trying to undermine that agreement, changing positions, raising more and more problems and emphasizing and exaggerating differences of views. The metamorphosis which has taken place in the attitude of two of the participants in the tripartite negotiations on the question of the prohibition of nuclear-weapon tests is truly profound. This phenomenon is, generally speaking, extremely dangerous in negotiations. I should like to ask a question: supposing we had somehow reached an agreement yesterday, what guarantee would there be that the parties to the agreement who behave in such a way would not repudiate it today?

CD/PV.232 pp.13-14 India/Dubey 9.8.83 CW

The importance of the question of verification of compliance cannot be over-emphasized. This question has, therefore, very rightly claimed a large part of the time and attention of the Ad Hoc Working Group. I would not like, on this occasion, to go into the details of the proposals made in this regard. I would simply reiterate my delegation's position that one of the most important considerations to be taken into account in reaching agreement on the verification of compliance should be that the chemical industry in many countries of the third world, including my own, still remains at an early stage of development and nothing should be done in the proposed convention which will inhibit the growth of the civilian chemical industries in these countries. The legitimate desire of these countries to develop their chemical industries for the benefit of their peoples and as a contribution to bridging the technological gap and developing self-reliant economic structures must be respected. Moreover, the verification regime which is ultimately agreed upon must be non-discriminatory in character and should be accessible to all States parties to the convention. Finally, we should be careful to ensure that the procedures for the verification of compliance remain fair to the civilian chemical industry and do not put an unnecessary burden on it.

CD/PV.232 pp.19-21 Egypt/El Reedy 9.8.83 CW

States are most likely to be predisposed towards accession if they have faith in the credibility of the convention and are satisfied that its provisions are conducive to the furtherance of a common interest, namely, the prohibition of chemical weapons, and that their security would not be jeopardized as a result of their accession thereto.

In this connection, the provisions concerning verification and compliance assume

particular importance. The greatest inducement for States to accede to the convention would be a feeling of confidence that the convention is capable of enforcing compliance with its provisions. This necessitates the establishment of an effective system to verify the occurrence of any violations, to counter such violations when they occur, and to deal with any situation in which a State finds itself endangered as a result of its accession to the convention and its fulfilment of its obligations in good faith.

At meetings of the Working Group and meetings of experts, Egypt has consistently stressed the need for the convention to incorporate an effective verification system, including the possibility of on-site inspection. It is gratifying to note that the Committee on Disarmament currently appears to be more aware of this requirement.

However, we do not believe that the establishment of an effective verification system would, in itself, be sufficient to inspire the requisite degree of confidence in the credibility of the convention. Provision should also be made, therefore, to deal with situations in which a State party refuses to co-operate with the bodies responsible for verification, or in which a violation of the provisions of the convention is ascertained through the verification procedure.

It might be said that, in such a situation, any injured State could call upon the Security Council to discuss the matter and take the appropriate action. However, with all deference to the Security Council, which plays a commendable and significant role in disarmament conventions, we do not believe that recourse to its authority is sufficient for dealing with situations such as those to which we have referred. Resort to the Security Council is not, in itself, sufficient to inspire the requisite degree of confidence in the credibility of the convention and would not, therefore, encourage the largest possible number of States to accede to the Convention.

I do not believe that we need to elaborate on our reasons for taking this view. In effect, under the Charter of the United Nations, any Member State has the right of recourse to the Security Council and no special convention is needed for this purpose. Moreover, resort to the Security Council is regulated by the provisions of the Charter which cannot be amended by a convention such as the convention on the prohibition of chemical weapons. The right of veto or objection granted to the five superpowers is laid down in the provisions of the Charter governing the work of the Security Council.

We are all aware of the problems encountered in the adoption of resolutions in the Security Council as a result of political considerations and current circumstances. Consequently, we can envisage a situation in which a single State, possibly not even a party to the convention, might be able to obstruct the work of the entire Council and prevent the adoption of a resolution. For this reason, we do not believe that the possibility of resort to the Security Council would, in itself, inspire the requisite degree of confidence in the convention.

In making this assessment, we have taken into account the special nature of a convention on the prohibition of chemical weapons, together with our past experience of the work of the Security Council.

It should also be noted that the ultimate objective of the proposed convention is the institution of a general legal system under which the various States would give specific, verifiable undertakings. They would assume these commitments on the understanding that the other States parties would follow suit. Voluntary participation in such a system must be based on the conviction of every State party that, in the event of its security being endangered as a result of the non-fulfilment of commitments by any other State party, there would definitely be a body to which appeal could be made. That body could only be the group of States in association with which the injured State entered into specific commitments, on the understanding that the group would be responsible for upholding the convention and ensuring its observance.

To that end, stipulation of the possibility of convening a special meeting of the

consultative committee if the fact-finding team is unable to solve a problem relating to the observance of the provisions of the convention, as mentioned in the draft submitted by the United States of America, merely constitutes a proper application of the principle of the collective joint responsibility of the States parties to uphold the convention and endeavour to ensure the observance of its provisions.

However, we believe that the provision concerning the convening of the consultative committee to consider a matter relating to the violation of the stipulations of the convention should comprise an indication of the legal framework within which the consultative committee can act. Since the consultative committee consists of all the States parties, specific provision should be made for a commitment on their part to assist any State whose security is endangered or which is otherwise prejudiced as a result of the violation of the provisions of the Convention by any States party. In parallel, a stipulation should be made to the effect that the States parties must take action to ensure observance of the convention and fulfilment of the commitments specified therein.

Furthermore, it is possible to envisage circumstances in which the convention, the legal system that it establishes or the legal principles that it lays down might be endangered, but not necessarily as a result of a breach committed by one of the States parties. In such a situation the Security Council might, once again, be convened, particularly if the matter relates to a circumstance which poses a threat to international peace or security. In addition, however, it might also be necessary to convene an urgent meeting of the consultative committee. In this connection, we believe that there must be some form of guarantee of the serious nature of such convocation for which we have therefore stipulated the concurrence of a number of States parties, for example, five.

These are the concepts that we believe should be incorporated in the convention on the prohibition of chemical weapons in order that the convention may acquire the credibility and effectiveness needed to make it truly capable of fulfilling our aspiration, namely, the final elimination of such weapons and the exclusion of their use in any form whatsoever.

CD/PV.233 p.9 Mongolia/Erdembileg 11.8.83 OS

Secondly, the proponents of this view assume that it would be difficult, if not impossible, to prove the violation by one State or another of the obligation it had assumed not to deploy weapons in outer space. Of course, there is no perfect verification system, nor can there be. Every agreement in the sphere of disarmament contains an element of trust. But the opposite is also true. No attempt at obtaining a strategic advantage by violating the treaty would pass unnoticed. The possibility of individual violations is not excluded by any of the agreements now in force in the sphere of disarmament. But with the existing verification measures we believe that it would be impossible to secure strategic advantages without the other parties to the agreements being aware of it.

CD/PV.233 pp.28-30 FRG/Wegener 11.8.83 CW

In a recent statement, Ambassador Imai of Japan underlined the priority of the destruction of existing stocks. Indeed, the current decisive danger emanates from existing chemical weapons stocks and from those chemical weapons production facilities which make for the proliferation of stocks, or at least could do so. In consequence, their destruction, reliably verified, constitutes, in our view, the central task for the

entire chemical weapons negotiating complex. There is at least a certain measure of agreement among ourselves on this requirement, and there are also in this central area a number of elements which work towards consensus in substance. We should seriously ask ourselves whether it would not be worthwhile to achieve, in the first instance, a solution to these two interrelated problems — the destruction of stocks, and of production facilities. I would indeed suggest that the chemical weapons Working Group should, on a priority basis, concentrate on these elements of consensus, and my delegation would be ready to undertake a compilation containing such elements for the benefit of the Working Group. These elements of consensus could then be "recorded" in the proposed manner. If we do succeed in this central area in achieving partial progress, and registering it in written form, we shall have accomplished a great step, facilitating and accelerating the work of next year's session.

In this connection, I am pleased to comment on the impressive working paper by the delegation of the United States of America in which procedures for the verification of the destruction of stocks are graphically described, based on the example of an existing destruction facility. The particular value of this working paper resides in the fact that it testifies in a particular practical form to the possibility of effective international surveillance during the destruction process. It makes evident that control by international inspectors entails no undue burden for the signatories to the future convention. My delegation is therefore surprised that the views of Western countries on the destruction of stocks has drawn only critical and rather unhelpful comments from the representatives of socialist States, most recently in the statement of the distinguished delegate of Czechoslovakia, Ambassador Vejvoda, of 28 July 1983. These negative views are, however, developed without the benefit of any constructive counter-ideas on the part of the socialist representatives. This dilatory and superficial treatment of the topic of the destruction of stocks and its verification is in blatant contradiction with the urgency of eliminating those threats that stem from the existence of the present chemical arsenals. We must seriously deal with the issues of the international verification of the destruction of stocks. Here, more than elsewhere, it is totally insufficient to reiterate positions that harbour no consensus potential, and, for the rest, to remain motionless on established positions.

Advocating the concentration of our work on one key problem area of the future convention does not imply any less emphasis upon the important issues of, for example, the prohibition of transfer or other elements, such as, especially, the important issue of non-production and the details of a verification system relating to non-production. However, our position on these issues is well known, since my delegation has in working paper CD/326 submitted detailed suggestions for the verification of non-production. In particular, in these papers, my delegation has developed a control system of a low level of intrusiveness over the industrial production of organophosphorus compounds on the basis of random inspections. For its part, the United Kingdom delegation has shown a pragmatic path towards the verification of non-production in working paper CD/353.

My delegation would counsel seriously against any attempt to solve the problem of non-production by other means than an pragmatic approach. Obviously, a high degree of expert knowledge is required to avoid loopholes in the future convention. On the other hand, we should not unduly blow up the scientific complexities of non-production, thus building roadblocks on the way to the early conclusion of a convention. It appears highly advisable to conduct our discussion on non-production under the auspices of genuine relevance in arms control terms, and to structure our debate in a more goal-oriented fashion.

In contact group C, under the brilliant leadership of our Dutch colleague, Mr. Akkerman, a consensus on the inclusion of the prohibition of the use of chemical weapons in the future convention is imminent. There is now agreement in substance that

the prohibition of the use of chemical weapons will be included in the future convention, and that the verification system will also cover chemical weapons use. We still have to work out a formulation which will accomplish the inclusion of the use prohibition in the convention in correct relationship to the present rules of international law. One possible solution could consist in a proviso which would juxtapose an unambiguous prohibition of the use of chemical weapons and the acknowledgement that such provisions would reaffirm and strengthen the interdiction of the Geneva Protocol of 1925. In the view of my delegation it is regrettable that the Geneva Protocol of 1925 has, by virtue of the manifold reservations attached to it, de facto degenerated into a prohibition of the first use of chemical weapons only. It would have been a noble task for the Committee on Disarmament to eliminate the many ambiguities which result from the multitude of reservations to the Geneva Protocol by a constructive further development of law in the direction of an absolute interdiction of use. It is worthwhile to remind ourselves that such an evolution was in fact called for by the Geneva Disarmament Conference in the 1930s. It is therefore legitimate to ask whether the issue of the further evolution of international law in terms of a categorical prohibition of use -- if indeed a consensus of States to this effect cannot be reached during the current round of negotiations -- should be assigned to a later review conference which could deal with this problem, say, at the conclusion of the chemical weapons stock destruction phase.

CD/PV.234

p.17

Mexico/Garcia Robles

16.8.83

FRZ

A second measure which would also contribute an important contribution to the prevention of nuclear war would be the implementation of resolution 37/100 B, adopted by the General Assembly on 13 December 1982, in which it urged the United States and the Soviet Union, as the two major nuclear-weapon States, to proclaim, either through simultaneous unilateral declarations or through a joint declaration, an immediate nuclear arms freeze with the structure and scope described in that resolution.

It is envisaged that the initial duration of the freeze would be five years, with the proviso that that period would be subject to prolongation "in the event of other nuclear-weapon States joining in such a freeze, as the General Assembly expects them to do".

The preamble to that resolution contains various points of special significance, among which I should like to mention the following.

The nuclear arms freeze is not an end in itself. It would, however, constitute the most effective first step that can at present be taken both to prevent any further increase in the vast nuclear arsenals of the two superpowers and to expedite the negotiations towards a substantial reduction and qualitative limitation of existing nuclear weaponry.

In order to dispel in advance any doubts about the strict observance of the undertakings involved in the freeze, the General Assembly provided expressly in its resolution that the freeze would be subject, not only to the relevant measures and procedures of verification already agreed on by the parties in the case of SALT I and SALT II treaties -- which posed verification problems far more complicated than those that might arise in the case of the proposed freeze -- but also to those agreed upon in principle by the same parties during the preparatory trilateral negotiations on a comprehensive test ban held at Geneva between 1977 and 1980.

The foregoing, combined with the fact that the freeze would mean halting all activities under any arms programme, has led someone so well versed in the matter as Herbert Scoville, former deputy director of the CIA, to declare that "verification can no longer legitimately be invoked as an excuse for not proceeding towards an agreement on a freeze".

Another question connected with chemical weapons stocks which has caused disagreement concerns the international verification of such stocks at the stage up to their elimination. Quite frequently, solutions have been proposed which could not be implemented in practice because they did not take into account a number of specific features connected with this question. In particular, it has been suggested that States parties to the future convention, after it enters into force, should declare the locations of declared stocks of chemical weapons, i.e. the storage places where they may be kept. Such a requirement is purely unilateral and unrealistic, since it does not take into account the possible general use of such places of storage, where chemical weapons are being kept, and might affect the defence interests of States not connected with chemical weapons.

After careful study of this question and some realistic proposals made in connection with it, the Soviet Union proposes that in order to ensure reliable verification of the declared stocks, provision should be made for the creation of store-houses at the specialized facilities for the destruction of these stocks, the location of which would be declared concurrently with the declaration of the destruction facilities mentioned above. At such places of storage, international verification on a "quota" basis would be permitted during the entire period of the destruction of the declared stocks.

Thus this question, too, could be considered to be resolved, with provision for the verification of the entire process of the destruction of all stocks of chemical weapons, on the understanding, of course, that everyone will display a realistic approach to it.

At the current session of the Committee on Disarmament a great deal of attention has also been paid to the question of the direct verification of the process of the destruction of chemical weapons stocks. In this connection we would like to state once again that we are not less interested than other States in reliable verification assuring our security and that of our allies. This applies in full measure to the verification of the elimination of stocks of chemical weapons. But this approach in no way calls for extremes — the converting of verification into an end in itself.

What kind of approach to the verification of the destruction of stocks would we consider effective and at the same time sufficient and consequently the most feasible? As you know, the Soviet Union proposes the conduct of verification through systematic international inspections on the basis of an agreed quota at the facility (facilities) for the destruction of chemical weapons stockpiles.

The level of the quota, which in our view means an agreed number of international inspections per year at one destruction facility or another, could be determined by the consultative committee on the basis of criteria agreed on in advance.

Unfortunately, the rigid position of one delegation on the question of the verification of the destruction of stocks, which up to now has not wished to take into account anything except its own maximalist proposals, has hampered the solution of this problem. We appeal to it in the hope that it will be able to make an objective assessment of the proposals of other delegations too, primarily from the point of view of providing an assurance of the compliance of States parties possessing chemical weapons with the order for the destruction of their stocks which has been elaborated and agreed on.

It is not clear, for example, that there is no need at all for the permanent presence of inspectors at a facility destroying, for instance, small lots of chemical weapon stocks that are, furthermore, obsolete or of low toxicity, during the entire process of destruction? The stock probably does not represent any significant danger from a military point of view, but rather creates problems for the State to which it belongs, because the time for its storage has expired and it presents a danger for the environment, but under the convention the same close attention would be paid to it as to the latest and most

dangerous chemicals.

The Soviet Union proposes a differentiated approach whereby, for the purposes of verification, account would be taken of the quantity of the stocks to be destroyed at one facility or another, their characteristics according to toxicity and danger, the destructive capacity of the facilities, the level of their automation and some other factors. In practice this would mean that in some cases the inspectors of the consultative committee would visit the facility more frequently, and in others less frequently. Nerve gases are one thing and chloropycrine quite another.

All this we have already explained in the course of consultations with other delegations, in private talks, etc., and we are prepared to continue to do so in order to reach an agreement as soon as possible.

The specific feature of the Soviet position consists in the fact that we do not propose any final solutions about arrangements for the application of the quota during verifications, because we believe that this could best be done by joint efforts. It is in this direction that we intend to concentrate our efforts in the future.

This, in our view, is the general state of affairs as regards the problem of the elimination of stocks of chemical weapons. There is everything necessary in order to advance in the nearest future to its solution and the completion of work on this matter as soon as possible.

There are, of course, certain other questions connected with the elaboration of the convention which require solution. We do not think that it would be correct to wait until a time when all of them are agreed on in principle before starting the drafting of the convention where that is possible. The experience gained at the negotiations shows that the best results are provided by flexibility and a skilful combination of various working methods.

In this connection, we would like in particular to dwell upon the question of the facilities for the production of chemical weapons. During the deliberations in the Committee on Disarmament on the preparation of a draft convention on the prohibition of chemical weapons, different views have been expressed and are still held as regards the time for the declaration of the location of facilities that are to be destroyed.

The Soviet Union and some other delegations, taking into account the possible general use of some facilities producing, in particular, chemical weapons, and the importance of not causing any harm to the commercial interests of the States parties because of their accession to the convention, and a number of other considerations which I shall refer to later, propose the starting of the elimination of chemical weapons production facilities not later than eight years after the convention enters into force, and the declaration of their location not later than one year before that date. Consequently, the initial declarations of States parties would refer only to their existing capacities for the production of chemical weapons.

At the same time we would like to state today that a mutually acceptable solution on the time for the declaration of the location of facilities and the beginning of their elimination could be found at a later stage of the negotiations, taking into account the agreements of principle which could be reached, in particular, on the question of the verification of the destruction of chemical weapons stocks, the permitted production of supertoxic chemicals and the non-production of chemicals for binary weapons at commercial enterprises.

The Soviet delegation attaches great importance to the solution both of the question of the verification of the destruction of stocks and of that of the verification of the production of supertoxic chemicals for permitted purposes, but at the same time it particularly singles out, in the context of chemical weapons production facilities, the question of the verification of the non-production of components for binary chemical weapons at commercial enterprises. The solution of these questions will, to a consider-

able extent, ensure confidence between the States parties to the future convention, regulate questions of balance and guarantee the viability of the convention as a whole.

The Soviet Union fully supports the relevant proposals of the German Democratic Republic concerning the elimination in the first instance of facilities producing binary weapons and proposes for its part that their destruction or dismantling with partial diversion should begin not later than six months and be completed not later than two years after the convention enters into force. We believe that the number of these facilities should include not only those which are in fact producing binary chemical weapons, but also facilities which are fulfilling contracts on work connected with their production. We also believe that the closing down of these facilities, their maintenance in a state of non-production and their destruction or dismantling with partial diversion should be carried out with appropriate international verification.

Logically, the convention should also include a provision under which the destruction of stocks of binary and multicomponent weapons should start not later than six months and be completed not later than two years after the convention enters into force.

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Netherlands/Ramaker

18.8.83 CTB,CW

My delegation first of all wishes once again to place on record that it is its Government's firm conviction that the scope of a future test-ban treaty, in order to be truly comprehensive, should include what have been called "peaceful nuclear explosions". In this respect the Netherlands find itself in complete agreement with the conclusions arrived at in document CD/383, submitted by the United Kingdom delegation. In reaching this conclusion, my delegation proceeds from the fact that no distinction whatsoever can be made between basic technologies to be used for nuclear weapons testing and for nuclear explosions for peaceful purposes. As a result, it seems irrefutable that the conduct of explosions for peaceful purposes would strip the future treaty of its entire meaning.

From a technical point of view, only a few potential applications exist for peaceful nuclear explosions. In practice, even less are possible in view of, inter alia, environmental problems and obligations undertaken under the partial test-ban treaty. In the final analysis, peaceful nuclear explosions are of very marginal economic value, if any. Therefore, being confronted with the dilemma between the peaceful applications of nuclear energy on the one hand, and the inherent grave dangers of peaceful nuclear explosions as seen from an arms control point of view on the other, it is the latter concern that by far outweighs the former.

My delegation shares the opinion that once a comprehensive test-ban treaty enters into force, and once, therefore, an efficient international seismic monitoring system is in operation, it may become tempting to continue nuclear testing outside the underground environment. My delegation is therefore grateful that the Swedish draft text takes this legitimate concern into account and provides as well for an international monitoring system relating to airborne radioactivity as already called for in document CD/312, submitted at the time by the Netherlands.

My delegation feels that such a system in addition to an international seismic monitoring system deserves further consideration and should not be rejected out of hand. The establishment of such a system should, of course, not unduly complicate an already complex subject-matter but my delegation is convinced that in due course it will turn out to be not too difficult to incorporate such a system into a global monitoring system.

Among the valuable material submitted to the Ad Hoc Working Group by delegations I would be remiss not to mention the contributions made by the delegations of the United Kingdom and the United States.

The Netherlands, on earlier occasions, appealed to the former trilateral negotiating parties to make their views known on the requirements an efficient international seismic verification system should meet. My country was, in particular, interested to be elucidated on the need as perceived by those parties for additional arrangements to detect and identify low-yield explosions.

My delegation is therefore grateful that two of the three negotiators, the United Kingdom and the United States, probed somewhat deeper into this field during this session. They thus shed additional light on what they have in mind on the subject of supplemental seismic data as mentioned in paragraph 22 of the last tripartite report to the Committee on Disarmament of the then negotiating partners, as contained in document CD/130. Apparently, those nuclear-weapon States see a need for additional seismic information with respect to areas in which a higher risk exists that an illegal test could go undetected, such as in deep layers of dry alluvium and large salt-dome cavities. There are only a few of those areas in the world.

The Netherlands shares the opinion of the United Kingdom and the United States delegations on the need to arrive at the lowest possible threshold of identification. My delegation wonders whether the former trilateral negotiating partners could give the Committee their views on possible additional detection-systems in some more detail, thus allowing the Committee to judge in what way such systems could be set up and be incorporated in the international exchange of seismic data at present under discussion. In any case, there does not seem to exist any particular technical problem which cannot be solved, provided delegations adopted a constructive approach to these matters.

My delegation remains interested to hear from the delegations of the United States and the Soviet Union their views with regard to the question of the restriction of the production of fissionable material for weapon purposes, envisaged by their governments in the early 1960s. This question was raised by the Netherlands Foreign Minister in his speech of 29 March last when he observed that the question of the so-called cut-off had been dealt with during the last four sessions of the United Nations General Assembly.

In concluding my statement, let me turn to the subject of chemical weapons. At the outset of the 1983 session of the Committee it was commonplace to hold the view that prospects for progress, if any, were to be found in the field of chemical disarmament negotiations. Such progress has not materialized. The head of the delegation of the Federal Republic of Germany, Ambassador Wegener, eloquently elaborated on that disappointing fact a week ago. The delegation of the Netherlands unfortunately has to add its voice to his. It must be clear that if a delegation that opposes the detailed views of another fails to submit a correspondingly detailed proposal of its own, the basic tools for any valuable negotiations are not available.

We are informed -- even more frequently so in recent times -- that it is too early in the day to proceed to the ultimate substantive phase of negotiations on a chemical weapons ban. Such an assertion, no matter who makes recourse to it, hardly seems convincing. The Netherlands holds the view that only in that ultimate phase are delegations really forced to see eye to eye on the remaining key problems. Further delay is hard to accept for all countries which, like the Netherlands, have renounced the option of chemical weapons.

This is not to say that some useful work has not been carried out in 1983. No delegation any longer stands in the way of the incorporation of a use prohibition in the scope of the convention. A good deal of progress was made on conditions, structures and mechanisms for on-challenge verification. The problems relating to key precursors have been defined and analysed, so that the basis has been laid for them to be solved in the hopefully near future.

In evaluating the positive results in the chemical weapons Working Group, one must have the greatest admiration for such men as Dr. Lundin of the Swedish delegation, who

has worked longer than anyone else in the Committee on Disarmament and its predecessors with untiring persistence for the cause of chemical disarmament.

Notwithstanding the advances made on many related issues, a breakthrough in the field of the monitoring of stockpile declaration and destruction was not achieved. The laudable efforts of the Polish delegation which co-ordinated the work on this aspect unfortunately were not matched by sufficiently forthcoming positions of certain delegations. It is therefore with great interest that we have taken note of the positions developed today by the distinguished head of the delegation of the Soviet Union, Ambassador Issraelyan. We will study them carefully.

If it is realized that stockpile destruction constitutes, together with assured non-production, the main goal of the convention, the seriousness of the situation just outlined is brought to light in all clarity. Furthermore, lack of progress in one area apparently has a spill-over effect on other areas of the future convention. So this lack of progress on stockpile destruction seems to have had an adverse effect on progress in the field of assured non-production.

In an important brochure of the International Federation of Chemical Energy and General Workers' Unions (ICEF) entitled "The Chemical Workers Report on Chemical Warfare", we are once again reminded that chemical weapons were originally derived from civilian industrial research. Chemical warfare agents can be produced without difficulty in the non-dedicated civilian industry. This very fact led, in the early discussions on a chemical weapons treaty, to the rejection of the idea of establishing a list of chemical warfare agents to be banned, since such a list could be easily circumvented and might indeed promote research on non-listed chemical warfare agents. We therefore do not think that the chemical warfare agents approach is a very promising one. It is obvious that some form of assurance by the civilian chemical industry that commercial chemical operations do not conceal the production of outlawed chemicals (which would be a qualitative check) and that they do not produce more than the permitted quantities of dual purpose agents (quantitative check) is necessary.

For these purposes, an obligation to exchange production statistics should be within reach, since, inter alia for environmental reasons, most countries already require that the industry submit such data on the national level. This, however, can only be part of an effective verification system. More intrusive control measures cannot be dispensed with, first and foremost to control the civilian chemical industry that produces key precursors. The United Kingdom, in submitting document CD/353, has rendered us a highly valuable service by dispelling the myth that this is an impossible task because of the sheer size of the chemical industry involved. More difficult is the problem of the verification of non-production in commercial chemical plants that are not declared as producing key precursors but nevertheless can be considered capable of making them. During next year's session, work on these problems should continue and be intensified.

As to the acceptability of the particular measures of inspection of the civilian industry on the territory of the inspected party, the delegations of Australia, Finland and the Netherlands have in past years made proposals that would allow for a lower degree of intrusiveness than often feared. With regard to countries with a traditionally high degree of secrecy, we found it interesting in this respect to note that the ICEF report argues that such secrecy is de facto gradually disappearing, as a consequence of the technology- and products-exchange barter-agreements nowadays existing between the Western world and the Soviet Union. This phenomenon already necessitates vast numbers of foreign personnel to be directly engaged in Soviet industry, and shows that the Soviet concern with secrecy can be accommodated. In so far as on-site inspection will be necessary in the context of a future convention, this may therefore turn out to be likewise manageable and acceptable.

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NTB/Rose

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Firstly, the work of the Group as well as its report show that issues of verification can only be considered and solved in close connection with the scope of the treaty envisaged. Thus the Group discussed questions pertaining to the scope of prohibition, including nuclear explosions for peaceful purposes, as well as to the participation of nuclear-weapon States. Paragraph 10 of the report reflects the different positions held with regard to the scope of prohibition in a future nuclear test ban treaty.

Secondly, pursuant to its programme of work, the Ad Hoc Working Group held a structured discussion of the issues connected with verification of, and compliance with, a nuclear test ban. Paragraphs 13 to 18 show the areas of agreement and disagreement in this field. There was a common view on the basic elements of a verification system of a nuclear test ban. Accordingly, paragraph 13 states that "it was generally recognized that such a system should be based on a combination of national and international measures and could include, inter alia: (a) national technical means; (b) international exchange of seismic data; (c) procedures and mechanisms for consultation and co-operation; (d) multilateral organ or organs of States parties; (e) procedure for complaints; (f) on-site inspection".

Many delegations underlined in this regard that the means of verification presently available were sufficient to provide reasonable assurance of compliance with a nuclear test ban treaty. They reaffirmed the conclusion drawn by the Secretary-General of the United Nations in 1972 that all the technical and scientific aspects of the problem had been so fully explored that only a political decision was necessary in order to achieve final agreement. Some delegations disagreed.

Thirdly, the Working Group discussed and examined various documents which had been submitted by different countries. Many delegations especially welcomed the "Basic provisions of a treaty on the complete and general prohibition of nuclear-weapon tests" (CD/346) tabled by the Soviet Union and the "Draft treaty banning any nuclear weapon test explosion in any environment" (CD/381) submitted by Sweden. In the view of those delegations, the documents mentioned above not only identify issues of a nuclear test ban in a comprehensive way, but provide sufficient material to proceed without further delay to negotiations on a nuclear test ban treaty.

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pp.19-22

UK/Cromartie

23.8.83

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Mr. Chairman, before going on to review the more positive aspects of our work this session on chemical weapons, I must express a certain disappointment that attempts to come to grips with some key issues of the Convention, and in particular the important area of the destruction of stockpiles, have not met with an adequate response from all members of the Committee. My delegation welcomed the tabling of document CD/387, which offers a practical model of a verification system for the destruction of stockpiles. We hoped that this would provoke a full discussion of all aspects of this important issue. We were therefore disappointed that Contact Group A of the Chemical Weapons Working Group did not make a serious effort to deal with this key issue, but instead spent much of its time examining in depth rather minor points of the Convention, such as the question of the transfer of stockpiles to another State for the purpose of destruction.

Fortunately, Mr. Chairman, in the other Contact Groups more substantive work was done on the central issues with which the Groups were entrusted. My delegation particularly welcomed the elaboration in Contact Group B of fact-finding procedures for use

in connection with verification by challenge, together with the further work on the related issue of the structure of a consultative committee. Challenge inspection and fact-finding procedures are clearly vital elements of the verification regime of the chemical weapons convention. They are the safety-net which will allow States to call for international investigation of any problem which they have with any aspect of the convention. We look forward to further work in this area next year.

Interesting ideas also emerged from the work on the question of use of chemical weapons in Contact Group C. We welcome the clear statement which has now been made that all delegations can accept that the convention should ensure that the use of chemical weapons is banned. We are grateful to Mr. Akkerman for his tireless efforts to find a way of expressing this underlying agreement, which will not weaken the Geneva Protocol. This is, indeed, my delegation's own major preoccupation when examining the question of including use in a chemical weapons convention. We are concerned that during the first 10 years of the life of the Convention, when stockpiles are being run down and destroyed, obligations undertaken by States under the existing regime, under the Geneva Protocol, should be preserved and should be extended to States parties to the new convention, which are not parties to the Geneva Protocol. After the 10-year period, when everyone is satisfied that chemical weapons stocks have been destroyed, we would then wish to see all States parties to the new convention subject to an obligation not to use chemical weapons in any armed conflict in any circumstances, regardless of whether they are parties to the Geneva Protocol. We believe that the work of the Contact Group C has tried to address this problem, and we hope that all delegations will consider carefully during the recess the type of approach outlined in the Contact Group's report. We should come back next year ready to come to grips with this problem, on which we seem close to reaching agreement.

Under Mr. Lundin's able guidance, Contact Group D also produced some very useful results on definitions, although my delegation was disappointed at the unwillingness of some delegations to become engaged in a serious discussion of a possible list or lists of key precursors. The report, nevertheless, contains much food for thought, not least in the area in which my delegation has taken a special interest, the verification of the non-production of chemical weapons. Delegations will by now have seen the working paper my delegation has tabled, showing the information we have so far received, from other delegations to the Committee on Disarmament, and also from non-member States, on the production levels of the key precursors listed in our earlier paper CD/353. We would very much welcome further information in this area from other delegations, and we hope that at the beginning of the next session such information will be forthcoming. It is perhaps too early to draw any firm conclusions from the information received, but the results to date, recorded in the revised table, suggest that the procedures we have proposed in CD/353 would affect only a relatively small number of factories in the world. While delegations are holding discussions with their chemical industries on the question of civil production, we would like to suggest that they should also inquire about any production of super-toxic lethal compounds for civil uses. We would expect such uses to be extremely limited, because the very high toxicity of these compounds makes them difficult to handle. This information would help us to assess more clearly the practicality of proposals already on the table for limitations on the production of these compounds for civil purposes, and to enable us to see whether other means of verifying their production for civil purposes could be devised.

In this connection, Mr. Chairman, I listened with interest to the statement on chemical weapons made at our last plenary meeting on 18 August by the distinguished representative of the Soviet Union; I should like to make some preliminary comments on some of the points he made. My delegation welcomes the agreement by the Soviet Union to include in the future convention a provision for a declaration within 30 days of

stocks of chemical warfare agents and munitions specifying the relevant chemical names and toxicities. A requirement for full detailed declaration of stocks immediately after the convention comes into force will contribute to the confidence that will be needed to enable States to ratify the convention, and to sustain it during the long transitional period of 10 years proposed for the destruction of stocks.

Unfortunately, however, the reverse is true of the Soviet proposal that parties to the convention should only be required to start the elimination of facilities for chemical weapons production eight years after the convention comes into force. If we have understood their proposal correctly, the declaration of the location of production facilities would not necessarily be required until a year later, that is to say, nine years after entry into force. During these long periods other parties to the convention would seem to have no assurance that chemical warfare agents were not being produced at these unknown locations. My delegation finds this position hard to square with the proposal of the German Democratic Republic, supported by the Soviet Union, that the destruction of plants for the production of binary weapons should begin within six months, and be completed within two years after the convention enters into force. The components of binary weapons are necessarily immediate precursors in the synthesis of the super-toxic agents they are designed to generate; and, in at least some cases, they are also precursors in the normal route for their synthesis. It seems to my delegation, therefore, illogical that plants for the production of these compounds should be treated differently according to whether the final product is a binary chemical weapon, or a chemical weapon in which the agent is preformed. If the periods of six months and two years are appropriate in the former case, they would seem also to be appropriate in the latter. My delegation agrees with the Soviet view that the declaration and destruction of production facilities, and the verification to provide sufficient confidence to other parties that they have been eliminated, require further consideration.

I was disappointed that the distinguished representative of the Soviet Union was unable to give further clarification of his Government's proposal for international inspection of the destruction of stockpiles on a quota basis. My delegation has always made it plain that we are fully prepared to give careful consideration to the ideas of other delegations, and to work together to find mutually acceptable solutions to the problems which remain in our negotiations; but it is difficult to work for such solutions when one has no more than a general concept of the position of other delegations. If we had a clearer idea of what is meant by inspection on a quota basis, and by the new Soviet idea of a differentiated approach to verification of destruction of stocks, then we would be able to see whether a solution could be found to this important question. My delegation therefore hopes that at the beginning of the next session we shall hear in detail how these approaches to the verification of destruction of stockpiles would be put into practice. Without such clarifications, further progress in this area will be difficult.

Finally, I should like to turn to an important general point. The verification regime of the convention, taken as a whole, will need to provide sufficient confidence to potential parties that its provisions will be strictly observed; in the first place to enable it to enter into force at all; and then to sustain it, through the exceptionally long transitional period of 10 years, and thereafter on a permanent basis. I say, "taken as a whole", because the confidence among parties and potential parties, that the verification provides them with an adequate degree of assurance, that the convention is being fully respected, will need to be built up from several interdependent elements. One element of primary importance must be provisions for a system of verification by challenge, which would also provide a reliable recourse to States which are suspicious or dissatisfied about the implementation of the convention by other parties. Nevertheless, we see a risk that the repeated use of challenge could create a climate of distrust, and

thus undermine the very confidence which is so important for the continued life of the convention. It seems to us, therefore, to be vital that the convention should, in addition, include a system of routine inspections which would not involve any element of suspicion or accusation, but would take the weight off the ultimate safety-net of verification by challenge. As my delegation has already indicated in its working paper CD/353, we believe that the system of routine verification should comprise four distinct elements:

- Verification of the destruction of stocks;
- Verification of the destruction of production facilities;
- Monitoring of production of super-toxic chemical agents for permitted purposes; and
- Verification of non-production of chemical weapons.

I have already reviewed the substantive discussion that has taken place this year on the first and last of these elements, i.e. the verification of destruction of stocks and the verification of non-production of chemical weapons; but we have not reached any conclusions and a great deal more needs to be done. We have not yet seriously tackled either of the other two elements. Obviously, if the Convention is to permit the production and retention of small quantities of super-toxic substances for protective purposes, this will have to be subject to stringent international control to ensure that this exception is not abused. Perhaps even more important to confidence in the Convention will be the provision of adequate assurances that the existing facilities for the production of chemical weapons, and the super-toxic compounds that go into them, have been definitively eliminated and cannot be used secretly to replenish stocks that have been ostentatiously destroyed. These four elements, along with the element of verification by challenge, will ultimately need to be considered together, because they will, together, be needed to build up and sustain the required level of confidence in the convention that we are negotiating. As confidence is indivisible, so we must look very carefully at the verification regime as a whole. My delegation hopes that this will be the priority task of the Chemical Weapons Working Group at the beginning of our next session. My delegation will give careful thought to these problems during the recess, and we hope that all other interested delegations will come back in February with comprehensive instructions to enable us to make rapid progress in this area, which will be of decisive importance to the success of our joint endeavours.

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USA/Busby

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Furthermore, the problem is not a lack of willingness on the part of the United States delegation to meet Soviet concerns about the intrusiveness of on-site inspection of stockpile destruction. The United States Working Paper of 5 July (CD/387) includes several important new elements for just this purpose. We now recognize the importance of co-operation between national and international personnel. We are now prepared to use data generated during routine facility operations for verification purposes. We have agreed that efforts must be made to minimize interference with the operation of a destruction facility. And, we are now prepared to restrict verification to the actual destruction step. In our view, these important steps to satisfy Soviet concerns seem to have been ignored by that delegation.

My delegation recognizes the generally constructive nature of the Soviet remarks on various substantive issues related to chemical weapons stockpiles.

We welcome Soviet willingness to provide a detailed declaration of the contents of stockpiles, along the lines advocated by a majority of delegations, including my own. It is to be hoped that the remaining unagreed points can be quickly resolved.

We also welcome the Soviet proposal for the establishment of special storage sites

at stockpile destruction facilities and for the monitoring of these sites by systematic international on-site inspection on a quota basis. In this connection, we would like to ask the Soviet delegation to clarify which stocks would be located at the special storage sites. In addition, would all stocks be moved to these locations promptly after entry into force? Or would the special storage sites contain only some of the stocks at any given time, for example, those stocks to be destroyed in the next stage of the schedule for stockpile destruction?

We also listened with interest to the explanation of the Soviet concept of inspection on a quota basis for stockpile destruction, particularly the criteria which were given. As outlined in the United States Working Paper CD/387, our conclusions are different. But the criteria on which the United States conclusions are based are similar. For us a major problem with the Soviet approach is that the actual level of verification would not be known until after entry into force. We are being asked to undertake a commitment to disarm without having an agreement on verification levels. We would expect the Soviet delegation to take this concern into account.

On the other hand, the proposals to single out binary chemical weapons stocks and production facilities for specially severe treatment seem to my delegation to be extraordinarily one-sided. They can only be seen as efforts to preserve Soviet Chemical Weapons capabilities while eliminating those of the United States. What else is one to think of the Soviet proposal whose effect would be to eliminate totally United States binary production facilities within two years after entry into force and not even to begin elimination of Soviet Chemical Weapons production facilities until eight years after entry into force? Surely the Soviet delegation recognizes that such proposals cannot advance the work of the Committee.

As you know, my delegation attaches great importance to the efforts of the Committee on Disarmament to find a common approach to verification of the destruction of chemical weapons stockpiles, which is one of the principal obstacles to agreement. The need to resolve this issue as soon as possible has also been stressed recently by the delegations of the Soviet Union, the Federal Republic of Germany, and other member States.

To help accelerate the negotiations, the United States is today inviting member and observer delegations to participate in a workshop to be held at the United States chemical weapons destruction facility at Tooele, Utah. The workshop, which is scheduled for mid-November, will provide a first-hand look at actual procedures used by the United States for destruction of chemical weapons. It is our intention that it will also provide a forum for discussion of various means of verifying destruction of chemical weapons. A working paper outlining the arrangements for the workshop is being distributed today.

In addition to touring the destruction facility and being briefed on its operations, participants will also observe a mock on-site inspection exercise. That exercise will employ actual equipment installed at the destruction facility.

I would like to emphasize that the workshop will not be constructed solely as a platform for United States views. It will provide an opportunity for a wide-ranging discussion of all points of view regarding verification of destruction. It could also provide an opportunity for discussion of other issues closely linked with stockpile destruction, including those raised in the Soviet plenary statement of 18 August. To facilitate a balanced discussion we are inviting a number of delegations with particular interest and expertise in this field to make presentations.

We welcome the fact that the urgency and importance of determined efforts and concrete negotiation in the field have been recently underlined, notably by the USSR in its proposal regarding a regional European approach to chemical weapons prohibition and by the United States in its announcement of comprehensive proposal to be submitted to this body. I should also like to express the appreciation of my country to the United States for the organization of the Tooele verification workshop in Utah, in 1983, which provided the participants, including some Finnish experts, with important knowledge concerning the problems of destruction of chemical weapons.

Problems relating to verification continue to delay the progress towards the conclusion of a comprehensive chemical weapons treaty. There seems to be a general agreement on the need to verify the compliance of the parties to the treaty in all phases of its operation. Differences of view, however, continue to persist regarding the mode of functioning of verification and reporting as well as fact-finding procedures. In this connection I wish to emphasize that the progress made in recent years in instrumental verification technology has been remarkable. The durability, accuracy and reliability of automatic monitoring instruments are expected to improve considerably in the near future. Their extensive use in the verification of a chemical weapons treaty might prove possible. It is our impression that the difficult question of verification could be approached by making full use of the possibilities of modern existing and developing instrumental verification technology on the one hand and on-site inspection on the other hand, which would primarily be needed in order to secure the proper functioning of the verification equipment.

The long-standing project of Finland on chemical weapon verification is an attempt to contribute to the solution of verification problems in the area of chemical weapons. The objective is to produce scientific knowledge of methods by which their possible use can be detected, the discontinuance of their production surveyed and their destruction verified.

The results of the project are freely available to the international community. We hope that they will prove especially useful when the Conference on Disarmament comes to an understanding about the procedures for verification of the chemical weapons treaty.

A most urgent matter in the field of disarmament is progress regarding the ban on the testing of nuclear weapons. The total banning of nuclear testing would be a crucial measure in halting the nuclear arms race. This is illustrated by the priority always given to this issue in the agenda of the Committee on Disarmament. Finland has for some years participated in the work of the Ad Hoc Group of Scientific Experts, for example by offering Finnish seismological stations to the global seismological network and by taking part in the international level I data exchange through the WMO global telecommunication system. In addition, the Finnish Government has made a provision in the budget for 1984 for starting a special seismological project at the University of Helsinki aiming at developing a capability for processing and using digitally recorded seismic data.

In 1980 Finland allocated development co-operation funds to carry out a seismic project in Zambia. The objective of the project is to initiate seismological research in Zambia by establishing a seismic network and training Zambian expert personnel. Apart from its general scientific and development impact, this project is relevant in the light of the work of the Ad Hoc Group of Scientific Experts which in several reports had emphasized the need for additional seismograph stations in Africa and South America in order to improve the capabilities of the global network for the southern hemisphere. It is estimated that the project will be completed in 1984.

To our regret, frequently we do not see the same desire to seek mutually acceptable solutions, to take into account the positions of other participants in negotiations, from the part of some of our partners at the negotiations. From year to year they repeat the same proposals which are unacceptable to us. Sometimes there is a movement in quite the opposite direction: toward greater differences, tougher, maximalist, unrealistic demands. In this connection I cannot but refer to the statement made a week ago by Mr. Luce, Minister of States for Foreign and Commonwealth Affairs, containing an appeal to display readiness to compromise. But allow me to ask whether the United Kingdom itself is ready to follow this path? What compromises on its part can we speak of, when, for example, in its working document on the procedures of on-site challenge inspection of the implementation of the future convention on the prohibition of chemical weapons it repeated the whole number of hard-line demands which had been many times rejected by other participants in the negotiations. Frankly speaking, even with a microscope one would be unable to discover in that document the signs of any readiness to compromise.

Let us take another example — the demands of some delegations to conduct immediately after the convention enters into force the verifications of the credibility of the declarations of the chemical-weapon stockpiles and to this end to submit information on the places of the storage of such stockpiles. The Soviet delegation has already repeatedly explained why it considers such demands both unrealistic and unacceptable. I shall now repeat only the following — in certain cases they inherently threaten the national security interests of the States Parties to the future convention. Nevertheless this demand is being stubbornly repeated, even though, as we have already stated, it can lead to a stalemate in all the negotiations on the prohibition of chemical weapons. At the same time there is a simple way out of the situation which was proposed by the Soviet delegation. We have in mind the international systematic of verification, at the depots at special facilities, of the destruction of the stocks of chemical weapons, through which all such stocks would proceed during the destruction process and consequently the initial declarations would also be verified.

Let us look at the situation with regard to the verification problem from the following angle. The delegations of the USSR and other socialist countries have very often repeated that the prohibition of chemical weapons may become a reality only in the case when the verification measures of the future convention correspond to the nature of the obligations and are determined in strict accordance with the requirements of such a convention, i.e. on the prohibition of chemical weapons. To take extremes in this matter, regardless of how they are embellished, would torpedo the current negotiations. We pay no less attention than other States to the effective control of the implementation of the future convention on the prohibition of chemical weapons. We do not have the slightest basis to trust our negotiating partners any more than they trust us. Our premise is that each type of activity prohibited or limited by the convention should be effectively verified. To this end, during the negotiations we have proposed and continue to propose a very broad range of verification measures. They include national control, the use of national technical means, on-site inspection on a voluntary basis or, as it is also called, by challenge, and international systematic on-site inspections. Confidence in compliance with the convention is also promoted by various declarations by the States parties, many of which have been proposed by us.

One of the unresolved problems remain the methods of verification of the destruction of stocks at special facilities. This is a very important question and we pay great attention to it. The Soviet delegation has already had occasion to state its approach to this question. As is known, it stated that it was in favour, in this concrete case, of the use of systematic international verifications, the annual number of which (the quota)

would be determined by the Consultative Committee individually for each facility on the basis of preliminary agreed criteria. That is to say, the number of visits would depend upon such notions as the quantity of the stocks to be destroyed, their toxicity and danger characteristics, technological parameters of the destruction facilities, etc. We have described it in detail both within the Working Group and in the course of various consultations with other delegations.

Such a differentiated, one might say scientific, approach could, in our opinion, give the States parties to the future convention complete confidence that the stocks of chemical weapons are being really destroyed and eliminated.

This proposal is countered by the idea of the permanent presence of international inspectors at the destruction facilities. The Soviet side has carefully listened to the arguments in favour of such approach and conducted a number of bilateral and multi-lateral consultations on this subject. In particular, last January there was useful exchange of opinions with the group of delegations of non-aligned States.

Further study of the question, and the consultations, have shown that systematic international on-site verifications of the destruction of stocks at a special facility on a quota basis represent a sufficiently effective verification instrument and that other delegations' understanding of this fact is increasing. They have also led us to the conclusion that in respect to some chemicals the verifications could be more strict. In the final analysis, the Soviet delegation, displaying its desire to achieve progress as rapidly as possible in the negotiations on the prohibition of chemical weapons, and in an effort to unravel one of the most complicated and important moot issues at the negotiations, and once again demonstrating its real rather than feigned interest in progress at the negotiations, declares the following.

It would be prepared, during the elaboration of the procedures for verification of the destruction of chemical weapons at a special facility, to agree to such a solution when the efficiency of the verification, from the beginning of the destruction process up to its completion, would be ensured by the permanent presence at the special facility of the representatives of international control, as well as by a combination of systematic international verifications at the facility, including also the storage of the stocks of weapons at it, with the use of instruments (gas chromatographs, dynamometric counters, measuring thermoelements, etc.).

The verifications in the depots at special facilities of the next batches of chemical weapons to be destroyed could be conducted together with the inspections at the special facility. We shall state in detail our view on the subject in due time in the subsidiary body of the Conference.

In declaring today our readiness in principle to consider in a positive manner the proposal for the permanent presence of the representatives of international control at the special facilities for the destruction of stocks, we would like particularly to stress that our premise is that our partners at negotiations will also for their part prove their readiness, not in words but in deeds, to seek mutually acceptable solutions.

Mr. President, we have heard a number of important statements this morning, and it is perhaps invidious to comment on one without commenting on all, but I do think it important to note the statement we have just heard from the distinguished representative of the USSR, given the imminence of the decision, we hope, on a chemical weapons working group. Firstly, I think I should say as a very preliminary response, that we are pleased at this positive reaction of the Soviet Union to the initiative announced by United States Secretary Schultz at Stockholm of the intention of the United States

Government to table a draft convention on chemical weapons. Secondly, we are equally pleased that this new Soviet policy should be one of the first signals emitted to the West and to the world by the new leadership in Moscow, and we say this most sincerely. Thirdly, the positive Soviet response on the issue of on-site verification of destruction of chemical weapons appears to develop in a concrete way the position announced by Foreign Minister Gromyko at the second special session of the United Nations General Assembly devoted to disarmament to the effect that the USSR was prepared to accept on-site inspection. It is well known of course that it is the Canadian position that this is the only viable approach from a functional point of view to this problem. Fourthly, we would hope that this new policy of on-site verification foretells an across-the-board engagement by the Soviet Union in all areas of arms-control verification. The fifth point I would like to make is that we will have obviously to react more definitively to the Soviet proposal somewhat later, after careful study and in the appropriate body. Finally, in the meantime, like others, we await with even greater interest than before the tabling of the United States draft convention which, we assume will reflect what is now common ground on this point just discussed, and I might say of course that we await that proposal with somewhat more confidence than some others have expressed.

CD/PV.244

pp.15-16

Belgium/Depasse

23.2.84

CW

Some questions which recently still give rise to polemics have developed in a satisfactory manner; with regard to the central problem of verification of the destruction of stocks of chemical weapons, we certainly noted a breakthrough in the statement made on 21 February by the distinguished representative of the USSR. I found that statement particularly encouraging because it clearly goes in the direction of the conclusions which I drew from attending the Workshop organized by the United States Administration at Tooele. In my opinion, the conclusions of that Workshop are quite straightforward.

The first is that effective verification of the destruction of chemical weapons in an industrial facility is possible on condition that the constraint of verification is taken into account at the design stage of the facilities to be set up. In other words, if the planning office which designs the destruction facility takes account of these constraints, the facility becomes wide open to verification; otherwise, it remains opaque.

The second conclusion is that the importance of a human presence for verification purposes in a destruction facility depends on the sophistication and reliability of the equipment. The greater its reliability and sophistication, the smaller the importance of the intrusion of human beings.

At Tooele, a permanent human presence is essential not only during the destruction stage but above all during the maintenance and setting of the instruments; otherwise, the reliability of the verification is negatively affected. The day may perhaps come when the automatization of the instruments will make it possible to do without this permanent human presence, but that does not seem the case today.

That is why my delegation was very pleased by the statement made by Ambassador Issraelyan on 21 February. His statement amounts to a breakthrough on a fundamental point, but we do not think that it is enough to justify euphoria on our part. For differences on essential issues still exist, particularly with regard to the means to be utilized to verify effectively in future the non-production of new chemical weapons by the industry.

We think these differences can be resolved.

Belgium, which has a large chemical industry, is prepared to accept a verification system which combines systematically organized random inspections with ad hoc inspec-

tions in the case of a challenge procedure. The USSR proposes a different system, based on prohibition of the production of certain, especially dangerous products, but verification would be carried out solely on the basis of the challenge procedure initiated in the event of suspicion.

We fear that the weakness of such a system could be that it reserves inspection exclusively for cases which are already the subject of controversy, and therefore having political undertones, whereas we prefer a routine system that would avoid controversy.

The discussion on this point should therefore be continued, account being taken in particular of the proposals submitted by the Minister of State, Mr. Luce, to the Conference on 14 February 1984.

CD/PV.244

pp.21-24

USA/Fields

23.2.84 CW,CTB

If successful, our negotiations here would eliminate an entire category of weapons by imposing equal obligations upon all parties to destroy all existing stocks of chemical weapons and to undertake never to develop, produce, stockpile or transfer such weapons, in any manner inconsistent with the terms of the treaty. Moreover, the foundation of such a treaty would be an effective verification regime to ensure that the obligations of States parties are undertaken faithfully and, thus, instilling high confidence that the objective of the instrument has been accomplished. And finally, there is no doubt that such a treaty would serve to strengthen both national and international security.

With regard to the principle of verification in our chemical weapons negotiations, let me welcome as a sign of progress the statement of the distinguished representative of the Soviet Union in our last plenary meeting on 21 February 1984. We are pleased that the Soviet Government will be prepared to agree, in our negotiations on the verification regime for the destruction of all existing stocks of chemical weapons, to the "permanent presence at the (destruction site) of the representatives of international control" and to the use of technical monitoring devices at such sites to augment that verification process. My delegation will be actively exploring the importance and significance of the statement of the Soviet Union. Edmund Burke once said that "every prudent act -- is founded on compromise", and we note that our Soviet colleagues seem to be exercising that degree of prudence which, if continued, will help to create a firm foundation upon which we together can construct a meaningful instrument to ban chemical weapons once and for all.

Mr. President, let me recount briefly the status of our chemical weapons negotiations. Most colleagues will recall that the Vice-President of the United States, Mr. George Bush, delivered an address to the Committee last February, in which he stressed the importance which the United States attaches to the negotiation of an effective and verifiable ban of chemical weapons. Following the Vice-President's remarks, my delegation introduced a comprehensive paper outlining our "detailed views" on the contents of a chemical weapons convention (CD/343). Verification played a central role in the formulation of those views. Indeed, the Soviet Union had recognized the importance of verification in their "Basic provisions envisioned to form the basis of a chemical weapons ban" (CD/294). Subsequent to an exchange of views on issues in the Chemical Weapons Working Group in the spring part of our 1983 session, my delegation introduced, in the summer part of our session, a second working paper which provided an illustrative, comprehensive review of on-site inspection procedures for the verification of the destruction of chemical stockpiles (CD/387). This paper was designed to further our search for understanding of a mutually acceptable solution to this important component of the general verification approach in the negotiation of a chemical weapons ban.

In order to provide a multi-dimensional demonstration of how these procedures could be implemented in an actual chemical weapon destruction facility, we invited our colleagues — both members and observers — to participate in a workshop at our chemical agent munitions disposal site at Tooele, Utah, on 15 and 16 November 1983. The 25 States that attended will agree, I believe, that the information and briefings provided at the Workshop, coupled with the tour of the actual destruction facility, were of considerable benefit in developing an understanding of what is required to provide an effective monitoring system to verify chemical weapons stockpile destruction and an appreciation of the ease and manageability of its implementation under actual circumstances.

Another area in which verification is of cardinal importance is that of a nuclear-test ban. My delegation is prepared to resume the work of the Ad Hoc Working Group on a nuclear-test ban where it left off last summer. In our view, discussion of significant aspects of the issue of verification and compliance for a nuclear-test ban has scarcely begun and a vast amount of essential work remains to be done. Those who say that the original mandate has been exhausted cannot produce one major element of agreement on a comprehensive verification regime for a potential nuclear-test ban treaty. Let me assure my colleagues that, without such a regime, any future test-ban treaty will be unverifiable and, therefore, unacceptable to the United States Government. Why, then, do we not get down to the task at hand and do serious work on this vital subject? We only delay the objective which everyone seems to be seeking, each in his own way, by our continued inaction.

In the related, more technical work of the Ad Hoc Group of Scientific Experts on an International Seismic Data Exchange System, the Group has nearly completed its third report and has begun preparations for follow-on experimental work. The proposed experiment would take advantage of the new authority granted by the World Meteorological Organization to make use of the global telecommunication system to exchange so-called Level I data. My delegation strongly supports such experimental efforts, which provide important, "hands-on" data to validate theoretical estimates of seismic data exchange capabilities for a global data-sharing system. This important Group continues to render a valuable service in an area of great relevance to the verification of a future nuclear-test ban and we do not serve our professed interests by failing to give the Group our fullest support and co-operation. Therefore, it is the ardent hope of my delegation that many States will choose to participate in the work of the Ad Hoc Group of Scientific Experts.

CD/PV.245

pp.15-17

FRG/Wegener

28.2.84

CW

Turning now to the important agenda item of chemical weapons I would like to voice the gratification of my delegation with the considerable momentum that has recently been instilled in our work. All of us are eagerly anticipating the comprehensive draft convention which the United States delegation will soon submit, certainly as a major accelerating factor of our work. My delegation is also highly gratified with the proposals introduced by the Soviet delegation on 21 February. The readiness of the Soviet Government to accept the continuous surveillance of the chemical weapons destruction process by international on-site inspection is most encouraging. The Federal Government, by the voice of its Vice-Chancellor and Foreign Minister, has welcomed this step in one of the crucial areas of our negotiations where an accord is still outstanding. My delegation hopes that the Soviet proposals can swiftly be translated into concrete terms. In this process, and while we consider in greater detail the requirements of on-site

inspection in the destruction phase of the operation of the future convention, we will also have to visualize the inherent relationship between that particular aspect of verification and the other important verification problems to be solved. There is a logical bond between the activities of inspectors in that first important phase, and the treaty obligations we have to work out on the involvement of the international inspectorate both in the verification of future non-production of chemical weapons, and in the case of on-challenge inspections. My delegation welcomes the recent proposal of the Soviet Union in the expectation that the Soviet delegation will demonstrate a similar co-operative attitude at the time when these other aspects of verification come up for detailed consideration and negotiation.

The United States announcement of a comprehensive draft, the Soviet statement of 21 February, the helpful procedural suggestions contained in Working Paper CD/435, the Working Papers introduced in the last few weeks, among others by the delegation of the United Kingdom and my own, taken together with the swift agreement of all delegations on a forward-looking negotiating mandate for the future committee on chemical weapons, entitle us to look into the future of our work with some realistic optimism, hoping that the one "ray of hope" which Ambassador Issraelyan had perceived earlier in our session can soon broaden into lasting sunshine.

Mr. President, before demonstrating the readiness of my own delegation to contribute vigorously to this new phase of our negotiations on chemical weapons, let me briefly deal with two related developments in the chemical weapons field.

While this Conference embarks on a new phase in the attempt to ban chemical weapons forever, there continue to be chilling reminders that huge arsenals of these gruesome weapons still exist, and that there may be new incidents involving their production and use.

My delegation has taken note with preoccupation of the accusations which the Foreign Minister of Iran has levied on 16 February of this year in our very midst regarding the use of chemical weapons on the national territory of Iran. The Geneva Protocol of 1925 prohibits the use of chemical weapons in war. For a long time, my Government has insistently maintained that all and every allegation of the use of chemical weapons in violation of international law, wherever they are raised, must receive the same careful investigation and clarification. As regards an instrument for such investigation, there is the possibility of recourse to the mechanism with which the international community has endowed itself on the basis of United Nations resolution 37/98 D. This instrument is, as a matter of course, also available to the Government of Iran.

In his statement of 21 February, Ambassador Issraelyan has again referred to the recent proposal of the States parties to the Warsaw Treaty on a zone free of chemical weapons in Europe. When this proposal was first publicized, my Government underlined as its positive feature that the Soviet Union and her allies were giving new emphasis to the significance of the chemical weapons topic. However, while agreeing wholeheartedly that Europe should be freed of the menace of chemical weapons as soon as possible, I would again like to stress the priority importance which the Federal Government attributes to the negotiations on a world-wide, comprehensive and reliably verifiable interdiction of all chemical weapons in this Conference. Our negotiations, we all agree, are now in an advanced state, and everything that would slow them down or serve to dissipate our energy should be avoided. Our further negotiations must concentrate upon the still outstanding issues, especially in the realm of verification. Regional solutions would undoubtedly work to the detriment of this global perspective. Were they to be given precedence, injustice would also be done to the countries of the Third World which are rightly fearful, on the basis of past experience, of the chemical weapons threat to their parts of the world. They would not understand that this vital topic of

negotiation would be, wholly or in part, taken out of their hands. All countries have the same right to be freed from the scourge of chemical weapons. Since verification problems are essentially identical, in some aspects even larger, in regional contexts, my Government also has doubts as to whether the corresponding language of the Warsaw Pact offer contains any indication of willingness of the authors to deal with verification issues in an adequate way. On the other hand, my delegation is ready at all times to pursue all available contacts, including bilateral contacts, that promote the efforts of the Conference to arrive at a world-wide chemical weapons convention with the appropriate verification mechanism.

Let me now turn to some contributions which my delegation wishes to make to our ongoing chemical weapons negotiations process in this annual session. I would first like to introduce a Working Paper that deals with the question of the transfer of super-toxic lethal chemicals and their key precursors. The paper is now before us and bears the symbol CD/439. With this Working Paper my delegation wishes to provide an input into the current discussions on "Prohibition of Transfer" and "Permitted Transfer".

Obviously, in this realm a fine balance must be maintained between the dangers inherent in the transfer of super-toxic lethal chemicals and their key precursors -- the danger that the fundamental prohibition of the development, production and stockpiling of chemical weapons be circumvented -- and the unencumbered functioning of international trade in chemical products. We have been encouraged to undertake a new search for such an equilibrium point by our impression that these two conflicting principles have not been adequately balanced in all of the proposals for transfer limitations that are already before the Conference.

The question of which chemical products should be regarded as key precursors of super-toxic lethal chemicals is fundamental to the formulation in a chemical weapons convention of a transfer ban and of the provisions for permitted transfer. Underlying the present Working Paper is our long-held view that a narrow definition must apply to the term key precursor.

In the view of my delegation chemicals should be defined as key precursors only if: they have particular significance to the relevant provisions in a chemical weapons convention; they constitute characteristic chemical compounds at the final technological reaction stage for the production of super-toxic lethal chemicals; and they are not used, or are used in minimal quantities only, for permitted purposes. To us, this definition appears particularly relevant for the international measures of verification of the non-production of chemicals for use in chemical weapons because it strictly limits the range of chemicals which might be covered by controls. Thus, legitimate interests of the chemical industry are duly taken into account.

Our definition implies that controls, and any limitation of production, shall extend only to the transfer of substances for "protective purposes". According to our proposal, the transfer for "permitted purposes" between States parties will not be limited.

With regard to the transfer of super-toxic lethal chemicals and their key precursors for protective purposes, permitted transfers between States parties should be limited to the allowed production level. Notification to the Consultative Committee of any transfer of such super-toxic lethal chemicals or their key precursors shall be required.

As in a previous Working Paper, CD/326, which purports to set out the views of my delegation on various aspects of verification, the present Working Paper couches its recommendations in prescriptive language. My delegation thereby hopes to facilitate the consideration of the problems raised in the most concrete terms possible, in keeping with the now agreed mandate for the work of the committee on chemical weapons, which emphasizes that the future convention should be developed and worked out in requisite detail.

As delegations are aware, the Federal Government, on the basis of an invitation

extended at the second special session of the General Assembly devoted to disarmament, intends to hold a Workshop for the discussion of problems of verification relating to the destruction of stocks. I take pleasure in making this invitation more concrete by informing you that the Workshop will now take place from 12 to 14 June 1984 at Munster in northern Germany. A formal letter of invitation to each head of delegation will be sent soon. In co-operation with the President of the Conference for the month of June (who is at the same time the Chairman of the Committee on Chemical Weapons and who is already informed) we intend to establish the closest possible connection between the Workshop and the ongoing negotiations at this Conference. We expect the Workshop to make a practical contribution to the problems of verification of the destruction of stocks, illustrated by the situation at a small national destruction facility. My delegation realizes that this invitation takes on a new significance in the aftermath of the proposals of the Soviet Union relating to the verification of the destruction of stocks. This gives us the hope that all delegations find it possible to participate in the event.

CD/PV.245

p.24

GDR/Rose

28.2.84

CTB

It should be recalled that all countries represented at this Conference in 1978 approved the principle contained in the Final Document of the first special session of the United Nations General Assembly devoted to disarmament, according to which the form of verification should be determined by the scope of the agreement concerned.

It is not verification that is at stake. We share the conclusion drawn by the delegation of Sweden here on 17 February that there are no technical obstacles to verification of a comprehensive test ban. Thus, the Conference should no longer allow itself to be misused as a screen to conceal lacking willingness of one side. The Conference should not subject itself any longer to the will of one nuclear-weapon State; rather, that State is called upon to reconsider its position and to clear the road for negotiations in the framework of a relevant subsidiary body.

CD/PV.247

p.18

Mexico/Garcia Robles

6.3.84

FRZ

There are no grounds whatsoever for concern about the observance of the undertakings involved in the freeze, as the General Assembly provided expressly in its resolution that the freeze would be subject, not only to the relevant measures and procedures of verification already agreed on by the parties in the case of the SALT I and SALT II Treaties — which posed verification problems far more complicated than those that might arise in the case of the proposed freeze — but also to those agreed on in principle by the same parties during the preparatory trilateral negotiations on a comprehensive test-ban held at Geneva between 1977 and 1980. The foregoing, combined with the fact that "the freeze would mean halting all activities under any arms programme" has led someone so well-versed in the matter as Herbert Scoville, former Deputy Director of the United States CIA, to declare that "verification can no longer legitimately be invoked as an excuse for not proceeding towards an agreement on a freeze".

CD/PV.248

p.10

Czechoslovakia/Vejvoda

8.3.84

CTB

Much has also been done by the group of seismic experts, which is already now in the process of adopting by consensus its third report. This report represents a project for the creation of a reliable international system for the exchange of seismic data on

the global scale. It provides in the first place for the exchange of level I data, which are sufficient for the identification and localization of the overwhelming majority of seismic events by national centres having at their disposal data from a global network. Only in some exceptional cases could level II data be required from some stations so situated as to be in a position to make a clear record of a seismic event. This could apply, for example, to parallel recording of several seismic events by a number of stations of the network. Another case might be an attempt to make use of a strong earthquake to mask nuclear explosions. It may also happen that in exceptional situations the depth of a seismic event could not be clearly estimated on the basis of level I data: level II data would then be required as well.

The proposed system for the exchange of seismic data is designed to ensure the full participation of technically less developed countries also which do not possess own seismic means of verification and of countries with small territories not having a global network of seismic stations. At the same time the system proposed in the third report is, to some extent, only supplementary for countries having their own, national global system, consisting of seismic as well as non-seismic means. For example the United States receives level II data from its own global network of seismic stations through the transmission by satellite. In view of this fact, it was not very difficult for the United States to abandon its original requirement for the exchange of level II data only.

It is well known that the United States "specializes" now mainly in carrying out "weak" nuclear explosions. This type of nuclear explosions of about one kilton of TNT, is necessary first of all for the development of tactical and operational nuclear weapons and for nuclear weapons with diminished destruction effect, e.g. neutron weapons. It is therefore clear, that the United States is actively developing this type of weapon now, in the improvement and deployment of which it is eminently interested. That is one of the main reasons as we heard here from the United States delegation previously, why a nuclear-test ban has become only a "long-term objective".

Some 20 years ago, nuclear-weapon tests were usually much stronger than today. Hence, if a nuclear-test-ban treaty had been adopted then, ensuring compliance with it would be easier. The postponement of the conclusion of the treaty can only unnecessarily complicate the problem further.

Last year the activity of the working group on a nuclear-test ban was greatly complicated by futile discussions on so-called peaceful nuclear explosions. It is true that under some circumstances this type of explosion could be misused for nuclear-weapons purposes. The Soviet "Basic Provisions", as well as the Swedish draft treaty, propose in fact, that peaceful nuclear explosions be stopped until a mutually acceptable regime for their carrying out is agreed upon. Some very useful provisions to this effect are contained in the 1976 Soviet-American Treaty on Underground Nuclear Explosions for Peaceful Purposes.

We consider it safe to conclude that the group of seismic experts through its three reports suggests the creation of a reliable system for the exchange of seismic data which could contribute highly to ensuring compliance with the desired nuclear-test-ban treaty.

Destruction of the existing stockpiles of chemical weapons constitutes one of the most important provisions of the convention. Once the huge stockpile of existing chemical weapons is indeed totally destroyed, the threat of chemical warfare will fundamentally be removed. This in turn is closely linked to the issue of declaration and verification. Taking into account the time required to draw up plans for destruction,

etc., we favour the idea that initial declarations should be made within 30 days of adherence to or entry into force of the Convention, whereas detailed declarations may be made within a period of three months. As to the question of how to proceed with the destruction of stockpiles we think that consideration should not be given unduly to parity and balance between the countries possessing chemical weapons, but should centre, first and foremost, on the speedy and early elimination of the threat of chemical warfare. With this in mind, we propose that the countries concerned should destroy in the first place those chemical weapons in their arsenals which are the most toxic and dangerous and not those which are out-dated or inoperative.

Verification is one of the key elements of the convention. We have always held that a chemical weapons convention must contain such provisions for verification as to ensure strict and effective implementation of verification, on the one hand, and minimize intrusiveness as much as possible on the other. Emphasis should be put on international verification with necessary on-site inspection. Such on-site inspection should cover destruction of chemical weapon stockpiles, destruction and dismantlement of production or filling facilities for chemical weapons, small-scale production of super-lethal agents used for protective purposes, and alleged use of chemical weapons, etc. As to the method of verification, proposals have been made for on-site inspection on a continuous basis, routine or periodic or random on-site inspection, on-site inspection by challenge and on-site inspection on the basis of quota. We think all these methods can be considered and that different methods of verification can be used for different verification purposes. It is our hope that on this key issue, a solution acceptable to all parties will eventually be found.

CD/PV.249

pp.15-16

Netherlands/Ramaker

13.3.84

CW

It is hard to think of a more propitious setting for the introduction of document CD/445, entitled "Size and structure of a chemical disarmament inspectorate", which my delegation intends to submit to the consideration of this Conference today. This Working Paper aims at addressing for the first time some of the practical, mainly administrative, implications of the verification schemes in the framework of the future chemical weapons convention as envisaged by the Netherlands and other members of the Western Group. It may be interesting to note that these include the administrative consequences of a continuous on-site inspection by representatives of the projected international inspectorate as referred to by the head of the Soviet delegation on 21 February.

After some general introductory remarks on the verification needs of the future convention, the document proceeds to a categorization of the different kinds of verification which the various undertakings foreseen in the convention will make necessary. The document uses a number of general assumptions basically relating to the function of an international inspectorate, as well as a number of more specific assumptions with regard to the various categories of verification the convention will necessitate.

On the basis of these assumptions the document seeks to demonstrate that the administrative consequences of our ideas on the matter of verification remain safely within manageable confines.

One of the key assumptions we had to make had to do with the "output" of an international inspector. The evident example was the International Atomic Energy Agency in Vienna which proved to be a highly useful frame of reference. As the nature of activities that need inspection under a chemical weapons convention differ from those the IAEA has to deal with, a number of adjustments had to be made. Amongst the various problem areas with respect to the verification of a chemical weapons convention, the one on verification of non-production is dealt with in relative detail. This is admittedly

an area fraught with mines and traps. As we all realize, verification of non-production should not intrude unduly in the functioning of the civilian industry and its commercial operations.

Nevertheless, a minimum of confidence concerning non-production as well will be essential to the survival of the convention. Possibilities for circumvention that would be all too readily available, let alone loopholes, could well be extremely harmful to such confidence if left without any regulation. The slumbering capabilities inherent in the very nature of the means of production for permitted non-chemical-weapon purposes cannot be left out of consideration. One of the conclusions of the present document is that the size of the inspectorate is to a rather large degree determined by this category of verification.

The main conclusion of the document is that our assumptions indicate that the future international inspectorate will be relatively limited in size. The assumptions suggest a number of 355 inspectors and supporting staff for the duration of the period of destruction and elimination, estimated, as we know, to last about 10 years. After this initial period in the life of the future convention, this total will decrease to an approximate maximum number of 140 officials, a smaller number than the comparable part of the IAEA secretariat.

In concluding my intervention of today, I wish to turn briefly to the specific subject of non-use. In the view of the Netherlands, the verification-system to be created by the future chemical weapons convention must be a comprehensive one and therefore include a prohibition of use. It is all very well, and indeed essential, to aim at the full verifiability of the prohibition of development, of production, of stockpiling, of retention and of transfer of chemical weapons. But I daresay that through the years we all have gained a greater awareness of the practical limitations that may well prevent us from achieving perfection. The need to take into account legitimate security interests as well as the need to avoid undue intrusiveness of the inspection of the chemical industry can be cited in this context to illustrate what we have in mind. It is clear that indications of use, in violation of international law, would imply eo ipso that treaty obligations as to destruction and non-production etc. had possibly been violated. Thus, use can constitute the verifiable summit of a huge undetected, largely submerged, iceberg of violations. I therefore wish to stress that the inspectorate, roughly outlined earlier in my statement, is duly tailored to ensure verification of non-use.

The requirement of an adequate provision on non-use in the scope of the convention is not intended to -- and should in no way -- prejudice the importance of assuring continued authority for the 1925 Geneva Protocol. This international instrument will be of particular relevance in the initial phase after the entry into force of the convention, when all stocks and means of production will not yet have been eliminated.

CD/PV.250

pp.15-16

Hungary/Meiszter

15.3.84

NFU

The no-first-use commitments are not verifiable, it is stated, because they express intentions, and intentions are by their nature not verifiable.

International treaties express some kind of an intention of the parties to them to have certain aspects of their relationship regulated. As soon as intentions are formalized in an international treaty form, those intentions cease to be intentions in a legal sense as they are transformed into legally binding commitments. These are the legally binding commitments and not intentions that are subject to verification. The member States of the Warsaw Treaty Organization have proposed a treaty, that is, a legally binding instrument, to be concluded on the global non-use of military force, be it with nuclear or conventional weapons. It is quite unfortunate that NATO member States,

questioning the validity of intentions, have failed to agree to transforming the vague declarations made on their non-aggressive intentions into such a legally binding commitment.

As to the intrinsic impossibility of adequate verification I should like to say the following: the no-first-use commitment is, of course, not a disarmament measure which can be quantitatively measured and verified. It is a legally binding commitment prohibiting a certain activity. If we assume that legally binding commitments of a prohibitive character are intrinsically unverifiable and, therefore, unwanted, one can easily question the practicability of a whole set of treaties prohibiting different types of military activities. The *raison d'etre* of the Geneva Protocol, the Antarctic Treaty, the Partial Test-Ban Treaty, the Outer Space Treaty, the Treaty of Tlatelolco, the Non-Proliferation Treaty, the Sea-Bed Treaty, the ENMOD Convention and the Convention on Certain Conventional Weapons, that is, nearly all major multilateral disarmament treaties and conventions, in fact could be called into question.

A no-first-use commitment, once assumed, entails adequate changes in the military hardware, doctrine and posture. Nuclear weapons with clear first-strike capabilities, technological efforts to improve first-strike capabilities, nuclear warfighting doctrines, counterforce and first-strike postures, and concepts like that of a pre-emptive first strike must be renounced. The practical implementation of such a renouncement with all the change it entails cannot go unnoticed, it is positively verifiable. At the same time a contemplated use of nuclear weapons necessitates adequate preparations and a return to the *status ante*, which is identifiable and verifiable as well, leaving ample room for the necessary counter-measures.

CD/PV.250

pp.18-19

Sweden/Ekeus

15.3.84

CW

One of the areas where progress has been made is that of the elimination of chemical weapons and verification thereof. Constructive proposals have been put forward, in particular with regard to the methods of verification under a future Convention. Thus, there now seems to be a general understanding that the destruction of the most dangerous chemical weapons should be verified by continuous on-site inspection during the destruction periods. Although even this rather straightforward approach implies many unsolved problems, I think it constitutes a necessary basis for the further work.

It might be useful to, in this context, analyse some ideas put forward informally earlier this year concerning different conditions which might influence the level of verification. Thus, could the extent of verification be decided by the degree of the danger of certain types of chemical weapons? Could the military value of the weapons be decisive? Other factors influencing the extent of verification could perhaps be the amount of weapons to be destroyed, or such a variable as whether they contain dual-purpose chemicals. Although no general recognition exists that all of these aspects should determine the level of verification, a thorough analysis of these problems could be useful in our work. In this connection, I would like to refer to the Swedish working paper CD/425 on the verification of the destruction of stockpiles of chemical weapons.

Another problem is the question of a possible prohibition of use in the convention. After many years of divided opinions, there now appears to be an understanding that the prohibition of use should in some way be expressed or referred to in the convention. This would imply the possibility of investigations of allegations of use under the provisions of the convention.

Regrettably, the question of prohibition of use has become of immediate importance in the last few weeks. Reports of use of chemical weapons in the Gulf area remind us

of the necessity not only to uphold the prohibition of use in the Geneva Protocol, but also to get as soon as possible a convention which allows adequate means for investigation and verification of such allegations. We are gratified that the Secretary-General of the United Nations has appointed a group of experts to investigate the matter at hand.

The German Democratic Republic has suggested, at the Conference on Disarmament in Europe in Stockholm, that, in order to increase confidence between States in Europe, States should declare the existence or non-existence of chemical weapons on their territories and also renounce the stationing of chemical weapons where there are none at present, i.e. — and this is somewhat ambiguous language — on the territory of those participating States which have declared the non-possession of chemical weapons as well as their intention not to acquire them. We regard this proposal as a confidence-building measure with relevance for the work on a comprehensive chemical weapons convention.

The Swedish delegation put forward some similar ideas in Working Paper CD/279 of 14 April 1982, aimed at facilitating the work on the convention.

It was in the same confidence-building spirit that Sweden in January this year introduced Working Paper CD/426 proposing that all preparations for waging chemical warfare should be prohibited, not only the development and production of chemical weapons. When that Working Paper was introduced, we expressed the hope that delegations would give their reactions and views on the subject. Some have already done so. Our ambition is to find a pragmatic and effective way to increase confidence in the future chemical weapons convention.

CD/PV.250

pp.25-26

Poland/Turbanski

15.3.84

CW

A strong positive impulse in our debate on the prohibition of chemical weapons were new proposals of the Soviet Union on the question of verification presented by the distinguished Ambassador Victor Issraelyan on 21 February last. In the framework of systematic international on-site inspections considered so far, the Soviet Union expressed its readiness to accept in certain cases a permanent presence of the representatives of international control at a special facility for the destruction of chemical weapons. This new step by the Soviet Union has to be seen as another measure towards compromise and the successful resolution of the tasks still ahead of us. My delegation highly appreciate this Soviet undertaking. It indicates once again that the socialist States approach the negotiations in a flexible and constructive way. The proposals put forward by the socialist States with regard to chemical weapons during this and the previous session of the Conference have indicated willingness to accept a wide range of verification procedures, including systematic international control, and opened the way to the intensification of negotiations on the chemical weapons convention. The recent proposal of the Soviet Union just referred to promises a possibility of bringing to fruition the work on the vast and weighty problem of the verification of stockpile destruction.

Provisions of a future convention on chemical weapons, like all the provisions of international treaties, must be implemented in goodwill, in accordance with the objectives and principles of the Charter of the United Nations, and in application of wisely and adequately formulated mechanisms of international control. The term "adequacy" can be characterized as technical feasibility and practicality, together with capability for effective detection of violation and minimum interference with the life of individual nations.

One may suggest many theoretical requirements for disarmament verification systems, such as, to name only a few: high detectability of objects and activities related to the scope and subject-matter of an agreement, practical feasibility and technical

sufficiency of the verification means, continuity of the verification process, timeliness of the fact-finding and of the assessment processes, flexibility of the methods adopted, economic acceptability of the verification system, etc.

But our main task is, I would say, to stay with these considerations on solid, real ground, that is, to confront always theoretical desires with practical possibilities.

It is conceivable, for example, that when the highest detectability is demanded from the verification system, it may render it too expensive or procedurally too complicated or, in the extreme case, too intrusive for many of the parties concerned. Furthermore, certain features of the so-called "adequate" verification may become contradictory to each other: in maximizing one aspect of the "adequate" verification, another one, not less important, may suffer. In short, every verification system is a compromise between various technical, economic and political factors. To find the best of compromise solutions is a task to be tackled in the course of our negotiations. We must remember, however, that the basic prerequisite for the achievement of such "best compromise" solutions is political goodwill. We would like to hope that it does exist in this chamber, among us, but can we really say that it has been sufficiently demonstrated?

I would also wish to express my delegation's conviction that no verification, however intrusive and elaborate, can provide us with a 100 per cent certainty that no violation, even the least meaningful, occurs. The ideal verification system would, in my opinion, be one that would ensure States' security through a high probability of detecting violation, could provide a convenient channel of communication between parties, and would help in building confidence between them. The convention we are negotiating here may become the first authentic disarmament treaty, but it is for that very reason that it is so politically sensitive. Entering into such agreements, States are, understandably, eager to gain reassurance that the agreements are mutually upheld by all.

Speaking on the organization of a most reasonable system of control, it is worth recalling also that living up to a future convention will be guaranteed through, inter alia, the moral prestige of future States parties. For their moral prestige, so to say, will be at stake. We should remember in this connection that future States parties will be most interested not to stain their reputation before the whole international community by possible offences against provisions agreed and signed by themselves. In other words, we should assume that they will apply national means of control also in good faith. Unfortunately, this means of control is rarely valued here and, even worse, its importance is often diminished. We would like to hope that, in further developing and specifying their positions in future working documents, the respective delegations will take these considerations into account. It is hard to believe that the process of elaborating a future convention will proceed smoothly if at the root of this process is a lack of confidence among the majority of the most interested partners.

CD/PV.250

pp.27-28

USSR/Issraelyan

15.3.84

CTB

The reports prepared by the Group — CCD/558 of 1978, CD/43 of 1979 and the third report submitted to the Conference now -- represent a good basis for the furtherance of the elaboration of a treaty on the complete and general prohibition of nuclear-weapon tests. Naturally, the system for the international exchange of seismic data could be established only after such a treaty entered into force.

In its first report, CCD/558, the Group of Scientific Experts dealt with the elaboration of an international system for the exchange of Level I seismic data with the use for data transmission to international data centres of the telecommunications network of the World Meteorological Organization (WMO). The second report, CD/43, points out that the Group of Scientific Experts initiated the elaboration of scientific and methodo-

logical principles of a possible comprehensive experimental test of the seismic data exchange system to be conducted after the conclusion and entry into force of a treaty. Finally, the third report circulated today notes that the Group of Scientific Experts has elaborated on the basis of the two previous reports, preliminary technical instructions and operations manual for a comprehensive experimental testing of all the elements of a global exchange system.

Thus, the experts have performed significant and useful work which shows that international operational seismic data exchange within the context of implementation of the future treaty can be organized on a global basis. To this end, the seismic stations that could be used within the global system have been provisionally identified. It has become clear that the telecommunications system of the World Meteorological Organization fully meets the requirements for the prompt transmission of seismic data. Definitions have been made of equipment and automated procedures for seismic data processing at stations and the future international data centres.

All this is evidence that the Group has fulfilled its functions under its current mandate and prepared the necessary technical basis for the elaboration of the relevant provisions of a treaty on complete and general prohibition of nuclear-weapon tests and of the protocol covering peaceful nuclear explosions that would form an integral part of such a treaty.

There has thus been devised quite a good technical basis involving the use of methods of acquiring and exchanging seismic data that are accessible to a wide range of States. This has been repeatedly confirmed by the overwhelming majority of States participating in the Conference on Disarmament. The recommendations of the Group of Experts laid down in all three reports and based on the actual state of affairs represent a definite basis for creating a real seismic data exchange system. The improvement of such a system taking into account the newest technology could be dealt with, *inter alia*, by the consultative committee, the establishment of which is envisaged within the framework of the future treaty.

CD/PV.250

pp.30-31

Japan/Imai

15.3.84

CTB

It would be appropriate, under the circumstances, to reserve our detailed views on the third report until some proper occasion at a later date when we have made a thorough examination of its contents as well as of the wealth of information contained in the Appendices. Thus, I would like to limit myself today to some brief remarks. My delegation has taken note with great appreciation of the comprehensive nature of the report, which includes descriptions of the global system for international seismic data exchange already proposed in the previous reports of the Group, as well as of the international data centres on the basis of further in-depth examination and some newly-gained experiences, both individual and collective. It is indeed gratifying to see that the Ad Hoc Group is now in a position to make more concrete proposals for the comprehensive experimental exercise proposed already by the Group in its first report in document CCD.558. Such an exercise indeed constitutes an indispensable step towards the realization of a global system of data exchange which would not only assist national verification efforts but is, with others, a necessary instrument for effective multilateral verification of a nuclear test ban.

In this regard, we welcome with particular satisfaction the fact that the Group has agreed to conduct for two months toward the end of this year a technical test concerning the exchange and analysis of Level I data using the WMO/GTS under new formal arrangements between the Conference on Disarmament and WMO for regular use of the GTS. This will be the first such test, and certainly a very important one for further

refinement of the proposed global system. I would like to point out at this juncture some of the important factors to be borne in mind in undertaking this test this fall.

Firstly, this exercise must be well prepared and organized so that not only data exchange will lead to a useful result in itself, but also various possible practical problems, such as reduction of data and as their communication and assessment, will be clarified for future improvement. The Ad Hoc Group, in its progress report, indicates that a preliminary plan for this technical test has already been worked out and suggests that its next session be held in July-August to finalize the plan. My delegation certainly welcomes and endorses such a suggestion.

Secondly, my delegation expresses once again, as it has done on previous occasions in connection with the trial data exchanges conducted by the Group, our strong hope and belief that the participation of as many countries as possible would be essential for the purpose of obtaining the maximum meaningful outcome from the test, so that as any scientifically meaningful data points as practical will eventually form parts of the system. It would also promote a sense of participation by many in this important exercise. In this respect, I note that 23 countries have already indicated their intention to participate, including Japan, and we expect that more countries will follow that example.

Thirdly, it goes without saying that a proper assessment of the results should be made as a joint effort, so that full advantage is taken of the advancement in seismic science, and a proper incorporation of Level II data may be worked out for the future. Here again I notice that the Progress Report mentions that "It is expected that the results of the test will be discussed in the Group and reported to the Conference on Disarmament in 1985". My delegation expects that the Group's report on the results of the test and on the Group's assessment will be presented to this Conference as quickly as possible after the test, so that full use will be made of it by the Conference, as well as, of course, by all the interested States.

My delegation, which took the initiative for formalizing the arrangements with WMO for regular use of the GTS, and which took an active part in the Group's work as a co-convenor of the third sub-group of GSE on the format and procedures for the exchange of Level I data through the GTS system, will continue to do its best for the success of the forthcoming test, as well as future ones.

As we recognize the importance of this year's experiment as another important step forward in realizing the comprehensive and global system of international seismic data exchange, we also know only too well that further questions relating to verification of a nuclear-test ban still remain to be addressed. Here, I would like to merely remind the distinguished delegates of Working Paper CD/389 which I presented to the Committee on Disarmament during its session last year. It is the view of my delegation that many of the points enumerated in that document need further elaboration by the Ad Hoc Group of Scientific Experts, while some other important features thereof need clarification by the Conference itself. In this regard we hope that the Group of Scientific Experts will be able to continue its activities in the future, in order to clarify points, as already proposed in the final Chapter of the Third Report, entitled "Conclusions and recommendations".

CD/PV.250

pp.39-41

Ad Hoc Group of Scientific
Experts/Dahlman

15.3.84

CTB

The proposed global system, as specified in the Ad Hoc Group's earlier reports CCD/558 and CD/43, has three main elements:

- a network of more than 50 existing or planned seismological stations around the

- globe, with improved equipment and upgraded procedures for the extraction of data;
- an international exchange of these data over the Global Telecommunication System of the World Meteorological Organization;
 - processing of the data at special International Data Centres for the use of participating States.

The data to be reported and exchanged would be of two kinds: so-called Level I data, which are to be routinely and promptly reported for all detected events and which contain basic parameters extracted at each station from the recorded signals; and so-called Level II data, which are copies of the originally recorded waveform data and which are to be exchanged in response to request for additional information.

The Third Report considers in great detail these various components of a Global System, and I will now try to summarize some of these considerations.

Significant technical developments have taken place in the past few years with regard to world-wide seismograph facilities. The many advantages of digitally recording seismograph systems are now widely recognized, and many such systems have been installed. A significant number of stations of interest for the global network are, however, still of the analog recording type, and the Ad Hoc Group therefore recommends that conversion of such analog stations to the digital system be given high priority.

Already in the first report of the Ad Hoc Group it was noted that the large majority of high-quality seismic stations were located in the northern hemisphere. The situation is essentially unchanged today. The Ad Hoc Group considers it essential that more high-quality stations be established in the southern hemisphere, especially in Africa and South America.

With regard to Level I data extraction at the seismograph stations of the global network, national investigations have shown that existing methods for obtaining such parameters can impose a heavy work load on participants in an international data exchange. The Ad Hoc Group notes that promising results, which might lead to a reduction in the work load, have been achieved using automatic procedures. The Ad Hoc Group recognizes, however, that this is a difficult problem and that further research in this area is needed.

Two trial exchanges of abbreviated Level I data using the WMO/GTS have been conducted with broad participation of countries represented in the Ad Hoc Group and in co-operation with the WMO. Although some technical problems have been encountered, the results from the experiments have shown that the WMO/GTS has the potential of fully satisfying the aims of rapid and undistorted transmission of Level I data for the proposed global system. At many remote places, the WMO/GTS offers the only practical communication mechanism for rapid transmission of Level I data.

The Ad Hoc Group noted with appreciation the recent decision by the WMO Ninth Congress that the WMO/GTS may be used for regular transmission of Level I data from 1 December 1983. The Group sees the need to conduct further technical tests, in co-operation with WMO, to establish the operational performance of the WMO/GTS for seismic data exchange on a global basis. As no significant experience has so far been obtained regarding transmission from Africa, Antarctica and South America, the Ad Hoc Group considers it important that additional experiments should include participation from these continents.

The Ad Hoc Group has noted the advice of WMO that significant improvements in transmission can be expected only if the GTS is used on a more regular basis. The Ad Hoc Group therefore considers it essential that up-to-date information on improvements and changes to the GTS be readily available; therefore, it is recommended that the secretariat of the Conference on Disarmament should make arrangements with the WMO Secretariat to receive regular advice on these matters.

In the proposed global system, Level II data will be exchanged, upon request, between government-authorized national facilities through International Data Centres. Some national investigations have shown that rapid exchange of Level II data in digital form can be achieved using modern telecommunications facilities without any particular restriction on the amount of such data that might be requested.

The Ad Hoc Group agrees that a precise estimate of the amount of Level II data that might be requested can be given only after sufficient experience has been acquired from a comprehensive experimental exercise as proposed in CCD/558.

A number of national investigations have been conducted regarding the organization of International Data Centres and the data processing that would be performed. Experimental data centres have been established by some countries and some large-scale experiments have been conducted to test and develop procedures for data handling and analysis. A "Preliminary Operations Manual for International Data Centres" has been developed, giving a detailed outline of the operational procedures to be followed at such centres. The manual is annexed as an integral part of the report. Certain aspects of these procedures, especially the automatic processing, should be further developed and tested. National investigations carried out by some countries have shown the effectiveness of the use of Level II data at national centres in obtaining more accurate focal parameters of interesting events.

Further research efforts are needed to improve the accuracy of epicentre location and, most urgently, of event-depth estimation. An increased use of depth phases seems to be the most important step here.

Certain national investigations have also shown that the more detailed analysis of information at stations of the global network (Level II data), provides greater effectiveness in the identification of such depth phases:

The Ad Hoc Group has also worked out detailed preliminary instructions for a comprehensive experimental exercise of the proposed global system. These instructions are annexed to the report as an appendix.

In conclusion, the Ad Hoc Group notes that significant and rapid developments have taken place in recent years regarding seismology and data processing techniques, and that these developments are continuing. The Ad Hoc Group notes that these results can turn out to be useful and thus could be considered for the further development of the scientific and technical aspects of the co-operative global system as well as for the further elaboration of a comprehensive experimental exercise of that system.

This concludes my introduction of the Ad Hoc Group's Third Report, and I am now going to touch briefly upon the Ad Hoc Group's Progress Report, contained in document CD/449. This report deals mainly with the envisaged technical test concerning the exchange and analysis of Level I data using the WMO/GTS. This technical test would be the first one conducted by the Ad Hoc Group under new formal arrangements provided by WMO for regular use of the WMO/GTS, and should result in the further elaboration of operational procedures for Level I seismic data exchange and of operational procedures at the envisaged International Data Centres. The test is scheduled for the period 15 October to 14 December 1984, including preparatory operations for about one week. It is expected that the results of the test will be discussed in the Ad Hoc Group and reported to the Conference on Disarmament in 1985. Preliminary detailed instructions for the test were worked out in consultation with the WMO representative. Dr. P. McGregor (Australia), Convener for the Study Group on Level I data exchange, is serving as the Co-ordinator for this technical test.

The Ad Hoc Group expressed the hope that the technical test will enjoy the widest possible participation and noted that, thus far, 23 countries from various regions of the world have indicated their intention to participate. More extended participation is, however, highly desirable from a technical point of view.

CD/PV.250

pp.42-43

Australia/Butler

15.3.84

CTB

The Third Report is an important document.

We note, in particular, the conclusion that significant and rapid developments have taken place in recent years regarding seismology and data processing techniques and these developments are continuing.

There is a need for additional scientific and technical progress in a number of areas. We endorse the recommendations in Chapter 8 of the Report which are intended to achieve just this.

In our view important work remains to be done, particularly in the area of exchange of Level II data.

The Third Report clearly demonstrates the valuable contribution the Ad Hoc Group has made and can continue to make to facilitating the verification of a comprehensive nuclear-test-ban treaty.

The specification of an international network of seismic stations, and the associated data exchange system, in support of the detection and identification of seismic events, is an integral part of a verification system for a comprehensive nuclear-test-ban treaty, and for that reason is an important activity and set of technical developments. The success of such a system will depend not only on national technical means but also on multilateral co-operative arrangements.

In this regard we are particularly pleased to note in the Progress Report presented by Dr. Dahlman that the Ad Hoc Group, at its recent session, worked out a preliminary plan for a technical test to be conducted later this year concerning the exchange and analysis of Level I data using the World Meteorological Organization/Global Telecommunications System on a regular basis.

This will be the first such technical test conducted by the Group under the new formal arrangements provided by WMO. We share the hope mentioned in the Report that this test will enjoy the widest possible participation from countries of all regions of the world.

CD/PV.252

p.10

USSR/Issraelyan

22.3.84

OS

In our draft we propose to prohibit the testing and deployment in outer space of any space-based weapons, to solve completely and radically the problem of anti-satellite weapons and to ban the testing and use of manned spacecraft for military, including anti-satellite, purposes. Taking into account these new provisions, our initiative goes considerably further than our proposal of 1981 on the non-stationing of weapons of any kind in outer space. Its salient feature consists in the fact that it takes into account in many respects the positions of other, including Western, countries, and the considerations they have put forward in the United Nations and in the Committee on Disarmament.

The important feature of the document submitted by us consists in the combination of political and legal obligations of States not to allow the use of force against each other in and from outer space with measures of a material nature aimed at preventing the militarization of outer space. It prohibits resorting to the use or threat of force in outer space and the atmosphere as well as on the Earth through the utilization, as instruments of destruction, of space objects in orbit around the Earth, on celestial bodies or stationed in outer space in any other manner. At the same time it prohibits resorting to the use or threat of force against space objects.

The Treaty envisages the complete prohibition of the testing and deployment in outer space of any space-based weapons for the destruction of targets on the Earth, in

the atmosphere or in outer space.

We propose also a radical solution to the question of anti-satellite weapons: the complete renunciation by States of the creation of new anti-satellite systems and the destruction of any such systems which they already possess. The parties to the Treaty would also undertake not to destroy, damage, disturb the normal functioning or change the flight trajectory of space objects of other States in any other manner.

In addition, it is proposed to ban the testing and use of manned spacecraft for military, including anti-satellite, purposes; they should be entirely dedicated to the solution of various scientific, technological and economic tasks.

The draft envisages the obligations of each party to take internal measures to prohibit activity contrary to the provisions of the Treaty.

The provisions on verification of compliance with the future Treaty deserve particular attention. The verification system envisaged in the USSR draft is quite extensive and far-reaching.

In our view, the control provisions provide for reliable implementation of the obligations by the parties to the Treaty. They are based on an effective combination of national and international verification measures. At the same time, the USSR is prepared to elaborate and agree upon some additional measures concerning mutual assurance of States parties in its implementation.

CD/PV.252

p.19

Sweden/Ekeus

22.3.84

OS

The main task ahead of us should be to negotiate an international treaty banning all space weapons, including weapons directed against targets in space. Such a ban should cover the development, testing and deployment of ASAT weapons on earth, in the atmosphere and in outer space and must include the destruction of all existing ASAT systems.

Furthermore, damage, disturbance and harmful interference in the normal functioning of permitted space objects should be forbidden in international agreements in order to strengthen the Outer Space Treaty and confirm the International Telecommunications Convention.

The banning of the development testing and deployment of space-based ABM systems, as agreed upon in the 1972 ABM Treaty between the Soviet Union and the United States, should also be reiterated in a multilateral treaty.

A prohibition of Fractional Orbital Bombardment Systems (FOBS) should likewise be included, in line with SALT II.

In addition, efficient measures should be adopted regarding the verification of the compliance with such a treaty or treaties. At the present stage of technical development it appears inescapable that some sort of international direct inspection be applied, including on-site inspection whenever feasible.

In the process of creating an international legal system prohibiting an arms race in outer space, military space systems which could have particularly destabilizing characteristics must be identified. It would also be essential to recognize that certain military space systems can have a stabilizing effect and that they can be a valuable contribution to disarmament measures.

The international use of satellites for the monitoring of disarmament agreements should be considered in the context of the proposal of France to establish an International Satellite Monitoring Agency (ISMA).

The notification procedures in the 1975 Registration Convention could be further developed to serve as a collateral measure to strengthen disarmament agreements related to space. Such a measure, and other similar confidence-building measures, would

be helpful in the efforts to create a system of international agreements to curb an arms race in outer space.

CD/PV.255

pp.21-22

Yugoslavia/Mihajlovic

3.4.84

CW

Today I would like to introduce the Working Paper prepared by the Yugoslav delegation, document CD/482 of 26 March 1984, entitled "National verification measures", which has already been distributed to delegations. The purpose of this paper is to present some of our views which, we hope, will be useful in further negotiations on the elaboration of the Convention. They do not represent, however, the final position of the Yugoslav delegation, and can be revised in the course of negotiations.

From the outset of the consideration of banning the research, development, production and destruction of chemical weapons, it was widely acknowledged that verification should be based on a combination of appropriate national and international measures which would complement and supplement each other, thereby providing an acceptable system which would, in turn, ensure effective implementation of the prohibition.

Basically, the Working Group proceeds from the generally accepted view that the effective implementation of the prohibition of the production, destruction or diversion of stocks and production facilities can only be assured if there is an effective system of international verification of compliance with a convention banning chemical weapons.

We consider, however, that national verification measures could also play a role in the implementation of the two provisions of the convention in all its phases. It is important to emphasize, nevertheless, that from the very outset of the implementation of the convention there should be close co-operation between the international and national authorities in all activities related to the convention. It is understood of course that such mutual co-operation can only be achieved in an atmosphere of general confidence. Negotiations conducted so far have unambiguously shown that each State party is obliged to establish a national authority which should assist and support the work of the international authority in the implementation of verification measures. Also, the States parties to the convention shall be obliged to prevent, within the bounds of their administrative and legal regulations, any activity violating the convention. The existing classification of toxic chemicals into three categories: super-toxic lethal chemicals, other lethal chemicals, and other harmful chemicals, can serve as a basis for implementation of verification measures by the national authority, as well as for determining the level of verification. In this process, close co-operation with the national authority is advisable. We are of the opinion, however, that the verification of less toxic chemicals, other lethal and harmful chemicals, as well as chemical-weapon precursors can be carried out in almost all stages under control of the national authority. This form of verification of less toxic chemicals is suggested because the majority of these chemicals today are referred to as dual-purpose chemicals and are widely used for peaceful purposes. It goes without saying that the State party producing these chemicals must present evidence concerning the purpose of their diversion, production facilities and end-users.

However, it should be pointed out even in this case that the measures of national verification should be agreed upon in advance among all States parties, and should at all times be an unequivocal and viable basis for the maintenance of confidence among the parties. Of course, such confidence can only be achieved on the basis of the objective and reliable data furnished by every national authority through the provision of regular information to the consultative committee about the verification measures implemented.

In other words, the control of production of other lethal and harmful chemicals, dual-purpose chemicals and precursors, and their diversion for permitted purposes should

be organized in such a way as to provide authentic information at all times. In order to attain an effective system of verification and to maintain confidence among the States parties, it will be necessary to agree on co-operation among future States parties already during the elaboration of the Convention, on the basis of the exchange of expert information, standardization of methods and introduction of the known and proven monitoring systems, as well as on the basis of introducing a compatible computer system.

Such co-operation will make it possible also to exercise, if necessary, control by way of the international authority. This may be the case if there is, with the passage of time, a change in the process of production of any of the dual-purpose chemicals, or if a new technological procedure is introduced, or if production capacity increases. In addition, if on the basis of information received in the form of reports which the national authority submits to the consultative committee, the conclusion is drawn that there has been a change in production, the consultative committee may suggest that the State party concerned should also organize international control for that production facility.

On the other hand, we are of the view that confidence among States parties is also achieved by the composition and structure of the national authority. Apart from being composed of representatives of different institutions of the States parties, we think that it should also, on a voluntary basis, include one representative of the State party proposed by the consultative committee in agreement with the receiving country.

The role and tasks of the national authority for verification are essentially determined by the law of that particular country. Regardless of the fact that the administrative and economic systems of many States parties to the convention are very disparate, we believe that the structure, composition and functioning of the national authority should be such as to ensure efficiency, competence, objectiveness and the necessary confidence in close co-operation with all international institutions in the implementation of the convention.

The basic ideas presented in the Yugoslav Working Paper are meant to point both to the need for and to the usefulness of, combined national and international verification for a chemical weapons ban. When there is doubt, however, that national measures are insufficient, it goes without saying that priority should be given to an agreed international verification system. We hope that this paper will contribute to the drawing up of satisfactory provisions on the verification system of a convention.

CD/PV.256

pp.12-13

USSR/Issraelyan

5.4.84

FRZ

One of the most effective and relatively easily applicable measures towards that end could be the freezing, under appropriate verification, of nuclear weapons in quantitative and qualitative terms. This step should be taken by all nuclear-weapon Powers or, in the first instance, only by the USSR and the United States of America on the understanding that the other nuclear-weapon States would follow their example.

To agree to a freeze would mean:

- to cease the build up of all components of nuclear arsenals, including all kinds of nuclear-weapon delivery systems and all kinds of nuclear weapons;
- not to deploy nuclear weapons of new kinds and types;
- to establish a moratorium on all tests of nuclear weapons and on tests of new kinds and types of their delivery systems;
- to stop the production of fissionable materials for the purpose of creating nuclear weapons.

A nuclear-weapon freeze would significantly improve the general political atmos-

phere and facilitate agreement on the reduction of nuclear arsenals.

The cessation of the qualitative refinement of nuclear weapons and the development of new models and types of such weapons would be assisted by the earliest completion of the preparation of a treaty on the complete and general prohibition of nuclear-weapon tests and, until the conclusion of such a treaty, by the proclamation by all nuclear-weapon States of a moratorium on all nuclear explosions.

CD/PV.256 p.18 FRG/Wegener 5.4.84 CW

Before concluding, Mr. President, let me make a brief specific comment on those statements and working papers which have recently dealt with the question and modalities of national means of verification as one important element in the comprehensive verification scheme which the future convention will have to provide. I would like to make reference both to the statement of Ambassador Turbanski of Poland of 15 March, and to the equally interesting statement by Minister Mihajlovic from Yugoslavia, presented to us on 3 April, when he introduced a Working Paper by his delegation on the subject (CD/483). In a comprehensive verification framework, where the necessary place is assigned to effective international control of requisite detail and intensity, national means of verification also have a legitimate role to play, and we should be grateful to the two aforementioned speakers for having brought out this essential fact, and for having provided guidelines for national verification measures, showing what they can accomplish within their particular domain.

CD/PV.256 p.21 Romania/Datcu 5.4.84 CW

The verification of the substantive provisions of the convention on the prohibition of chemical weapons is a fundamental element of this international instrument.

In the opinion of the Romanian delegation, verification should consist in a combination of national and international means, including an obligatory system of systematic inspection, including on-site inspection, as an important instrument for creating and maintaining a climate of trust between the States parties. We appreciate the important proposals made on this subject by the delegations of the USSR, China, United States, Sweden and the Netherlands.

We believe that every State should have the right, set forth in the convention, to adopt the necessary measures in accordance with its constitutional procedures to implement the undertakings entered into and in particular to prevent and prohibit any activity constituting a violation of the convention.

With regard to national technical means, our delegation believes that their inclusion in the convention will create no difficulty if it is stipulated that all parties have the right to free access to the information gathered.

CD/PV.256 pp.23-24 France/de la Gorce 5.4.84 CW

The French delegation wishes to introduce today a contribution, contained in document CD/494, on the elimination of stock and of production facilities for chemical weapons. It hopes that a methodical presentation of its positions on this capital aspect of the negotiations will be useful at the present stage in our work. I shall consider the following three points successively: declaration, destruction and verification.

With regard first to declarations, States must declare, on their own responsibility,

their stocks and production facilities. These declarations must be detailed because such precision will generate trust and simplify control. The document which my delegation has just submitted therefore includes a large number of binding provisions.

We stress the importance of the information provided unilaterally. It is our concern to keep interference to a minimum. This rule also leads us not to demand that the sites or arsenals at which the declared stocks are kept should be inspected. Finally, in the implementation of the suggested control procedures, with regard to precursors, or production facilities, we are concerned not to jeopardize the protection of industrial secrecy.

Furthermore, every State party to the Convention should propose its own destruction plans and time-table, and naturally divulge any unexpectedly discovered stock. On the other hand, we consider it an unnecessary complication to seek to establish dates of manufacture or of stockpiling.

With regard to destruction, this should of course cover all chemical weapons.

Of course, we may, as a temporary derogation during the transitional period, admit that some quantities of toxic chemicals mentioned in the Convention should be used for protective purposes, or that pilot production facilities, which are therefore limited and controlled, should be maintained for that purpose. But within 10 years the stocks, production facilities and single-purpose precursors should be totally destroyed. We do not believe that conversion operations may be envisaged: this would involve the construction of facilities which might work both ways, in a reversible manner, thus maintaining a potential prohibited production capacity. Furthermore, the control of such conversion facilities would be both complicated and unsure. We simply accept that a chemical-weapon production plant should be converted into a destruction plant; but at the end of the cycle it should be destroyed. Finally, we wish to provide every possible guarantee that after 10 years there may be no possible return to the manufacture or use of chemical warfare agents.

With regard to verification, I do not wish here to go into details of the various procedures, but shall merely recall that for each operation they will take place in three stages: prior to the operation, during the operation and, finally, after it. International on-site inspection will verify the sites for the regrouping and destruction of stocks. The destruction process will also be continuously monitored; finally, destruction should be duly verified. The same applies to production facilities: their closure will be verified, and then their destruction, both during the process and on its completion.

Finally, an effective and permanent human presence will not be necessary everywhere and in all cases. However, the technology which produces sensors and recorders, which will certainly have to be used, is not yet sufficiently advanced to make it possible to forego all human intervention, whether occasional or continuous, as the case may be.

If correctly carried out, the operations described above — declaration, destruction and verification — will lead to the desired goal of the final elimination of chemical weapons.

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pp.12-14

GDR/Thielicke

10.4.84

CTB

The three reports which have been worked out by the Ad Hoc Group since 1976 provide an appropriate basis for establishing the international exchange of seismic data, the aim of which would be to contribute to verifying compliance with a future treaty on the complete and general prohibition of nuclear-weapon tests.

Thus, we now have clear ideas of the three main elements of the international exchange.

Firstly, the reports contain considerations on the network of seismic stations and the process of extracting data from them.

Secondly, the data would be distributed through the Global Telecommunication System of WMO. Trial exchanges have shown that this system has the potential of fully satisfying the aims of rapid and undistorted transmission of Level I data for the proposed global system. Moreover, document CD/448 contains in Appendix 8 preliminary instructions for a comprehensive experimental exercise of the global system to be carried out after a CTBT has entered into force.

Thirdly, an important part of the system would be the International Data Centres. Also in this regard document CD/448 contains detailed views, i.e., the "Preliminary operations manual for International Data Centres" contained in Appendix 7.

A close look at the state of affairs concerning a nuclear-test ban reveals a kind of paradox. Whereas technical work on parts of the verification system, i.e. the international exchange of seismic data, is quite advanced, there are no negotiations on a CTBT at present. Nobody can deny, however, that the proposed system for global data exchange is intended to operate on the basis of such a treaty and to serve its purposes. The aim, therefore, is not an international exchange of seismic data per se or in a vacuum, but to facilitate the implementation of a CTBT. The system cannot be set up in the absence of such a treaty, nor can it replace the treaty. From this angle it is obvious that technical work on verification aspects cannot go on endlessly as if it were an open-ended exercise. The Ad Hoc Group of Scientific Experts has clarified all relevant questions concerning the international data exchange. Detailed arrangements for the international data exchange could be worked out, after the treaty is concluded, by the Experts Committee which is envisaged.

Having said this, we do not deny that the technical experiment planned for this year to test the exchange of Level I data through the Global Telecommunication System of WMO may be of some use. However, after this experiment the Conference on Disarmament will have to take a decision on the future of the Ad Hoc Group, taking into account the situation with regard to negotiations on a nuclear-test ban. Here again, much will depend on the position of the United States. The United States delegation on 8 March expressed its support of the work of the Ad Hoc Group of Scientific Experts. This can hardly suffice. As long as the United States refuses treaty negotiations, the work of the Ad Hoc Group could be used as a cover for the lack of the political will to negotiate.

With your permission, Mr. President, I should now like to address the item which provides the basis for the work of the Ad Hoc Group of Scientific Exprts, namely, a nuclear test ban.

Needless to say, such a ban is of crucial importance to stop the nuclear-arms race and to reduce the threat of nuclear war. Such a step has become more urgent in recent years in view of the accelerating nuclear-arms race, characterized inter alia by the creation of new destabilizing nuclear-weapon systems and the deployment of United States first-strike nuclear weapons in Western Europe.

At the same time there exists an excellent basis for elaborating a treaty on the complete and general prohibition of nuclear-weapon tests. Comprehensive proposals were tabled in 1982 by the Soviet Union and in 1983 by Sweden. The three reports presented by the Ad Hoc Group of Scientific Experts provide a wealth of material for establishing an international exchange of seismic data as an important part of the verification system of a future treaty.

Immediate steps to cease nuclear-weapon testing are advocated by the overwhelming majority of States. A moratorium on nuclear-weapon tests is also called for by many politicians in Western countries.

In view of the urgent need for a nuclear-test ban, and of all existing materials

which show ways for solving the problems connected with it, world public opinion might rightly ask why a CTBT has not yet been concluded and why negotiations are not yet under way for that purpose.

Honesty and realism, so often demanded by one side in this Conference, allow only one answer: whereas the Soviet Union is prepared for such negotiations, two other nuclear-weapon States refuse any participation in activities to achieve a NTB, and the two remaining nuclear-weapon States are only prepared to engage this Conference in a futile debate on verification questions in order to cover their negative attitude to the slightest progress towards a CTB. Such an approach is by no means a new one. The so-called verification issue was and is still being used in many cases to block agreements on arms limitation and disarmament.

One side has repeatedly attempted in this Conference and elsewhere to foster the belief that verification problems were blocking the road to the cessation of nuclear-weapon tests. Therefore, it was argued, the Conference should start from scratch and identify and examine issues of verification with the hope of achieving such a ban in a long-term perspective.

But have the proponents of such an approach forgotten history? Questions relating to a test ban have been considered for more than 25 years in different forums, and a large number of solutions, *inter alia* on verification questions, have been offered. "No other question in the field of disarmament has been the subject of so much international concern, discussion, study and negotiation as that of stopping nuclear-weapon tests", as the United Nations Secretary-General emphasized in 1979. Moreover, in the trilateral report submitted in 1980 to the Committee on Disarmament, the three negotiating parties, among them the United States and the United Kingdom, expressed their belief that "the verification measures being negotiated -- particularly the provisions regarding the international exchange of seismic data, the Committee of Experts and on-site inspections -- break significant new ground in international arms limitation efforts and will give all treaty parties the opportunity to participate in a substantial and constructive way in the process of verifying compliance with the treaty" (CD/130).

Thus, since the submission of the trilateral report something must have happened which has forestalled further progress concerning the elaboration of the treaty, including its verification provisions. This development must have been so serious that the United States, which in 1980 together with its negotiating partners desired to achieve an "early agreement" as was stated in CD/130, today looks upon a comprehensive test ban only as an "ultimate objective".

Obviously, conditions for verification have not worsened. On the contrary, technical means of verification, including those in the possession of the United States, have considerably improved. The change in the United States position, however, is determined by political and military factors. The former Director of United States Arms Control and Disarmament Agency (USACDA) and chief CTB negotiator, Mr. Paul Warnke, has referred in this regard to internal pressures to continue testing for new nuclear-weapon systems and to improve old ones. In a letter sent by USACDA to Congress in 1983, it was underlined that "nuclear tests are specifically required for the development, modernization and certification of warheads, the maintenance of stockpile reliability and the evaluation of nuclear-weapon effects".

Last week, there was news of a long-term programme under way in the United States for the production of nuclear warheads which also involves a considerable increase in nuclear-weapon tests. That eight-year programme provides for additional underground tests as part of the so-called "Star Wars" plan, as well as for tests of warheads for the Trident missile. Cruise missiles, the Pershing-II missile, the neutron artillery shell and others. According to this report, the output of nuclear warheads in the United States, now already the highest it has been for 20 years, is expected to

continue increasing.

Obviously, it is not an alleged verification problem that prevents progress towards a complete nuclear-weapon-test ban. As we all know, there is today every possibility to verify compliance with a treaty on the complete and general prohibition of nuclear-weapon tests.

Nevertheless, we have been asked over and over again here in this Conference to study in depth the verification issues of a test ban.

Effective verification arrangements, however, can only be elaborated in the framework of the negotiation of a treaty on the complete and general prohibition of nuclear-weapon tests. It cannot be done by a subsidiary body whose mandate has been limited by a few delegations to a mere examination of verification issues. In the absence of real negotiations, declarations can hardly be expected to bridge existing differences on certain issues of a nuclear-test ban only in a framework of discussions.

Thus, the Ad Hoc Working Group on a Nuclear Test Ban could hardly do more than it did in 1982 and 1983. As was stated in its report of last year (CD/412), "a large number of delegations considered that the Ad Hoc Working Group had fulfilled its mandate by discussing and defining all the issues relating to verification and compliance of a nuclear-test ban".

CD/PV.257

p.17

New Zealand/Peren

10.4.84

CTB

New Zealand remains ready to play its part in this process. Here too our geographic location has relevance, for New Zealand and Australia are the only two Southern Hemisphere countries with a past and continuing capacity to contribute to the efforts of the Ad Hoc Group of Seismic Experts. Similarly, New Zealand and Australia are the only two countries that offer network data from seismograph stations in Antarctica. New Zealand thus contributes directly to the work of the Ad Hoc Group, and, we hope, also towards the creation of a CTB.

We hope that it will be the decision of this session of the Conference on Disarmament that the Ad Hoc Group will remain in existence, and will continue to meet at least annually. If so, New Zealand will wish to continue to participate in, and contribute to, the Ad Hoc Group's deliberations. Meanwhile members should continue the work necessary for a successful outcome of the proposed technical test for the exchange and analysis of Level I Data using the WMO/GTS under a regular use basis. The successful completion of this test, will, we believe, be a further tangible sign that progress continues to be made by the Ad Hoc Group at a technical level. However, to make further significant progress in future, it is now urgent that full agreement be reached on a "comprehensive experimental exercise" which would adequately test all aspects of the global system, including the full seismograph network, data transmission procedures and facilities, and data collection operations.

New Zealand has also indicated its wish to participate in other Working Groups within the Conference on Disarmament and especially in the subsidiary body that should be established to move towards the negotiation of a CTB. We call now on all parties to redouble their efforts to formulate a wider mandate for the NTB Group that will allow real progress to be made.

In the United Nations General Assembly New Zealand and Australia initiated and proposed resolution 38/63 which was adopted with 117 votes in favour and not one vote against. This resolution requested the Conference on Disarmament:

(a) to resume its examination of issues relating to a CTB with a view to the negotiation of a treaty on the subject and, in accordance with the 1983 Report on the work of the Committee under this item, to take up the question of a revised mandate for the

Ad Hoc Working Group during its 1984 session;

(b) to determine, in the context of its negotiations on such a treaty, the institutional and administrative arrangements necessary for establishing testing and operating an international seismic monitoring network as part of an effective verification system; and

(c) to initiate investigation of other international measures to improve verification arrangements under such a treaty including an international network to monitor atmospheric radioactivity.

Our position is quite clear. We believe that there are many issues relating to a comprehensive test ban that deserve immediate consideration, and that positive progress can be achieved on some, even if hesitations remain on others. We also believe there will be widespread concern, disappointment and frustration if the Conference on Disarmament meets for another year without beginning this process. As in the United Nations General Assembly resolution, we urge all members of the Conference on Disarmament, in particular the nuclear-weapon States, to co-operate with the Conference in fulfilling these tasks.

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pp.20-22

Sweden/Ekeus

10.4.84

CTB

International discussions of a global seismological verification system over many years have illustrated both the desire, and the difficulties, to obtain a generally accepted international verification system for a comprehensive test-ban treaty. In this context the international co-operation measures worked out by the Ad Hoc Group of Scientific Experts constitute however an important step towards the achievement of an internationally acceptable system.

The Third Report of the Ad Hoc Group (CD/448) is a considerable achievement. An impressive amount of work has been carried out by the Group's experts and at observatories, laboratories and data centres in the participating countries. It might be difficult for us to understand and fully to appreciate the vast amount of scientific work in many countries that forms the basis for this report.

The Report contains a large amount of facts and information that deserves close consideration. My delegation shares the Ad Hoc Group's view that a significant technical development has taken place in the last few years and that it is important to fully incorporate this new technology into the proposed global system of exchanging seismic data.

The conversion of existing analogue stations relevant for CTB verification into digital systems and the establishment of new and highly sensitive stations at suitable locations in the Southern Hemisphere are important steps recommended by the Ad Hoc Group. Working Paper CD/491 presented by the Federal Republic of Germany on "Aspects of modern developments in seismic event recording techniques" contains a sound basis for a discussion of how advanced technology can be used to improve and simplify seismic recording. Concerning the establishment of new, high-quality stations in the Southern Hemisphere, Sweden has earlier introduced in the Committee on Disarmament the idea of so-called "sister-observatories". Such observatories are co-operative projects between countries that already have experience in establishing and operating modern seismological facilities and countries have less experience in this field, but with suitable geophysical situations. The present co-operation between Finland and Zambia, reported on to the Ad Hoc Group, is a good example of such co-operation.

The development in communication and computer technology has been more rapid than was possible to foresee only a few years ago. This has made it possible to exchange, rapidly and on a global scale, large amounts of information and simultaneously

to handle such information in fairly small computer systems. The question of the exchange and use of the more voluminous original recordings of data, the so-called Level II data, has been a difficult problem in the present work of the Ad Hoc Group; however, it is likely to be less sensitive when such data gradually come more extensively used in general seismological practice. It is important that an international co-operative system for CTB verification should be advanced and modern, and that technical equipment and existing data are used in a way that is not inferior to those used in systems available to individual countries.

My delegation is pleased to note in the report that the Ad Hoc Group has elaborated a preliminary operational manual for international data centres. This manual gives comprehensive instructions on how such data centres should operate. The instructions are worked out in great detail, including the specification of the computer codes to be used.

In the Swedish draft on a Nuclear-Weapon-test-ban treaty (CD/381), presented in June 1983, operational manuals were foreseen for all the components of an international co-operative system. Operation manuals should give detailed instructions on how to operate participating stations, extract and exchange Level I data, and exchange Level II data, and on how the analysis should be carried out at the International Data Centres. The preliminary manual presented as an annex to the Third Report is a substantial step towards achieving such necessary detailed instructions. Further work remains to be done to make it possible to reach agreement on all the details of this preliminary manual and to prepare similar manuals for other components of the system. This is an important future task for the Ad Hoc Group of Scientific Experts.

Additional experience is needed and my delegation therefore welcomes and fully supports the proposal of the Ad Hoc Group to hold an experimental test later this year. Such a test should result in further elaboration of operational procedures for Level I seismic data exchange and the envisaged International Data Centres.

The test will be conducted in co-operation with WMO. My delegation welcomes the decision by WMO to make available its Global Telecommunication System for regular exchange of seismic data. We are convinced that this experimental test, on a global scale, will give most valuable data and experience for establishing an international system to monitor a CTBT.

My delegation has noted with satisfaction that 23 countries have announced their intention to participate in the test. We know that many more countries have the capability to participate. The value of the test would increase substantially with more countries participating and with a wider, global distribution of these countries. I therefore urge all countries that have not yet announced their intention to participate, to seriously consider to contribute to this important test.

Sweden will participate in the test by providing data from the Hagfors Observatory and by operating an Experimental Data Centre. At our centre in Sweden we will receive the reported Level I data and analyse these data using the procedures described in the preliminary operational manual. This experiment will thus not only give experience on the extraction of Level I data and the exchange of such data over the WMO system, but also on the procedures and computer programmes needed to process these data at International Data Centres.

We think it is important that such experimental data centres will be operated during the test in the United States and the USSR. We have also with great satisfaction noted the plans to establish data centre facilities in Australia. Sweden looks forward to close co-operation with these countries to further develop the procedures to be used at the envisaged data centres. We are confident that the forthcoming experiment will offer experience of great importance to reaching agreement on a generally acceptable verification system.

My country has for many years been dedicated to the task of achieving a CTB. We have conducted an extensive national research programme to facilitate the verification of such a treaty. We are convinced that the work of the Ad Hoc Group is an important contribution to our efforts in this respect. We are further convinced of the value of continued work to gain more experience through this experiment and to prepare operational manuals. In our view no efforts should be spared in paving the way for a CTB, including continued efforts in the technical field. The report just presented by the Ad Hoc Group shows clearly that most valuable work has already been accomplished towards satisfying reasonable verification requirements. It is now time for the Conference on Disarmament to reach agreement immediately on a mandate which would make this possible.

CD/PV.257

pp.23-24

Argentina/Carasales

10.4.84

CTB

Some eight years have elapsed since the Ad Hoc Group of Scientific Experts was established by the then Conference of the Committee on Disarmament and subsequently maintained by the Committee on Disarmament. It is regrettable that the prospects on this issue which the international community faced towards the end of the 1970s have substantially altered -- if they have not actually disappeared -- owing to the lack of political will of some nuclear-weapon States to initiate negotiations on a treaty banning nuclear-weapon tests. At the recent plenary meeting of 3 April this lack of will once again emerged clearly.

Obviously, this continuing situation has repercussions on the task of the Ad Hoc Group of Experts. It is our opinion that the Ad Hoc Group and its planned exercises cannot continue to take place in a vacuum. Any activity performed must be directly related to the negotiating process which is taking place under item 1 of our agenda. Otherwise, it will detract from the mission of the Ad Hoc Group, which would then become a permanent body the purpose of which would be to consider and experiment with scientific and technical developments in the field of seismology. It is obvious that this cannot be the function of the Ad Hoc Group, nor was this the purpose for which it was established.

The objective which led the negotiating body to establish the Ad Hoc Group was to receive technical information and suggestions on a system suitable for verifying compliance with a nuclear-test-ban treaty. The considerable experience which we have accumulated shows us that the search for a perfect solution is preventing us from achieving an adequate one. It would also seem that, in the expectation of negotiations, the Ad Hoc Group of Scientific Experts will continue with a series of experiments which, despite their scientific and technical value, will be of little importance if they are not accompanied by the relevant political negotiations.

As the Secretary-General said to the Conference of the Committee on Disarmament on 29 February 1972, "The technical and scientific aspects of the problem have been so fully explored that only a political decision is now necessary in order to achieve final agreement". That opinion, which has been recalled countless times, was to be officially reiterated subsequently in 1979.

It is also our conviction that, as paragraph 31 of the Final Document states, "Disarmament and arms limitation agreements should provide for adequate measures of verification satisfactory to all parties concerned in order to create the necessary confidence and ensure that they are being observed by all parties. The form and modalities of the verification to be provided for in any specific agreement depend upon and should be determined by the purposes, scope and nature of the agreement".

The last sentence of the paragraph I have just quoted should be stressed. The form and modalities of the verification should be in keeping with the purposes, scope and nature of the disarmament agreement the observance of which it is wished to monitor. If that agreement does not exist, nor has even begun to be negotiated, it cannot be clear how studies and tests which must be carried out in a total vacuum can be useful and fruitful. It is not possible to go on working indefinitely on the basis of assumptions and out-of-date political data, as the Ad Hoc Group finds itself forced to so, as can be seen from paragraph 2 of its report.

In accordance with the broad experience already accumulated, only by making a start on substantive negotiations will it be possible to tackle all the pertinent aspects of a future agreement. And only in this context, too, will the Conference on Disarmament be able to make proper use of the technical and scientific contribution furnished by the Ad Hoc Group.

CD/PV.259

pp.16-18

Japan/Imai

17.4.84

VER,CTB

In practical terms, the foregoing would mean that we have to find an appropriate compromise between two things. One of the two is a comprehensive approach based on expressions of disarmament ideals, while the other factor is various details of actual measures, including institutions and technologies of verification. In other words, if an agreement in the abstract on comprehensive and declaratory measures can achieve a goal of truly effective disarmament, that will indeed be a very welcome situation. That this is not always the case may be clear if we take the example of the 1925 Geneva Protocol. To think that the idealism and political will will be sufficient is unfortunately optimistic in today's world, and I made this point clear in the statement I delivered in February. In order that disarmament measures can be effective and credible as an arrangement among nations, it is essential that the member States can have confidence that others are faithfully observing the terms of such conventions. This is an understandable situation when national security is involved and when science and technology of modern weapon systems have become highly sophisticated and complicated as they are today.

As I emphasize the importance of verification, I would like to hasten to add that there is a danger also of extremism in this regard as well. If one starts by assuming the occurrence of all the violations which are theoretically possible, but practically unlikely, and insists that an agreement is meaningless unless all such cases are covered, then we are overstating the virtue of verification.

I would like to refer here to some of my own experiences regarding the International Atomic Energy Agency safeguards which, as you are well aware, concern verification measures against nuclear proliferation. It took a very long time to distinguish what is useful and necessary from what may be less practical. There was a group of people who insisted that mere nominal arrangements to prevent diversion of nuclear material from peaceful to military uses were sufficient. This position was not accepted by most countries and, as a result, detailed negotiations on institutional and technical arrangements for effective safeguards took place. On the other hand, from over-eagerness scenarios were sometimes depicted which, for those who are knowledgeable in the nuclear industry, could not even be visualized as practical possibilities. What exists today as the IAEA safeguards is the product of compromise between such extreme positions. I have mentioned this example not in any way as an attempt to make an assessment of our current discussion about verification on a nuclear-test ban or the prohibition of chemical weapons, but merely to indicate that in our view this is a general point worth remembering.

In this context, I would like to mention the following. For one thing, it is important that basic political agreement exists to form the ground for any disarmament arrangements. On the other hand, there should be a scientific and technical approach in putting such agreements into reality. These two elements must have a complete understanding of each other. It is possible, in the absence of such understanding, that the political circles and the technological circles may be speaking two different languages, and this is an assured way to confuse the situation. I recall, in the case of IAEA safeguards, that there were occasions in which scientists, in the absence of full comprehension of the basic political requirements, gave replies such as "What is required is technically possible in principle, if certain conditions are met". The political side ignored the conditions and only accepted "It is possible in principle". In fact, among these conditions were such items as "if the continuous presence of inspectors is possible", or "if determination of diversion can be accepted at an 80 per cent confidence level", or "if a certain amount of material per annum can be left unaccounted for as an accumulation of measurement errors". You can see that these conditions which are related to the political objective of the arrangements certainly required serious consideration.

A number of statements have been made in this or other forums to the effect, for instance, that there are no more technical problems remaining with regard to verification of a nuclear-test ban. Some have even insisted that all the underground nuclear explosions can be detected and identified. I have had the opportunity to talk with some of the authors whose writings in this respect have been extensively quoted in this forum as well. I have been told by these very authors that the system of seismic detection they base their arguments on is not what is currently available and existing in the world. They have to be upgraded into a better network incorporating more advances in seismology, including a considerable number of so-called black boxes in the countries concerned. Furthermore, their argument is based on the assumption that geological conditions around the test sites as well as the mode of dissemination of seismic signals through the geological formation between the site of the explosion and seismic stations are known in detail. Of course, I am not an expert on the subject and the reports of the Ad Hoc Group of Scientific Experts give a description of some of these problems, while I believe that the upcoming seismic data exchange experiments will help clarify these points. I have merely mentioned this case to point out again the importance of satisfactory dialogue between the political and the scientific communities.

The example of IAEA seems to me to indicate another very important point. It was extremely convenient, and indeed fortunate, in the case of the NPT that an international organization was already in existence whose Statute specified the safeguards for the purpose of preventing diversion from peaceful to military purposes as its main function. Although not on the scale of today, the institutional arrangements to gather and apply necessary technology at the international level were already functioning. As the distinguished delegates are aware, this enabled the NPT merely to refer, in its Article 3, to the application of these arrangements. In spite of that, the parties to the Treaty had to spend more than a year in a conference to reorganize the system, establish the technological requirements, determine rights and duties of inspectors, agree on the methodology for determination of diversion possibilities, and to agree on the sharing of financial burdens.

This lesson indicates to me that we have to bear in mind, by the time we are at the actual stages of determining verification of a prohibition of nuclear testing or chemical weapons, as the case may be, that we have to get on, as the necessary first steps, with the job of establishing such international verification organs. Of course, by saying this, I do not mean to insist that the arrangements under the NPT are the best or even the most desirable formula in the case of other disarmament agreements. It is nevertheless important that within the negotiation process in the Conference on Disarmament, all due

attention should be given to the nature of verification requirements as well as the structure of verification arrangements which would best suit the purpose of each agreement. Without such attention, I am afraid, disarmament agreements cannot function in such a way that the parties to them can place confidence in their effectiveness.

I have used earlier an expression "extremism", and implied that over-emphasis on political will alone, or on scientific details alone, would not lead to a meaningful disarmament arrangement. In our approach to problems, we should have in mind the expression about "the virtue of taking the middle-of-the-road position", which means not that the exact mid-point of two extremisms is necessarily the best solution, but that there is always a need to open our minds and eyes to different points of view. With regard to NTB considerations today, for example, efforts to understand the capabilities and limitations of the available multilateral verification measures seem to represent this virtue of a "middle-of-the-road" approach. This will enable us to take up various related matters that constitute elements of a future nuclear-test ban (NTB) agreement, including the problems of how to deal with nuclear explosions in the unverifiable range. I do not need to repeat that Japan considers the NTB as the highest priority item in disarmament. We have stated our position a number of times in this and other fora. It is in this context that the establishment of multilateral verification capabilities, given the existing technology, and then taking steps towards their gradual improvement, is, in our view, what the Conference on Disarmament can meaningfully accomplish today as long as we are looking at the NTB as a multilateral measure. With regard to chemical weapons, we are all aware that the nations of the world are showing a very positive attitude towards their prohibition and elimination, and the related verification. As active negotiations are taking place, my delegation is second to none in pursuing the objective of an early conclusion of a chemical-weapons convention and we take pride in having made various contributions in the past. Here also, I should like to mention that a workable chemical-weapons agreement should take care to avoid the pitfalls of possible extremism. If the outcome of our negotiations would lead either to a very large loophole in verification or on the other hand to a claim for virtual international control over the entire chemical or pharmaceutical industries of the world, not only would that raise legal problems, but also it would mean either a very unreliable treaty or a highly impractical situation. I shall refrain from further references to the example of IAEA, but merely note that the willingness of the Conference on Disarmament to take its experience into account in defining the range of verification requirements regarding either chemicals or their precursors would be extremely important. I should like to take future opportunities again to present our detailed position to the Conference on Disarmament in due course. Here I would like to add very briefly that there is a similar problem with regard to the outer space. Peaceful outer space is obviously a very important item, to which Japan attaches high priority. However, as far as we are concerned, except for a limited knowledge and experience regarding exploration of outer space for peaceful uses, we have to confess that our understanding and knowledge of the related space activities are not at all based on our own experience. It is very difficult, therefore, for us to engage in detailed discussions on space arms control on the basis of published and often popular information. We believe that the examination of the problem of outer space starting from an exploratory approach at the outset, with those in a position to know providing information, would be most appropriate and meaningful.

CD/PV.260

11-13

USA/Bush

18.4.84

CW

For a chemical weapons ban to work, each party must have confidence that the other parties are abiding by it. This elementary, commonsense principle is the essence of

what we mean by verification. No sensible Government enters into those international contracts known as treaties unless it can ascertain — or verify — that it is getting what it contracted for.

Lack of effective verification and compliance mechanisms has been a major obstacle to achieving a true and effective ban on these weapons.

As I mentioned at the beginning, the technical similarities between chemical weapons production facilities and commercial production facilities, the similarity between chemical weapons agents and chemicals for peaceful uses, and the similarity between chemical munitions and conventional munitions makes discrimination impossible without very, very close observation.

And, perhaps most importantly, strict verification is needed to protect those who do not possess chemical weapons, or are willing to give them up, from those who might maintain possession surreptitiously.

The goal of our proposal is a treaty to require States to declare the sizes and locations of their chemical weapons stocks and their production facilities, to destroy the stocks and facilities and to forswear creating any new chemical weapons.

If they are to sign such a contract, States must have confidence, in particular, that they can know:

First, that all stocks have been destroyed;

Second, that all declared production facilities have been destroyed;

Third, that the declared stocks really do constitute all the stocks;

And fourthly, that the declared facilities are all the facilities.

Without such firm assurance we cannot -- and I think everybody here knows this -- we cannot claim to have banned chemical weapons. In this regard, the United States Government has taken note of the Soviet Union's announced willingness to consider accepting the continuous stationing of international inspection teams at the locations where declared stockpiles are to be destroyed, and we welcome that.

We are encouraged by this recognition of the indispensability of on-site inspection, a matter that was tabled right here in this room, I think by Ambassador Issraelyan. The Soviet Union's announcement has advanced the negotiations toward establishing confidence in the first of the four critical requirements, that is, that all declared stocks be destroyed.

To address the second of the four criteria -- that all declared production facilities be destroyed -- we propose a similar continuous, on-site monitoring and periodic inspection.

The verification difficulties inherent in the problem of undeclared sites -- determining that there are no hidden stocks and no clandestine production facilities -- remain our most formidable challenge. It is formidable because the problem of undeclared sites can be resolved only if States commit themselves to a new, but absolutely necessary degree of openness.

Let us face reality. Chemical weapons are not difficult to hide and are not difficult to produce in a clandestine manner. Many States have the capacity to do this. We can rid the world of these weapons only if we all make it difficult for anyone, for ourselves to do such things without detection.

The opportunity for undetected violations is the undoing of arms control. If that opportunity persists, it would render whatever chemical weapons ban we conclude illusory and really would set back the cause of peace.

And so, for that reason, the United States Government is putting forward the unprecedented "open invitation" verification proposal to which I referred earlier. As part of a chemical weapons ban, the United States is willing to join other parties in a mutual obligation to open for international inspection on short notice all of its military or government-owned or government-controlled facilities.

This pledge to an "open invitation" for inspections is not made lightly. We make it because it is indispensable to an effective chemical weapons ban. The essence of verification is deterrence of violations through the risk of detection. The "open invitation" procedures will increase the chances that violations will be detected and the chances that, in the event of violations, the evidence necessary for an appropriate international response can be collected. That is the heart of deterring violations.

If the international community recognizes that such a provision is the sine qua non of an effective chemical weapons ban and joins us in subscribing to it, we will not only have realized the noble longing for a treaty that actually bans chemical weapons, but we will have changed in an altogether salutary manner the way governments do business.

We will have set a bold example for overcoming barriers that impede effective arms control in other areas. And we will have engendered the kind of openness among nations that dissipates these ungrounded suspicions and allows peace to breathe and thrive.

We recognize that all governments have secrets. Some speak as if openness and effective verification cut against their interests alone. But openness entails burdens for every State, every single State, including the United States of America. Openness of the kind we are proposing for the chemical weapons ban would come at a price.

But an effective ban on chemical weapons requires this kind of "open invitation" inspections we propose. We, our President, the United States Government, are willing to pay the price of such openness. The enormous value of an effective ban warrants our doing so.

I know that the United States delegation to this body is eager for the process of negotiating a chemical weapons ban to begin to unfold. We hope and trust that the seriousness of this work, its urgency and, perhaps most of all, the humane aspirations of the peoples represented here, will spur all in this Conference towards an early and successful agreement.

We do not underestimate the difficulties that this task presents. I have said that the key to an effective convention — a convention that could eliminate the possibility of chemical warfare forever — is enforcement of compliance through effective verification.

Our emphasis on this point (and our "open invitation" verification proposal) springs from a desire that the ban work permanently and effectively, to provide the security that all of us seek.

CD/PV.260

pp.16-18

USSR/Issraelyan

18.4.84 VER,CTB

One of the measures to strengthen mutual confidence in compliance with disarmament agreements, and thus international confidence, is verification, as is well known, and we would like to dwell on this in particular today. The Soviet concept of verification is based on the following: the main function of the system assuring compliance with the disarmament agreements, an integral part of which is verification, consists in ensuring confidence in their implementation by all parties to the agreements, and through certain forms of co-operation facilitating the settlement of disputes, thus providing for honest implementation by all States parties of their undertakings, and building confidence between them. The forms and conditions of verification or control envisaged in any specific agreement depend upon the purposes, scope and nature of a given agreement and are determined by them.

We approach the questions of verification concretely and not in terms of general declarations or abstract views. This approach of ours has been enshrined in the strategic arms limitation agreements, as well as in other existing agreements in the field of disarmament. Our policy on questions of verification is far-reaching.

As Comrade K.U. Chernenko stressed recently, "considering the policy and practice

of the United States we are interested not less but probably more than the United States in reliable verification, in adequate concrete measures of arms limitation and disarmament".

The Soviet Union has made recently many far-reaching proposals on the verification problems concerning compliance with various arms limitation agreements. As an example let us take the negotiations on a chemical-weapon ban. During those negotiations we propose agreement on a whole range of different verification methods. These include national control, control with the employment of different national technical means, based on the latest scientific achievements, mandatory systematic or permanent international on-site verification, and finally the "challenge" inspections. Of course, the selection of any particular verification method is entirely determined by the goals of the chemical-weapon ban which it is intended to further. There is no universal system of control: each verification method must be linked to a specific activity prohibited or permitted under the convention. We have no unjustified leaning in favour of any single verification method, and we do not play with verification in order in fact to block the negotiations. The complex approach of the USSR to the questions of verification of a chemical-weapon ban completely ensures, we are deeply convinced, the effective implementation of the future convention.

Experience of international negotiations confirms that the basis for the solution of verification problems always consists in whether or not different sides taking part in the negotiations have the political will to conclude an appropriate agreement. In spite of the great difficulties connected with the solution of complex verification problems, including technological problems, it turned out to be possible to conclude, for example, the strategic arms limitation treaties between the USSR and the United States, as well as the agreements on the limitation of underground tests of nuclear weapons, on underground nuclear explosions for peaceful purposes and the whole set of multilateral international agreements containing the relevant provisions on verification.

"I wish to emphasize most firmly" stated A.A. Gromyko at a press conference on 2 April 1983 -- that for the Soviet Union verification has never been a stumbling block for the implementation of agreements or negotiations in the course of agreements, though we have heard from the other side a great deal of demagogy on that score, particularly away from the negotiating table.

However, verification is impossible without appropriate agreements on the limitation of the arms race and disarmament. Just as disarmament is hardly probable without control, likewise there cannot be control without disarmament. It cannot be considered feasible, on the one hand, to block the elaboration of appropriate agreements in the field of disarmament, oppose negotiations and block appropriate mandates for subsidiary bodies, and, on the other, achieve agreements on verification measures.

The course pursued by the United States and the United Kingdom on the question of a nuclear-weapon-test ban can serve as an example of such a distorted approach to the verification problem. These countries continue to block negotiations aimed at achieving an agreement on a nuclear-test ban, while insisting at the same time on the continuation of the discussion of verification.

They tell us that the time for negotiations has not come, not everything is clear in the field of verification. We decisively disagree with this manner of approaching the question. We are convinced, and this is confirmed by many reports from various sources, including United States ones, that behind it there are plans for expanded nuclear-weapon testing with a view to the development of new types of nuclear arms. In our opinion all problems of verification, without exception, could be solved during appropriate negotiations if all sides display political will to achieve an agreement. In order to show once again our goodwill, the Soviet delegation would like today to state the following.

In the event that the mandate of the Conference's subsidiary body on a nuclear-test

ban is revised and the elaboration of a draft treaty on the complete and general prohibition of nuclear-weapon tests is begun, the Soviet Union would be ready to consider the possibility of organizing, as has been proposed by Sweden, the exchange of data on the radioactivity of air masses with the establishment of appropriate international data centres on the same basis as is envisaged in respect of the seismic data exchange. We could speak about this in detail within the framework of the subsidiary body.

It is not by chance that today we refer to the problem of a nuclear-test ban. Its solution will seriously hinder the qualitative nuclear-arms race, in particular the appearance of the most destabilizing types of such weapons, designed to carry out a first strike. One can therefore say that the cessation of tests without delay also reflects the military and political intentions of States, a kind of material expression of the readiness to renounce preparing for a nuclear attack. Finally, the renunciation of tests is also tantamount to verification of adherence to the non-proliferation regime, since conducting nuclear explosions represents a necessary link in the development of nuclear weapons. Under current conditions, the question of a nuclear-weapon-test ban has acquired particular importance and urgency.

CD/PV.260

pp.21-23

Mongolia/Erdembileg

18.4.84 CTB,CW

Technical issues involved in the elaboration of the appropriate provisions of a treaty on the complete and general prohibition of nuclear-weapon tests, in particular those connected with the development of an international system of seismic data exchange, the establishment of International Data Centres, and the transmission of seismic data through communication channels of the World Meteorological Organization have, in our view, been dealt with in the most detailed manner. That, of course, is a positive element. On the other hand, we are put on our guard by the lack, in this multilateral negotiating forum, of any kind of serious negotiations on the elaboration of the treaty itself. This situation has arisen, first and foremost, as a result of the unwillingness of certain States to advance towards the conclusion of a treaty on the complete and general prohibition of nuclear-weapon tests. In order to cover up their reluctance, the representatives of the United States of America and the United Kingdom are deliberately over-emphasizing the question of the system of verification, whose importance is recognized by all the parties in favour of considering the substance of the matter. In short, persistent attempts are being made to impose upon the Conference on Disarmament a limited and curtailed mandate for its subsidiary body called upon to conduct negotiations on a comprehensive prohibition of nuclear tests.

In accordance with the recommendation of the United Nations General Assembly, a group of socialist countries and the Group of 21 continue to support the adoption of a mandate which would make it possible to embark without delay on negotiations with the aim of the elaboration of an appropriate international treaty. Two draft mandates have been presented, one by a group of socialist States (CD/434) and the other by the Group of 21 (CD/492). Despite these constructive efforts by delegations belonging to these two groups of countries, it has proved impossible, owing to the obstructionist position of the United States of America and the United Kingdom, to reach consensus on drafting a mandate and on the question of setting up an ad hoc committee on a nuclear-test ban having a suitable mandate.

We are disturbed by the fact that China and France continue to stand aside from participating in the consideration of the substance of this important question.

I should like to stress that the delegations of socialist States, reaffirming their position of principle on questions of real disarmament proceeding from the need to reach agreement on radical measures towards the limitation and reduction of weapons on the

just basis of the principle of equality and equal security, have always shown flexibility, taking account of mutual interests, and have striven to find a mutually acceptable solution.

In this connection, we note with satisfaction that in his statement at today's meeting the representative of the Soviet Union expressed readiness, in the event of the revision of the mandate of the Conference's subsidiary body on a nuclear-test ban and the beginning of the elaboration of a draft treaty on the complete and general prohibition of nuclear-weapon tests, to consider the possibility of organizing an exchange of data on the radioactivity of air masses with the establishment of appropriate international data centres.

We believe that this statement by the Soviet Union testifies yet again to its readiness to reach agreement on one of the priority issues on the Conference agenda.

Taking advantage of the opportunity given me today to speak at a plenary meeting, I should like to touch briefly upon the question of the prohibition of chemical weapons.

At the current session, the Conference on Disarmament, after prolonged and complicated consultations, at last re-established a subsidiary body which is now functioning under the name of the Ad Hoc Committee on Chemical Weapons. A new mandate was agreed for this body, containing the provisions "to start the full and complete process of negotiations, developing and working out the convention, except for its final drafting, taking into account all existing proposals and drafts as well as future initiatives with a view to giving the Conference a possibility to achieve an agreement as soon as possible". Such a mandate, we think, offers the possibility of starting an important new stage in negotiations on the prohibition of chemical weapons.

From the very beginning of this session of the Conference, the socialist countries have expressed their readiness to participate in the new stage of negotiations in a businesslike and constructive manner.

The socialist countries' approach of principle and their views on improving the effectiveness of the work of the Conference in the field of the prohibition of chemical weapons are reflected in specific terms in working paper CD/435.

Mention should also be made of the topical nature of the proposal by the Warsaw Treaty Member States to the States members of NATO on the question of freeing Europe of chemical weapons. Mongolia firmly believes that this initiative provides yet another vivid confirmation of the socialist countries' sincere desire to remove the threat of chemical warfare from the States and peoples of Europe and the whole world and to speed up the conclusion of a convention on the prohibition of chemical weapons.

Evidence of its constructive and flexible position, genuine interest in making progress in negotiations and search for mutually acceptable solutions was the Soviet Union's readiness to give positive consideration to the proposal for the permanent presence of the representatives of international control at special facilities for the destruction of stocks.

In its statements the Mongolian delegation has repeatedly stressed the need for an approach to the definition of verification measures commensurate with the requirements of the future convention. It has been emphasized again and again that the socialist countries attach no less importance than, say, the western States to the exercise of effective control over compliance with the implementation of the future convention on the prohibition of chemical weapons. They have proposed a very broad range of verification measures. These include, for example, national control, international inspection by challenge, systematic international inspection and, in certain cases, permanent on-site inspections. The Soviet Union's numerous proposals and initiative on verification, which enjoy broad support in the negotiating body in question, are of great interest and significance in this respect.

We believe that a sensible approach is called for towards determining the most

efficient verification systems. It is out of place to suggest that some States are concerned with verification, are ready for it and open to it from every point of view, while others think of nothing but preserving loopholes and violating the future convention. Participants in the negotiations are well aware of the unrealistic demands of the United States of America in control matters, demands which are divorced from the requirements of the future convention. Today in the Conference on Disarmament we heard the statement of the Vice-President of the United States, Mr. George Bush. The United States presented its views on a convention on the prohibition of chemical weapons. The Mongolian delegation is prepared to study this document in order to determine its position concerning it.

We are forming the impression that certain western countries, under cover of a touching solicitude for commercial interests, are in fact trying to remove from the scope of control a potentially dangerous form of activity, namely, the production at commercial enterprises of the most up-to-date and dangerous varieties of chemical weapons. They claim that many hundreds of tons of the most super-toxic lethal chemicals, allegedly proposed for peaceful uses, can be freely traded on the market.

The socialist countries propose that the production of super-toxic lethal chemicals for any permitted purpose whatsoever should be limited, for any State party, to one metric ton a year and that such production should be concentrated in a specialized facility. Such activities would be placed under strict international control. And what do the western countries propose? They are in favour of permitting the production of one ton of super-toxic lethal chemicals for anti-chemical protective purposes, and of imposing no limitation on the production of such chemicals in all other cases.

The socialist countries, anxious to find a way out of the genuinely difficult situation conditioned on the one hand by the emergence of binary weapons and the possibility of producing their components at practically any chemical plant and, on the other hand, by the inadmissibility of interference in the economic affairs of States, have submitted appropriate proposals. These amount to the complete exclusion from peaceful chemical production of one highly specific category of chemical compounds, namely, those containing the methyl-phosphorus bond. It is this category which, as it were, sustains all the most dangerous super-toxic lethal chemical weapons, including binary weapons, and this category is practically not used for peaceful purposes.

CD/PV.260

p.26

Australia/Butler

18.4.84

CW

Australia believes that, for an effective chemical weapons convention, special emphasis must be given to three essential elements: first, an uncompromising prohibition of the use of chemical weapons; second, provision for the destruction of existing stocks of chemical weapons and for the prohibition of the future development and production of such weapons; third, a verification regime that will ensure that these treaty commitments are being honoured.

Rigorous standards will be involved, particularly in the area of verification. There can be no security in such a convention unless the means of verification of compliance with the convention are effective and seen to be effective. We must negotiate the verification provisions with great care.

We are aware that there are differing views on what arrangements for verification would be required to ensure confidence that the obligations of the convention are being observed. The United States draft is particularly valuable in pointing to the standard of verification needed for this purpose.

We appreciated the statement by the Soviet Ambassador to this Conference on 21 February, with regard to verification of the destruction of stock-piles. That statement

addressed one of the difficulties in the area of verification. It seemed to indicate a willingness to find negotiated answers to the problems of verification and my delegation heard again with great interest today further clarification from the Soviet Ambassador on this point.

It is critical that we proceed further to extend these negotiations, particularly with regard to verification.

CD/PV.261 p.7 Cuba/Lechuga Hevia 24.4.84 CTB

While the Conference has, for the last two years, been attempting to initiate negotiations on the prohibition of nuclear tests, the United States Government has been preparing a testing site at Pahute Mesa in the State of Nevada with a view to carrying out approximately 30 nuclear tests in 1985, since there is no longer any room for such tests at the Yuca Flats site. It is here maintained that the obstacle is verification, when it is common knowledge that verification problems have basically been resolved, as has just been affirmed by the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events and as was already stated 22 years ago by the Secretary-General of the United Nations. It is not verification that is hampering negotiations — the fact is that there is a nuclear testing programme for the next few years and there is an unwillingness to abandon it.

CD/PV.261 p.12 Sweden/Theorin 24.8.84 RW

Radiological weapons as such do not exist in the present. This fact provides us with an opportunity to negotiate a model convention on the prohibition of possible future means of warfare. Such a convention should contain provisions on concrete measures to halt research and development of new weapon systems and even weapon concepts. Our goal should be to reach provisions that are more ambitious than those developed in the Convention on the Prohibition of Military or any Other Hostile Use of Environmental Modification Techniques (ENMOD).

My delegation would, in a spirit to facilitate the work on track A, like to reiterate a proposal, presented in the Ad Hoc Working Group in June last year for a formula for a positive definition on the concept of radiological weapons that in our view solves the problem of not legitimizing nuclear weapons.

Sweden is working on the problem of delimiting the concept of radiological weapons from that of particle-beam weapons not having mass destruction effects and based on the principle of accelerated radioactivity.

As to track A verification, we think that safeguarding the relatively few deposits of radioactive material that are large enough to be significant as potential sources for production of radiological weapons, should such weapons ever be produced, would be a relatively simple one. The experience gained regarding international safeguards aimed at preventing diversion of material from peaceful uses to weapons is considerable.

CD/PV.262 pp.9-10 Iran/Sheikholeslam 26.4.84 CW

As has been briefly mentioned, and as the distinguished members of this Conference know very well, there already exist international commitments and undertakings on the non-use of chemical weapons. But the basic fact that should be taken into consideration in the new convention is the promotion of such commitments by preventive and enforce-

ment measures against any violator. Effective international measures and collective actions to punish violators should be envisaged on occasions when such violations occur. Otherwise the new Convention will suffer the same fate as the Geneva Protocol of 1925, and the Security Council will deal with the reports of on-site inspections under the new Convention as it did with the report of the team of experts despatched by the Secretary-General to the Islamic Republic of Iran.

The 1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological and Toxin Weapons and on Their Destruction, apart from not being comprehensive, neglects such important aspects of the matter as verification systems.

We have all witnessed how certain countries, whose delegates are present in this very conference, refrained from the implementation of United Nations General Assembly resolution No. 37/98 D of 1982, concerning the use of chemical weapons. Is it not an adequate reason to suspect the goodwill of such countries as regards the adoption of the convention now being prepared by the Ad Hoc Working Group on Chemical Weapons? The lack of a verification system for continuous international control is an important defect in the existing international conventions that should be eliminated from the new convention. What is more important, we strongly call for guarantees and priority to be given to the inclusion of the question of the use of chemical weapons and the proper verification measures it requires in the future convention on chemical weapons. Otherwise what is the benefit of commitments undertaken on paper but not carried out and verified? Such verification should, in order to be effective, include all the different stages of development, production, stockpiling, acquiring and transfer of technology of such weapons, and more especially their use. We propose that the use of chemical weapons should be considered as a war crime for which the perpetrators would be internationally punished.

CD/PV.262 pp.14-15 Mongolia/Erdembileg 26.4.84 CW

The Mongolian delegation attaches great importance to the question of verification in any real disarmament measures. In this connection we advocate a principled, reasonable and realistic approach to working out an effective verification system, but without going to extremes and without preconceptions. We have advocated and continue to advocate a verification system which takes into account mutual interests and is based on the principle of equality and equal security.

Seen from this viewpoint, the so-called "open invitation" inspection proposed in the United States draft convention does not, in our opinion, respond to the above principles. To agree to such an approach would be to harm the interests of States and would represent a crude violation of their sovereign rights.

CD/PV.262 pp.15-18 USA/Fields 26.4.84 CW

Mr. President, for the United States, the elimination of the threat of chemical weapons — and the elimination of the terrible reality of chemical warfare — is a paramount objective for strengthening international security. To this end, the United States is resolved to pursue a complete, effective and verifiable ban on chemical weapons.

The history of this effort is well known. In 1977, the United States and the Soviet Union began formal bilateral negotiations on chemical weapons. In 1980, the United

States moved its efforts to ban chemical weapons to this body, in recognition that the abolition of chemical weapons is an issue that concerns all States. In February 1983, after long and intensive discussions both here and in Washington, my delegation tabled its detailed views on the content of an agreement. Since then, we have elaborated our detailed views as we participated in the work of this Conference. In July 1983, my delegation also presented a comprehensive paper that set forth illustrative on-site verification procedures for destruction of chemical weapons. Last Autumn, further to accelerate work in this area, the United States invited member and observer delegations to this Conference to visit an operating facility for the destruction of our chemical weapons. Participants gained a first-hand look at the actual destruction procedures used by the United States and at the verification measures necessary to ensure effective verification of that destruction.

Then, last week, President Reagan once again sent Vice-President Bush to Geneva. In a new effort to create momentum in the negotiating process, the Vice-President came before this body and presented the draft United States convention for a chemical weapons ban. The Vice-President emphasized yet again the importance the United States attaches to the conclusion of such a ban. The Vice-President also spoke of his personal concern, as a father and grandfather, and stated his personal resolve that chemical weapons be effectively eliminated for all time. This is a point on which surely we all can agree. In this context, I want to make it perfectly clear that the United States condemns any use of chemical weapons whenever and wherever it occurs.

This history shows a continuing United States effort to work hard and work sincerely for an agreement on the effective and verifiable ban of chemical weapons, the cornerstone of which effort is the draft convention which we presented here last week. Accordingly, I would like to take some time now to explain the major provisions of the United States draft convention.

The essence of the draft convention is in its first article, which contains the basic prohibitions. The parties would agree not to develop, produce, otherwise acquire, stockpile, retain or transfer chemical weapons. The parties would further agree not to conduct other activities in preparation for the use of chemical weapons, use chemical weapons in any armed conflict, or assist others to engage in prohibited activities. In including a ban on the use of chemical weapons, the United States has been mindful of the importance attached to such a provision by many delegations. Taken together, articles I and XIV would ensure that the convention would supplement, and not replace, the 1925 Geneva Protocol.

Article II presents the definitions of terms which are necessary for the implementation of the convention. Chemicals which could be used in weapons are divided into three categories according to the danger they pose -- "super-toxic lethal", "other lethal" and "other harmful". The convention would regulate these different categories in different ways. The most important of the definitions is that of "chemical weapons". We have formulated this definition using the definition that was agreed to in document CD/112. Furthermore, we have formulated the definition of "toxic chemicals" to take into account the points of view of China and other members of this Conference. The definition of "chemical weapons" is drawn very broadly so as to include all lethal and incapacitating chemicals and their precursors which are not justified for permitted purposes. It does not include chemicals which are justified for peaceful purposes, such as those used in agriculture, research, medicine and domestic law enforcement.

Permitted uses of toxic chemicals are specifically protected in article III, so that peaceful chemical activities will not be significantly hindered. In order that any misuse of these chemicals can be detected, article III also places limits on the amount of super-toxic lethal chemicals and key precursors that any State party may possess for protective purposes. Similarly, the draft convention provides that the States parties may

produce super-toxic chemicals for protective purposes only in a single facility, and must annually declare all toxic chemicals for protective purposes which could also be used for weapons. The parties also would be limited in the extent to which they may transfer super-toxic chemicals and key precursors to other States. Article III also provides special measures on certain types of chemicals that are used for peaceful purposes, as listed in schedules A, B and C to the convention, to ensure that these chemicals will not be diverted to use in weapons.

Once the convention enters into force, each party would file an initial declaration of its existing chemical weapons, production facilities and past transfers. Articles IV, V and VI stipulate the information that must be included in these declarations. The parties would be required to destroy any chemical weapons and production facilities over a 10-year period, and annually provide information concerning such destruction. There would be guaranteed access for on-site verification to monitor the chemical weapons and production facilities, as well as the destruction process. The effect of these various declarations and monitoring activities would be to provide confidence in compliance by giving the parties comprehensive knowledge of the chemical weapons and production facilities in existence, and by confirming their eventual destruction.

The proposed convention also contains a variety of other provisions to aid in its implementation. As suggested by this Conference, a Consultative Committee would be established pursuant to article VII to oversee the implementation of the convention and promote the verification of compliance with it. Through its subordinate bodies this Committee would conduct the on-site verification activities required by the convention. We have also adopted the concept of an Executive Council, as developed by the Ad Hoc Working Group on Chemical Weapons last year. This body would be delegated the responsibility for the continuing work of the Committee.

Articles IX, X and XI provide procedures for resolving compliance issues. Under article IX, the parties are required to consult and co-operate on any matter which may be raised relating to the objectives of the convention, and to participate in fact-finding inquiries. Any party may request that the Consultative Committee conduct appropriate fact-finding inquiries, including on-site inspections. The fact-finding inquiries must be completed within two months, and if any party still has concerns about compliance which have not been resolved, it may request a special meeting of the Consultative Committee.

In article X, the parties would authorize special on-site inspections, whereby each party must consent, on 24-hour notice, to a special inspection of one of the sites for which inspection is authorized by articles III, V or VI, or of any military or government-owned or controlled location or facility. This provision has been the object of most of the comments which my delegation has heard during the past week. As Vice-President Bush stressed, the United States is offering an "open invitation" for inspection of many potentially suspect sites in its own territory. We recognize that this provision could open sensitive United States facilities and activities to international inspection. Nevertheless the United States is fully prepared to accept these risks in order to ensure an effective ban of this entire class of weapons of mass destruction. We have found no other approach which can satisfactorily deal with the problem of possible undeclared chemical weapons or clandestine production facilities. In view of the gains in relation to the costs involved — that is, the potential of some intrusion essential to resolve concerns that the convention is being circumvented — this step is both reasonable and prudent. There are some who have objected that the "open invitations" approach is unfair because it may place a greater burden on some States than on others. No imbalance is either contemplated or desired. The United States delegation is ready to work with others to ensure that the "open invitation" approach applies fairly to differing economic and political systems. Without this or a comparable measure, no State can

rest in the knowledge that these weapons have been truly banished.

The next article in the United States draft convention, article XI, authorizes ad hoc on-site inspections. Such inspections may be made of all locations that are not covered by article X. A party must consent to an ad hoc inspection requested by the Consultative Committee except for the most exceptional reasons, which must be explained. Upon consideration the Committee may send the party another request, and if this is also refused, the Security Council would immediately be informed.

The convention would also require a number of detailed provisions for its implementation, which we propose to place in annexes to the main text. These annexes would be integral parts of the convention. Accordingly, in addition to the draft convention which was presented last week, the United States also presented its detailed views on the contents of these annexes.

Annex I provides many details concerning the Consultative Committee, including provisions for the working of that Committee. It also contains provisions for the creation of an Executive Council, fact-finding panel, and a technical secretariat, as well as provisions for the convening of special meetings of the Committee.

Annex II provides detailed views on verification. Section A of this annex stipulates the detailed information that would have to be provided in the various declarations required by the convention, such as the declarations concerning chemical weapons, production facilities, and destruction activities. Section B of annex II is concerned with procedures for on-site verification, including inspections. It provides detailed rules for on-site inspections and the use of on-site monitoring equipment, and provides rules to protect the rights of both inspectors and host States. It also provides for the inspection and monitoring of chemical weapons, production facilities, protective activities and destruction activities. Finally, this section stipulates criteria to be used by the Consultative Committee in evaluating requests for ad hoc inspections.

Annex III provides the basis for the three schedules which list the chemicals that have legitimate uses but which also pose a risk of diversion to chemical weapons purposes. In addition, there is a fourth schedule, embodying parts of document CD/CW/WP.30, to specify methods for measuring the toxicity of chemicals.

I also wish to draw attention to two actions which should be taken before the convention can enter into force. First, upon signature, every State should declare whether chemical weapons or production facilities are under its control anywhere or located within its territory. In fact, many States have already made such statements, including the United States. We would urge others to do so as well. Second, there should be a preparatory commission convened once the convention is open for signature to plan for the implementation of the convention, but separate from it.

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USSR/Issraelyan

26.4.84

CW

The latest, I would say, graphic example of this attitude on the part of the United States to arms-limitation and disarmament issues is the broadly-publicized draft convention on the prohibition of chemical weapons submitted by the United States delegation on 18 April 1984. Contrary to all promises, even if there are some changes in the obstructionist position of the United States on a chemical-weapons ban, they are in no way for the better. Previously, in order to bar the conclusion of an agreement on a chemical-weapon ban the United States insisted on a verification system under which other States should at the first request allow foreign inspectors access to any chemical facility regardless of whether or not it has anything to do with the production of chemical weapons. Now Washington proposes that States should agree in advance and unconditionally to unimpeded access of foreign inspectors "anywhere and at any time".

It hardly requires very keen insight to understand that what is involved here is not verification which is really necessary for confidence in strict compliance with agreements, in which, incidentally, the USSR is no less interested than the United States. The main point is the following — putting forward demands on unimpeded access to the territories of other States to continue to block the achievement of agreement on a chemical-weapon ban.

In reality, the United States draft can only throw the negotiations on a chemical-weapons ban many years back. It not only suffers from extremism, it not only cancels the efforts of many years made by many States with a view to elaborating realistic solutions to verification problems, but it is built on a blatantly discriminatory basis, and places States with different social systems in unequal situations. This was also recognized in today's statement by the representative of the United States. Its implementation would inflict damage to the economic and defence interests of a number of States, first of all those of the socialist States, but not only theirs.

Today the representative of the United States referred to the statement of the Soviet delegation of 21 February. I should like to recall what was said in that statement. I quote from the English translation. "In declaring today our readiness in principle to consider in a positive manner the proposal for the permanent presence of the representatives of international control at the special facilities for the destruction of stocks, we would like particularly to stress that our premise is that our partners at negotiations will also for their part prove their readiness, not in words but in deeds, to seek mutually acceptable solutions." And now we have before us the United States draft, which should have taken into account, as we hoped, the viewpoint of the Soviet Union as well, which is very well known to the United States inasmuch as we have been carrying on negotiations with the United States for eight years at least on both a bilateral and multilateral basis.

The question must be asked: Why was it necessary for the United States to put forward such a proposal which is deliberately unacceptable for the Soviet Union and many other States? Incidentally, many high United States officials have said that it is deliberately unacceptable. In fact, they could not expect that agreement could be achieved on the basis of it. No, of course, nobody expected that. And the achievement of an agreement was hardly the goal of the authors of the draft. We are deeply convinced that the draft was submitted merely in order to try to cover by the noisy publicity around the United States draft the reality of what the American administration is engaging in — the intensive preparation of the implementation of the 10 billion dollar "United States chemical rearmament" programme proclaimed by President Reagan.

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UK/Middleton

26.4.84

CW,CTB

The tabling last week of the draft convention on the prohibition of chemical weapons by the Vice-President of the United States, Mr. George Bush, was an event of the highest significance. The British Government warmly supports this latest initiative by the United States, which will mark a milestone on the long path towards a total ban on these appalling weapons. My Government shares the United States view that strict verification is needed to assure all States that the prohibitions of any future convention are being observed. My delegation was glad to note from the statement of 18 April by the distinguished representative of the Soviet Union that his delegation was prepared to agree, in negotiations on this subject, to a whole range of different verification methods, including mandatory systematic or permanent international on-site inspection, as well as inspections by challenge. My delegation believes that a combination of these two types of verification will be needed, both to give confidence that all chemical

weapons stocks and production facilities are destroyed; and, on a permanent basis, to give confidence that they are not clandestinely restored or created. We hope that the United States draft, by virtue of its comprehensive character and wealth of ideas, will provide a major impetus to our work in spite of the negative reactions that we have heard from certain delegations this morning. The complex nature of the proposals, indeed of the subject itself, hardly needs stressing, but we continue to hope that all delegations to this Conference will give the draft most careful study in the weeks to come and will return, as my delegation intends to do, ready to undertake detailed negotiations.

Our problems with the formation of an ad hoc committee on the nuclear test ban are somewhat different. We know what needs to be done but we also know what fundamental differences of view exist on certain aspects of the problem. We do not believe that these differences can be resolved simply by entering into negotiations; nor can we pretend, as some do, that these differences do not exist. These difficulties will not be solved by selective quotation from reports of earlier negotiations or reliance on supposed authorities outside this Conference. It is right, in our view, that the Conference should, on a multilateral basis, try to establish basic common ground before negotiations are started. As Mr. Luce said on 14 February, "It would do no one any service to pretend that we can begin to negotiate the language of a treaty when we remain so far apart on basic principles". We remain ready to participate actively in an ad hoc committee, in the hope of resolving these difficulties.

A brighter note was struck in March with the submission of the Third Report of the Ad Hoc Group of Scientific Experts which my delegation joins others in welcoming. My delegation supports and will contribute to further work by the Ad Hoc Group of Scientific Experts and would like to pay particular tribute to the work of the Chairman of the Group, Dr. Ola Dahlman, and of the Scientific Secretary, Dr. Frode Ringdal. The contributions of Norway and other non-member States of the Conference on Disarmament have added greatly to the value of the work of the Ad Hoc Group.

The Ad Hoc Group of Scientific Experts has done valuable work but we think it oversimplifying the matter to state that the Ad Hoc Group has "clarified all relevant questions". We see implicit in the report the considerable difficulties which remain even in data exchange. There is a substantial task before us in achieving greater compatibility in technical skills between different national seismic centres. There is a need for the installation of modern systems in participating seismograph stations and for the establishment of more high quality stations in the Southern Hemisphere. Improvements in this direction will only be possible if the States concerned are ready to take the necessary steps. There still exist differences of view as to the degree to which Level II data should be made available. And we must not forget that the work of the Ad Hoc Group of Scientific Experts is concerned only with data exchange; it does not answer directly important questions relating to the detection and identification of nuclear explosions.

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FRG/Wegener

26.4.84

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In this context it is important that the United States views on verification and especially its new concept concerning special and on-challenge verification be taken at face value. The provisions on open-invitation mandatory inspections for verifying compliance demonstrate an unprecedented measure of audacity. Delegations that evaluate the proposal in this respect should not only look at what the United States demands from others but what they are prepared to give themselves. Openness is offered on the basis of reciprocity. It is a new phenomenon that a significant military Power is prepared to

pay such a high price in order to ensure compliance with a disarmament convention. My delegation is impressed with the readiness of the United States delegation to join in a mutual obligation to open for international inspection a substantial segment of its sensitive military installations. Whatever the final outcome of negotiations will be, we should look at this offer as a strength of the United States approach, and my delegation would advise that all delegations remain mindful of the political dimension of this open invitation philosophy. It provides for a far-sighted, indeed unique approach aiming at changing the way Governments deal with each other in an important field of national security. This new concept contrasts favourably with certain antiquated views pretending that mystification and excessive secrecy are the nucleus of States' sovereignty. This new creative approach deserves a thorough discussion and my delegation would wish that all delegations engage in such endeavour in good faith.

As far as we are concerned, we are prepared to accept the challenge that the United States draft contains. The forthcoming intersessional period will offer all of us the advantage to study more carefully certain provisions which on first sight appear at variance with views our respective delegations have taken in previous negotiations.

My own delegation has submitted several working papers on the question of verification, the latest, document CD/326, already couched in formal language, such as the drafting of the future treaty will require. We have always looked for a comprehensive and mutually balanced international verification system where levels of intrusiveness and inspection efforts would be carefully dosed and measured by the sole criterion of efficiency. From this vantage point, the detailed verification provisions of the United States draft deserve a generally positive assessment.

The destruction of chemical weapons is, from the position of a Central European country, a goal of foremost urgency. The mechanism for a verified destruction of stocks should, however, not be complicated in a way that is not called for by the purposes of the Convention. In this respect we shall have to study thoroughly and with some hesitation those parts of the United States proposal that deal with the verification of the initial declarations. I have already referred to the statement by the Soviet delegation of 21 February 1984 with regard to verification of destruction of stockpiles. This is an area where a consensus in principle appears now within reach. My delegation is cautiously optimistic that we shall find negotiated answers to the more detailed problems of verification of destruction of stocks.

We are equally concerned that the mechanisms envisaged for the verification of nonproduction, as laid out in the United States draft, should not entail unnecessary burdens for the civilian chemical industry. In the Federal Republic of Germany, the chemical industry is an important pillar of our over-all economic performance. It is therefore a legitimate consideration to seek to avoid intrusive measures that would not directly raise the level of effectiveness of verification. Our joint endeavours should be directed towards establishing a correct balance between two contrasting principles: the first, that the convention should function and international verification be effective; the other that the restrictions imposed by the convention upon the performance of chemical industry must not lead to excessive constraints and burdensome, costly controls. On the basis of our strong general endorsement for the relevant provisions of the United States draft concerning the verification of non-production on a selective and random basis, many of the details will have to be sorted out in an earnest endeavour.

The distinguished Deputy Foreign Minister of Iran has today forcefully reminded us that our negotiations on a permanent ban on chemical weapons are not conducted in a vacuum, but that the production and use of chemical weapons is a grim reality of our time, in his region as in others. The Federal Government has taken note with utmost concern of the report of the experts who went to Iran at the request of the Secretary-General of the United Nations in order to investigate the alleged use of chemical agents

in the war between Iran and Iraq. On the basis of this report it must be assumed that one side to the conflict has indeed used chemical weapons. The Federal Government has stated its position on these occurrences publicly, and in an unequivocal manner. It regrets and condemns the use of chemical weapons as a clear violation of the Geneva Protocol of 1925 which prohibits the use of such weapons in war. The findings of the United Nations mission underline, once more, the vital importance of the early conclusion of a comprehensive world-wide and reliably verifiable ban on all chemical weapons.

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Czechoslovakia/Vejvoda

26.4.84

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I would therefore limit myself now to reiterating the deep regret of my delegation that the important proposal concerning the verification of the destruction of chemical-weapon stockpiles, introduced by Ambassador Issraelyan on 21 February has not been matched by a similar move on the part of western countries, especially the United States. Its draft convention, introduced on 18 April, failed to bring about such a constructive step. Moreover, while not moving an inch towards the positions of other countries, the draft raised new unfounded requirements especially in the field of verification. The authors of the concept of "open invitation" not only realized but undoubtedly proceeded from its obvious unacceptability for many countries. It is politically naive to assume that States would be seriously prepared to open, on 24-hours notice, all their military installations, including those of strategic significance, to international inspectors looking at random for "hidden" chemical weapons. We believe that this fully applies also to the United States itself.

The United States draft convention is also somehow behind what has been achieved so far in the Conference on Disarmament. For example, the definition of "toxic chemical" used is scientifically unacceptable, using the term "chemical action" which is unknown to toxicologists throughout the world. The definition of precursors is related only to production which does not imply its use as component of binary or multicomponent weapon technology. We also miss a definition of key precursor. Instead one can only find an incomplete and arbitrary list of such compounds scattered in schedules A and C.

The concept of lists without definitions and the effort to relate various measures only to lists, as reflected also in the article dealing with permitted activities, is unacceptable for my delegation. We are convinced that at the time of signing the Convention, there must be a clear and binding line, which can be drawn only by means of definitions which are scientifically based, delimited by the purpose-criterion limited and concisely elaborated.

Binary chemical weapons have traditionally been a taboo subject in the United States newspapers. But it is still surprising that they are still ignored even in a comprehensive draft convention. At least in this regard, the United States draft is "consistent". This is very much apparent from schedule A, where the most dangerous chemicals are said to be summarized. We maintain that such a schedule should contain also all key precursors of super-toxic lethal chemicals, which, in the United States draft, it does not. For instance, the key precursor of the most toxic contemporary super-toxic lethal nerve agent forming a substantive part of the United States chemical arsenal, VX, that is, O-ethyl O-2-diisopropylaminoethyl methylphosphinite, has been "forgotten".

The draft convention is also lacking in its undifferentiated approach to destruction, with no schedule of destruction according to the danger of particular elements of chemical weapons aimed at avoiding one-sided military advantage during the destruction period.

With regard to old chemical weapons, this proposal conserves also the anachronistic

and unreasonable view, which is unacceptable for small countries not possessing chemical weapons and having therefore no destruction facilities. Such countries (and they will form the majority of States parties to the future convention) need to have the right to address other States parties and the Consultative Committee in seeking know-how and/or assistance for the safe destruction of rarely-found old individual chemical weapons, rather than being submitted to verification concerning whether some kilograms of toxic material were really destroyed or illusory transferred to non-existing chemical arsenals. Besides, a number of delegations, including mine, have serious reservations with regard to a description in initial declarations of the exact locations of chemical weapons.

CD/PV.262

pp.45-46

India/Dubey

26.4.84

OS,ASAT

In an article in "Le Monde" of 27 March 1984, the French journalist Michel Tatu has quoted Mr. Keyworth, Scientific Adviser to the White House and a supporter of the new ABM system, as having said: "It is difficult to have stability under conditions of parity". From there to say that the programme for developing ABM system will permit the establishment of a superiority is but small step. On the other hand, when an exhortation for developing the new weapons system was given at the highest level by the United States Government early last year, the response of the USSR, again at the highest level, was: "All attempts at achieving military superiority over the USSR are futile. The Soviet Union will never allow them to succeed". The net result is going to be, as in the case of the nuclear-arms race, neither superiority nor parity, but a new level of escalation of the arms race, both in outer space and on Earth, with all the grave implications which I have tried to outline.

A key question before this Conference is: Are these weapons verifiable, and, if not, is it feasible to ban them? The expert opinion on whether the control or elimination of these weapon systems is verifiable or not is by no means unanimous. For example, the National Council of the Federation of American Scientists has stated in its November 1983 report that "further deployment and testing of USSR's ASAT system will be easily verifiable. If there is a verification problem, it is with the far more sophisticated United States system". On the other hand, some experts have stated that the more sophisticated United States system is easier to verify. Another expert view is that an absolute ban, including the development of ASAT systems, would certainly pose verification problems, but such a ban is not critical. The banning of testing and deployment could really be monitored and will achieve the key objectives of preventing the further development and proliferation of these weapons.

In any event, the way military technology, including that for space-weapon systems, is developing, most of the new weapon systems are likely to become unverifiable sooner or later. According to the expert opinion, the new arms will be based on a technology that has been miniaturized to an extent which will not make them amenable to verification. To develop weapon systems which could beat verification has now become a principal challenge of the nations engaged in the arms race in the mistaken notion of seeking security by this means.

What is going to happen in that event? Will there be no arms limitation or disarmament simply because such measures cannot be verified? In the opinion of my delegation, that will only demonstrate how mistaken this absolute emphasis on verification has been and how this has been used as a pretext for not engaging in serious and genuine negotiations for halting and reversing the nuclear-arms race and now the arms race in outer space.

Earlier this session, in our statement of 21 February, we welcomed the Soviet proposal for on-site inspection of destruction of chemical weapons stocks. At the time, speaking immediately after Ambassador Issraelyan, we said that this Soviet initiative was a most welcome development in the ongoing negotiating process on a ban on chemical weapons, and represented a significant step forward. We also said that we hoped that this Soviet proposal had broader implications. We reaffirm our satisfaction at this Soviet initiative, which we are confident will assist in providing impetus, along with the recently-tabled United States draft on a chemical weapons ban, to our negotiations on this subject.

The unpalatable truth about chemical weapons is that restraint in their use in many cases has been motivated more by fear of retaliation than by legal considerations. Whatever one's legal position may be about the universality of the legal principles embodied in the Geneva Protocol of 1925, we must assume that there is sufficient general agreement on the need for the banning of the development, production, stock-piling, retention, transfer and use of chemical weapons that there is a realistic prospect for agreement. Similarly, however, it is our view that there must be acceptance of the principle that unless there is adequate assurance of verification of compliance with the terms of the Convention by all parties, States will be extremely fearful of giving up their deterrent.

Many are still studying the United States draft treaty submitted by Vice-President Bush last week; many are also awaiting further elaboration of the Soviet position on on-site inspection of the destruction of chemical-weapon stocks. The test is now whether these two related proposals will give the needed impetus to the negotiation — and, we trust, general acceptance — of the essential agreement we are pursuing.

The United States proposal is, as already pointed out, the most comprehensive and, not surprisingly, the most detailed. Like the USSR approach, it also embodies a bold step forward on the path we all wish to follow. With respect to the United States proposal, we should recognize this initiative as a genuine attempt on the part of a super-Power to bring about disarmament on chemical weapons. Whatever the reaction to the specific provisions, the draft treaty must be recognized as a development of major importance. While there are stipulations, particularly in the compliance aspects of the treaty, which may be viewed as stringent, nevertheless, these provisions are intended as mutually applicable, indeed generally applicable. By including them in the draft, the United States has signalled, in advance, its willingness to comply. It is fundamental, in our view, to recognize at the outset of our negotiations on treaty language that the alternative to effective verification is either complete trust or continuing reliance on a State's own capabilities; the former is perhaps the ideal, but is unfortunately unrealistic; the latter is the reverse of the ideal, and it is obviously undesirable. Clearly, only very stringent verification measures would motivate States to put their faith — and their national security — in treaty provisions rather than self-help. This is an apparent truism, but one which warrants most careful consideration. Stringent verification provisions may be not only our best alternative to self-help, with all the attendant horrors, but the only alternative.

If a CTB cannot be achieved at one stroke, we should make an in-depth study on a second-best measure, namely, a step-by-step formula, under which underground nuclear test explosions of a yield now considered technically verifiable on a multinational basis

will be taken as the threshold, an agreement will be reached on banning test explosions overstepping this threshold and then the threshold will be lowered by improving the verification capability itself.

Needless to say, the objective of this proposal is nothing but the acceleration of the process for a CTB, in view of the fact that no substantial progress has been made toward that goal over a long period. Therefore, in addition to improvement of technical verification capability, it should naturally be accompanied by a search for a means by which effective verification and inspection, based on trust among States, is made possible. I honestly believe that, in the present situation, this formula is the most realistic option left to us and I earnestly hope that it will open a way for an early realization of a CTB. I also take this opportunity to assure all of you that Japan is prepared to make available even further our advanced technology of seismic detection to increase the verification capability in this field, when such an approach has been accepted.

CD/PV.263

pp.21-22

France/de la Gorce

12.6.84

OS

It is already unrealistic even now, and it would not necessarily be desirable, to fix as the objective the complete demilitarization of space. It is, however, desirable and possible to achieve undertakings that would have the following features:

They would be limited, having as their objective the forestalling of destabilizing military developments without affecting the military activities that contribute to strategic stability and those that can be of assistance in the monitoring of disarmament agreements, account being taken of the joint nature of certain civil and military uses of space;

They would be progressive, with a view to limiting as a matter of priority those developments that would be likely to create a state of affairs that would be irreversible because it would not lend itself to subsequent verification;

Finally, they would be verifiable; all States must feel confident of respect for the application of such limitations and none must find itself in a position to benefit from a violation or the evasion of the agreed limits. There is a need to this end for the rapid initiation of an effort at international consultation covering the following points:

(1) The very strict limitation of anti-satellite systems, including in particular the prohibition of all such systems capable of hitting satellites in high orbit, the preservation of which is the most important from the point of view of strategic balance;

(2) The prohibition, for a renewable period of five years, of the deployment on the ground, in the atmosphere or in space of beam-weapon systems capable of destroying ballistic missiles or satellites at great distances and, as the corollary to this, the banning of the corresponding tests;

(3) The strengthening of the present system of declaration as established by the Convention of 14 June 1975 on the registration of space objects, with each State or launching agency undertaking to provide more detailed information on the specifications and purposes of objects launched so as to improve the possibility of verification;

(4) A pledge by the United States and the USSR to extend to the satellites of third countries the provisions concerning the immunity of certain space objects on which they have reached bilateral agreement between themselves.

The action proposed by the French Government therefore aims to preserve the great prospects for progress held out to the international community by the Peaceful use of outer space. It also seeks to preserve in the actual military sphere the observation, communication and monitoring tools that contribute to stability and, as a result, to security and peace.

During the spring part of this year's session of the Conference important new contributions were made. I should like to recall inter alia the statement by the Soviet Union on some aspects of verification, the documents submitted by delegations, notably of the Federal Republic of Germany, United Kingdom, China, the Netherlands, Yugoslavia, as well as the draft convention presented by the delegation of the United States in April. The proposals made by you, Mr. President, in your capacity as Chairman of the Ad Hoc Committee on Chemical Weapons, and by the Chairman of the three Working Groups equally deserve appreciation.

One of the most difficult problems in negotiations on banning chemical weapons has been verification. Many delegations have focussed on this crucial question in their contributions. Finland on her part has endeavoured to contribute to the advancement of the negotiations by initiating in 1973 a project on technical aspects of verification. Our work has concentrated on the creation of an analytical capacity for verification on chemical warfare agents. The goal of the work has been to develop procedures which could be internationally applied when a comprehensive treaty is concluded. Our purpose has been to accumulate knowledge on and develop modern analytical procedures with the potential of providing technical means for verification. We hope such work could contribute to the progress of the negotiations in the Conference on Disarmament or at least be useful once a treaty has been concluded.

Starting in 1973 from a general review of suitable methods and techniques, the work of the Finnish project advanced towards a more systematic phase comprising development and application of selected technical procedures, establishment of a data bank and building up of reference and standard compound collections. During its ten years of existence, the Finnish project has developed detailed procedures for systematic identification of nerve agents, their precursors and degradation products as well as of potential non-phosphorus agents. Methods of sampling and the trace analysis of nerve agents from environmental samples have been elaborated. The results of the work have been published and submitted in seven working documents to the Conference on Disarmament, beginning in 1977. The list of these documents appears at the beginning of document CD/505.

The document now submitted by the Finnish delegation aims at being simultaneously a summary of previous work and a concise description of the present state of the methodology of the Finnish project. The objective of the report is to evaluate the potential of existing technical means for verification tasks requiring chemical expertise. The report is not meant to be a proposal for future verification procedures, but an evaluation of the technical means of handling possible verification tasks, presented for the purpose of advancing discussion. Furthermore, the report is not a collection of detailed analysis of procedures but a general description of the application of different technical means to selected verification tasks. The purpose is to provide a picture of all the analytical methods needed for the completion of each of the tasks. In order to meet a wide range of verification tasks a number of analytical methods have been developed and described.

Chapter 2 of document CD/505 discusses the possible verification tasks which might be required in the future Convention, in the context of destruction of stocks of chemical weapons, prohibition of production and development and verification of alleged use of chemical weapons. In chapter 3 the different verification ranges — on-site, near-site and off-site — are discussed. Chapter 4 presents a summary of the technical means for verification of chemical agents which can be utilized by both national and international organizations to collect information on compliance with the Convention. Automatic monitoring, sample collection and methods for analysis in two types of

laboratories, a so-called central laboratory and a mobile field laboratory, are discussed in detail in chapters 5 to 8.

In chapter 9 it has been assumed that verification tasks could be handled with different combinations of automatic monitors and laboratory analysis. Whenever possible, use of tamper-free automatic monitors of the "black box" type is preferred. For control of the destruction of stocks and of production facilities, these monitors could be used in combination with inspections carried out by qualified inspectors capable of doing field tests and of collecting representative samples for scientific analysis and identifications of prohibited compounds. Samples can be analysed either in a mobile field laboratory or in a central laboratory.

The most demanding analytical task is obviously met when only a small amount of a previously unknown agent is found in a complex environment, such as soil, possibly in an advanced state of decomposition. Two aspects of this general problem are discussed in chapter 11.

This publication, CD/505, completes a cycle of work on systematic identification of chemical warfare agents. The Finnish project will now concentrate on two areas: first, on the development of instruments with better performance in order to meet the requirements of very fast progress in the field of instrumental analysis, and second, on the special requirements of verification of a comprehensive chemical weapons ban, particularly on developing selected monitors with very long time recording capability. The selection of future priorities will of course depend not only on the findings of the project but also on the progress of the negotiations on a comprehensive chemical weapons ban in the Conference on Disarmament.

CD/PV.267 pp.8-10

Norway/Huslid

26.6.84 CW,CTB

The Norwegian research programme on sampling and analysis of chemical warfare agents under winter conditions, which was initiated in 1981, is already known to the Conference through documents CD/311 and CD/396, and two previous research reports.

Working Paper CD/508, which I have the honour to present today, outlines the results of, and the conclusions which can be drawn from, the third part of the research programme, which was carried out during last winter. The research report itself is circulated as an annex to document CD/509.

I would like to underline that our research programme is based on experiments carried out under field conditions. This implies that samples of chemical agents are kept outdoors to deteriorate by exposure to the prevailing weather conditions, such as wind, changing temperature and snowfall. By doing this we have wanted to make sure that our findings have as realistic a basis as possible and that they are of direct relevance to the verification mechanisms to be agreed upon in a future chemical weapons convention.

During the winter 1983/1984 the investigations were extended to examine in depth those chemical warfare agents which are particularly unstable, and where verification may be a problem within a four-week timeframe. This period, we believe, is a reasonable time for an international inspection team to be organized and sent to select samples from an alleged contaminated area. Those agents are the so-called G-nerve agent such as sarin and soman and the blister agent mustard. In order to increase the possibility of definite verification of the two unstable nerve agents sarin and soman, we included analysis of their decomposition products and also the two main impurities formed during their production. In addition, we studied the effect of droplet size and carried out several experiments under different climatic conditions with the three warfare agents. The three research reports presented to CD so far contain, therefore, detailed information on several different factors which will influence the possibility of verification of

use of chemical agents, namely: penetration in snow, coverage of snowfall, temperature, wind speed, droplet size and interference from battlefield background.

Experiments carried out last year showed that temperature was a very important factor as regards the possibility of verification under winter conditions. Low temperatures increased greatly the possibility of obtaining positive verification of the three unstable agents, whereas temperatures close to zero led to rapid deterioration of the samples. In the latter case verification by means of decomposition products or production by-products proved most important and greatly facilitated the verification efforts. It should also be mentioned that as regards mustard gas, verification was made easier the larger the droplet size.

The experiments carried out so far prove that use of selective and sensitive analytical methods make it possible to verify use of a number of agents — which are specified in the research report and in the Working Paper — well beyond four weeks.

During the winter 1983/84 a new line of investigation was also initiated in order to gain practical experience in the problems of sample collection, sample preparation and transportation of samples. The first experiment took place 100 km from the main laboratory, whereas a second test took place 1,400 km from the laboratory. The results from these experiments seem to be interesting and highly relevant to the role which the Consultative Committee and its subsidiary bodies may be called upon to perform within a future convention.

The results show that with regard to effects there are large differences between the different methods of preparing the samples for transportation. Without any special effort to preserve the samples the unstable agent will deteriorate within 24 hours. As an example I can mention that from samples of mustard gas only 2-9 per cent was left after 24 hours of transport without any precaution. It is clear that this finding has a very significant bearing on the future procedures to be selected for sampling and transport of any agent. A good method was shown to be extraction of the snow samples with an organic solvent. Furthermore, I should like to emphasize that extraction of samples was found possible even with simple equipment and under improvised field conditions. This is a consideration that must be given due emphasis in this respect.

I hope that the conclusions of the Norwegian research programme so far, as described in documents CD/508 and CD/509, can be of use for the work of the Conference on Disarmament, including its Ad Hoc Committee on Chemical Weapons. As I have already stated, our main focus has been to assist the Conference as regards the elaboration of the role of the Consultative Committee and its subsidiary bodies within the framework of a chemical weapons convention.

The third Norwegian document which I have the honour to introduce today is Working Paper CD/507, which deals with seismic verification of a comprehensive nuclear test ban. This document is a follow-up of previous Norwegian contributions to the Ad Hoc Working Group on a Nuclear Test Ban in 1982 and 1983 and to the Ad Hoc Group of Scientific Experts since its establishment in 1976.

It is regrettable that an ad hoc committee on a nuclear test ban has not yet been established. Further progress toward a comprehensive test ban is now highly desirable, also in view of the third review conference for the Non-Proliferation Treaty in 1985.

Within the field of seismic verification of a nuclear test ban, the third report of March this year of the Group of Scientific Experts represents a very important step forward. In addition, the planned exchange and analysis of so-called Level I data by making use of the World Meteorological Organization's network can further promote the work in this field.

In this connection the Norwegian delegation has noted with interest the statement made by the distinguished representative of the Union of Soviet Socialist Republics, Ambassador Victor Issraelyan, on 18 April, when he said: "The Soviet Union would be

ready to consider the possibility of organizing, as has been proposed by Sweden, the exchange of data on the radioactivity of air masses with the establishment of appropriate international data centres on the same basis as is envisaged in respect of the seismic data exchange". This and other statements suggest to us that there is now broad support in principle for this proposal which, if implemented, would further strengthen a future nuclear test ban treaty.

Document CD/507 describes the results of recent research at the Norwegian Seismic Array (NORSAR), which is one of the world's largest seismological observatories and which has recorded high-quality seismic data in digital form for about 70,000 earthquakes and more than 500 presumed nuclear explosions since 1970. A monthly summary of recorded seismic events is regularly distributed to seismological agencies in 25 countries. I would like to stress that all data and research results from NORSAR are openly available to the world's seismological community.

As described in document CD/507, NORSAR has currently under construction a new experimental small-aperture array named NORESS, which will be operational in the autumn of 1984. In contrast to existing arrays, which are primarily designed to achieve optimum performance for seismic events in the range of 3,000-10,000 km, the purpose of NORESS is to develop methods for detection and location of seismic events at so-called local and regional distances, which are distances of less than 3,000 km. Stations of this type would be of particular importance in detecting and locating events too weak to be observed at distances beyond 3,000 km. Work of this nature could have important implications for improved detection of weak seismic events as well as for seismic source identification. As the verification issues have proved to be the main problem in connection with a comprehensive test ban, we believe that further development in this field will have positive effects on the possibilities to make progress towards a comprehensive test ban. In this respect the exchange of seismic waveform data or so-called Level II data is of special importance as well.

Norway will continue her research in the field of both selection, handling, transportation and analysis of chemical agents and seismic verification of a comprehensive nuclear test ban with a view to contributing further to the work of the Conference on Disarmament. Norway devotes considerable resources in these two fields, first and foremost because of the urgency of the questions of a total ban on chemical weapons and a comprehensive nuclear test ban. The Conference on Disarmament, as the only negotiating body for global disarmament questions has a decisive role to play in order to bring about progress in both of these vital fields.

CD/PV.268

pp.8-9

USA/Fields

5.7.84

CW

The problem with permitted uses of toxic chemicals is that they pose a potential for misuse and a corresponding problem for verification. We all want peaceful uses of chemicals to continue, but none of us wants such activities to be used for clandestine chemical weapons production. This is a very serious problem, since many chemicals that are used in industry can also be effectively used in chemical warfare. Thus, we recognize that a certain degree of regulation of permitted activities will be necessary in any convention banning chemical weapons. The United States proposal for such regulations, and their implementation, is presented in article III and annex III of our draft convention. In paragraph 1 of article III we propose that a party may only possess or use chemicals for permitted activities in types and quantities consistent with such purposes. Thus, if anyone, whether linked to the government or not, purports to be engaged in permitted activities but possesses chemicals inappropriate to that activity or in amounts in excess of that legitimately needed for the activity, then that would be a violation of

the convention.

Moreover, although any chemical may be used for one or more permitted purposes, there are some specific chemicals which pose special risks for diversion to chemical weapons purposes, and we believe that these chemicals must be subject to particular regulation, depending on the degree of risk they pose and the degree to which they are used in industry. To this end, Annex III presents three schedules of chemicals that are subject to special regulation if they are used for permitted purposes.

First, there are some chemicals — for example, super-toxic lethal nerve gases — that are extremely dangerous, but also have limited applications for research, medical, or protective purposes. These chemicals are listed in Schedule A. Paragraph 3 of article III proposes that the production and use of such chemicals shall be in "laboratory quantities", that is, a few kilograms. In other words, no large-scale commercial uses of such chemicals would be allowed.

Second, there are other chemicals, such as hydrogen cyanide and phosgene, which are used for permitted purposes in large quantities, yet which also pose a particular risk for diversion to chemical weapons purposes. This category includes both precursors and toxic chemicals. These chemicals are listed in Schedule B. The United States believes that each party should be required to make annual reports concerning the production and use of such chemicals. Because of the large-scale production and widespread use of these chemicals, more stringent verification measures, such as on-site inspection, would not increase confidence in compliance.

Finally, there are some chemicals which are used for permitted purposes that are not as widely used as those listed in Schedule B, and which pose a greater risk of diversion to chemical weapons purposes. These chemicals are listed in Schedule C. They are largely "key precursors", although some toxic chemicals should also be included. The United States proposes not only that production and use of such chemicals be declared, but also that their production should be subject to systematic international on-site inspection on the basis of random selection of facilities. Our approach in this area is based on earlier proposals by the delegations of the United Kingdom and the Federal Republic of Germany.

But the list of activities that should be permitted does not stop with these peaceful uses that I have discussed thus far. We believe that any convention must also have provisions, such as those in articles II and III of the United States draft, which allow the use of certain chemicals for "protective purposes". "Protective purposes" are defined as a subset of "permitted purposes"; they are purposes directly related to protection against chemical weapons, rather than directly related to the weapons themselves. For example, while a party may not produce mustard gas so as to be able to engage in chemical warfare, it may produce a small amount of mustard gas necessary to test clothing designed to protect its troops from chemical attack.

Obviously, to prevent a party from using the "protective purposes" exception to maintain an inherent chemical weapons production capability, the amount of chemicals that a party may have for "protective purposes" must be carefully regulated. This is true for all toxic chemicals, but especially for super-toxic lethal chemicals and their precursors. Paragraph 2 of article III of the United States draft provides for such detailed limitations. Specifically, the amount of super-toxic lethal chemicals and key precursors that a party may produce or use for these purposes is strictly limited to the amount that can be justified for protective purposes, and in no event may the total amount exceed one ton per year. Once a party has produced or acquired its one ton limit, even if it has used some of that amount, it may not produce or acquire additional chemicals until the following year. If a party chooses to produce super-toxic lethal chemicals or key precursors for protective purposes, such production may only occur at "a single specialized facility"; that is, a single, declared facility of limited capacity.

This facility would be subject to special verification measures. While a party may transfer such chemicals for protective purposes to another party, the amounts of such transfers are limited, and such chemicals may not be transferred to a non-party State or re-transferred to a third State. If a party transfers such chemicals for protective purposes, it must declare these transfers.

Thus, as is clear from paragraph 8 of article II, the United States believes that permitted activities should include those related to peaceful uses of chemicals in our chemical industries and to protective activities. Paragraph 8 also includes as a "permitted purpose" any military purpose that does not make use of the chemical action of a toxic chemical to cause death or injury. This is an important, but relatively technical exception, which permits, for example, the military to use a toxic chemical as a rocket fuel. This provisions would not provide a party with a capability for chemical warfare, since the chemicals involved are not suitable for this purpose.

CD/PV.270

pp.19-20

USA/Fields

5.7.84

CW

The information contained in the declarations would not only be necessary to help the Consultative Committee in determining which locations and facilities on the territory of a party would be subject to systematic international on-site verification. It would also help specify those facilities and chemical stocks that will have to be destroyed under the provisions of articles V and VI of the draft convention. These articles require a party to destroy all of its chemical weapons and all of its chemical weapons production facilities.

Along with the initial declaration concerning its chemical weapons, a party must submit a detailed plan for their destruction, including the locations and manner of their destruction, schedules of quantities and types of chemical weapons to be destroyed, and the end-products of the destruction process. Pursuant to article V, destruction of chemical weapons must begin not later than 12 months and finish not later than 10 years after the convention enters into force. This destruction process would be subject to systematic international on-site verification, including the continuous presence of inspectors and the continuous monitoring with on-site instruments. In accordance with article V, a party would also be required to make annual reports concerning the implementation of its destruction plan.

Paragraph (1) (E) of article V provides that the destruction of chemical weapons is to be controlled by a time-table contained in annex II. This time-table is not specified in the United States draft and needs to be the topic of negotiations here in the Conference on Disarmament. It is vital that the time-table for the destruction of chemical weapons be such that, during the destruction period, no State can gain a military advantage over another due to the pace of its destruction activities. The negotiation of this time-table will require the consideration of many factors to achieve a fair and balanced result. Because of the importance of this time-table to a party's national security, it is necessary that it be specified before the convention is opened for signature. We cannot delay consideration of this crucial provision of the convention until after entry into force, as some have suggested. I urge delegations to begin to examine this basic issue.

Before leaving this subject of destruction of chemical weapons, I would like to discuss one other issue. Some delegations have urged that diversion of chemicals contained in chemical weapons to permitted purposes be allowed in addition to destruction. The United States has opposed the concept of diversion, primarily because of concerns about how to verify that the items involved are not placed in clandestine chemical weapons stockpiles. Clearly, additional, very intrusive verification measures would be necessary to ensure that such a prohibited action was not taking place. In

view of the concerns expressed by the Soviet Union and others about international on-site verification, the United States chose the approach which would minimize the need for such inspection, that is, to require that all chemical weapons be destroyed. However, the United States delegation is willing to consider any proposals for diversion, as long as these proposals specify in detail what could be diverted and the verification measures that would apply to such diversion. This would enable members of the Conference on Disarmament to determine whether the requirement for effective verification will be satisfied by those proposals.

Article VI of the draft convention requires a party to cease production of chemical weapons immediately and then to destroy its chemical weapons production facilities within 10 years. A party must submit a plan for the destruction of these production facilities that explains the method that will be used to close and destroy the equipment and structures comprising the facility, and that specifies the time periods when each specific production facility will be destroyed. As with chemical weapons, production facilities must be destroyed in accordance with an agreed time-table that ensures that no State will gain a military advantage during the destruction process. This time-table will also have to be negotiated before the convention is opened for signature. The destruction of these facilities would be subject to systematic international on-site verification, and annual reports on the destruction process would be also required.

Pursuant to the definition of chemical weapons production facility in the draft convention, parties would not only be required to destroy facilities that actually produce chemical munitions. Parties would also be required, with one exception, to destroy any facility that was designed, constructed, or used since 1 January 1946 to produce for use in chemical weapons any toxic chemicals or key precursors. The only exception to this broad requirement would be for facilities that in the past produced a toxic chemical listed in schedule B of annex III that was used for chemical weapons purposes.

CD/PV.270

pp.24-25

Argentina/Carasales

5.7.84

VER

We must bear in mind that time is not on our side. It may be worth mentioning a case connected with verification. It is by no means my intention to discuss the need for a satisfactory verification system in any disarmament agreement, even if there are examples where there is no such element. On the contrary, the trust which agreements should generate in this delicate and complex field stems inevitably from the security that they are fully complied with and respected, for which purpose suitable verification is an inescapable requirement.

However, it is frequently asserted that this or that prohibition is currently unverifiable and therefore efforts should not be made in that field. The logical corollary is that we should wait until such verification, which might be termed perfect, is considerable possible. However, who can assure us that over time verification will become easier and not on the contrary more difficult, if not impossible? We are living in a period of dizzying technological progress which can be applied both to the development of new types of weapons and to better methods of detection. It may easily be supposed that the resources available will be greater in the first case than in the second. Will not the day come when the sophistication and miniaturization of destructive devices will make verification an impossible task? Can we remain inactive when our goal is growing more and more remote? Is it not preferable at once to undertake the negotiation of international disarmament instruments, in whose context the search for satisfactory verification systems is possible as well as essential, without indefinite and unproductive delays while awaiting a future, which, it must be foreseen, will never be better and probably will be

worse?

CD/PV.271 p.19 Czechoslovakia/Vejvoda 10.7.84 RW

As for the position of my delegation on the problem, it proceeds from the fact that the prohibition of radiological weapons is a question of a basically different nature than that of the protection of nuclear facilities. These two important problems differ as far as technical nature as well as military and legal background are concerned. Within the prohibition of radiological weapons we shall take into account the possibility of creating concrete weapons in the full sense of the word. They would comprise radioactive material with an optimum half-life of decay, which has to be produced and stored, as well as the necessary munitions, devices and equipment which would also have to be produced and stored. The final weapons could hypothetically be prepared for use, transported and used. All these characteristics render the question of the prohibition of radiological weapons a typical disarmament problem with a possibility for appropriate verification measures.

On the other hand, the prohibition of attacks against nuclear facilities is of a different nature, since it amounts only to a problem of non-use of force against certain objects or installations. Since there is no possibility of applying the same measures of compliance and verification to the prohibition of radiological weapons as well as to the material and technical pre-conditions of a possible attack against nuclear facilities, the latter problem should be treated with a completely different approach.

CD/PV.271 pp.21-23 Australia/Rowe 10.7.84 CW

Thus far we are in agreement. However, the countries of the world need to be assured that the purpose of the convention has been fulfilled, and to this end each stage of the destruction process must be verified.

As we have said the measure of agreement that exists already is quite considerable. This could be extended if thought were given to what may be called the interdependence of all aspects of the destruction of chemical warfare stocks and facilities.

Destruction must be: verifiable; balanced; complete; and it must be carried out in a manner that is visible to the countries of the world.

This will only be possible if declarations and plans for destruction are detailed as to quantity, type, location, etc. Time-tables for destruction cannot be worked out in vacuo but must be based on detailed knowledge of what exists, where it is, and how it will be destroyed.

Provisional plans for destruction will be deposited with the Consultative Committee soon after entry into force. It would seem logical, however, for these plans to be revised by the Consultative Committee, in order to fulfil the requirement for a verifiable, balanced, complete and visible destruction to take place. Thus, States possessing chemical weapons should expect the Consultative Committee or its executive body to revise time-tables, and specify verification procedures. This type of revision will only be possible after entry into force, when all details of stocks and facilities are available to the Consultative Committee.

General principles relating to a phased and balanced destruction can be negotiated and laid down in the convention. However, detailed plans and time-tables must be achieved by consultation between the Consultative Committee and those States which possess chemical weapons. Detailed plans must be based on a detailed knowledge of what is to be destroyed.

The principle of a balanced destruction of stockpiles and production facilities, so as not to afford any State a temporary military advantage, is accepted. However, States not possessing chemical weapons will be to some degree at a military disadvantage until the process of destruction is complete. These States will be interested to ensure that the chemical capacity of States possessing these weapons is reduced as fast as possible. The concept of a balanced destruction of chemical stockpiles between possessor States could be fulfilled if old, obsolete stocks were destroyed first. Such a procedure would, however, be unacceptable to States not possessing such weapons, since the early years of implementation of the convention would involve very little reduction in chemical capability.

The equation for the phased destruction of stockpiles and facilities will be very complex. A prime consideration must be that chemical capability is reduced as rapidly as possible. Thus, operational weapons and operational facilities must be destroyed early in the period of implementation of the convention.

Where obsolete stocks present a hazard to the environment, they should be disposed of expeditiously. It is to be hoped that the destruction of such stocks will not await the entry into force of the convention.

We are aware from Workshops held in the United States and the Federal Republic of Germany, which have made a valuable contribution to the work of this Conference, that such stocks are at present in the process of destruction. It is conceivable that obsolete stocks may be largely destroyed before entry into force. Should this be so, it would reduce the complexity of the equation needed to bring about a phased and balanced reduction in chemical capacity. There is also the obvious corollary that if obsolete stocks are destroyed prior to entry into force, this would substantially reduce the burden of verification.

We must exercise ingenuity in devising effective regimes which produce the minimum degree of intrusion and the minimum effort in terms of manpower. This aim is achievable, but an effective regime must be based on the maximum amount of information possible.

The power of computer techniques is such that it would be possible for an executive subgroup of the Consultative Committee to store all data relevant to the process of destruction. It would then be possible to follow this process, and interrogate on-site computers as appropriate.

Much thought will be required to set up appropriate procedures, which to date we have addressed only in rather general terms. It seems self-evident that verification will be effective and not unduly burdensome if procedures are worked out on as complete a data base as is possible. This will require a maximum frankness and openness in the early stages of the convention. States are accustomed to thinking of national security in terms of protection of information private to the State. In the situation presented by the convention, national security will be best served by full and detailed declarations.

The maintenance of a central computerized data bank would ensure that all States parties can follow the orderly process of destruction. Regular updating by remote sensing techniques, verified by reports from inspection teams, would monitor all stages. The computer-controlled process which we envisage would be similar to that used by manufacturing industry. The techniques are known, and can be adapted to the requirements of the Consultative Committee.

At this point, it may be asked whether the computerized control of the destruction process would obviate the need for continuous on-site inspection. Such an idea would involve a misconception of the capability of computers. Computers are an extension of the human mind, not a substitute for it. They can reduce manpower requirements, and should do so in the situation of verification of destruction. They cannot, however, replace it. In particular, these techniques should reduce anxieties as to compliance, and

therefore reduce the number of challenge inspections. However, the continuous presence of the human intelligence in the form of an inspection team will not be obviated by even the most sophisticated monitoring regime. Verification would be greatly simplified if this style of control were implemented.

In summary, my delegation is suggesting that the process of destruction should be controlled by a centralized computer facility. To be effective this will require that the maximum amount of information regarding stockpiles and facilities be available when the programmes are written.

In conclusion, the Australian delegation wishes to emphasize and recognize that the tasks of monitoring of destruction and the verification of compliance of a convention are extremely complex ones. It is essential that we meet the challenge and seek practical solutions. Our intervention will, we hope, provide a basis for discussion of some aspects of these tasks. We can make progress through constructive dialogue on these and other issues.

CD/PV.271

pp.26-27

Belgium/Depasse

10.7.84 CW,CTB

The problem of verification is obviously a key issue. Here, as elsewhere, as regards verification, a subject which is inherent in all disarmament negotiations, the difficulty is to reconcile the situation of an open society, such as ours, with the situation of a closed society, that of the Eastern countries. We all know that there is virtually no possibility that a serious violation of the convention would not immediately be detected in our Western societies. On the contrary, the secrecy characteristic of the Eastern countries warrants suspecting the worst as much as hoping for the best: however, we must concern ourselves with the worst-case hypothesis. When the security of our States and the freedom of our citizens are at stake, we must be able to guarantee to our peoples that the other party has, without any possible doubt, performed to the letter the obligations it has undertaken, and that the two situations are symmetrical as regards security.

I should like to add here that the quotation which our colleague from Czechoslovakia has just made from General Rogers' statement did not seem to me to be complete. General Rogers, whose statement I read but do not have before my eyes, pointed out that if the negotiations on a chemical-weapons ban failed, it was necessary for the Atlantic Command also to have modern chemical weapons. I do not think that he went beyond that. He adopted the pessimistic hypothesis that our negotiations might fail.

The convention on chemical weapons must therefore have effective verification machinery. Such machinery must operate on two levels. The first is that of systematic on-site international verification: this concerns the entire process of elimination of stocks of chemical weapons and chemical weapon production facilities. It is also necessary, with different modalities, to ensure that chemical weapons are not produced in civilian industry. So far the negotiations have only seriously tackled the question of the verification of the elimination of stocks of chemical weapons. I believe that it is high time that the other two aspects of the problem were also tackled.

The second concerns verification in case of suspicion or complaint by one State party with regard to another. There is no question, in our opinion, of impinging on the national sovereignty of States by providing for a system of verification at will, in which States would have immediately to submit, without argument, to arbitrary checks dreamed up by meddlesome inspectors. It will be necessary to establish objective conditions, time periods, and prior consultations to be specified in the current negotiations. We must also be aware that the final consequence of a refusal of international on-site inspection (a refusal, and therefore a hypothesis, that cannot be ruled out) at the request of the

Consultative Committee following a complaint, could be the denunciation of the treaty. This seems to be the balance of the respective legal obligations.

On these difficult issues, for which greater serenity should prevail in the negotiations, we consider it essential that dialogue be resumed between the two major Powers possessing chemical weapons. We welcomed the offer made by Vice-President Bush for the holding of bilateral consultations on this subject with the Soviet Union.

Belgium believes that bilateral consultations between the Soviet Union and the United States on disarmament are a demonstration of those two States' awareness of their outstanding responsibilities for the maintenance of peace. These negotiations cannot fail to benefit multilateral negotiations, and such bilateral consultations between the Soviet Union and the United States are therefore always to be encouraged, in our opinion.

I have devoted the bulk of this statement to the question of the prohibition of chemical weapons. I should nevertheless like to say a few words concerning the nuclear-test ban, and I am a little saddened and surprised that I am, I believe, the first speaker here to refer to the statement made here on 12 June by Mr. Shintaro Abe, Minister for Foreign Affairs of Japan.

I think that if we are realistic we all know that an agreement on a complete nuclear-test ban cannot be achieved today. The Japanese proposal for the prohibition of underground nuclear tests whose strength exceeds a verifiability threshold could constitute a temporary evolving measure whereby we would gradually draw closer to the ideal objective of a complete ban.

Belgium endorses the motives underlying the Japanese proposal: to pursue the process leading to a complete nuclear test ban, and go beyond the contradiction between verification and prohibition which reminds me of the story of the chicken and the egg.

From the same standpoint, Belgium supports the proposal of its Western partners to set up an ad hoc committee whose terms of reference would enable to consider all aspects of a complete test ban with a view to the negotiation of a treaty on this issue. We believe that in its present wording the draft mandate would make it perfectly possible to consider the Japanese proposal, with all the interest attaching to an initiative put forward by the only State which knows what a nuclear attack signifies, and which has always expressed this knowledge with stunning dignity.

CD/PV.272

pp.12-15

USA/Fields

12.7.84

CW

Mr. President, in my statement today, I will begin my explanation of how the United States draft convention addresses the last of the four major issues involved in a comprehensive and effective chemical weapons ban. This is the vital issue of verification.

Chemical weapons are much too dangerous a means of warfare to permit any uncertainty in an agreement banning these weapons. An agreement with the objective of banning chemical weapons that is not effectively verifiable would be less than worthless. It would, in fact, be dangerous. If such an agreement entered into force, there would be inevitable and continuous concern and uncertainty whether the other parties to the agreement were living up to their commitments. The uncertainties and lack of confidence that would flow from such an agreement would create tensions in the international community and could weaken confidence in other existing and proposed arms control agreements. This situation must and can be avoided.

While acknowledging that effective verification provisions are necessary for a successful chemical weapons ban, we must acknowledge at the same time that negotiation of such effective verification provisions will not be easy. Chemical weapons are not

very different in appearance from conventional munitions, except on close inspection. Also, chemical weapons production facilities are not easily distinguished from peaceful chemical production facilities.

There is already widespread recognition in this Conference that national technical means of verification will not be sufficient to assure confidence in compliance with a chemical weapons ban. This task will require, therefore, a more intrusive means of verification, in particular, on-site measures. The United States has not sought and is not seeking absolute verification. But the United States is seeking those measures that will provide the necessary confidence that the chemical weapons ban is being complied with.

In his speech before this body on 18 April of this year, the Vice-President of the United States, the Honourable George Bush, cited four points with regard to which parties to a convention must be assured that the relevant provisions of the convention are being complied with. Let me cite these four points again: first, that all declared chemical weapons production facilities have been destroyed; second, that all declared chemical weapons have been destroyed; third, that the declared chemical weapons indeed constitute all of the chemical weapons of a party; and fourth, that the declared chemical weapons production facilities are all such facilities possessed by a party. The verification requirements regarding these four points can be described within two broad categories. First, the declared chemical weapons and production facilities — that is, the chemical weapons and production facilities whose existence and location have been declared by a party pursuant to the applicable provisions of the convention — will be subject to systematic international on-site verification. Second, for assurance that undeclared chemical weapons or chemical weapons production facilities do not exist, or that prohibited activities are not occurring, States must rely largely on challenge verification procedures. Today, my statement will focus primarily on the regime of systematic international on-site verification that would be established by the draft convention.

Pursuant to the provisions of the United States draft, chemical weapons would be subject to systematic international on-site verification from the moment they were declared to the moment they were destroyed. A party's declaration would be subject to an initial on-site inspection to confirm the accuracy of the declarations. Then the chemical weapons would be subject to continuous monitoring by on-site instruments and periodic on-site inspections to ensure that they are not removed from their declared locations except to be moved to a declared destruction facility.

At this time I would like to introduce a United States Working Paper on the declaration and monitoring of chemical weapons stockpiles, which my delegation is tabling today. This Working Paper contains a detailed outline of one possible approach for declaring chemical weapons and for monitoring them until they are destroyed, based on the approach contained in the United States draft convention. The Working Paper focuses on types of on-site monitoring devices that could be utilized for this purpose. We hope this Working Paper will stimulate discussion on this important issue in a way that will aid in resolving it as soon as possible.

Because of the danger of diversion and other forms of evasion during the destruction process, the United States has proposed that the actual destruction of chemical weapons be monitored continuously not only by means of on-site instruments but also by the continuous presence of inspectors. Inspectors would always be on hand during destruction operations to monitor the destruction process itself and to ensure that the monitoring instruments were functioning properly. Thus, under the draft convention, chemical weapons would be closely monitored until they ceased to exist.

The types of procedures the United States believes are necessary for the destruction of chemical weapons were described in Working Paper CD/387, tabled by my delegation on 6 July 1983. These procedures were demonstrated during the Workshop which was held at Tooele army depot in Utah in November 1983. The briefings presented to the

Workshop were distributed to the Conference as Working Paper CD/424 on 20 January 1984.

While still on this subject, I would like to refer to the Soviet statement made on 21 February that the Soviet Union is willing to accept the continuous stationing of international inspection teams at locations where certain types of chemical weapons are being destroyed. We welcome the explanation of this Soviet proposal that is contained in document CD/CW/WP.78, dated 2 April 1984. We would like to ask the Soviet delegation to clarify two points in regard to its proposal. First, would the continuous presence of inspectors during the destruction of chemical weapons be supplemented by continuous monitoring with instruments? Second, under the Soviet proposal, would continuous presence of inspectors be limited only to the destruction of super-toxic lethal chemicals and their corresponding munitions and devices? We look forward to receiving answers to these two important questions.

In our draft convention, the facilities for producing chemical weapons would also be subject to systematic international on-site verification from the moment their location is declared until they are destroyed. This verification will ensure that the production facility ceases to produce chemical weapons and that it is eventually destroyed. During the initial inspection after declaration, the international inspectors will prepare an inventory of key equipment at the chemical weapons production facility. When the facility is destroyed, the inspectors will make sure that this key equipment is also destroyed. Unlike the destruction of chemical weapons, inspectors need not be continuously on site during the destruction of chemical weapons production facilities. However, on-site instruments will have to monitor the plant continuously to ensure that the facility remains inoperative during the destruction process. Of course, inspectors will be permitted to visit the facility periodically during the destruction process.

In addition to chemical weapons and their production facilities, systematic international on-site verification would be applied to other facilities that are designated in the draft convention. The single specialized production facility envisioned by the draft convention for producing super-toxic lethal chemicals and key precursors for protective purposes would be subject to on-site verification, consisting of both on-site sensors and inspectors. Also, facilities producing the chemicals listed on Schedule C would be subject to periodic on-site verification based on a random selection of facilities. The purpose of these inspections is to ensure that the chemicals produced by these facilities are not being diverted to chemical weapons purposes.

Mr. President, the issue of which verification measures are to be applied to chemicals of types listed on Schedule C and those produced by the single specialized production facility is one of the important unresolved verification issues. The United States and Western delegations have proposed methods for verifying that such chemicals are not being used in a manner prohibited by the draft convention. However, other delegations have neither responded to these proposals in detail nor made their own comprehensive proposals on how to deal with such chemicals. This issue of verification of "non-production" can be resolved only if these delegations actively participate in exchanges of views on this important matter, so that a mutually acceptable solution can be negotiated in this body. I hope those delegations will soon make their positions known on this important issue.

There are a great many detailed, technical provisions that need to be negotiated in order to implement systematic international on-site verification. Annex II of the United States draft convention contains an outline of the verification regime. For example, to ensure that inspectors can effectively perform their functions, they need to be granted specific privileges and immunities. Inspectors should be granted entry visas promptly. Although a party subject to an inspection has the right to have its representatives accompany the inspection team, these representatives must be ready to accompany the

inspectors immediately. The international inspectors should not be delayed because the host party claims its representatives are temporarily unavailable. Also, no bureaucratic constraints — for example, the need for approval by the host party for inspectors to travel to the location to be inspected — should be allowed to delay the inspectors. Of course, the inspections themselves should be carried out in such a way as to avoid hampering the economic and technical activities of a party and to be consistent with the safe operation of the inspected location. Many other details will have to be worked out between the Executive Council of the Consultative Committee and the party that will be inspected. For example, they will need to agree on subsidiary arrangements that specify in detail how on-site verification will be applied to each location subject to such verification.

These proposals for procedures to implement systematic international on-site verification represent what the United States believes is necessary for the successful operation of this verification regime. They are subject to further modification, elaboration, and refinement. We hope other countries will have their own ideas on this subject and will put them before the Conference on Disarmament for consideration. We look forward to developing the contents of this part of Annex II in conjunction with our colleagues in the Conference on Disarmament.

The regime of systematic international on-site verification that I have outlined today is designed to ensure that declared chemical weapons and their production facilities are destroyed and that prohibited activities do not take place at other declared locations and facilities. We believe that this regime is both comprehensive and effective, certainly as it applied to those declared locations and facilities. However, the regime I have outlined today is inadequate by itself to provide the necessary assurance of compliance required for an agreement banning chemical weapons. It must be complemented by an effective challenge inspection system. In another statement, I will examine the challenge inspection provisions that the United States believes are necessary for a comprehensive and effective ban on chemical weapons.

CD/PV.272

pp.16-19

UK/Cromartie

12.7.84

CW

My Government have considered the text of document CD/500 with great care. It is our firm view that its approach, particularly on verification, points to the direction in which we must go, if we are to find the means to assure full compliance. My delegation therefore stands ready to proceed with others along the path identified by document CD/500. Just as the United States delegation has already indicated its readiness to consider alternative approaches, we too shall be flexible; we shall try to be imaginative, where imagination is required. In our view, effective compliance can be achieved, if there exists the political will to agree to a solution guaranteeing it.

There is a broad consensus among all delegations round this table about what needs to be prohibited. But we all need to work together to develop provisions that will create confidence that all parties are fulfilling their obligations under the convention. This confidence is needed to make it possible for governments to sign and parliaments to ratify the convention, and to give it stability after its entry into force. The need for provisions to create confidence that all parties are fulfilling their obligations is increased by the nature of the chemical weapons themselves. Some of those which have actually been used in past conflicts are based on simple chemical substances, which are not difficult to make, and in some cases are made and used on a substantial scale for legitimate civil purposes, with which none of us intends, or, indeed, would wish to interfere. Even the super-toxic nerve agents can be made from fairly readily accessible materials of simple chemical structure. The practical difficulties of manufacturing them

stem from the super-toxic character of the agents themselves, which necessitates complex safety arrangements. In addition, chemical munitions, once they have been made, are not difficult to conceal, because they can only be conclusively distinguished from other munitions by close inspection. In order, therefore, to give assurance that a chemical weapons ban is not being evaded by the clandestine manufacture of chemical weapons and chemical warfare agents, or by retention of undeclared stocks, it will be necessary to embody in the convention a number of mutually reinforcing verification methods on lines that have been already indicated. It will be necessary to build up confidence in the convention by all possible means if it is to command wide acceptance.

In this connection, my delegation welcomes the tabling by the distinguished representative of Finland of document CD/505, the latest in the series of blue books embodying the results of the research of Professor Miettinen and his collaborators on scientific methods for the verification of chemical disarmament. This valuable contribution, which represents the fruits of 10 years of research, provides the Conference at an opportune moment with a comprehensive picture of the techniques available as a result of the latest scientific advances. The instrumental methods they have developed could play a valuable part in reducing the need for the presence of inspectors on the ground. It should be our aim to make use of instrumental methods where appropriate, both for reasons of economy, and to reduce the intrusiveness of verification. The physical presence of inspectors will, of course, still be needed to maintain the instruments, as well as for the on-site inspections which will be required to ensure compliance with the convention.

One essential element in the verification regime must be provision for challenge by a party which is not satisfied that another party is fulfilling its obligations under the convention. The views of the United Kingdom Government on this subject were set out in detail in Working Paper CD/431 which was introduced on 14 February this year by Mr. Luce, Minister of States for Foreign and Commonwealth Affairs. The system of challenge leading to on-site inspection provides the ultimate assurance that States parties will not be able with impunity to evade their obligations under it. It would be essential that any suspicions of non-compliance should be rapidly and conclusively allayed. This challenge system would apply to all aspects of the convention and would thus provide its safety net. It is however important to the stability of the convention that assurance of compliance should be based as far as possible on routine methods of verification, which involve no suspicion, and do not therefore weaken the convention; and that too much weight should not be put on the safety net provided by challenge verification.

The first type of measure of routine verification in point of time must be the verification of destruction of existing stocks of chemical weapons. In this field the conference has made some progress. Members of the conference had a welcome opportunity to see on the ground how chemical weapons can be completely and safely destroyed at two workshops organized by the United States Government at Tooele last year and by the Federal German Government this year at Munster. My delegation is grateful to the host governments for an opportunity to see these plants at work, and, in particular, for the way in which it was made clear that the destruction can be carried out in a manner that lends itself to verification, by impartial observers, that the declared stocks have indeed been destroyed. I think that it was clear to all of us who visited the plants that it would be necessary to have observers on the spot throughout the period of destruction at the site chosen for the purpose. The statement on 21 February by the distinguished representative of the Soviet Union that his Government would in principle be prepared to accept the continuous presence of observers on site while chemical weapons were being destroyed gives grounds for hope that this aspect of the problem will be soluable.

A related problem, also limited in time, is the verification of destruction of production facilities which has been actively considered in Working Group A of the Ad Hoc Committee on Chemical Weapons. My own Government demonstrated to the members of the Committee on Disarmament in 1979 the complete demolition of the only facility in the United Kingdom for the manufacture of nerve gases after the remaining stocks of these agents had been destroyed.

In order to give stability to the Convention it will also be necessary to include in it provisions to give assurance that chemical weapons are not being made clandestinely, especially after the destruction of existing stocks has been completed. To this end my delegation introduced last year document CD/353 on the verification of non-production of chemical weapons. This included suggestions for declarations on the production for civil use of certain compounds, and, in some cases, verification by random routine inspections of the declarations, and of the fact that the compounds in question were not being transformed into chemical weapons. This type of random routine inspection was proposed for certain key precursors, which are not themselves chemical warfare agents, but are important intermediates in their synthesis. The aim of such routine inspections would be to provide assurance that chemical warfare agents were not being clandestinely produced by providing a routine check on the main synthetic pathways by which such agents might be made.

The annex to the United Kingdom Working Paper CD/353 contained a list of key precursors which had previously been drawn up at a meeting of experts, under the aegis of the Chairman of the Ad Hoc Working Group on Chemical Weapons, Ambassador Sujka. Document CD/353 contained a request to other delegations for information about the extent to which these compounds were made in other countries for civil purposes. We are grateful to those delegations which have responded. Some of the data they gave us were circulated at the end of the 1983 session in Working Paper CD/CW/WP.57. We hope that other delegations will provide similar data in time for inclusion in a further working paper at the end of the current session.

After consideration of these data and discussion with other delegations, the United Kingdom delegation has now circulated a further Working Paper with the symbol CD/514, which I have pleasure in introducing today. In this Working Paper a classification of compounds is proposed according to the risk that they might be used as chemical warfare agents or as precursors for them. It is hoped that this classification, based on objective criteria, will help the Conference towards a consensus on the identification of compounds that need to be subject to declarations and monitoring. The delegation of the Federal Republic of Germany has rightly drawn attention, in its Working Paper CD/439, to the fact that a similar list is required in connection with the transfer of key precursors to other countries. As pointed out in that Working Paper, some of the compounds in question have significant civil uses. In the view of my delegation it would not be possible to exclude from control all substances in this category. We also share the doubts of the delegation of the Federal Republic of Germany as to whether it would be practicable to determine the list of key precursors entirely on the basis of theoretical criteria. These would be helpful in guiding the choice of compounds for the list or lists, but we believe that for operational purposes, whether declaration, export control, or routine inspection on the territory of a State party, it will be important that the compounds be listed by name. The United States delegation has used this approach in the schedules contained in document CD/500. The initial lists would clearly need to be agreed as an integral part of the convention we are negotiating. My delegation believes, however, that a mechanism for modifying the list or lists under the aegis of the Consultative Committee should be incorporated into the convention to take account of possible future advances in technology. The present paper is designed to stimulate discussion of these issues and provide a basis for further work.

The need to agree internationally a list of these important precursors has been underlined by confirmation by the United Nations of the use of mustard and the nerve agent Tabun in the Gulf war. In the light of this report the United Kingdom Government has imposed new export controls on compounds which could be used to make such weapons. Similar action has been taken by other governments, in particular by the governments of our partners in the European Community and by the United States and Canada. The need for this action has emphasized more than ever that a mechanism is required for the verification of non-production of chemical weapons to give assurance that these precursors are not being made in quantities unjustified by civil uses and transformed into chemical weapons.

In the view of my delegation a regime on these lines to verify non-production would make a valuable contribution to confidence in the convention without intruding unnecessarily in the chemical industry of States parties. The Netherlands delegation has provided a valuable analysis in their Working Paper CD/454 of the practical implications of such arrangements. The size of the inspectorate required for this purpose would seem to be a manageable one. Unlike the verification of destruction of stocks and of production facilities, which would be limited in time, it would be a continuing task for the Consultative Committee and its secretariat, which would also have the separate task of monitoring the possession and very limited production of super-toxic lethal compounds for permitted purposes.

Close consultation with national chemical industries will be needed both in the formulation and in the implementation of arrangements for verification of non-production. The example of the IAEA system of safeguards shows how inspections can be carried out in close co-operation with the industry being inspected. The IAEA secretariat enjoy the confidence of the nuclear industry in the wide range of countries all over the world where their safeguards system is in operation. At the same time they command international respect for the thoroughness and reliability of their operations. My own Government has consulted fruitfully with representatives of the British chemical industry, through its co-ordinating body, the Chemical Industries Association. We have been heartened by their positive response and encouraged by their interest in our negotiation for a convention to ban chemical weapons.

CD/PV.272

p.22

Algeria/Ould-Rouis

12.7.84

VER

In other cases, reference is made to the difficulties in designing and establishing a reliable verification system to reject proposals for negotiating agreements on allegedly "difficult to verify" or "non verifiable" measures.

The concern of States to seek a verification system which can assure them that their partners are implementing all the provisions of the agreements entered into is, of course, a legitimate one. Indeed, is it not in the interest of all parties that reliable verification measures should be taken under each agreement?

However, such a system must be based on the means in existence at the time of negotiation of each agreement. The demand for a system which must be absolutely reliable can only postpone agreement. Furthermore, there can be no question but that the danger arising from the lack of any agreement is infinitely greater than the hypothetical violation of an agreement by a party; and, besides, such an act would render the author liable to consequences which have a deterrent effect.

CD/PV.274 p.8

Italy/Alessi

19.7.84

OS

Another positive step would be the prompt communication to an international authority of the full orbital elements of every object launched into space and a more detailed description of its mission on the basis of a standardized reporting instrument. This would involve a modification of the 1974 United Nations Convention on Registration of Objects Launched into Outer Space. At present, parties to that Convention are free to provide whatever kind of information they wish on their launches, and in the format they wish. The result is that such information is too sketchy and difficult to compare.

Co-operative measures to permit ready verification of orbit and general function could also be envisaged on the basis of article IX of the Outer Space Treaty, which calls for prior consultations on activities that would "cause potentially harmful interference with the activities of other States Parties".

The 1974 Registration Convention provides also, at least in part, a basis for the identification of interest in a space object. The elaboration of a detailed set of principles or circumstances which would identify a space object as one covered by a future arms control agreement would also be of primary importance.

The question of ownership, control, or other elements of interest in and responsibility for a space object is a delicate question to be solved with priority in the appropriate forum, in particular at a time when joint space ventures, including commercial ventures, are becoming more and more numerous.

CD/PV.274 pp.9-11

FRG/Wegener

19.7.84

CW

The main purpose of my intervention today is to introduce Working Paper CD/518 that records the results of the recent Workshop on the Verification of the Destruction of Stocks of Chemical Weapons organized by the Government of the Federal Republic of Germany in Munster, Lower Saxony. The Workshop, to which member and observer delegations of the Conference on Disarmament were invited was intended to acquaint these delegations with the procedures used by one of the few existing destruction facilities of chemical weapons, and to provide a forum for discussion of all aspects relating to the destruction of such weaponry. The destruction facility in Munster undertakes to eliminate old stocks of chemical weapons that were found after World Wars I and II. The Federal Government had chosen to devote its 1984 Workshop to the verification of the destruction of chemical weapons because it holds the view that the destruction of stocks deserves a particularly high priority in the negotiations on a future chemical-weapons ban. The current threat emanates in the first instance from existing chemical weapons stockpiles. Furthermore, the Federal Government considers the verification of the destruction of chemical weapons stocks to be a key problem of the entire verification complex of a future chemical weapons convention. If it proves possible to reach agreement on the verification issue, it should also be possible to agree on the necessary inspections for the other areas of the convention.

The Federal Government draws the following conclusions from the Workshop in Munster:

Firstly, the requirement of effective verification of the destruction of stocks of chemical weapons can be met only with a monitoring system operating on a continuous basis;

Secondly, a continuous monitoring system should comprise a mutually complementary combination of checks by inspectors and monitoring by tamper-proof measuring devices;

Thirdly, the integration of technical monitoring devices should aim at reducing the number of inspectors required to be present at all times, thus diminishing the degree of

intrusiveness that inspections can imply;

Fourthly, at the present juncture, all technological prerequisites exist to solve the verification problems inherent in the destruction of chemical weapons.

The failure or success of any workshop depends largely on the contributions that come from the participants themselves. I should like to express our gratitude to all those delegations who enhanced the effect of the workshop by their valuable participation.

Few will dispute that workshops of this nature -- and aside from the visit to Munster, I would equally like to mention the workshop in Tooele, Utah, of late last year -- provide interesting insights and learning experiences. But what is the direct relevance to our negotiating tasks in the Ad Hoc Committee on Chemical Weapons? I realize that this question has frequently been asked, and the question certainly deserves an answer. Obviously, it is nobody's intention to write into a future chemical weapons convention norms which oblige the parties to the treaty to embark on particular technical processes, or to buy and employ specific apparatuses of particular brands. But the link is there, and it is direct. Workshops of this kind demonstrate both the necessity and the feasibility of certain technical processes. They thus show how planned prescription can be translated into law-abiding action, and at what cost. The obligation the parties are to undertake in the future treaty will be simple. They will be expressed in abstract legal language. But behind the normative language, knowledge looms. Negotiators, with the aid of such technical experience as the workshops have given them, have assured themselves that it is possible to translate treaty obligations, such as are now envisaged, into effective action, and that the most practical and least costly and intensive approach has been chosen in defining obligations and selecting legal language.

If we attempt to digest the negotiators' lessons out of the Tooele and Munster experiences, the usefulness of the exercises is amply born out. On the basis of a general consensus that is forming on the subject matter in the field of the verification of destruction of stocks, formulations like the one in Article V (1) (f) of the draft convention contained in document CD/326, now prove themselves to be so drafted that, if accepted, they would stand the test of eventual implementation with the assistance of current-state technology, and at low and adequate cost levels.

If satisfaction and, indeed, a measure of accomplishment derive from the recent technical workshop in Munster, my delegation is much less optimistic with regard to the general level of progress in the chemical weapons negotiations. Although the negotiating process is manifold -- if somewhat over-complicated in its structure -- the general state of negotiations is hardly encouraging and leaves much to be desired.

This is all the more deplorable because this year we should have been particularly concerned about making progress rapidly. The findings of a team of experts charged by the Secretary-General of the United Nations in conformity with the relevant United Nations General Assembly resolutions, revealed that chemical weapons had been used in the conflict between Iraq and Iran. However, not even the actual use of chemical weapons in an ongoing conflict and the unfortunate likelihood of further proliferation of these barbaric weapons have prompted the Conference on Disarmament to speed up negotiations and to produce decisive results. Yet, the 1984 Ad Hoc Committee on Chemical Weapons was placed under the skilful and competent guidance of its Chairman, Ambassador Ekeus of Sweden. Mr. Akkerman of the Netherlands, Mr. Duarte of Brazil and Dr. Thielicke of the German Democratic Republic have once again proved their high abilities in chairing their respective Working Groups. Many delegations have introduced important working papers or initiatives.

In spite of these favourable conditions, the positive momentum that had marked previous years of work is about to peter out. My delegation has no explanation for this unfortunate state of affairs. It cannot but urge all delegations to contribute fully to the

negotiations by demonstrating more flexibility and readiness to compromise. The urgency of achieving results does not only bear upon the chemical weapons convention itself. This segment of our work constitutes an important test case for the over-all commitment of governments to the task of disarmament.

In spite of a negative over-all assessment of the negotiations my delegation, of course, does not wish to belittle the efforts to come to a closer understanding in certain areas of the convention and the progress that has been achieved so far. In the area of elimination of stocks a consensus is now emerging. My delegation is equally hopeful that a solution of the question of verification of initial declarations can be found on the basis of discussing further the ideas of subjecting the declared stocks to verification measures either at intermediate storage sites or at the destruction facility. My delegation also welcomes the endeavour to provide a complete structure for the future chemical weapons convention as has skilfully been elaborated by Ambassador Turbanski of Poland.

CD/PV.274

pp. 13-15

USA/Fields

19.7.84

CW

Mr. President, in my statement on 12 July, I began to address the last of four major issues involved in a comprehensive and effective chemical-weapons ban, that is, the vital issue of verification. I described in detail the regime of systematic international on-site verification established by the United States draft convention in document CD/500. I also stated that that regime, by itself, would be inadequate to provide the required assurance of compliance with all the provisions of the draft convention. Today, I will examine the system for dealing with compliance issues that is a necessary and vital complement to the systematic verification regime I described last week.

In the United States view, the future chemical weapons convention should set forth a range of actions that can be taken by a party to resolve compliance concerns. The convention should also set forth the obligations of a party to co-operate in the prompt resolution of such concerns. The arrangements should be designed to prevent dilatory tactics and to promote clarification at the lowest possible political level. However, the right to escalate an issue politically, if necessary, should be built into the arrangements to serve as an important stimulus to provide resolution of compliance problems. A party should be able to select the course of action it believes will resolve its concerns most effectively and expeditiously.

The United States draft convention incorporates a number of provisions for dealing with compliance concerns. These provisions are contained in articles IX, X and XI, as well as in annex II. Taken together, these provisions would provide an effective system for resolving compliance concerns.

Should a party to the convention have reason to believe that another party is not completely fulfilling its commitments under the convention -- if, for example, that party suspects that chemical weapons are being stored at a location that the other party had not declared to be a chemical weapons storage location -- then that party could initiate bilateral consultations with the other party, as provided in article IX. Article IX would require the party receiving such an inquiry to provide sufficient information to the inquiring party to resolve the latter's doubts concerning compliance. If both parties so desired, article IX would permit them to arrange a bilateral inspection to aid in resolving any lingering questions.

When necessary -- if, for example, there continued to be concerns over whether the party was complying with its commitments under the convention -- either party involved in the dispute could request the Executive Council of the Consultative Committee to initiate fact-finding procedures. Upon receiving such a request, the Executive Council

would request the party whose actions were suspect to clarify these actions. If the clarification provided still did not resolve the question, the fact-finding panel of the Executive Council would immediately begin an investigation. The report of its investigation would then be made available to all parties to the convention. If still unsatisfied, the inquiring party could initiate a special meeting of the Consultative Committee to consider further the compliance question.

It is hoped that most compliance questions can be resolved through information exchanges that occur either bilaterally or through the Consultative Committee. However, in some instances assurances more persuasive than the uncorroborated statements of a party will be necessary. In other cases, the assurance will be required more rapidly than the time periods contained in article IX. Articles X and XI of the draft convention were designed to meet the needs of such situations.

Under article X of the draft convention, procedures for special on-site inspection will apply to any facility either already subject to systematic international on-site inspection pursuant to other articles of the convention or to any facility or location owned or controlled by the government of a party, including military facilities. Annex II would contain provisions aiding in the specification of such facilities and locations. For these locations and facilities, a party to the convention is deemed to have issued an "open invitation" with regard to the possibility of their inspection. This means that a party must permit an on-site inspection of the location or facility within 24 hours of receipt of a request from a member of the fact-finding panel for such an investigation. Members of the panel could initiate such an inspection on their own or on behalf of a party not represented on the panel. A party cannot refuse a request for a special on-site inspection.

My Government recognizes that these special on-site inspection procedures will require an unprecedented degree of openness on the part of all countries that become parties to the convention. The United States also recognizes that such openness could potentially pose a risk to sensitive activities not related to chemical weapons. However, the United States strongly believes that a comprehensive and effective ban on chemical weapons, which would provide substantial security benefits, must, if it is to be truly effective, contain an "open invitation" inspection scheme along the lines I have sketched out today. Thus, the United States has decided that the benefits flowing from such an inspection scheme greatly outweigh the risks.

The United States seriously considers that any risks can be minimized and managed through appropriate procedures for initiating and conducting special on-site inspections. The United States draft contains a number of provisions designed to do just that. In the United States view, the inspection procedures should be designed to resolve the issue at the lowest possible level of intrusion. For example, the inspectors' access should be unimpeded, but the procedures could stipulate that the least intrusive steps be taken first. More intrusive steps would be implemented only to the level needed to resolve the specific issue in question. We would welcome other suggestions for minimizing the risks that might result from a special on-site inspection.

I want to assure all delegations in the Conference on Disarmament that my Government did not take the decision lightly to include this "open invitation" provision in our draft convention. There should be no question that the United States is willing to accept the consequences of these provisions. I hope that other States will display a like amount of political will and accept this "open invitation" concept, because it is essential for an effective chemical-weapons ban.

I would also like to respond to some criticisms that have been publicly voiced concerning the article X provision on special on-site inspection. The statement has been made that, since the provision applies to government-owned or government-controlled facilities, it discriminates against some economic and political systems. The argument

seems to be that, since the civilian chemical industries in some socialist countries are owned by the government, these facilities would be subject to article X, whereas the chemical industries in the United States or other western countries, since they are privately owned, would not be covered by article X. In passing I would like to note that the countries voicing this and other criticisms of the convention have done so without accepting the invitation of my delegation to meet with any interested delegation to explain fully our draft convention. If they had availed themselves of this opportunity to meet with us, this matter could have been clarified privately. Article X covers not only those locations and facilities that are owned by the government, but also those controlled by the government, whether through contract, other obligations, or regulatory requirements. The privately-owned chemical industries of the United States are so heavily regulated by the United States Government that this equates to the term "controlled" as used in the draft convention. Thus, the private chemical industry of the United States is fully subject to the inspection provisions of article X.

In addition, I will repeat a statement made many times by me and by other representatives of the United States Government. No imbalance in inspection obligation is either desired, intended, or contained in any provisions of the United States draft convention banning chemical weapons. My delegation welcomes any suggestions concerning ways to improve the procedures for the "open invitation" inspections, as long as an equivalent level of confidence is maintained. It is easy to criticize a proposal. It is much harder to work out mutually acceptable solutions to difficult problems. I hope that delegations that have concerns about the "open invitation" approach of article X will join with us in a constructive manner to seek effective solutions.

For locations and facilities not subject to article X, "ad hoc on-site inspections" are provided by article XI of the United States draft. A party may request the Consultative Committee, at any time, to conduct such inspections in order to resolve doubts and concerns. The fact-finding panel shall convene within 24 hours to determine whether such an inspection should be granted. The panel will make its decision based on guidelines contained in annex II. If the panel decides to request an inspection, the requested party shall, except in the most extraordinary circumstances, provide access to the inspectors. If a party refuses an inspection, it must fully explain its refusal and suggest concrete alternative methods for resolving the compliance concern. The fact-finding panel will review these explanations and suggestions to determine if they resolve the question raised. If the problem is not deemed to be resolved, the panel can again request an inspection. If it is refused again, the Chairman of the Consultative Commission shall immediately inform the Security Council of the United Nations.

As with systematic international on-site inspection, there are many detailed, technical procedures governing the conduct of special and ad hoc on-site inspections that need to be negotiated. Section H of annex II contains a list of the areas where the United States believes there must be an agreement on procedures. Some examples of these areas are: a requirement for definition of the area to be inspected, types of equipment to be used, and protection of proprietary or confidential information. These procedures should be negotiated in connection with our consideration of the inspection provisions contained in articles X and XI.

In two statements I have outlined in detail the provisions contained in the United States draft convention dealing with the verification issue. The regime of systematic international on-site inspection, and the compliance resolution system outlined today, combine to provide the confidence in compliance necessary for a comprehensive and effective ban on chemical-weapons. These provisions are central to the United States draft convention. No chemical weapons convention can be achieved without agreement on effective provisions for verification.

Permit me, before addressing the test ban issue in more detail, to make a few observations with respect to the two bilateral, so-called threshold, treaties concluded between the United States and the Soviet Union in 1974 and 1976. In the absence, for the time being, of a comprehensive test ban, ratification of these treaties would seem to be of great importance.

The Netherlands is aware of existing problems, for example, with regard to the calibration of test-sites, but we ask ourselves whether these are not outweighed by the advantages of ratification. Those treaties contain interesting provisions with regard to data exchange and international on-site inspection which also have an important confidence-building potential. In case there are problems, these can perhaps be discussed in the joint consultative commission as foreseen in the treaty on peaceful nuclear explosions. My Government, therefore, urges the United States and the Soviet Union to remove the remaining obstacles and to ratify the treaties as soon as possible.

Mr. President, recently the threshold approach has also been mentioned by the Foreign Minister of Japan, H.E. Mr. Shintaro Abe, who suggested that this Conference should look into the possibilities of this option. My delegation agrees with the Japanese delegation that no avenue towards reaching the objective of a CTB should be left unexplored.

We still have doubts, however, on the desirability of a multilateral threshold treaty. It could, for instance, have the effect of "legitimizing" tests in the permitted yield-range by non-nuclear-weapon States parties to such a treaty. On the other hand, we of course welcome the observance of a lower threshold by the present nuclear-weapon States until such time as a CTB is achieved.

What could at present be done by the Conference on Disarmament with regard to a comprehensive test ban? We think quite a bit. First, the ad hoc committee to be established should direct its activities at fully elaborating the institutional set-up accompanying a future CTB, such as the international seismic data exchange system, data centres, complaint procedures, etc. The "trilateral" Powers could give their views on how they wish to see verification problems solved or how they had them solved already amongst themselves at the time of their talks. Much of this will have to be based on the reports of the Ad Hoc Group of Scientific Experts. My delegation was impressed by the Third Report of the Group indicating the greatly increased possibilities for the effective verification of a CTB, on the basis of the model of a global system, described in the report. Similar suggestions of increased possibilities for verification are contained in the interesting Working Paper (CD/491) submitted by the Federal Republic of Germany.

We welcome the testing of methods of exchanging and analysis of level I data through the WMO/GTS communications system later this year. The Netherlands will be pleased to participate in this exercise, as we hope many other countries will do, including those from the Southern hemisphere. Of course, we realize that much work has yet to be done in this field, such as carrying out tests which would include level II data. The improved possibilities for verification, however, are a cause for optimism. In the 1970s the identification of seismic events was possible for all nuclear explosions above 10-20 kilotons. Now this has been reduced to no more than a few kilotons. Today we wish to urge countries to make full use of those new possibilities. Our substantive work on this most important subject must not be stalled by the present procedural impasse.

As part of the consideration of such concrete measures, the Conference on Disarmament should on a priority basis focus attention on the issues raised by the development of anti-satellite weapon systems (ASAT), in particular on a prohibition of the testing, deployment and use of specific anti-satellite weapon systems.

We do not underestimate the technical complexities of ASAT arms control and its adequate verification. These factors indeed complicate things. They should not however discourage us from vigorously seeking practical and pragmatic solutions. An agreement which comprehensively bans all means of anti-satellite warfare appears to be impossible. Residual ASAT capacities of certain space systems are amongst the main obstacles. We have to look for a combination of verifiable and co-operative elements in a future agreement, which would prevent anti-satellite warfare from any longer being an effective military option. In the view of the Netherlands, negotiated constraints on ASAT would be greatly preferable to a totally unrestrained ASAT competition.

CD/PV.275

pp.15-16

Poland/Turbanski

24.7.84

CW

I would like to thank, as a number of other colleagues did earlier, the Chairman of the Ad Hoc Committee, Ambassador Ekeus, as well as the Chairmen of the Working Groups who, in organizing numerous meetings and informal consultations, spare no efforts to achieve as much progress as possible. It seems at the moment that if the Committee could agree on the most important questions regarding the destruction of stockpiles and on the verification of this process, together with the procedure on submission of the initial and detailed plans for destruction, then the question of how and what to do with the facilities would also be easier to solve. Let me say that an understanding on the questions mentioned above would make it possible to establish the main trunk of the future convention. The Polish delegation persistently works towards this end. Of extreme importance at the present stage would be the elaboration of guidelines for initial plans for destruction. Based on such agreed guidelines, the States signatories of the future convention who are in possession of chemical weapons could, after its entry into force, agree between themselves the detailed contents of such plans and submit them to the Consultative Committee. Any action in this respect at present would enhance an outlook on the whole process of destruction and verification. In other words, we consider that further work in this field will be both prospective and useful in all respects.

I would like to devote also a few lines to the question of the diversion of stocks. As is well known, different misunderstandings or lack of understanding concerning this problem have impeded progress of negotiations. We note therefore with satisfaction that a considerable degree of mutual understanding is emerging. It was especially encouraging to hear in this connection that the United States delegation would show flexibility to consider any proposals in this respect. All of us should have in mind that regardless of destruction or diversion, both these kinds of elimination of chemical weapons will have to be exactly reflected in future plans of destruction which the States parties concerned will have to submit at the mutually agreed time to the Consultative Committee. Thus the problem as such will be in full sight of all participants to the convention.

It is obvious that the diversion process will have to be adequately controlled.

Let me say also a few words on the forms of verification, particularly in the context of the United States draft convention contained in document CD/500. As I observed in my intervention on 15 March this year, no verification, however intensive and elaborate, can provide absolute certainty that no violation, even the least meaningful, occurs. The United States draft contains and proposes the widest and most demanding system of verification. Has it been justified by a real need or by an excessive care for the obligations to be fulfilled by future signatories of the convention? I shall try to make a short analysis of different requirements for the verification systems. Out of numerous requirements, the following could be mentioned:

- first, correspondence of the verification system with international law and with

- the provisions of law of the States parties concerned;
- secondly, correspondence of the verification system with the principle of the inviolability of security interest of the States parties concerned;
 - thirdly, the intrusiveness of the verification system should be reduced to minimum and justified only by the nature and the dimensions of the scope;
 - fourthly, the verification system should be reasonable in the sense of costs involved which are to be covered by the future signatories.

We are of the opinion that the most appropriate verification system is one which ensures in practice the effectiveness of verification on one hand and is acceptable to the interested parties on the other. It seems, in this connection, that the intrusiveness of the system proposed by the United States is incommensurable with real needs. Some proposed methods of verification overlap, although that does not double the control effects and does not increase the volume of information achieved. As an example I quote from the statement of Ambassador Fields on 12 July. What is proposed is "...systematic international on-site verification of chemical weapons, from the moment they were declared, to the moment they were destroyed...". In a system thus proposed there should be: immediate verification of the initial declarations, verification of the declared stocks between the declarations and elimination, and the verification of the destruction of stocks. In fact, such a system could allegedly reduce to a minimum the eventual cases of violation of the convention but, on the other hand, it may bring distrust among States parties as to the real intentions for conducting at least some on-site inspections. What can be achieved as a result might be the reluctance on the part of certain States to participate in the convention. This result would be exactly the opposite of what I believe we want to achieve.

In another statement, namely that of 19 July, the distinguished Ambassador Fields tried to answer some criticisms and dispel some legitimate questions and doubts many delegations, including mine, have with regard to article X of the United States draft convention by saying, *inter alia*, that "...the private chemical industry of the United States is fully subject to the inspection provisions of article X...". I must say, however, that our doubts have not been dispelled. They are further strengthened by the opinions of some United States experts; for example, in a serious work on the subject entitled "Arms Control and Inspection in American Law", an American author, Louis Henkin, suggests that the question of on-site inspections in case of private industry, and that would of course pertain also to chemical industry, may go even as far as to require amendment of the United States Constitution.

During the last plenary meetings we have listened with great attention also to several other statements devoted to chemical weapons. Some of them, containing interesting ideas, are subject to careful study by my delegation. Today, without going into details, I would like to dwell on two of these thoughts. We have no doubt that chemical weapons must be destroyed, and this should be done as soon as possible, without any artificial complications. Thus we sympathized very much with the idea voiced by the delegation of Australia that obsolete stocks of chemical weapons, which sooner or later will have to be disposed of, could be destroyed as an act of goodwill, before entry into force of the Convention.

Such a step could not only reduce the burden to be carried by verification but would also build up the confidence necessary for the early elaboration and implementation of the convention banning the chemical weapons.

Yet another example. It has been proposed -- by the delegation of the United States of America -- to prohibit in the future convention some almost mysterious chemical, specially designed to intensify the effects of the use of chemical weapons. After persistent requests to clarify everything involved, it was stated that the matter concerns substances capable of acting as solvents in chemical weapons or as thickening agents, of changing the viscosity of chemicals or their local stability, of increasing their capacity to penetrate the human skin or the charcoal filter of a gas mask, etc. Even from this list -- and it can, of course, be expanded -- it is clear that the matter does not concern a particular specific chemical, but a great number of chemicals. It is true that, in this connection, we have not been given the name of a single chemical. It is proposed, consequently, that substances unknown to anyone should not be developed, produced or stockpiled and that they should be destroyed. Can this be serious? Here, too, if a genuine need to resolve the above-mentioned question arose, the consultative committee would be able to take the appropriate steps.

In a word, we attach very great importance to the consultative committee and consider that it and its subsidiary organs should be assigned the task of the solution in practice of the broadest possible group of questions connected with the practical implementation of and compliance with the convention.

We proceed from the basis that the consultative committee, if reference is made to it as a collective body, would receive, have custody of and distribute information furnished by States parties in accordance with the requirements of the convention, would provide to States parties at their request assistance in the conduct of consultations among them, would work out recommendations and individual technical questions, etc.

It would also have to perform a considerable number of responsible functions with regard to the implementation and co-ordination of all forms of verification. In particular, we consider it important that the consultative committee should work out standardized verification methods and verify reports of cases involving the use of chemical weapons. The convention must also include a clear provision under which the consultative committee would determine the procedure and periods for carrying out verifications at facilities for the destruction of stocks and at facilities for the production of super-toxic lethal chemicals for permitted purposes. It would take into account the size and characteristics of the stocks, data on the destruction facilities and on the permitted production, and a great deal more.

A most important task under the future convention will be the proper organization of the working interaction between international and national monitoring bodies. They should complement one another and assist one another, for otherwise, unless one is under the illusion of "constantly valid invitations", monitoring might prove to be imperfect. In this regard, too, it is clear that the consultative committee might have an outstanding role to play. It will have to concern itself even with such matters as the special training of national staff for carrying out inspections, the sealing of chemical weapons production facilities, the handling of seals, etc.

One would hope that these considerations will facilitate and speed up the preparation of the section of the future convention devoted to the consultative committee.

In connection with the consultative committee, I should like to draw attention to a matter of primary importance -- the composition of its main subsidiary organ, the executive council. We propose that this council should consist of 15 members, representatives of States parties to the convention, 10 of whom would be elected by the consultative committee on the principle of a two-year term for each party, five members being replaced each year; the remaining five seats would be set aside for the permanent

members of the Security Council parties to the convention.

This machinery should be seen primarily as an earnest of the effectiveness of the future convention, ensuring compliance with the principle of not endangering the security of any of the parties.

A very important problem is the elaboration of a procedure, acceptable to all the States parties to the future convention, for the adoption by the consultative committee and its subsidiary organ of decisions relating to substantive questions. Many far-reaching proposals of every kind have been submitted on this subject, but no reply has yet been forthcoming. This is not surprising, since the question really is complex. Yet, in our opinion there is a solution — as in many other questions which have arisen in the process of elaborating a convention on chemical weapons, it lies in a realistic view of matters. We proceed from the basis that the best means of adopting decisions is by consensus. However, if it is not possible to reach a consensus within strictly stipulated periods, reckoned in some cases in days and in others in hours, then, in our opinion, there is only one practical — I repeat, practical — possibility: to bring to the notice of the party or parties the individual views on a given question of the members of the consultative committee or the executive council. The opinions of States, set out in the manner established by international law, would together constitute for many States a serious political factor which it would not be possible to ignore. As a last resort, it would always be possible to use other procedures, which would be provided for in the convention.

CD/PV.276

pp.16-17

Brazil/de Souza e Silva

26.7.84

NPT

Article I spells out the obligations of the nuclear Powers with a view to preventing non-nuclear States from manufacturing or acquiring nuclear weapons or nuclear explosive devices. The question which has been asked over the past 16 years is simple and remains unanswered: how can proliferation be prevented if some Powers, Parties or non-Parties to the Treaty, retain and utilize their right to continue developing, stock-piling and disseminating their nuclear weapons all over the world? Resolution 2028 stated that "the treaty should be void of any loop-holes which might permit nuclear and non-nuclear Powers to proliferate, directly or indirectly, nuclear weapons in any form" (stress added). What became of that principle, which was once supported by all, including the nuclear Powers which are now Parties to the treaty? Furthermore, is the non-transfer of weapons, or the transfer of their control, verifiable in any way? What became of the principle of an acceptable balance of responsibilities and obligations in relation to verification? Verification of compliance with the main objective of the treaty is non-existent when it touches on the actions and interests of the nuclear Powers, which are not, in any way, accountable to the other Parties. Concerning the transfer of nuclear weapons, one cannot but evoke their massive deployment in Europe by the super-Powers outside their own boundaries. To corroborate the conformity of such deployment with the provisions of the Treaty, the Parties must count only on unilateral declarations of the nuclear Powers concerned, to the effect that it retains the control over those weapons. By contrast, even the mere transfer of equipment for research reactors for civil purposes to a non-nuclear Party is covered by a stringent system of verification. In other words, nuclear weapons are freely transported and deployed wherever and whenever the super-Powers so decide, while the search for nuclear technology for peaceful purposes by any other country is severely scrutinized.

The super-Powers went even further into their unconstrained freedom to dispose of their nuclear arsenals and, through unilateral interpretations, they will be prepared, if necessary, to relinquish control of nuclear weapons to their allies in case of conflict. In

"Hearings on Executive H", before the Committee on Foreign Relations of the United States Senate, in 1968, connected with the military implications of the NPT, one finds the interpretation that Articles I and II do "not deal with arrangements for deployment of nuclear weapons within allied territory, as these do not involve any transfer of nuclear weapons or control over them unless and until a decision were made to go to war, at which time the treaty would no longer be controlling". Since we have no comparable access to similar publications in the Soviet Union, we do not know how the other super-Power views the situation with regard to a corresponding automatic suspension of its obligations under the Treaty.

The second operative article, which is the obverse, or the mirror-image of the first, spells out the obligations of the non-nuclear countries under the system of verification provided for in the following article.

Two of the nuclear Powers have unilaterally and voluntarily placed their peaceful facilities under the safeguards system of the IAEA. It is difficult to understand why the remaining nuclear Party has so far chosen not to do so, although such a decision is well within its rights according to the Treaty. Confidence in its provisions and purposes would be better served by an attitude of openness with regard to peaceful nuclear activities, the same ones which are subject to a close scrutiny when related to non-nuclear Parties.

CD/PV.276

pp.24-27

Japan/Imai

26.7.84

CTB

In the deliberations on the subject, verification has always been the central point in establishing the credibility of the test ban. I have no intention of quoting myself, but I recall that on a number of occasions I have discussed political, legal and technical aspects of verification as a very important element in disarmament arrangements. Verification is an instrument of effective deterrence against violation of disarmament agreements by providing timely and credible detection of such violations. Verification is also a means of confidence-building through which parties to an agreement can assure themselves that the agreement is in fact binding, and thus contribute to their national security.

I would like to emphasize that in the context of negotiations in this forum, we are looking at multilateral verification institutions and capabilities. There is a number of factors that need to be considered in this context. The capabilities of such a multilateral system are determined by who the participants are, as well as what they would contribute to this system. Its effectiveness will be governed by the institutional arrangements to collect data, process them, make an appropriate analysis and take necessary actions. With regard to underground nuclear explosions, there are different opinions about the detection capabilities. The difference comes from what assumptions one makes. If one is talking about known test sites with the emplacement of numerous so-called "black boxes" around them, the detection capabilities will be very high, whereas if one is talking about underground nuclear explosions that might take place in any part of the world, including possible tests under the sea-bed, there is much to be desired before meaningful capabilities can be achieved.

The Working Paper CD/524 which I am introducing today describes a very simple and practical idea, which my Foreign Minister called the next-best, but a very practical approach. We shall start with the prohibition of nuclear testing within the existing multilateral verification capabilities. In other words, rather than waiting for the perfection of technology as well as considerable expenditure to complete a world-wide ideal network, we may start with what we have already got. In this regard, my delegation hopes to see an ad hoc Committee established under a mandate such as the one con-

tained in document CD/521, introduced by the distinguished delegate of Australia, which would include in its deliberation the following. The first is the need to identify the existing and available detection system based on the contribution by the parties indicating willingness to participate in such a system. We can then proceed to make an assessment and make recommendations about the manner in which the system can be improved. We can thereby start a process of continuously lowering the threshold of the actual test ban, hopefully eventually to zero. The speed and efficiency with which we can reach this goal will entirely depend on our joint efforts. In order to ensure the effective administration of the available verification capabilities and their improvement, discussion should start simultaneously on the institutional arrangements pertinent to this purpose.

I would hasten to add that these procedures are by no means intended to discourage the development and exercise of national technical means by individual countries or to exclude possibilities of countries' undertaking actions based on the findings of their national technical means. In fact, what is proposed here is an attempt to pay tribute to the multilateral nature of this Conference and to do everything possible to advance the cause of a complete test ban agreement. In this sense, the development and use of national technical means should be encouraged with the hope that they will eventually be incorporated into the multilateral verification system envisaged above.

In presenting this Working Paper, I wish to address briefly some of the problems concerning our idea which people may point out and which we ourselves are aware of.

First, it may be objected that our idea would further delay a comprehensive test ban.

Let me reiterate here again that Japan would very much like to see a complete test ban worked out and agreed upon immediately. History, however, seems to indicate that this, unfortunately, is not a very practical idea. We can see from the prolonged debate on a mandate for the Ad Hoc Committee on a Nuclear Test Ban which took up a good part of this year's session that some patience and a step-by-step approach could be more rewarding than repeated declaratory statements. I would also point out that our proposal contains a built-in mechanism to arrive at a comprehensive test ban.

Secondly, it may be argued that our idea would in effect imply legalizing nuclear explosions whose yield is below the threshold and which may now be considered to be militarily significant.

To this argument I can only respond by pointing out that, however desirable a comprehensive test ban may be, we know only too well that what is not adequately verifiable cannot be effectively prohibited or credibly adhered to. Provisions that arrangements and actions based on national technical means will in fact be encouraged means that the situation will, at least, be an improvement of what it is today. I would also like to take this opportunity to point out that even a combination of currently conceivable and advanced verification methods would still leave some lower limit below which detection and identification is in doubt as far as the technology as such is concerned. This is one phase of the "scope" issue which needs to be addressed in any event.

Thirdly, it may further be argued that it would be difficult to decide whether an explosion is below the threshold or not. In this context, the difficult question also arises as to how to avoid possible cheating.

These are indeed difficult questions. Here, I may merely state that as we lack necessary information and data in this regard, we can only count upon the forward-looking co-operation on the part of nuclear-weapon States. With their help I hope we can improve our multilateral verification capabilities to such an extent as not to tolerate the existence of any loopholes within the range of our interest. It is possible, in our view, that the initial identification of multilateral capabilities will be a band,

rather than a number, especially when we think about the different detection and identification capabilities regarding underground explosions in different parts of the world. In the meantime, as I have mentioned above, a special bilateral arrangement could be worked out within the framework of our multilateral agreement, among States wishing to make the most of their national technical means.

There are certainly other questions to be addressed in a substantive manner, and we welcome a discussion in the ad hoc committee when it is established. While waiting for an in-depth discussion on our proposal, I would like to put forward for your consideration some of the concrete steps which my delegation thinks indispensable for its implementation.

First, it is necessary to define the existing multilateral verification capabilities with regard to both detection and identification. We need this because we have to be very clear about what it is that can be multilaterally verified and therefore can be effectively prohibited. We all know that a valuable report has been presented to this Conference by the Ad Hoc Group of Scientific Experts on the basis of its intensive research concerning international co-operative measures to detect and identify seismic events. And I wish to suggest that the Ad Hoc Group should be entrusted with this new assignment, hopefully within a specified time-limit, to look for and establish a range or a group of seismic events about which we can tell, with a certain degree of confidence, on the basis of existing technical capabilities, that they are really nuclear explosions. The results of an experimental exercise should be brought to bear upon these technical findings. Also from the point of view of facilitating this new task of the Ad Hoc Group of Scientific Experts, my delegation would like to make an appeal to the nuclear-weapon States to publish the data about their nuclear explosions to the extent possible -- their time, location, yield, etc. This would greatly assist the Ad Hoc Group in their work of calibration and enhance the credibility of their findings. Besides being a great help, the publication of nuclear explosions data could also serve as a confidence-building measure -- an indication of willingness on the part of the publishing States to accelerate the process for an effective mutual test ban.

Secondly, parallel to our work of defining the existing verification capabilities we should decide on ways and means for their improvement. Only concentrated international efforts to make steady improvements of our ability can justify this approach, which we have called a next-best approach, of starting out by outlawing nuclear explosions at a level corresponding to our present capacity to verify. Thus, enhancing our ability is an integral part of our gradual approach. It is out of this consideration that Japan is working on another Working Paper which tries to examine the relevant technical steps as well as the costs involved in upgrading the current seismic network and the associated communication system to a somewhat more efficient one as indicated by the Ad Hoc Group of Seismic Experts in the past. I hope that we shall be in a position to present such a paper in due course.

These two exercises, in our view, will simultaneously call for an in-depth examination of institutional arrangements to supervise all these and other related activities. The sort of mechanism for the administration of such arrangements which should be set up, in terms of its function and composition, will also have to be discussed and agreed upon. In the event of the establishment of such a mechanism, it would be appropriate to provide for a review of its work and to formulate its future plans at a certain period of time in order to pave the way for an effective zero threshold.

It is our hope that once we have worked out a scheme with the combination of these steps -- the determination of existing verification capabilities and means for their improvement as well as effective administration of an international verification organ -- we will be in a much clearer position to make the necessary judgement as to the steps required to realize a more comprehensive test ban. In presenting our proposal my dele-

gation wishes that it could be of some help in disengaging ourselves from the present impasse, and would thus make a contribution to reactivating the substantive discussion on a nuclear test ban with a view to its early conclusion.

CD/PV.279

pp.9-13

Australia/Hayden

7.8.84

CTB,CW

Some people assert that the technical means of verification are available, though it is evident that the matter is not yet resolved to the satisfaction of all concerned. Others say that technical questions of verification are no more than a smokescreen that deflect attention from a lack of political will to conclude the CTB treaty. Now, it is only through detailed technical discussion of the practical matters at stake that such questions can be answered. Only then will we establish the real nature and extent of the issue and what needs to be done to resolve it. The verification of a CTB treaty was the subject of trilateral negotiations for years before 1980. It has been considered by this Conference (and its predecessor bodies) for many years. This Conference's Ad Hoc Group of Scientific Experts has undertaken a considerable amount of work on the issue, even though somewhat constrained by a restrictive mandate. The experiment to be conducted later this year is an important test of the ability to pool seismic information from different parts of the world, and more work of course needs to be done in this regard.

The more intractable problems of verification of a CTB by seismic means are the threshold conditions related to, first, the inherent uncertainties in the measurement technique and second systematic bias because of the geological differences in various regions of the world. These matters have not been explored in detailed technical fashion so far in this Conference.

Serious questions need examination. What assistance in resolving these problems, for example, could be derived from carefully prepared and monitored measurement shots of known yield? What means of evading a seismic monitoring system can be envisaged and what counter measures are available? Questions as to whether or not additional remote sensing techniques for verification and cross-checking purposes are needed remain to be answered. One thinks for example of the possible need for atmospheric fallout detectors to detect explosions conducted in the atmosphere and unable to be detected seismically -- to quote only the best known of a well-known range of relevant technologies. There is the whole question of "black boxes" and of on-site inspection on which agreement has seemed close at least twice in the past but in the end result, has proved elusive. These are matters which must be re-opened and pursued to successful conclusion by resolving what should be essentially the agreed application of technology.

As an indication of the issues that could be considered by a subsidiary body of the Conference on Disarmament -- if the Conference were willing to start work on a CTB in such a body -- I am tabling today a Working Paper outlining a set of principles for the verification of a comprehensive nuclear-test-ban treaty.

No amount of procedural debate, of course, will cause the technical questions involved in implementing such principles to disappear. Nor will it resolve them. The fact is that urgent practical work on such questions cannot possibly impede progress towards completion of a CTB. It is the only road towards a CTB. The Australian delegation has worked with vigour to overcome those procedural obstacles and in an effort to secure establishment of a subsidiary body of the Conference on Disarmament to undertake this urgently needed practical work "with a view to the negotiation of a treaty" as we have described it. It goes without saying that Australia would prefer a so-called "full negotiating mandate". There should be no misunderstanding about that. It also goes without saying that it is conclusively established that there is no consensus for such a mandate

at present.

In this situation, to maintain a demand for "immediate negotiations" I think constitutes a refusal to allow urgent practical work to be done. That refusal cannot be squared with the stated policy of those who are blocking this work. They say they want a test-ban treaty. If so, then let us work together on that treaty under the best mandate available to a conference which works by consensus. The mandate for such work tabled by Australia on behalf of nine countries is itself the product of considerable compromise. It is, I repeat, the best mandate available at present. That mandate proposes that the Ad Hoc Committee should work on "scope" and "verification and compliance", "with a view to the negotiation of a treaty". "Scope" of the future agreement is what is to be prohibited. In Australia's view this would be all nuclear explosions, in all environments, for all time. "Verification and compliance" constitute the remainder of a CTB treaty.

There are no other issues in the CTB. When these two matters have been fully considered, and not before, the Conference on Disarmament will be in a position to negotiate the text of a CTB treaty. That treaty would have to be fully verifiable. The Conference on Disarmament can and must work now on the required means of verification. Our draft mandate also provides for that work. The principles of verification I have tabled are a guide for those negotiations.

The compromise mandate which Australia has promoted is the road towards a CTB. Rejecting that mandate may support a feeling of sea-green incorruptibility on the part of some; regrettably, it may suggest an inner insincerity with regard to the CTB objective on the part of others, but neither frame of mind should be allowed to distort our work. The Conference should seize the opportunity presented by the Australian draft mandate.

A chemical weapons convention is also a high priority objective for the Australian Government. We believe there is a general will within the Conference on Disarmament to establish a convention requiring the declaration and destruction of existing chemical weapons and the means of producing them. Such a convention would prohibit the manufacture, stockpiling or use of such weapons and set up an effective system of international measures to demonstrate full compliance with all these provisions.

In this connection, the Australian Government particularly welcomed the tabling of a draft convention by Vice-President Bush of the United States in April. That action gave new impetus to the objective of achieving such a convention. The United States draft contains (by and large) the prohibitions which the Government of Australia would like to see in the future convention — in particular, an absolute prohibition on the use of chemical weapons. It also provides verification and compliance provisions of the standard which Australia believes is necessary if such a convention is to attract the adherence of all relevant States and to be fully effective in its physical and political objectives.

Australia wants an intensification and acceleration of the Conference's work on chemical weapons. The critical task is to resolve differences over the verification provisions. A striking example of this has arisen in connection with the United States draft convention and its provisions for ad hoc and special on-site inspections. Some delegations have argued that the draft provisions make a distinction in the verification regime from one country to another, depending on the degree of State ownership of the chemical industry.

The Australian Government holds that the verification provisions of the future Convention should apply with equal effectiveness to all countries, whatever their economic, social and political systems, and that comparable facilities should be subject to comparably effective controls, regardless of their ownership.

These are thoroughly legitimate, realistic considerations. The United States delega-

tion has, I understand, said that no such imbalance was intended and that it is ready to work with others to ensure that its verification proposal apply fairly to differing economic and political systems. I suggest to the delegations most concerned to address the difficulties which they see in the United States draft by proposing alternative arrangements which are equally effective but do not suffer from the problems they see in the present draft. This would be an act of positive negotiation, and such proposals would be considered.

I should like to mention briefly Australia's contribution to verification. In the field of chemical weapons, Australia has long been conscious of the fact that the 1925 Protocol lacks verification provisions. For this reason we supported the General Assembly resolution initiated by France (37/98D) inviting the Secretary-General to establish a list of experts and laboratories on which we could draw to investigate allegations of the use of chemical weapons.

Following adoption of the resolution, Australia nominated the Materials Research Laboratory of the Australian Defence Department to the Secretary-General's list. We are now making plans to expand the capabilities of that laboratory to contribute such expert services to international verification of reports of use of chemical weapons. Indeed, even before the Secretary-General had completed the task of implementing resolution no. 37/98D, he had occasion to establish an investigatory team of specialists to investigate reports of the use of such chemicals in the Iran-Iraq war. Australia contributed an expert to that mission. By virtue of our geographical location, Australia is in a position to make a unique contribution to verification and information gathering related to the implementation of nuclear-arms control.

The arms-control agreements being observed by the United States and the Soviet Union rely on the national technical means of those two Powers, especially on information-gathering satellites. More than ever, information-gathering satellites make an essential contribution to the stability of the strategic balance between East and West and they do this by providing a basis for confidence in the observance of arms-control agreements which can lead to significant arms reductions. The preservation of that capability is vital to all. It is in fact a necessary prerequisite to arms reduction and disarmament. In this context I note, in particular, the section of the recent French initiative on outer space arms control which calls in part for "prevention of destabilizing military developments without affecting military activities (in space) that contribute to strategic stability, and those which may be instrument in controlling disarmament agreements".

In similar spirit I would suggest today as an urgent items for the Conference on Disarmament, in its exploration of the issues relevant to arms control in outer space, consideration of the possibility of measures to protect from attack all satellites (early warning, communications and the like) which contribute to the preservation of strategic stability and which can be instrumental in monitoring disarmament agreements. I would also suggest that the same protection be extended to the ground stations which are essential to the operation of these satellites. For the present, I hope that the idea will commend itself to the Conference as a potentially important confidence-building measure. It directly supports the implementation of present arms-control agreements and future disarmament agreements, and above all, it will contribute to the maintenance of stability, until the required disarmament agreements are made and put into effect.

In relation to the question of a nuclear-test ban, Australia has participated actively in the continuing work of the Ad Hoc Group of Scientific Experts. We are involved in the co-ordination of the Ad Hoc Group of Scientific Experts' global seismic experiment. Subject to budgetary decisions, which I can confidentially acknowledge have been successful, we are preparing to expand Australia's own seismic detection capabilities and ability to contribute to a global network in support of a CTB.

I suggest that the Conference on Disarmament proceed now directly to establish a fully operational global seismic network -- possibly supplemented with atmospheric fallout samplers and other technologies. This network would monitor all nuclear explosions, wherever they occur, and explore the capabilities of such a network to monitor a comprehensive test-ban treaty.

CD/PV.279

pp.15-16

Sri Lanka/Dhanapala

7.8.84

CW

I referred earlier to the questions relating to definitions. As regards herbicides my delegation agrees that this question could best be handled outside the definitions in view of the conceptual and practical problems, including verification problems, it entails. This should not, however, belittle the need for the future convention to take cognizance of the concerns expressed. Coming from a tropical developing country where the natural cover and ecology is an important element of our agro-based economy, we share the concerns about the hostile use of herbicides. We therefore believe that the absence of an undertaking against such use will be a lacuna in the convention. There is an important need to define permitted purposes and activities in such a manner that no loopholes are left, while recognizing that loopholes will always be found where the political will to honour a treaty is absent.

There is agreement that one of the most important elements, if not the most important of the convention, is the elimination of existing stockpiles and facilities. The negotiations in Working Group B showed that there is also agreement that elimination of stocks should be undertaken according to an agreed schedule which takes into account the security interests of all States. We also would like to be optimistic about the emerging consensus on on-site monitoring of destruction or diversion of stocks. These areas of agreement however cannot mask the differences that remain. The issues relating to the timing of declarations and locations of stocks should be addressed in a realistic way in accordance with the principles already agreed upon such as the principle of having an agreed schedule or time-frame for elimination of stocks. It is regrettable therefore that more thought could not be given to the possibilities of finding realistic solutions to these outstanding problems without indulging in circular discussions of arguing for and against well-known positions. Whilst noting the constructive trend of emerging understanding on the question of verifiable diversion of components of existing stocks, my delegation regrets the lack of similar understanding on the need to have as comprehensive information as possible with regard to the plans for destruction. It would be important for the States parties who do not possess chemical weapons as well, to know that chemical warfare capability is reduced and eliminated without prejudice to the security of any State party. This would promote the stability of and wider adherence to the convention. It is to be hoped that an acceptable compromise could be found on the basis of the suggestion for the redeployment of stocks before declaration. We welcome the willingness displayed to share expertise over the destruction of chemical weapons. Document CD/518 of the delegation of the Federal Republic of Germany and the kind invitation of the Government of Switzerland to the Conference on Disarmament to visit the facility in Spiez are examples of this. So also are the statements of the representative of Finland on 19 June and the representative of Norway on 26 June.

Much has been said about verification. It has been accepted by all that absolute verification is a chimera. Let us therefore save our energy by not chasing after it. There is no doubt that a convention as complex as the one being negotiated now should necessarily have a carefully worked out verification procedure to promote confidence of States. The technological capacity to verify a chemical-weapons ban is not in doubt so long as the political will to comply with the ban and mutual confidence exists. My

delegation regrets the political debate on verification which has blocked progress on more than one disarmament agreement. Refusal to accept nothing less than total intrusiveness or rejection of that optimum degree of the intrusiveness necessary for the viability of the agreement, would not be compatible with the declared commitment to outlaw these weapons in the interest of all States. We should also bear in mind the necessity of not burdening prospective States parties with cumbersome and expensive verification procedures relating to monitoring of production for permitted purposes. Similarly verification must be protected against misuse through irresponsible, mischievous and provocative challenges which could lead to counter-challenges and a consequent over-burdening of the verification machinery as well as a jeopardizing of the stability of the Convention. If the Convention is to be of a truly multilateral character, it should not give rise to additional investments on the part of the developing countries for the setting up of institutional mechanisms to monitor the civilian chemical industry. The common denominator of verification should be found not only among the possessors of chemical weapons but also among the possessors and non-possessors. With regard to the Consultative Committee and the institutional arrangements envisaged for verification, my delegation would like to see the principle of universality maintained with democratized decision-making procedures. We cannot subscribe to the view, that has been disproved over and over again, that power begets responsibility, justifying a weighted scheme of decision-making. Peace and security is the common right of mankind. It is too important to be put in charge of a few countries who happen to monopolize weapons of mass destruction.

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pp.18-19

Romania/Datcu

7.8.84

CW

In my delegation's opinion, efforts to prohibit the development production and stockpiling of chemical means of warfare should be placed within the setting of the general concern of States to outlaw all weapons of mass destruction, above all nuclear weapons. The convention on chemical weapons should therefore be global in character, covering all toxic warfare substances, including non-lethal ones, the means of using them and production facilities, even those which at present are not operational but may become so within a very short time. We believe that the basic undertakings of the future convention should cover the prohibition of the use and the threat of use of chemical weapons. At the same time, the convention should encourage the broadest exchange possible of technical information as well as co-operation in the peaceful use of the chemical industry, above all for the benefit of developing countries. Special provision should be made to guarantee open and free access for all States parties to the processes and licences required both for the destruction of stockpiles of chemical weapons and for the verification and monitoring of the obligations undertaken, the starting point being, naturally, the experience already acquired by some countries in this field. At the same time, the convention should permit the production, transfer and storage of toxic substances and their precursors, in strictly specified quantities, for protection, as well as for industrial, agricultural and medical uses, etc. It may be assumed that the chemical agents in this category should not exceed 1,000 kilos per year and that the national authority responsible for implementing the convention will inform the Consultative Committee in writing each year of these activities. The production of these agents should be carried out within a single industrial unit, designated by each State and subject to verification.

It is in this light that we have appreciated the Working Paper submitted by the United Kingdom delegation (document CD/514, of 1984) on the verification of non-production of chemical weapons, as a suggestion for ensuring that such activities do not

become a source for the production of chemical agents for hostile purposes.

The convention should allow the transfer of toxic substances used for protective or research purposes to member countries which do not possess production facilities. Such transfers should not exceed a total of 1,000 kilos and should be monitored by the Consultative Committee, with a view to preventing the acquisition of stockpiles through purchases from several suppliers.

Concerning the declaration of stockpiles, production facilities and transfers of chemical agents, we support the idea that each States party should report, within 30 days at the most following the entry into force of the convention, on quantities of toxic warfare substances, according to categories, types and characteristics, as well as their means of use, year of production and origin. In our opinion, declarations should also indicate programmes for the destruction of stockpiles of chemical agents and their means of use. The respective operations should begin at the latest within six months of the entry into force of the convention and should continue, though not beyond a period of 10 years. In addition, provision should be made for dismantling facilities for the production of chemical warfare agents and for the filling of chemical munitions.

The verification of the substantive provisions of the future convention naturally represents a fundamental element of this international instrument. In the opinion of the Romanian delegation, verification should consist in a combination of national and international means, including an obligatory system of systematic inspection, including on-site inspection, as an important instrument for creating and maintaining a climate of trust between the States parties. An important role should be attributed to the national authority, which each State should constitute with a view to acquiring appropriate instruments for the analysis and rapid appreciation of all relevant developments. The structure and composition of this authority should be such as to permit both specific activity on an internal plane and efficient co-operation with other similar agencies and international verification bodies. We attach full attention to the important proposals submitted in this respect by the Yugoslav delegation (document CD/432).

The Romanian delegation considers that, in order to increase the credibility of the destruction of stockpiles of chemical weapons, as well as of production facilities, national measures should be supplemented with international means, including on-site inspections. We also support the setting up of a Consultative Committee and of subsidiary bodies, based on the principle of the equality of all States parties to the Convention, working on a basis of consensus. In the opinion of the Romanian delegation, the task of the Consultative Committee could be to verify the declarations of States, to co-operate with national authorities and ensure an exchange of information, to analyse requests for on-site inspection, to resolve any differences which may arise and to inform all the States parties each year on the way problems related to the Convention have developed. We would also like to record our support for the idea of setting up an interim body, to prepare the application in practice of the Convention prior to its entry into force. Setting up such a body, through a General Assembly resolution, the same as would open the Convention to the signature of all States, would in our opinion be a good solution.

CD/PV.280

pp.7-11

USSR/Issraelyan

9.8.84

CW

About two years ago the Soviet Union submitted to the Conference draft basic provisions for a convention on that subject. We have since repeatedly adjusted and supplemented important elements of that draft so as to accommodate the positions of the parties to the negotiations, in particular with regard to the scope of the ban and its verification. This was welcomed at the Conference. The Soviet delegation is firmly

convinced that the proposals of the USSR provide a real basis for a mutually acceptable agreement on the totality of issues related to a chemical weapons ban, including, naturally, those of verification.

However, as in the case of many other arms limitation and disarmament negotiations, certain delegations made verification of compliance with the future convention a major obstacle to the conclusion of an agreement on this issue. The Soviet delegation therefore feels obliged to present once more our views on the issue of verification.

The main purpose of verification is to promote the implementation of arms limitation and disarmament agreements. Our assumption in this context is that the very conclusion of an international agreement is itself an expression of mutual trust between the parties to the agreement. As to the verification provisions, they should increase that confidence through the presentation of relevant information on the practical and effective compliance with the convention and by carrying out other adequate forms of verification. For all their importance, the verification measures have only a secondary role, while the central role belongs to the agreement itself which provides for arms limitation and reduction and should be subject to verification. If isolated from actual arms limitation measures, verification loses its meaning and becomes pointless. It should enhance the security of the parties, rather than undermine it.

The existing arms limitation treaties and agreements bear no evidence to the undisputable priority of national technical means of verification — I repeat, the undisputable priority of national technical means of verification — which are best suited to serve the security interests of States. At the same time the Soviet Union believes that, where necessary, additional measures may be adopted (depending on the nature of possible arms limitations) to increase the effectiveness of verification. However, in no case should those measures be used to interfere in the internal affairs of States or to damage the security of any of the parties. The Soviet Union is interested in effective and reliable verification as much as any other nation, including the United States. Naturally, this also applies to the prohibition of chemical weapons, in view of the current large-scale United States programmes for chemical rearmament.

As is known, the Soviet Union has proposed using diverse forms of verification to provide assurance of compliance with a chemical weapons convention. Those would be in the first place national verification measures, which are especially useful in view of the extremely broad scale of chemical production in virtually all countries of the world. In addition, there are national technical means which are now already fairly varied and will doubtless improve in the future. In this connection we assume that the parties having such national technical means in their possession can make available to other parties, as necessary, the information obtained by those means which is important for the purposes of the convention. We also have in mind systematic international on-site inspections in connection with certain provisions of the future convention; and finally, on-site verification on request, the role of which is hard to overestimate in view of its very broad nature.

Our approach to verification is confronted with another approach, one that can hardly be called anything but extremist. Its most striking element is the so-called "open invitation" concept formulated in the United States draft chemical weapons convention. This concept has already been mentioned repeatedly in the statements of many delegations. We too would like to set forth our views regarding that concept.

In the first place it is unrealistic. It has to be taken into account that every State in the world has certain areas of activity, agencies, institutions and facilities, an open access to which would require a change in their existing legislation. It would be sufficient to cite the national gold reserve and security depositories, institutes that use sensitive devices and equipment kept in special premises and made accessible only at strictly defined time intervals, or archives, not to mention military facilities and

defence agencies having nothing to do with chemical weapons. The adoption of this concept would result in the disclosure of the political, economic, scientific, military, commercial and other secrets of the States parties unrelated to the production, stockpiling and storage of chemical weapons, and the disorganization of various branches of industry.

Secondly, this concept discriminates against parties with State-owned or partly nationalized industry, putting them in an unequal position compared to the States where private enterprise predominates. This has repeatedly been pointed out in the Conference, including at the meeting on 7 August. Such an approach is especially unacceptable given the possibility of the production of binary weapon components by private enterprises.

Thirdly, this concept is, in our opinion, inherently flawed since it proceeds from total distrust between States and is an expression of outright nihilism with regard to international law. The inference present in this concept that any State party may be expected from the outset to violate its international obligations means that any State can be regarded as potentially in violation of international law. The application to the States of a concept contrary to the presumption of innocence would be counter to the principle of the voluntary nature of international obligations. By embracing this approach we would call into question the binding nature of the principle "Pacta sunt servanda" which is one of the foundations of international law, or what is known as "jus cogens", norms that no States can disregard if it is to remain a part of the international community.

And finally, the adoption of this concept can only complicate international relations and even give rise to international friction and conflicts. Hardly anyone fails to perceive that an international inspection conducted under the "open invitation" scheme, for example, at military facilities that have nothing whatever to do with chemical weapons, would provoke countermeasures on the part of the State subjected to such an unwarranted inspection. The consequences of this kind of an "inspection" are difficult to foresee.

The Soviet delegation shares the concern expressed on this subject by Ambassador Dhanapala of Sri Lanka, who said on 7 August: "Verification must be protected against misuse through irresponsible, mischievous and provocative challenges which could lead to counter-challenges and a consequent overburdening of the verification machinery as well as a jeopardizing of the stability of the convention". The "open invitation" concept is an attempt at achieving absolute verification. Here again we support the view expressed by Ambassador Dhanapala, who called such absolute verification a chimera. He suggested that we save our energy by not chasing after it. We call upon everyone to respond positively to this appeal.

For all these reasons the Soviet Union, like many other countries, rejects the "open invitation" concept. It has to be added that this concept is also an expression of the United States demand that other States, and the Soviet Union in the first place, shall open up their entire territories and disclose their military activities. And this is being demanded at the very moment when a frenzied anti-Soviet campaign is under way, when the Soviet Union has been called the "empire of evil" and plans for an all-out or a "limited" nuclear war against it are being discussed. It would be at least naive to expect the Soviet Union to meet such a demand. Indeed, that demand is only advanced in the calculation that it will inevitably be rejected, thus complicating or even disrupting the negotiation of a chemical weapons ban.

The problem of verification must not become an obstacle blocking the way to a chemical weapons convention. As the General Secretary of the Central Committee of the CPSU, and President of the Presidium of the Supreme Soviet of the USSR, K.U. Chernenko, put it, "when there is a real desire to agree on arms reduction and disarmament

ment measures, verification has never been and cannot be an obstacle".

The Soviet delegation suggests that the Ad Hoc Committee on Chemical Weapons should concentrate first of all on working out measures and forms of verification that would be both effective and practically feasible, rather than indulge in discussions around extravagant and deliberately unrealistic and irrational proposals. There is still plenty of serious and vitally important work to be done, including even in such apparently "advanced" areas as the destruction of stockpiles or permitted production at a specialized facility. We are convinced that a considerable potential for progress exists also with regard to the procedures for taking decisions on verification in the Consultative Committee and its organs, the procedures for conducting the actual inspections, etc.

I shall now deal with another fundamental problem related to the future chemical weapons convention. The Soviet delegation, like many others, is firmly convinced that the question of banning binary chemical weapons as a qualitatively new, and most dangerous, type of such weapons, described by its creators as the weapon of the future, should be among the central issues of the future convention.

However, a look at the United States draft reveals that the question of banning binary weapons is obviously being downplayed. That United States representative, Ambassador Fields, said in one of his statements at the Conference that the convention should ban "any type of munitions or devices used to release the chemicals on the battlefield". One possible understanding of this formula is that it covers the binary chemical weapons as well. But if so, why is this most advanced type of chemical weapons not referred to by its proper name, while it is included in the United States chemical rearmament programmes quite independently and is regarded as most promising?

One cannot avoid the conclusion that all this vagueness and lack of definition serves to conceal the intention to leave open a possibility of mounting the mass production of this latest generation of chemical weapons in the United States. The repeated statements by the NATO armed forces commander, General Rogers, regarding the importance of binary chemical weapons being deployed in Europe only confirm this understanding of ours.

The time has come when the question of banning binary weapons must be clarified once and for all if we are to move forward in our negotiations. We consider it necessary, in particular, to work out, for the purposes of the convention a definition of a "key component of a binary chemical system" so that it could not in some way or another entirely vanish from the scope of the convention, and then to compile, on the basis of this definition, a list of such components which should be kept in mind when formulating the relevant provisions of the convention.

There is another issue in the negotiations on banning chemical weapons that must be completely clarified. It is the question of prohibiting the use of herbicides in military operations, as well as the use of irritants in military and other conflicts. Their exemption from the ban is counter to the Geneva Protocol of 1925 and is aimed at legalizing the production of those chemicals which, as we all well remember, were widely used by the United States in Viet Nam.

We support the position expressed on this subject by Sri Lanka, Indonesia, Argentina, Viet Nam and some other States and believe that the convention we are discussing should absolutely ban the use of herbicides for military purposes. Regardless of the eventual decision on the relationship of the convention with the Geneva Protocol of 1925, the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques and other international agreements, such a ban on the use of herbicides would introduce utmost clarity and would therefore be very useful. Naturally the future convention should also ban the use of irritants in armed and other conflicts. As to the possible use of irritants for "riot control", which includes

suppression of peaceful public rallies (demonstrations, meetings, etc.) the Soviet side believes that such a provision would be far-fetched, incompatible with the dignity of people and tending towards human rights violations.

I would also mention that from our study of the proposed United States definition of chemical weapons we have been unable to understand the United States position on incapacitants, namely, whether their use for law enforcement should or should not be banned.

I should also like to point out the following. In the context of permitted activities, the United States draft convention focuses entirely on the relatively small quantities of supertoxic lethal chemicals that could, under the future convention, be produced or retained by the parties for protective purposes. At the same time the draft actually ignores the same chemicals, regardless of their quantity, once they are officially intended for peaceful purposes. Production of such chemicals is permitted at all commercial enterprises, with no restrictions whatsoever on the number of such enterprises or on the transfers of such chemicals. The proposed quantitative limitations are also unclear. This approach provides a basis for any State, should it choose to violate the convention, to produce the most dangerous of the prohibited chemicals in any amounts it might need.

And finally, I will touch upon one more issue which the Soviet delegation gave special attention to in its last statement on chemical weapons. I am referring to the tasks and functions of the Consultative Committee to be established under the future convention. As we have already emphasized, we attach great importance to formulating the provisions on the organization and functioning of such a Committee. In order to facilitate further negotiations on this issue, a group of socialist countries intends to submit to the Conference a working paper devoted to the organization and functioning of the Consultative Committee. We hope that the working paper of the socialist countries will be taken as a basis for the solution of this issue.

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pp.13-16

Sweden/Ekeus

9.8.84

CTB

The discussions on the verification of a treaty have so far mainly been focused on the monitoring capabilities of certain verification systems. Such capabilities are usually expressed as the detection and identification threshold which can be achieved with a high degree of confidence. Verification of a test-ban treaty, like verification of any disarmament measure, involves also other aspects.

As we see it, the purposes of such a verification system are: first, to deter the parties to a treaty from conducting clandestine activities; second, to provide confidence that the parties to the treaty observe the treaty obligations; and to counteract unfounded suspicion about naturally occurring events.

The verification situation must be looked upon from two different sides; the monitoring side and that of a potential evader. From the monitoring side the system is assessed in terms of what can be observed with a high degree of confidence. A potential evader is, on the other hand, considering which clandestine tests he could carry out with a small risk of being detected.

It is reasonable to assume that a potential evader is not prepared to accept a detection risk exceeding 1-10 per cent, whereas confidence levels of 90-95 per cent have been discussed as requirements for confident monitoring.

The detection and identification capability of any verification system depends on the level of confidence we are considering. As an illustration, a certain seismic system that has a 90 per cent probability of detecting and identifying an event in a certain area might have a capability of detecting and identifying events less than one third that

size if the detection probability were placed at 10 per cent. Other numbers may apply to other systems and other areas, but the example shows that a system has a deterrence capability at considerably lower threshold than are usually contemplated when assessing global and regional seismic verification systems.

To create and preserve necessary confidence in a CTB treaty, it is important that all parties are convinced that the deterrence against clandestine activities is maintained. To achieve this the established verification system must be efficiently operated and maintained. It is also essential to provide a high detection and identification capability against such clandestine activities that in any significant way can influence the over-all nuclear-weapon situation. This means that there must be a high probability of detection and identification of explosions of yields large enough to make possible the development of new nuclear weapons or weapon systems.

A global seismological verification system will be a key part of the verification arrangements for a CTB treaty. Such a system will observe a large number of earthquakes every year in most parts of the globe. With few exceptions these earthquakes will be identified as such with the help of the seismological data provided by the system. It is, however, expected that on a few occasions uncertainty will remain as to the nature of the observed events. In those cases it is important that such events could be clarified through the verification provisions of the treaty. Thus the parties, by means of consultations, of access to additional scientific data or of on-site inspections, could be assured that the events were not clandestine nuclear-weapon tests. This includes arrangements for observing special events, i.e., large chemical explosions that might otherwise be misinterpreted. Lack of agreed procedures for efficiently taking care of suspicion about naturally occurring events could jeopardize the very existence of the treaty.

In the Swedish view, the verification arrangements included in the draft treaty presented by Sweden on 14 June 1983 (CD/381) contain the necessary provisions for adequate verification. In this context we also support the proposal earlier this week by the Minister for Foreign Affairs of Australia that such a verification system should be established without further delay, which is in line with our view that a verification system should be in operation when the treaty enters into force. If the most advanced technology is used we should then be able to demonstrate that any reasonable demands on a verification system are fulfilled and the presumed lack of adequate verification can then no longer be used as an excuse for further testing.

The Ad Hoc Group of Scientific Experts is presently planning a technical test covering the extraction of level I data at participating stations, the exchange of this data using network provided by WMO/GTS and the compilation and analysis of the data at specially established experimental international data centres. Sweden supports this work and will actively participate in the experiment by providing data from the Hagfors array station and by operating an experimental international data centre in Stockholm during the test. The Swedish delegation is convinced that the results from this test together with the results of national efforts to improve and develop the procedures and the facilities for seismic data recording, analysis and exchange will greatly facilitate the establishment of a global seismic verification system.

In the draft treaty submitted by Sweden last year which I have just mentioned we proposed that, in addition to the international seismological verification system, a similar system for monitoring atmospheric radioactivity be established. We have noticed with satisfaction that delegations have expressed interest in pursuing this idea further. The time therefore seems appropriate to start technical elaborations on this subject. As a system for monitoring atmospheric radioactivity closely resembles that for the exchange of seismological data, developed by the Ad Hoc Group of Scientific Experts, it could be contemplated to give the Ad Hoc Group the task to further study also this

matter. Such a technical study should inter alia include the specification of the equipment necessary for collecting data on atmospheric radioactivity; the procedures for the extraction and the exchange of radioactivity data, and the procedures to be used at International Data Centres for the compilation, processing and redistribution of data.

It might also include a preliminary estimate of the detection capability of a tentative global network of collecting stations.

In the draft treaty of Sweden additional international verification measures were mentioned, such as the exchange of data on hydro-acoustic signals in the oceans and infrasound and micro-barographic signals in the atmosphere should be established. It is essential that technical discussions also of these measures be initiated.

The question of on-site inspection has become an essential element of the verification arrangements of a CTB treaty. Agreement in principle seems to exist in this respect. The technical material which is available today on the various inspection techniques and their potential usefulness is, however, insufficient to allow an in-depth discussion of this issue. It is important that a technical basis for such discussion should be established without further delay. In our view these tasks could also preferably be given to the Ad Hoc Group of Scientific Experts.

It has recently been suggested that, while awaiting a political opening for a comprehensive nuclear-test-ban treaty, a gradual approach should be considered. I have, of course, in mind the proposal presented to this Conference on 12 June this year by the Minister for Foreign Affairs of Japan, a proposal elaborated upon by the distinguished representative of Japan, Ambassador Imai, in his statement at the plenary meeting of 26 July. The ideas thus presented represent an imaginative approach by defining the lowest yield of nuclear explosions for underground testing to be banned in relation to the state of the art of verification. If I understand the proposal of Japan correctly, explosions that can be detected and identified by an established international verification system should be banned, others not. The proposal is thus an example of a threshold arrangement. However, the threshold approach as such raises some fundamental questions. The experience of the existing threshold test-ban Treaty can hardly be described as encouraging. May I remind the delegates of the 1974 Treaty between the United States and the USSR, signed, not ratified but still adhered to. This Treaty limits nuclear-weapon-test explosions to yields below 150 kilotons. This is, by the way, an absurdly high level, considering that the Hiroshima bomb corresponds roughly to 1/10 of the yield taken as a limit for this Threshold Treaty. The implementation of the 1974 Threshold Treaty has been marred by suspicion between the Parties and has reduced rather than enhanced confidence between them.

Another concern, of a more political character, which must be taken into consideration with regard to both threshold proposals and other step-by-step approaches is that such proposals tend to legitimize nuclear-weapon testing. It is indeed difficult to imagine an international treaty negotiated in the Conference on Disarmament that would tolerate and condone underground nuclear-weapon tests. In the light of past experiences my delegation is bound to state that eventual undertakings to the effect that the nuclear-weapon States would "in good faith" negotiate a comprehensive test ban lacks credibility.

Sweden considers that a gradual threshold approach could be acceptable only if it is directly linked to a treaty on a comprehensive test ban. In practice this would mean that a test-ban treaty effective from a specific date must be concluded. The treaty could contain a phase-out period during which the testing would be gradually reduced and finally stopped. This would take place during a limited specified period of time. Examples of such possible phase-out procedures are given in the draft treaty presented by Sweden in 1977 in document CCD/526/Rev.1.

A threshold approach does not preclude modernization of nuclear arms. It is there-

fore highly desirable that the phase-out period is kept as short as possible. A threshold system without a zero cut-off point within a limited time-span as the end-product would be of little or no help in advancing the task of blocking vertical and horizontal proliferation as set out in the Non-Proliferation Treaty. On the contrary, new threshold arrangements would rather be counter-productive as regards efforts to strengthen the NPT. Next year the third Review Conference of the NPT will take place. As Parties to this Treaty, an overwhelming number of States, including Sweden, have renounced their nuclear-weapon option. Under the NPT, the nuclear-weapon States have committed themselves to negotiate limitations on their nuclear-weapon development. It is of fundamental importance that the Parties to this Treaty honour their undertakings. Proposals for threshold arrangements must be looked upon in this perspective. Furthermore such arrangements would complicate efforts to establish a test-ban moratorium or a nuclear freeze, supported by many States.

We will study with great interest further information from the delegation of Japan with regard to the possible upgrading of the international verification system.

Sweden for its part considers that verification of nuclear-weapon tests is feasible down to such very low yields that the whole spectrum of nuclear-weapon development for all practical purposes would be covered. Certainly, as has been outlined, adequate verification measures would probably require some further refinement and testing, but that demands no other scientific and technical resources than those already within reach.

CD/PV.280

pp.16-17

Poland/Turbanski

9.8.84

CW

The reason for my taking the floor today is to introduce, on behalf of a group of socialist States, a working paper, to which Ambassador Issraelyan referred in his statement today, entitled "Organization and functioning of the Consultative Committee of a CW Convention", issued under the symbol CD/532, as well as CD/CW/WP.84, and as you undoubtedly noted, distributed at the beginning of today's plenary meeting.

The paper's main outlines are based on previous proposals of socialist States as well as on proposals of other delegations. It contains also some new elements such as, for example, on co-operation of international and national verification bodies. This subject is covered in Chapter III of the Working Paper.

In our view, closer co-operation between these bodies should contribute to implementation of the Convention.

By introducing this document we would also like to contribute to the further development of the concept of the organization and functioning of the Consultative Committee.

The basic provisions of the Working Paper are contained in three chapters concerning: General provisions and structure; functions; and co-operation with the national verification bodies of the State Parties.

I should like to stress that we are ready to co-operate and to work together with all other delegations in the search for mutually acceptable solutions for the work of the Consultative Committee.

Again in this respect the socialist States are ready to demonstrate their flexibility, willingness to compromise as well as understanding of other delegations' positions, and we hope that such an approach will be reciprocated.

Our aim is to establish the machinery of the Consultative Committee such as would ensure the best possible co-operation among the States Parties to the future Convention in order to prevent any possibility of its violation. This should be secured by means of consultations, broad exchange of information and effective co-ordination of the work of

the international and national control and verification bodies.

The first chapter of the document contains general provisions, such as, those relating to the establishment of the Committee, representation of the States Parties in the Committee, its sessions, decision-making, and presentation of the results of its sessions. It also contains a structure for the Committee, the structure of the Executive Council, and the Technical Secretariat, as well as the way in which decisions will be made by the Executive Council.

The second chapter deals with the functions of the Consultative Committee. Chief among these are the following: co-ordination of all forms of verification; elaborating standard verification techniques; receiving, storing and disseminating information on compliance with and implementation of the convention; consultations; determining the modalities and time-frames of international on-site inspection; verifying reports on the use of chemical weapons; and considering requests for on-site inspections.

The third chapter touches upon a problem which so far has not been discussed, or only to a small extent, in the Ad Hoc Committee on Chemical Weapons. It refers to one of the important, practical elements of the future convention.

In that chapter, the socialist countries try to provide a preliminary description of the principles on which the co-operation between the Consultative Committee with the national verification institutions should be based.

To sum up, I wish to emphasize again that our document contains all the basic provisions regarding the Consultative Committee, provisions which are considered to be our contribution to the wide-ranging discussion of the concept of that committee, in a spirit of good co-operation and mutual understanding.

CD/PV.280

pp.18-20

France/Montassier

9.8.84

CW

With regard to definition, we have often run up against a particularly difficult problem: that of key precursors, a crucial point at which the problems of stocks, production and verification all meet. There are two opposing viewpoints on this subject: those who wish to negotiate on lists of products, category by category; and those who call for a global definition to serve as a universal criterion. After carefully studying various possibilities, my delegation proposes a combination of the two approaches: it suggests a generic definition which would identify families of products and make it possible to draw up lists of products. In the case of each product, it will be necessary to carry precision to the point of determining, first, the degree of toxicity and therefore of risk; then use, exclusively military or partially for civilian purposes; and finally conditions of production, and control over it.

The French delegation intends to submit, at the next session, a technical document in which this outline will be developed.

With regard to the destruction of stocks, useful work has certainly been carried out at this session in bring us nearer to reasonable solutions. However, two points deserve particular attention.

The French delegation has long stressed the dangers inherent in all reconversion formulas. It is nevertheless ready to display a spirit of compromise and accept the possibility of the conversion of toxic warfare stocks for peaceful purposes, on two conditions: that lethal supertoxic chemicals and single-purpose precursors should be destroyed and not converted, apart from those produced for permitted purposes; and that the conversion process should be subject to strict control.

The fact remains that the destruction of conversion or stocks could not take place instantaneously. It would therefore be desirable to provide for co-ordination among States which declare that they possess chemical weapons to enable them to harmonize

their destruction plans. What is at stake here is something essential: nothing less than the security of each State.

Side by side with the negotiation of the Convention, and throughout the process leading to its signature and subsequent ratification, it will be necessary to ensure this co-ordination of destruction plans. This is a fundamental point: it is sometimes just as important to know how and at what pace the clauses of the convention will be implemented as to define flawless machinery.

The disappearance of stocks and production facilities is obviously the best guarantee against recourse to chemical weapons in case of conflict; in the interim, a threat will always exist, and current events demonstrate that this is not a theoretical danger. To avert this threat, which will last as long as there are chemical weapons which can be used, and which will reappear rapidly once a signatory State decides to withdraw from the Convention, protection exists in the form of the Geneva Protocol of 1925. It is therefore in no one's interest to weaken this bulwark.

Furthermore, the Geneva Protocol can itself resolve some problems which have arisen from time to time to complicate the drafting of the convention.

From this standpoint, it is quite useless to cover these various points in the convention, provided, of course, that the authority of the Geneva Protocol is expressly maintained and that it is clearly interpreted.

My delegation therefore proposes the inclusion in the convention of a clause which would provide for: "the exclusion of the use of chemical weapons in any armed conflict by the implementation of the provisions of the Convention, which are complementary to the Geneva Protocol, the prohibitions in which must be respected by all States Parties to the Convention".

We are aware that a formulation of this kind may perhaps have to be altered to take account of the legal system in some countries, but as far as substance is concerned the idea must be retained, however it is set forth, as a general formula, such as we have suggested, or a more detailed clause.

Finally, I should like in a few words to comment on the institutional machinery of the future convention, in particular the Consultative Committee and the Executive Council.

In our view, every signatory State will be an *ex officio* member of the Consultative Committee, which must take its decisions by consensus, like the Executive Council. On the other hand, the membership of the future Executive Council seems a more difficult matter. We should not try to seek a magic formula, but rather be realistic, in order to be effective. What, then, are the ways open to us?

The regional approach as a way of selecting the candidates for the Executive Council is certainly not to be ruled out. The desire for effectiveness also suggests that, whether a regional or some other criterion is adopted, the States whose technological, financial and military potential make them essential partners in the sphere of a chemical weapons convention should be permanent members. Thirdly, the possibility of access to the Council for all States Parties to the convention by means of election should obviously be recognized.

Consequently, to combine these various criteria it cannot be ruled out that the membership of the Executive Council must be raised to 20, perhaps 25, but certainly no more.

I shall not dwell at any greater length today on the details of the problems raised by the draft convention on chemical weapons. In a later statement my delegation will deal with all the problems raised by verification, whether of stocks, production facilities or the use of chemical weapons. It will also put forward its views on the institutional machinery of verification. These are controversial and thorny problems which show us how great the task before us would be even if it were merely a question of settling

those questions alone.

CD/PV.282 p.8 Pakistan/Ahmad 16.8.84 CTB

....But we have to recognize equally that such a step-by-step approach must be part of a plan where one step is followed automatically by more meaningful steps, with each time-bound phase leading within an agreed time-frame to a comprehensive test-ban Treaty. This approach can be pursued at two levels simultaneously. First, we can gradually reduce the yield range of nuclear tests and second we can provide for a reduction in the number of nuclear-tests on a yearly basis. Despite arguments that the technology to verify and locate nuclear testing has not yet reached a level of sophistication which would satisfy some States, my delegation believes that given the political will such an approach could be made adequately verifiable.

CD/PV.282 pp.15-19 Netherlands/van Schaik 16.8.84 CW

It is obvious that, in particular with respect to the verification of the future ban, certain immensely difficult hurdles must be overcome. This prompts me to focus in my intervention on some general aspects of the role of verification in a chemical weapons ban, as well as on some of the main related problems.

Let me state at the outset that it is no surprise that questions of verification continue to present major obstacles in the search for a chemical-weapons agreement: chemical weapons have only too effectively been used throughout this century and even in the recent past we have been witness to the horror of chemical war. Chemical weapons have been and continue to be stockpiled in militarily relevant quantities, thus forming a threat to mankind. Eradicating chemical weapons would therefore amount to a major disarmament effort aiming at the removal of a redoubtable and viable weapons-system. It is only too understandable that for such an effort to be successful, confidence in the compliance with the provisions of the agreement should be assured. This can only be achieved in the form of a set of inevitably elaborate and in themselves unprecedented verification arrangements.

This alone would sufficiently explain the formidable task the present negotiators are confronted with. Unfortunately, however, there are other complicating factors inherent in the nature of chemical weapons themselves.

A great many potential chemical warfare agents and precursors thereof are produced in the civilian chemical industry and for perfectly permissible and legitimate purposes. On the one hand we recognize that measures to verify the non-production of those agents and precursors for hostile purposes in the civilian industry should not interfere with production for legitimate purposes — production which takes place, moreover, in a highly competitive context. On the other hand we must insist that measures to contain and reduce the risk of circumvention or evasion of the rules are essential, especially in an area where possible loopholes appear to be abundant.

An additional related complicating factor is the emergence of highly developed chemical industrial activities for civil purposes in an increasing number of countries. Thus there is an increasing risk of proliferation of chemical weapons to be taken into account. This underlines the importance of a truly multilateral agreement.

Do these complicating factors render our goal well-nigh out of reach? This certainly is not the case. We witness progress in the Ad Hoc Committee and in working groups. We have listened to very constructive and thoughtful interventions on the matter in these last weeks. I mention the very interesting and comprehensive clarifying contribu-

tions made by Ambassador Fields of the United States, and by Ambassador Cromartie of the United Kingdom, the important observations which the Australian Minister for Foreign Affairs, Mr. Bill Hayden, made in particular on the verification issue, as well as Ambassador Dhanapala's lucid remarks that brought certain problems in their proper perspective. Permit me also to mention the interventions of Ambassador Issraelyan, on 9 August, Ambassador Daciu of Romania, Mr. Montassier of France and the State Secretary for Foreign Affairs of Switzerland, Mr. Brunner, to whom we are grateful for inviting us to visit his country's protection facilities in Speiz.

We share the views of those who stated that obtaining a hundred per cent assurance of compliance is beyond our reach. The other day Ambassador Issraelyan made the plea that "presumption of innocence" rather than mutual distrust should be the guiding principle in our work for the convention. We wish to add, however, that "presumption of innocence" is only valid once a verification regime will ensure that the present alarming situation, which certainly did not arise out of acts of innocence, will effectively be tackled.

In our view, we should seek, so to speak, "adequate" assurance of compliance through a package of verification measures which complement and mutually strengthen each other. At the same time, we should not dissimulate that ultimately the decision whether or not to agree on any draft of a chemical weapons convention is a political one, requiring both courage and, of course, confidence. Courage, because certain risks cannot fully be covered. Confidence, because, after all, the most likely risks under a regime banning chemical weapons will have been dealt with and the remaining risks can be minimized.

Let us take a closer look at some of these risks. The first such risk is the continued existence of stockpiles, in contravention of the ban. Therefore parties to the convention should first be enabled to assure themselves that declared stocks fully coincide with existing stocks. There is a limit to the degree of certainty that can be obtained, because the possibility for a State to hide stockpiles can never totally be precluded. But provisions should be such that a State contemplating doing so — in militarily significant quantities — would be deterred by a serious risk of detection warranting a challenge inspection.

We believe that there seems to emerge a consensus that international on-site verification of the declaration of stockpiles could be made less sensitive by having it organized at relocation sites where chemical weapons will be regrouped, in lieu of in military arsenals.

However, so far, no agreement has been reached on the time span within which and the schedule according to which, all declared stocks would have to be open for verification.

Ambassador Dhanapala expressed some views on this matter, underlining the need for comprehensive information with regard to the plans for destruction and for a phasing-out scheme that would not prejudice the security of any State party. We agree with him. Indeed, we think that we should seek agreement on a phased scheme for verification of declarations of stocks, to be put on a parallel with a time-table to be agreed upon for the phased destruction of stockpiles. Such time-tables should meet certain criteria, so as to ensure: first, that the most dangerous chemical weapons will be destroyed in the early phase; and second, that each country will gradually and proportionally dispose of its stocks.

In order to meet the first criterion — most dangerous weapons first — the toxicity of each category of weapons should be a determinant, while at the same time a distinction must be made between agents placed in weapons and those stored in bulk form. With respect to the latter distinction we agree with the approach chosen by the representative of Australia, Mr. Rowe, on 19 July, when he rightly pointed out that opera-

tional weapons must be destroyed first. The operational utility of a chemical agent is greater if weapons have been filled with it and such weapons pose a greater risk than those stored in bulk. Also the percentage which a particular category constitutes of the total over-all stockpile of a State should be taken into account when determining its relative danger.

As to the second criterion -- the proportionate reduction for each party -- this appears to be important, in order to leave to each possessor State a proportional share of its stocks during the interim period. Declarations and verifications should, moreover, in each phase precede destruction. Thus the location of a party's entire chemical-weapon stockpile would not have to be declared at once and would therefore not be exposed to the risk of attack, in case of a breakdown of the convention, unexpected delay in the implementation of its provisions or other unforeseen adverse developments.

In short, we think that we should seek formulas for destruction schemes through which the most dangerous weapons will first be destroyed and which, on the other hand, ensure that the mutual security of possessor States will not be reduced.

Parties should, of course, be assured that declared stockpiles are actually being destroyed. Here again agreement seems to emerge on obtaining such assurance by a combination of permanent on-site inspection by international inspectors during the entire destruction operation and the use of monitoring instruments for the most dangerous chemical weapons. The question remains whether an equally stringent monitoring of chemical weapons in a lower risk category is necessary. We on our side believe that a reasonable solution to that question can be found without too much difficulty.

More complex, however, is the question under what conditions a diversion of certain chemical warfare agents outside the supertoxic range can be accepted for permitted purposes. On this the representative of France, Mr. Montassier, made some pertinent remarks. Two types of approach to this issue are under discussion. The regime for diversion could be generally applicable to all non-supertoxic agents, in which case the quantities involved and the operations carried out would be declared and verified in accordance with the relevant regime to verify non-production. Alternatively, diversion should rather be treated as an exception and be verified according to the arrangements applicable to the verification of destruction of the same agents.

We believe that already for economic reasons (high costs) diversion to civilian purposes will remain an exception. We suggest that a specific regime should be established by the relevant States possessing chemical weapons for categories of specific agents for which diversion could exceptionally be envisaged. In our view a stricter regime would apply to agents that pose the greater risk, also in the manner in which they are stored, in other words, those placed in munitions. Agents in bulk pose the same risk, irrespective of their ultimate purpose. In that case the same verification regime could apply, namely the less strict regime for the verification of non-production.

Besides the stocks of chemical weapons, the capacity to produce chemical weapons poses a major risk. The significance of the destruction of stockpiles would severely be reduced if readily available production capacities are left untouched. Therefore, destruction of stockpiles should be seen in combination with measures to prevent production.

We believe we all share the view that facilities for the production of chemical weapons should be closed down and eliminated after entry into force of the Convention. A list of specific types of facilities should be drawn up including indications of the modalities of elimination that seem to be appropriate for each type of facility (e.g. total physical destruction, partial physical destruction, re-use of components for permitted purposes, etc.). In this context the feasibility of temporary conversion of production facilities into destruction facilities could and should be further studied.

There is still a lot of work to be done in this field and abundant material to be

investigated without delay. It cannot be denied, of course, that progress in other fields of the Convention which I address before will foster a favourable climate for progress on the question of production facilities. However, we would have serious objections to the suggestion of postponing the consideration of the facilities issue, pending progress to be made in other fields, which, if I understood him well, was Ambassador Turbanski's suggestion. Linkages of this sort could only delay the ultimate outcome.

For the effective elimination of chemical-weapon production facilities, a solution must also be found for the sizeable problem of the residual capacity to produce chemical warfare agents in the civilian chemical industry. The spread of advanced chemical and pharmaceutical industries to the developing countries points to the truly global nature of that problem. We believe that the size of the problem may make it very difficult to enter into elaborate verification arrangements on a continuous or semi-continuous basis. The competitive nature of the chemical and pharmaceutical market forces us moreover to admit that highly intrusive arrangements are undesirable and unrealistic. By the same token, however, the scope of the problem cannot serve as a pretext to simply ignore it.

We believe that a differentiated approach based on risk assessment, as proposed by the delegation of the United Kingdom in document CD/514 can be a viable one. In document CD/445, submitted by my delegation some months ago, an attempt was made to demonstrate that such an approach would be manageable from an institutional and organizational point of view. The inspection scheme for high-risk chemicals would have to function on a random basis, using weighing factors depending inter alia on the size of the plant. For medium-risk chemicals less intrusive verification arrangements, such as surveillance by the Consultative Committee based on data exchange on production statistics, should suffice.

No arrangement or set of arrangements of a routine nature can be considered to provide "adequate" assurance of compliance with the treaty. It is for that reason that we need a challenge inspection mechanism as well. Such a mechanism should serve both as a generally applicable verification device, and as a safety-net to be used in case of lingering doubts, after more routine type verification procedures have been exhausted.

In the view of most delegations the Consultative Committee would play a central role in such a challenge procedure. Challenge requests should not be allowed to be frivolous in nature; they should contain all facts that prompted the request. Unfounded allegations can adversely affect the viability of the Convention. As a general rule, a country ought to accept requests for an on-site inspection resulting from a challenge made. We believe, however, that in exceptional cases a State Party may have legitimate reasons for refusing such a request. In that case it should provide an indication of the nature of those reasons. The question then remains of what step should next be taken if such a refusal only adds to the existing doubts on the Party's compliance.

CD/PV.283

pp.17-18

USSR/Issraelyan

21.8.84

CTB

In order to provide camouflage — and, putting it bluntly, a clumsy one at that — for its negative attitude towards a test ban, the United States usually resorts to the verification problem. But these arguments do not stand up to any criticism. The possibility of effectively verifying a nuclear-test ban with national technical means has been confirmed by the most authoritative experts. It was recently reiterated at the Conference by Ambassador Ekeus who said: "there have been arguments put forward that the main obstacle to a comprehensive test ban treaty is the lack of adequate verification. We do not share that view". He went on, and I quote again: "Sweden for its part considers that verification of nuclear-weapon tests is feasible down to such very low yields that the

whole spectrum of nuclear weapons development for all practical purposes would be covered. Certainly, as has been outlined, adequate verification measures would probably require some further refinement and testing, but that demands no other scientific and technical resources than those already within our reach."

The same view is held by former CIA Deputy Director H. Scoville, who recently noted that the national technical means available at present to all the countries together are sufficient to guarantee compliance with a treaty on the complete and general prohibition of nuclear-weapon tests. He explicitly indicated that the United States officials who invoke the "difficulties" of verifying the compliance with such a treaty are using this argument to conceal their reluctance to stop the continuous development and creation of new types of nuclear weapons.

An immediate and unconditional cessation of nuclear-weapon tests is demanded by the socialist, the non-aligned and the neutral countries, as their representatives have stated, in particular, at the current session of the Conference on Disarmament.

We have also noted the statements made at the Conference by Foreign Ministers Hayden of Australia and Abe of Japan, which were largely devoted to the nuclear-weapon-test-ban problem. Many ideas expressed in those statements sound rather questionable to us. At the same time, however, we regard the very fact of those issues being raised at the Conference as showing the concern of Australia and Japan over the continuing lack of solution to the problem of nuclear-weapon tests. An important statement, in our view, was made by the representative of the Netherlands, Ambassador van Schaik, who said that the issue of a comprehensive nuclear-test ban continues to be a matter of "greatest importance" for his country, and that his Government favours the resumption of the trilateral talks and ratification of the 1974 and 1976 Soviet-United States treaties limiting the scale of underground nuclear explosions.

What, then, is the matter? Why cannot the Conference even initiate talks on the nuclear-test-ban issue? The main reason, it is said, is that the Conference members cannot in any way reach agreement on the mandate for the relevant subsidiary body. We believe that this view is not serious, to say the least. The basic reason is the negative attitude of the United States to banning nuclear tests, the fact that Washington places the improvement of its nuclear arsenals among the major goals of its military policy. Until the United States reconsiders its position on the nuclear-test ban and starts treating this task as an urgent priority, as the overwhelming majority of States does, there can obviously be no forward movement. As matters stand, attempts to set up a subsidiary body of the Conference with a curtailed mandate would be not merely pointless but actually harmful since they could be used as a cover for the implementation of various United States military programmes.

The work of the Ad Hoc Group of seismological experts is also organically linked to the state of the nuclear-test-ban issue at the Conference. We have no objection to taking note at this point of the Ad Hoc Group's report submitted by its Chairman, Mr. Dahlman, and we hope that the international experiment scheduled for the end of this year will take place successfully. At the same time, I would like to state most firmly that further activity of the Ad Hoc Group of scientific experts could only serve a useful purpose if the United States did not prevent the Conference from conducting practical negotiations on a complete and general nuclear-weapon-test-ban treaty.

As to the Soviet Union, its position concerning a nuclear-test ban is abundantly clear: we shall continue most resolutely and persistently to seek a complete and general cessation of nuclear-weapon tests. The Conference has before it the Soviet draft "Basic Provisions for a Treaty on the Complete and General Prohibition of Nuclear Weapon Tests", which incorporates all the many years of negotiating experience and takes account of the proposals and wishes of many States, including questions of verification. The Soviet Union is prepared to further consider in a constructive spirit the proposals of

other States aimed at promoting the prohibition of nuclear-weapon tests. We note in this connection the initiative of Sweden, which introduced in 1983 a draft treaty of its own. I should like to recall, in connection with that draft, that the USSR delegation stated at the Conference last April that the Soviet Union would be ready, in the course of the working out of a draft treaty on the complete and general prohibition of nuclear-weapon tests, to consider the possibility of organizing the exchange of data on the radioactivity of air masses, with the establishment of appropriate international data centres, on the same basis as is envisaged in respect of the seismic data exchange. We are convinced that the international public opinion, the peoples of the world, will be able to force the opponents of disarmament to take, at long last, the path towards curbing and eventually completely halting the nuclear-arms race.

CD/PV.283

pp.37-38

GDR/Rose

21.8.84

CTB

Mr. President, we have before us the Progress Report on the eighteenth session of the Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events. No doubt, the Group under the Chairmanship of Dr. Dahlman, has done a good job in preparing the technical test concerning the exchange and analysis of Level I data, which shall take place in autumn this year. Documents CD/534 and CD/535, submitted to this Conference on 16 August by the Chairman of the Ad Hoc Group, add quite a number of ideas to the material worked out by the Group in previous reports.

They again corroborate my delegation's conclusion concerning the relationship between technical work and negotiations at this Conference on a nuclear-test ban.

Whereas technical work on parts of the verification system, ie. the international exchange of seismic data, is quite advanced, there are no negotiations on a CTBT at present. Nobody can deny, however, that the proposed system for global data exchange is intended to operate on the basis of such a treaty and to serve its purposes. The aim, therefore, is not an international exchange of seismic data per se or in a vacuum, but to facilitate the implementation of a CTBT. The system cannot be set up in the absence of such a treaty, nor can it replace the treaty. From this angle it is obvious that technical work on verification aspects cannot go on endlessly, as if it were an open-ended exercise. The Ad Hoc Group of Scientific Experts has clarified all relevant questions concerning the international data exchange. Detailed arrangements for the international data exchange could be worked out by the envisaged Expert Committee after the treaty is concluded.

CD/PV.283

p.39

Belgium/Depasse

21.8.84

CTB

I would not have taken the floor if I had not considered that this morning's statement by the distinguished representative of the Soviet Union called for comment. The representative of the Soviet Union described the emphasis placed by the United States delegation on verification problems as "clumsy camouflage". It stated that the verification of a nuclear-test ban was currently possible, and drew on statements made here by the delegation of Sweden. However, the Belgian delegation is informed by its experts that, under current conditions, it is not possible, with the essential degree of certainty, to distinguish between seismic events and nuclear tests. It also notes that the text of the statement by the Ambassador of Sweden quoted by the representative of the Soviet Union is qualified, as the former stated that "adequate verification measures would probably require some further refinement and testing, but that demands no other scienti-

fic and technical resources than those already within our reach".

For the Belgian delegation, the extent of the scientific and technical work still essential to ensure adequate verification is not known. It believes that it is worth recalling that scientific and technical work may easily be compared to the progress of an alpinist when he sees a ridge; he may hope that it is the summit, but he knows that it may in fact only be a ridge which hides another. To enable these problems to be solved as rapidly as possible, the international scientific and technical community should devote itself to the task with determination.

In this connection, I should like to quote the following extracts from the report on the work of the Group of Scientific Experts during the week of 30 July to 3 August 1984 which was transmitted to me by the Belgian expert who drafted it:

"The documents were drafted at informal meetings of the experts concerned at the Australian Embassy. It should be stressed that the delegates of the socialist countries gave no assistance in the preparation of the working documents, although they attended the informal meetings of the Group. The Soviet experts reserved their comment until such time as they would have the translation into Russian ... Belgium will take part in the technical tests with the same number of seismological stations as the USSR!"

Belgium is a country of weak seismic activity, which is not the case of vast regions of the USSR, whose surface area is 750 times that of Belgium.

CD/PV.284

pp.13-16

USA/Fields

23.8.84

CW

At the current stage of the negotiations, three issues seem to my delegation to be the keys to progress. One is the declaration of locations of chemical-weapon stocks and chemical-weapon production facilities. A second is how to help ensure that chemical weapons are not produced under the guise of commercial chemical production. The third is what approach to take to challenge inspection. Today I shall discuss each of these pivotal issues in turn.

The United States has proposed that the locations of chemical-weapon stocks and of chemical-weapon production facilities be declared within 30 days after a State becomes a party to the convention. In itself such a declaration could contribute greatly to building confidence that States are prepared to reduce — and eventually eliminate — their reliance on chemical weapons. But declaration of locations is also an essential element of the verification measures designed to provide confidence that all stocks and facilities have been declared, as well as to provide confidence that the declared stocks and facilities are not misused before they are destroyed.

Let me elaborate. The completeness of declarations cannot be assessed unless a basis for such an assessment has first been established. With adequate information about existing stocks and facilities that have been declared, parties will be able to obtain adequate confidence that there are not stocks and facilities that have not been declared. Declared locations are essential to such an assessment and thus to building confidence in compliance. Once locations have been declared, then any stocks or facilities discovered at undeclared locations would clearly represent a violation of the convention. Furthermore, the systematic international verification measures needed to provide confidence during the period between declaration and destruction cannot be carried out unless such locations are declared. For example, it is obvious that international sealing of stocks or production facilities to prevent their illicit use would not be possible unless these locations are known to the technical secretariat.

We note, however, that the approach proposed by the Soviet Union is quite different. As my delegation understands it, no information on the locations of either stocks or facilities would be provided until just before their destruction. In the case of

stocks, the location declared would be adjacent to a destruction facility, whose location would already be known. Thus, no meaningful information about the location of stocks would be given. In the case of production facilities, under the Soviet approach no information on locations would be made available for the first eight years of the convention.

This approach makes sense only if one assumes that verification would be solely the responsibility of the State possessing stocks and facilities — in other words, that the only means of verification would be self-inspection. No one, however, is proposing such an absurd system.

Even the Soviet Union has proposed that national technical means of verification and challenge inspection be key aspects of the verification system for monitoring stocks and facilities. Therefore, the Soviet position regarding the declaration of stocks and facilities and the verification of this declaration appears to be internally inconsistent. How, for example, can one use national technical means to confirm that production facilities are inactive if their locations are unknown? How can one tell if a State is attempting to hide stocks if it refuses to reveal the location of those that have been "declared"? If the location of each chemical-weapon stockpile and production facility is not separately specified, it would be impossible to know whether any particular stockpile or production facility had been included in a party's declaration. Without declaration of locations, neither national technical means nor challenge inspection would have any utility in verifying the completeness or accuracy of a party's declaration.

Nor do the reasons given to justify unwillingness to declare locations hold up under close examination. It has been argued that the declaration of locations of stocks will reveal the location of front-line military units and make the stocks vulnerable to attack in the event of war. It is highly unlikely that a prudent military command would store the bulk of its chemical weapons with front-line units. Most of the stocks would normally be in regional and central depots. Furthermore, considerable information is already available about the location and identify of front-line units. Moreover, in the event of war, all ammunition storage sites are subject to attack, whether or not they have been specifically identified as chemical-weapon storage sites.

In developing its position on declarations, the United States carefully conducted an analysis of the military implications of declaring the locations of chemical-weapon stockpiles and production facilities. My Government reached a conclusion diametrically opposed to that put forward by the Soviet Union. In the United States view, the benefits of assuring an effective convention far outweigh any military risks flowing from the disclosure of locations. The fact that the Soviet Union apparently considers the military risks of disclosure to be very high suggests that chemical weapons play a much larger role in Soviet military plans than in Western plans.

For all of the above reasons, the Soviet approach is simply not realistic. Only if locations of stocks and production facilities are declared promptly, as proposed by the United States, can a practical and effective verification system be put in place to provide the necessary confidence in compliance. Would any Government rest its security on anything less?

In an effort to meet the concerns expressed by the Soviet Union, the United States is willing to consider the possibility that a party could move its chemical-weapon stocks before declaration from their original storage sites in combat units to regional depots. Since only these regional depots and not the combat units would contain chemical weapons, only the locations of these depots would have to be declared. Thus, the locations of combat units would not be revealed. The location of such depots would be declared within 30 days after the convention enters into force for the State.

The second pivotal issue I want to discuss today is the problem of providing confidence that chemical weapons are not being produced under the guise of commercial

chemical production. The United States strongly supports the approach outlined by the United Kingdom in its recent Working Paper CD/514. High-risk and medium-risk chemicals would be identified in lists. The level of verification would depend on the level of risk, with high-risk chemicals being monitored by systematic international on-site inspection on a random basis.

This approach would provide effective verification without jeopardizing commercial secrets. We believe that it should meet all of the concerns expressed by the Soviet delegation about misuse of the chemical industry.

The Soviet delegation has repeatedly emphasized the importance of ensuring that commercial facilities are not used for the production of chemical weapons. But what is the Soviet solution to this problem? To the best of our knowledge, no comprehensive Soviet proposal has yet been presented, although the problem has been recognized for years.

The Soviet Union has proposed to prohibit production of methylphosphorus compounds for commercial purposes. The stated objective of this proposal is to eliminate the possibility that certain nerve-agent precursors, which contain methylphosphorus bonds, could be produced clandestinely in commercial chemical plants. This proposal, however, does not take into account the realities of modern chemical technology. In fact, chemical plants which produce ethylphosphorus compounds could, in most cases, easily produce methylphosphorus compounds. But under the Soviet proposal such plants would not be affected at all.

Here again, the Soviet position appears to be internally inconsistent. It would fail to achieve its stated objective. Yet, at the same time, it would interfere substantially in the important and legitimate uses of chemicals for peaceful purposes.

Progress on this pivotal issue requires first of all that the Soviet Union present a clear and comprehensive proposal of its own, if it disagrees with the proposals of the United Kingdom and the United States. In developing its position I hope the Soviet delegation will reconsider its unworkable proposal to ban the production of methylphosphorus compounds.

The third pivotal issue is challenge inspection. I have already described the United States "open invitation" approach in my statement of 19 July. This approach has been rejected by the distinguished Soviet representative, Ambassador Issraelyan, as unrealistic, discriminatory, nihilistic, tension-provoking, and purposely unacceptable. But Ambassador Issraelyan has not denied that our proposal would be effective. To paraphrase Shakespeare, "the (gentleman) doth protest too much, methinks".

While the Soviet position has not been presented to the Conference in a clear and comprehensive way, its outlines are readily apparent. It is an approach designed to provide absolute protection from any challenge inspection that the Soviet Union does not want to accept. It would allow the Executive Council to endorse a request for challenge inspection only by consensus. In other words, the States to be inspected would control whether a request was even made. Furthermore, even if a request were made, the State to be inspected would have, under the Soviet proposal, complete freedom to reject the request whatever the circumstances.

The Soviet approach can only be termed as a "double-veto" approach. There is no other term for it. Except possibly the term "totally ineffective". It has a built-in guarantee of failure. It would produce a convention with noble aims but no effective mechanism to ensure compliance. It would thus fit the lamentation of Macbeth — "full of sound and fury, signifying nothing".

It has been wisely said in this body — by Ambassador Dhanapala of Sri Lanka and others — that parties to a chemical weapons convention must accept some risks. A convention would risk cannot be achieved in the real world, nor can it even be designed. I completely agree with that. Absolute verification is fantasy and we should not waste

time pursuing illusion. The United States recognizes that even the most effective verification system that can be conceived does not eliminate all risks that any deliberate violation of obligations undertaken will not be detected. The United States is prepared to accept such risks.

There is another fantasy that must be avoided — the notion that an effective verification system can be designed to eliminate all risks that that system might be abused or that some confidential information might be disclosed. While steps can and should be taken to minimize the potential for abuse and for disclosure of confidential information, it is inevitable that risks will remain. The United States is willing accept these risks to obtain the benefits of an effective verification system. Those countries that desire effective verification should also be willing to accept such risks.

If an effective verifiable chemical-weapons ban is to be achieved, all States must be willing to accept risks. But we must not let the twin fantasies of absolute verification and risk-free verification consume our energies. Let there be no doubt however that we will press for the most effective and verifiable convention that can be negotiated.

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First, we share the assessments given by the delegations of the USSR, Poland, Czechoslovakia, Sri Lanka and many others with regard to this draft treaty. As far as its scope is concerned, the document contains loopholes to safeguard well-known United States interests and intentions. Many of its verification provisions, especially the so-called open invitation concept, are in flagrant contravention of basic principles of international law and represent a complete departure from the consensus that had been emerging on challenge inspection. Small wonder, therefore, that this concept has been dismissed by many delegations. In fact, we have not heard any delegation clearly supporting this concept, apart, of course, from the United States delegation.

Second, as far as the work of the committee on chemical weapons is concerned, we have not been able to discern any sign of the promised flexibility on the part of the United States delegation. Instead of advancing the negotiations by joining in the efforts to search for mutually acceptable compromises the United States is stubbornly sticking to positions which are not acceptable to many delegations. This attitude became clear again when the report of this committee was drafted, with the United States delegation insisting by all means on the insertion of the notorious Article X into this report.

Let us be quite frank with each other: negotiations are a give-and-take process. No delegation is allowed to impose its will on others.

Therefore, we appeal to the United States to review its approach to the negotiations on the prohibition of chemical weapons. Otherwise, the prospects for progress may be rather gloomy.



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