

Framework Convention on Climate Change (FCCC)
Subsidiary Body for Scientific and Technological Advice (SBSTA)
Subsidiary Body for Implementation (SBI)
Joint Working Group on Compliance (JWG)

TENTH SESSION OF SBSTA AND SBI

MAY 31- JUNE 11, 1999

BONN

DELEGATION REPORT

DFAIT/AGE

TABLE OF CONTENTS

1. CANADIAN DELEGATION REPORTS

- Reporting Telex on SBSTA 10 and SBI 10
- Report from the Industry Representative
- Report from the Environmental Representative

2. EXECUTIVE SECRETARY'S STATEMENT TO SBI/SBSTA

3. DRAFT REPORT OF THE SBSTA

4. KEY CANADIAN INTERVENTIONS

- An Intervention on the Kyoto Mechanisms
- Proposed Work Programme on Methodological Issues Related to Articles 5, 7, and 8 of the Kyoto Protocol
- Annex I National Communication Guidelines
- Canadian Statement on Land-use, Land-use Change and Forestry
- Joint Working Group on Compliance (JWG) Statement by Canada
- Annex I National Communication Guidelines: Financial and Technology Transfer
- Development and Transfer of Technologies
- Canadian Intervention on CoP6
- Administrative and Financial Matters; SBI Agenda Item 10
- National Communications from Parties not included in Annex I to the Convention

Dept. of Foreign Affairs
 Min. des Affaires étrangères
 MAR 16 2010
 Retourner à la Direction de l'information
 Retourner à la Direction de l'information

5. REPORT OF MEETING OF FRANCOPHONE COUNTRIES

6. OTHER COUNTRY KEY STATEMENTS

- G-77 and China Initial Position Paper
- G-77 and China Submission on Article 6 of the Kyoto Protocol
- G-77 and China Submission on Article 17 of the Kyoto Protocol
- G-77 and China Submission on Article 12 of the Kyoto Protocol
- EU Statement on Mechanisms
- EU Submission on Article 6 of the Kyoto Protocol
- EU Submission on Article 17 of the Kyoto Protocol
- EU Submission on Article 12 of the Kyoto Protocol
- US Intervention on Kyoto Mechanisms
- G-77 and China Initial Views on Procedures and Mechanisms Relating to Compliance
- EU Statement on Matters Relating to Compliance

19-165-437

- **Report of the Joint Working Group (JWG) on Compliance**
- **G-77 and China Proposal for non-Annex I National Communications**
- **EU Proposal for non-Annex I National Communications**
- **EU Statement on Land Use**
- **Greenpeace Statement on Land Use**
- **EU Statement on Fuel for International Transport**

7. OTHER DOCUMENTS

- **Intervention by the Chair of the Climate Technology Initiative**
- **IPCC Report to SBSTA 10**
- **ICAO Statement to the Tenth Session of SBSTA**
- **Measuring Soil Carbon Stocks - summary of Canadian presentation**

REPORTING TELEX OF THE SUBSIDIARY BODY MEETINGS ON CLIMATE CHANGE, MAY 31st - JUNE 11th, 1999, BONN

SUMMARY: The 10th Meeting of the Subsidiary Bodies, held in Bonn from May 31 to June 11, 1999, featured modest progress on all key issues of concern to Canada. The first week of the meeting was characterized by slow progress on the Kyoto Mechanisms, due to the need for extensive coordination within the Group of 77 and China (G-77), as well as some disruption due to several "bomb threats". However, mid-way through the second week, the G-77 consultations bore fruit. While there was little substantive discussion, the joint meeting of the subsidiary bodies was at least able to go through a "first read" of the synthesis report on the Kyoto Mechanisms, and the chair was mandated to draft a second synthesis report which would be the basis of negotiations at the next session of the subsidiary bodies, to be held back-to-back with CoP5, at the end of October, 1999. The fact that the G-77 succeeded in submitting views on CDM, JI and IET and that they participated in initial discussions on the synthesis, demonstrates a growing interest on their part in the opportunities afforded by the mechanisms. From the point of view of the Annex I Parties, despite slow progress, the fact that all three mechanisms were addressed was a positive signal for moving forward and making parallel progress on the three mechanisms. As expected, the EU, presented their proposal on supplementarity, and made some references to it in the context of the deliberations on the mechanisms. However, the EU did not actively engage in debate on this issue at this session and the proposal did not affect the course of negotiations.

2. Limited progress was also achieved on other key issues. Momentum on land use and land-use change and forestry issues (LULUCF) was also successfully maintained with the focus on a workplan and activities leading up to CoP6. It was agreed that AOSIS and OPEC concerns on impacts and compensation (Article 4.8 and 4.9) would be addressed at a workshop in September. Similarly on technology transfer, work progressed with agreement to address the issue at regional workshops over the next year. Compliance discussions revolved primarily around the design and scope of the compliance regime and possible penalties or consequences, and will continue through the Joint Working Group on Compliance. Issues on revision of guidelines for non-Annex I National Communications remain largely unresolved, the G-77 continuing to insist that technical difficulties and financial constraints make revision difficult at this time, while Annex I Parties, led primarily by the EU, insisted that such a revision was necessary by CoP6. Concerns were also expressed at the small number of submissions on national communications received from non-Annex I Parties. Good progress was made in revising inventory guidelines for Annex I Communications, while guidelines on other issues, covering policies and measures, projections, financial and technology transfer, made very little headway. On budget matters, agreement was reached on a 18.4% increase for 2000-2001 biennium. This represents an increase of only 11.0% in terms of assessments, as 7.4% of the increase will be financed from a one-time drawdown on the sizeable carry-over from previous years.

3. Progress on other key issues and next steps are outlined below. In addition, a more detailed analysis of negotiating dynamics and views is available in a separate Annex for the reference of Canadian delegation members.

4. CLEAN DEVELOPMENT MECHANISM: After three canceled sessions on Kyoto Mechanisms, developing countries agreed to begin discussions on June 8, with the CDM addressed as a priority. G-77 spent several days developing a position paper on CDM. Divergent views amongst the G-77 members made it quite difficult for the Group to pull together a common position, with Saudi Arabia in particular playing an obstructionist role in G-77 internal negotiations. The paper focuses on principles and cross cutting issues like complementarity, but is short on technical guidance, such as estimation of additionality criteria. One of the more difficult internal issues involves the use of proceeds from CDM for adaptation assistance. With respect to CDM, G-77 stressed the following: 1) it is a priority, 2) need to discuss the principles first, 3) second synthesis report needs to follow the Buenos Aires Action Plan, 4) support for project by project approach for baselines, and 5) determination of sustainable development aspect of a project should be left to host countries. Germany, on behalf of the EU stressed the need for an early determination of the "part of" commitments that can be met through CDM.

5. The Umbrella Group continued its work on advancing the draft decision text on the CDM. This text basically puts the UG views (already submitted to the UNFCCC in April 99) in the legal format. Most of the discussion in Bonn focused on streamlining and lending clarity to the document. Some further work is required before the document is submitted to meet the July 31, 1999 deadline.

6. A number of developing countries took the floor on capacity building, with some (such as the Philippines) highlighting the concern that too many workshops on the mechanisms were taking place which were not being sufficiently managed and coordinated by the secretariat. Others, in particular the Africa Group, noted the workshops were extremely useful and called for more such events. The EU highlighted the need for better coordination and the need to avoid duplication. Switzerland prefers a bottom up approach to capacity building and suggested that project ideas should be host country driven. The secretariat will draft a revised paper on the subject for consideration at the next session.

7. EMISSIONS TRADING: Most noteworthy was the submission by the G-77, during the Bonn sessions, of its initial views on emissions trading. While many of the specific views promoted in the G-77 submission are at variance with Umbrella Group positions, overall it is of a relatively moderate tone. For example, China's previously submitted views that explicitly excluded the role of entities and fungibility between the mechanisms is not to be found in their submission. Prominent themes in the submission include the need to ensure that emissions trading will not work to perpetuate existing inequities between developed and developing countries; that it does not signify the bestowal or creation of any right, title or entitlements to the atmosphere; that it is contingent on satisfaction of prescribed domestic effort in fulfillment of commitments under Article 3; and the need to ensure a transparent and credible reporting system.

8. **JOINT IMPLEMENTATION:** As was the case with the CDM and ET, most of the discussion on JI focused on proposed modification to the Chairman's paper entitled *Synthesis of Proposal by Parties on principles, modalities, rules and guidelines*. The G-77 did submit a short paper on JI, which simply noted areas of concern that needed to be addressed for a decision on JI to occur. It is clear that both the EU and the G-77 favor relatively similar guidelines for all project activities, whether under Article 6 or Article 12.

9. **ACTIVITIES IMPLEMENTED JOINTLY:** According to previous CoP decisions, the AIJ Pilot Phase needs to be reviewed in 1999 and decision on its conclusion needs to be taken prior to the end of the decade. To address the pilot phase review, there were three issues on the table: the timing of the review process, the framework for the review, and the timing for the conclusion of the pilot phase. G-77 and China would like to extend the AIJ Pilot Phase because it brings investment without any credits. On the other hand, Annex1 countries would like to see AIJ pilot phase concluded as per the CoP1 and CoP4 decisions so that there is no delay in getting agreements on Joint implementation and CDM (which include credits). The Subsidiary Bodies asked the secretariat to prepare a synthesis report based on submissions from the Parties that would start the review process at the next session of the Subsidiary Bodies, with a view to making recommendations to CoP 5 on the next steps.

10. **LAND-USE, LAND-USE CHANGE AND FORESTRY:** The Conference of the Parties had requested the SBSTA to consider, at its tenth session, the requirements necessary to fulfil the provisions of the first sentence of Article 3.4 of the Kyoto Protocol and to consider a list of policy and procedural issues associated with Articles 3.3 and 3.4.

11. In the contact group on land-use, land-use change and forestry (LULUCF) discussions were mainly process related, and focused on the preparation of a work plan and associated events leading up to CoP 6. Combined efforts by the Umbrella Group countries facilitated the reaching of conclusions related to LULUCF at this negotiating session, despite the fact that Brazil, speaking for the G-77, continually refused to engage in any meaningful discussions. Given the heated discussions at previous negotiating sessions. The conclusions adopted by the SBSTA met most of our expectations coming into Bonn.

12. Divergent points of view were very clear. The EU disagrees with the position of Canada, and the Umbrella Group that the elaboration of guidelines and discussions on policy and procedural issues must take place prior to submitting data on additional activities. The G-77, believe that no discussions on additional activities should occur until after the completion of the IPCC Special Report.

13. At the last SBSTA session, under Other Matters, New Zealand introduced the issue of harvested wood products and who (exporters or importers) should be accountable for the carbon count in those products. This had been an issue for consideration in earlier SBSTAs, however the issue had fallen off the agenda in more recent sessions. NZ suggested that the issue be added to the SBSTA agenda at its next session in October. The EU and Japan (as importers of harvested wood products) strongly resisted. However, once it was apparent that the Chair agreed with NZ that the issue should be addressed by the SBSTA, Canada supported the NZ initiative, suggesting that the next meeting

consider the issue, with a focus on a future work program. The Chair and Parties agreed.

14. Specifically, the conclusions adopted by SBSTA allow for the continuation of a parallel process for moving forward as agreed to in Buenos Aires at CoP4, and ensure that discussions on sinks will continue while the IPCC prepares their Special Report. This is important because the Special Report will not deal with the policy decisions and criteria to be used for adding additional activities. Of note in the draft conclusions are: Parties are requested to provide submissions on additional policy or procedural issues and a framework for decision making by August 16, 1999, for discussion at SBSTA 11; the IPCC is invited to provide an in-depth progress report on the Special Report and a special side event at SBSTA 11; the SBSTA decided to further consider at its eleventh session the process and timing for the analysis of the information provided by the IPCC special report and the process for developing its work program on LULUCF; the SBSTA will reconsider the issue of harvested wood products at SBSTA 11; the secretariat is requested to organize a workshop to analyze the IPCC SR, between SBSTA 12 and CoP6; Parties are requested to provide guidance on the scope of this workshop by 1 February 2000; and the IPCC is invited to develop a work plan to address methodological issues raised in the SR in the context of the IPCC 1996 Revised Inventory Guidelines.

15. EMISSIONS RESULTING FROM FUEL USED FOR INTERNATIONAL TRANSPORTATION: The Chair of SBSTA and an informal group prepared draft conclusions for the bunker fuel issue. Of note during the discussions and reflected in the conclusions is the exclusion of any references to the questions of allocation of emissions, future targets, or the Kyoto Protocol. The SBSTA adopted the conclusions and noted the following: Data on emissions from international bunker fuels provided by Annex I Parties are often incomplete and inconsistent; further methodological work is needed to ensure consistent and transparent inventories, including the development and use of consistent definitions and good practice guidance of the IPCC; and the International Marine Organization (IMO) and ICAO were requested to make available their data and expertise on the issue and were invited to inform the SBSTA of their work plans on this issue and to provide regular progress reports to SBSTA.

16. The SBSTA decided to continue to elaborate on the inclusion of emissions based on fuel sold to ships or aircraft engaged in international transport in the overall greenhouse gas inventories of Parties and to consider the IPCC Special Report on Aviation and the Global Atmosphere, at its eleventh session. Parties are to provide comments by August 16, 1999 on an informal paper "*Methods used to collect data and to estimate and report emissions from international bunker fuels*" made available to Parties by the secretariat during the session. The secretariat was requested to revise the paper based on Parties comments.

17. ANNEX I NATIONAL COMMUNICATIONS: Part I: Annual Inventory Reporting Guidelines and Common Reporting Framework: SBSTA adopted new inventory reporting guidelines at the tenth session. The new guidelines will strengthen existing requirements to provide inventory information in a transparent manner, and provide a common structure for countries to submit information consistently. The date for submitting inventories will not change from April 15 of the second year subsequent to the year being reported.

18. Inventory submissions will now consist of a **National Inventory Report** that includes a Common Reporting Framework. This report will be provided annually to the CoP. It will provide a record of greenhouse gas inventory data and associated information from the 1990 base year to the year being reported and include full documentation of the methods and assumptions used in generating inventory estimates. Countries will supply background calculations as well as information on references, uncertainties, and QA/QC procedures. Complete documentation of changes in methodologies are required, as well as recalculations of emission trends if methodologies change. The Common Reporting Framework (CRF) provides a consistent structure for electronic reporting of inventory information. It consists of over 40 tables that provide summary information, sectoral level detail, and background data.

19. Given the significance of the changes in the inventory guidelines, Parties agreed to a two-year trial period, followed by a formal review of the guidelines. In addition, given the volume and complexity of the tables agreed to at this meeting, Parties will have the opportunity to provide the secretariat with technical comments on the CRF tables by July 15, 1999.

20. **Part II: Guidelines for National Communications, Policies and Measures and Related Issues:** Work continued to elaborate guidelines for use by Annex I Parties for their National Communications. Due to extended work on Part I (inventories), contact group meetings on Part II did not produce a completed draft text. Instead, a *working document* that specifically indicates unresolved issues (including outstanding issues and specific comments by Parties) will provide the basis for continuity and further work at SBSTA 11. The group proposed to shorten the name of Part II to read "UNFCCC reporting guidelines on national reports." Discussions on Part II were characterized by extensive debate between those Annex I Parties seeking tighter language and broader scope (European Union and Switzerland) and those seeking more flexibility to reflect national circumstances, data availability and reporting feasibility (USA, Australia, New Zealand, Norway, Canada, etc.). The issue of the mandatory language of "shall" (European Union) versus the non-mandatory of "should" (USA, Australia, New Zealand, Norway, Canada, etc.) remains unresolved. This status is reflected in the working document and will be addressed at SBSTA 11. A group of ENGOs made a concerted statement in the contact group to the effect that mandatory language was necessary to ensure the integrity of the Convention and Protocol. There remain strong concerns that the guidelines will not be ready for decision by CoP5. A strong editorial hand is needed in the Secretariat, to prepare a draft revised paper with much clearer definitions of what will be expected of Annex I Parties in the third set of National Communications. Overall, despite a number of unsettled issues, progress to date on the document reflects Canada's objective to retain flexibility in the development of these guidelines and avoid an EU push for greater international policy co-ordination.

21. **Review Process Related to Greenhouse Gas Inventories:** SBSTA adopted draft conclusions for the technical review process related to greenhouse gas inventories of Annex I Parties. The technical review process will contain the following elements: Annual initial checks, Annual synthesis and assessment, and Individual reviews. In addition, the SBI prepared a preliminary document specifying elements of a draft decision on a technical review process for greenhouse gas inventories of Annex I Parties. The enhanced review process will contain elements that were previously discussed at a SBSTA Workshop on Inventories and summarized in a SBSTA document prepared by the

secretariat, (FCCC/SBSTA/1999/3) and that are supported by Canada.

22. The SBI decided to consider draft guidelines, that will enhance and improve the current review process, (which only occurs as part of a periodic in-depth review of National Communications) at its eleventh session, and requested the secretariat to prepare draft guidelines for technical reviews and invited Parties to submit their views to the secretariat by October 1, 1999. In addition, the SBI requested the secretariat to develop a work plan, including operational requirements, for the period 2000-2002, for consideration at the eleventh session of SBI.

23. **NON ANNEX I NATIONAL COMMUNICATIONS:** SBSTA/SBI 10 addressed issues related to the process of consideration of initial national communications and the timing of second national communications, with a view of reaching a decision at CoP5. A large part of the early discussions focused on the nature and scope of the review of enabling activities of the GEF and its implementing agencies. The G-77, and the EU both tabled draft decision texts. The texts, varying significantly in terms of objectives and emphasis, left the Co-Chairs with very little room to manoeuvre in order for them to generate a consensus position.

24. The G-77 draft decision text argued that, in light of the very small number of submissions made to date, it is premature to review guidelines, and the present guidelines for initial national communications should remain valid. The G-77 highlighted the importance of recognizing the technical difficulties and financial restraints faced by developing countries in submitting their national communications and the need for enhancing capacity-building. In this regard, they proposed the notion of a non-Annex I Group of Experts which would be composed primarily of non-Annex I experts, and viewed it as the best vehicle to address many of their concerns. Its role would be to assess the availability of financial resources and technical support, identify gaps and act as forum to exchange experiences and information. It was also proposed that the group would make its recommendations and conclusions available to the CoP/SBs.

25. The EU, on the other hand, took a position aimed at laying out a clear process for consideration of national communications. This would entail compilation and synthesis of initial submissions by the secretariat, technical assessments of the submissions using country visits, resulting in the revision of guidelines for second national communications by CoP6. They saw the present mechanisms as appropriate to address G-77's concerns and would prefer the continued engagement of the secretariat in the process. They emphasized that the current initiative of the secretariat together with GEF and its implementing agencies to organize workshops and expert group meetings under the National Communication Support Programme (NSCP) was an important one and could be complemented with country visits by experts nominated by Parties as a basis for the revision of guidelines. The EU proposal also included a suggestion for the IPCC Inventory Task Force to develop a work plan to prepare a comprehensive database on emission factors, by region and technology, and proposing that the secretariat should develop a paper on regional priorities for the research and development of emission factors.

26. The Co-Chairs, as a result of the significant divergence in the texts, decided to solicit further views and comments from Parties by July 15, 1999, and prepare a framework for comparing elements of the draft decisions for consideration and a decision at CoP5. Canada supported this outcome and further develop its views on the issue. Draft decisions on review of GEF's enabling activities and the issues related to the provision of financial and technical support will also be discussed further at CoP5.

27. **COMPLIANCE:** Views on issues related to compliance under the Kyoto Protocol were exchanged during "consultations on compliance" held prior to and during five Joint Working Group on Compliance (JWG) sessions. Interventions in the JWG remained at a very general level, based upon Parties' March 1 submissions on compliance. The G-77 initially stressed that they had not had time to develop positions. However, in the third session, South Africa, on behalf of the G-77, tabled a paper on initial positions. Canada was active in the JWG, and also took advantage of informal opportunities to explore the views of Umbrella Group delegations as well as of EU delegations and some G-77 delegations (AOSIS, South Africa).

28. On compliance related elements in the Kyoto Protocol and identification of any gaps, interventions noted that compliance-related elements included the Protocol's substantive rules, provisions outlining procedural elements of a compliance system, and consequences to non-compliance. Several Umbrella Group delegations noted that few gaps were left with respect to substantive rules. The importance of tracking / information sharing between different groups working on compliance related elements was also underlined.

29. On the design of the compliance system and questions relating to consequences, Canada, Japan and New Zealand stressed the importance of preventive and facilitative approaches to promoting compliance. Other delegations (including the US, the EU and the G-77), while in agreement that prevention and facilitation were important, emphasized that the Protocol compliance system would also need to have enforcement features, including penalties. There was a range of views as to whether compliance procedures should proceed in a graduated manner or whether consequences to non-compliance with target related commitments should be predetermined and automatic. There was also a range of views on whether the compliance system should cover all commitments comprehensively (EU, AOSIS) or whether separate ("hard" and "soft") tracks may be needed for target related commitments and other commitments (US).

30. Parties are invited to make further submissions on compliance, addressing a list of "Questions related to a compliance system under the Kyoto Protocol" contained in an annex to the work programme, by August 1, 1999, on which the Co-Chairs will prepare an updated synthesis of Parties' proposals. Two intersessional events will take place to facilitate the full participation of all Parties in discussions on compliance issues. An informal workshop to exchange views, and information related to experience in other conventions, will be organized by the Co-Chairs of the JWG in early October. Canada's offer of financial support to enable the participation of developing countries in this event helped break down the G-77's block position. Financial support will also be made available by the EC and some of its member states. A further workshop will take place between the 11th and 12th sessions of SBI/SBSTA.

31. LEGAL STATUS OF DECISIONS: A very constructive discussion took place within the Umbrella Group on the question of the legal status of decisions of the CoP or CoP/MoP through which rules and guidelines are adopted under the Kyoto Protocol or the Convention. Canada explained its concerns regarding the extent to which legally binding rules can be adopted through decisions of CoP/MoP. In view of Umbrella Group consensus about policy imperatives at this stage in the negotiations, Canada did not raise its legal concerns (detailed in a paper circulated within the Umbrella Group) at Bonn. Canada obtained agreement among Umbrella Group colleagues that the underlying legal issue requires close attention with a view to finding a satisfactory solution at an appropriate time in the future.

32. ADMINISTRATIVE AND FINANCIAL MATTERS: Despite an unprecedented proposed budget increase for the secretariat (50%) and lengthy discussions, SBI 10 was successful in adopting a budget for recommendation to CoP5. After a difficult start, it soon became evident that there was no support amongst parties for the sizeable increase proposed by the secretariat and a contact group was formed to bring the budget back to an acceptable level. The budget proposal eventually adopted by SB 10 for the 2000-2001 biennium involves a total of US \$25.286 millions, an increase of 18.4% over the last biennium. However, since 7.4% will be funded from a combination of host government contribution and access to significant carry-over funds, this represents a net increase of only 10.7%. The secretariat was also successful in securing a sizable increase for its staff contingent, which will now stretch to 81 persons, including 53 professionals. Japan registered serious concern about this, and what it viewed as an incorrect use of the carry-over, but did not block consensus.

33. Coming into the budget discussions, Canada was prepared to agree to a modest increase, and as such, the budget adopted is acceptable to Canada. Canada's second concern, that of a lack of clear financial accountability and transparency in the decision-making process of the UNFCCC took root at SB-10 in the form of mounting demands from all sides to form a budget committee. This suggestion will likely be raised by many parties at the next session of the SB around CoP5. The general consensus seems to be that the secretariat remains well-equipped to service the needs of the Buenos Aires Action Plan, in a facilitating/coordinating role, rather than the active implementation role which was implied in the proposed 50% budget increase. Despite the controversial proposed budget increase, the secretariat continues to enjoy a high degree of confidence from the parties on financial and administrative matters, a sentiment which Canada shares.

34. CoP-5 BUREAU: Shortly after the start of the sessions, Candel was informed of need to select regional representatives for bureau for CoP5 and the following year. Canada assumed the role of WEOG coordinator (Drake/DFAIT) and over the two weeks of the sessions, several meetings and extensive consultations were undertaken to form up bureau choices - three bureau members per region were proposed. From the Canadian/Umbrella Group standpoint, prospects for the CoP5 bureau are mixed at best but one positive development was the proposal of Umbrella Group member Harald Dovland of Norway as SBSTA chair.

35. THE INTERGOVERNMENTAL MEETING PROCESS: The SBI considered items which addressed issues related to the intergovernmental process, the calendar of future meetings and the

arrangements for CoP5 and CoP6. The negotiations on the issues of CoP6 dates and the nature of the High Level Segment (HLS) for CoP5 were dealt with in Contact Group. Contact Group discussions were protracted and polarized between Annex I countries led by Canada, the EU and the U.S. and the G-77 (Saudi Arabia, China and Venezuela).

On the issue of the CoP5 agenda, the SBI requested that the Executive Secretary take into account the views of Parties when submitting the provisional agenda for adoption by the parties at CoP5. Significant debate took place on the timing and the nature of the HLS. The Chair of the Contact Group proposed a synthesis text, which was accepted, which saw the HLS begin on Tuesday afternoon (November 2nd) with brief policy statements and then continued on Wednesday and Thursday a.m. with an exchange of views among Ministers. Canada's wish to innovate and have a more interactive session was met, although we remain concerned that the proposed dates for the HLS of CoP5 do not leave enough time for substantive incorporation of Ministerial direction in the negotiations following the HLS.

36. The Netherlands offered to host Co 6 in the Hague but dates remain unresolved. The G-77 support the October/November 2000 period and underlined the provisions of Article 7(4) of the Convention which refers to annual conferences of the parties. Other parties including the US expressed the view that the workload necessary to implement the Buenos Aires Plan of Action may require more time and that a spring 2001 date may be more appropriate. While not focusing on a specific date, Canada expressed concern about the workload before us. It was recommended to return to the issue again at CoP5.

37. In terms of other issues, agreement was reached to consider at CoP5 measures to improve the intergovernmental process including the issue of transparency in the process which was raised by Switzerland at the end of CoP4 and dates for a calendar of meetings were adopted for the period 2001-2003 with the 2001 dates to be revisited following a decision on the dates for CoP6.

38. IMPLEMENTATION OF ARTICLE 4, PARAGRAPHS 8 AND 9 OF THE CONVENTION: The SBI and SBSTA considered terms of reference for an expert workshop pursuant to Decision 5/CP.4. The terms of reference, based on a proposal by the Vice-Chairman of SBI, were developed in a very constructive spirit through a Friends of the Chair group. Canada's objective of maintaining a distinction between the adaptation and compensation elements of Article 4.8 and of maintaining a focus on the need for future analytical work were met in the final terms of reference, which focused on the identification of factors that will help determine the adverse effects of climate change and the impacts of implementation of response measures, as well as, identification of information available, information gaps and views on methodologies. The four (4) day workshop will take place in September 1999.

39. DEVELOPMENT AND TRANSFER OF TECHNOLOGIES: The "consultative process" on the development and transfer of technologies continued its work, with the Friends of the Chair (including Jean Cooper, NRCan) holding its first meeting at SBSTA 10. It was agreed that the consultative process should be extended from CoP5 to CoP6, in order to hold three regional workshops over the next 12 months (Tanzania, Africa; Latin America / Caribbean; and Asia / Pacific

Islands) and better assess the views of a broad group of Parties. Thus far, the intention to provide some form of financial or in-kind support for these workshops was expressed by Australia, Canada, Germany, Japan, Netherlands and the USA. In securing the opportunity for private sector participation, Canada was successful in furthering its objective of promoting an enabling environment and is seeking to identify Canadian companies for involvement. To this end, Canada continued its involvement in other technology initiatives and events such as the Climate Technology Initiative, where Canada is also in promoting the participation of Canadian companies. Following a request by China, further submissions in response to Decision 4/CP.4 were requested for November 1, 1999 in order to extend the opportunity for non-Annex 1 countries to express their views. The results of the consultative process will be provided to SBSTA 12 with a view to recommending a decision at CoP6. The IPCC reported on the status of the forthcoming Special Report on Methodological and Technological Issues in Technology Transfer, due for release in June 2000.

40. RESEARCH AND SYSTEMATIC OBSERVATION: Several delegations made interventions emphasising the importance of systematic observations in addressing the climate change issue, and noting with regret the continuing decline in monitoring networks. A small contact group co-chaired by Australia and Uganda met on three occasions to draft conclusions for the Chairman of SBSTA. The discussions were very constructive and involved an almost equal number of participants from developed and developing countries. The conclusions encouraged the agencies involved in the Climate Agenda and the GCOS Secretariat to develop plans for regional implementation workshops and to report to SBSTA at its 11th session. The conclusions also noted the importance of research. Parties have been invited to provide suggestions on how research and systematic observations should be reported in national communications.

41. EDUCATION, TRAINING AND PUBLIC AWARENESS: Article 6 of the Convention outlines the obligations of Parties with regard to national public education and outreach programs as well as international activities concerned with education and public awareness of climate change, its effects and adequate responses. Due to the fact that only three submissions were made on the topic (by the EU, Uzbekistan and Switzerland), the Chair decided not to put forward proposals on how to integrate Article 6 into the work programme of SBSTA, as was requested at SBSTA 8. Parties are invited to submit further proposals to the secretariat by 15 October, 1999, to serve as a basis for discussion at SBSTA 12. The reporting of Article 6 activities was included in the discussions concerning the Annex I National Communications Guidelines and the discrepancy over the use of mandatory language (should vs. shall).

42. MEETING OF FRANCOPHONE COUNTRIES: As in past sessions, a meeting of Francophone countries was held in margins of SBSTA/SBI. The meeting was chaired by Canada (DFAIT/Drake), in deference to Canada's role as host of the upcoming sommet de la Francophonie, with Central African republic as co-chair. The meeting was well attended by delegates from most of the 20 or more Francophone countries represented at the SBSTA/SBI sessions. African delegates were particularly pleased at the action-oriented stance which Canada brought to the meeting. Some of the highlights of the meeting follow:

a) Morocco indicated that it would host a meeting of Francophone countries focusing on planning for projects under the CDM. This very practical and timely initiative would take place in January or February, 2000 and would be similar to the Francophone workshop held in Abidjan earlier this year. Candel indicated it would contribute support in some form, based on a small amount of funding anticipated from CCAF for Francophone activities; b) the UNDP (a surprise observer in the meeting) volunteered to host a meeting of Francophone countries on the preparation of national communications; c) Senegal (Bakary Kante) suggested that use could be made of the Francophone summit in Moncton to stress the importance of climate change issues for Francophone countries and draw attention to the role that the community of Francophone countries has to play in the negotiations.

The meeting concluded with agreement that there should be ^{be} three meetings of Francophone countries associated with CoP5. The first would be a preparatory session to take place in Paris immediately before the CoP which would be billed as an "exchange of information", but whose purpose would be to bring many of the developing country delegates up to speed on key issues (France has offered to host, and Candel expressed interest in working with French in preparing and contributing to the meeting). In addition there would be two other meetings during the course of the two weeks of the SBSTSA-SBI-CoP sessions, essentially one each week, the second of which could be at Ministerial level, as was the case at CoP4.

43. Canadian delegation to Bonn included:

Yaprak Baltacioglu/ENVCDA (Co-Head of Delegation)

David Drake/DFAIT (Co-Head of Delegation)

Tana Lowen Stratton/DFAIT (Delegation Secretary)

AGRIC- Alrick Huebener, Brian McConkey

CIDA- Cam Carruthers

DFAIT- Sushma Gera, Jutta Brunnee, Satender Singh, Alain Richer

ENVCDA- Dr. John Stone, Wayne Moore, John Drexhage, Art Jaques, Pascale Collas, Elizabeth Rohr

FIN- Jean-Francois Tremblay

IC- Pierre Ricard-Desjardins

NRCAN- Jean Cooper, Dave Boulter, Paul Samson, Eric Landry

QUE- Conrad Anctil (Provincial Observer)

BCNI- John Dillon (Industry Observer)

CEA- Pierre Guimond (Industry Observer)

SIERRA CLUB OF CANADA- John Bennett (NGO Observer)

June 11, 1999

REPORT OF THE INDUSTRY REPRESENTATIVES
United Nations Framework Convention On Climate Change
Report On The 10th Meeting Of Subsidiary Bodies
May 31 – June 11, 1999, Bonn

Kyoto Mechanisms

Of key interest to most developed countries are the Kyoto Méchanisms (international emissions trading, joint implementation and the Clean Development Mechanism). In the days leading up to the Bonn meeting of the subsidiary bodies, the EU had finally come to an internal agreement on a proposal on the so-called "concrete ceiling", which would place an upper limit on the use which parties could make of the Kyoto mechanisms. Entering Bonn, this had seemed certain to strain relations between the EU and the Umbrella Group of countries (including Canada). In fact, the US claimed such a proposal would re-open the Kyoto Protocol and the Canadian delegation also lamented the unfortunate timing of the EU move. The EU scenario would restrict both buyers and sellers of credits and the complex formula had many delegations running the numbers under a variety of scenarios. A timely International Energy Agency (IEA) preliminary analysis of the EU proposal informed EU members and other countries that the German inspired EU proposal was seriously flawed and unworkable. When the EU proposal was formally submitted to the subsidiary body, however, the German delegate, speaking on behalf of the EU signaled that they might not take a hard line on the issue of the cap. The EU ceiling was not mentioned in subsequent discussions.

Based on submissions from various parties the Secretariat prepared for this session a synthesis of proposals for the three mechanisms. The text was long and complex, containing a variety of alternative proposals on virtually every paragraph, many of which are inconsistent. But thus began the painful and slow process of whittling down the text to something that might lead eventually to a brokered deal. The objective at this session was to re-order the document (by moving paragraphs around based on converging and diverging points of view) and this was accomplished without entering into significant debate on the substantive issues for each of the mechanisms. The final decision calls for the Secretariat to assist in preparing "a revised and consolidated synthesis of proposals identified by sources" for consideration at the next session. The document is one step away from being a negotiating text and could be the output from Cop-5.

Compliance and Enforcement

Delegates for the first time began to grapple with the serious issue of the means of ensuring compliance with the Kyoto Protocol. A Joint Working Group on Compliance held sessions but beyond general calls for a "strong and effective compliance regime", there was little early evidence of what Parties had in mind or how they might approach the issue. Key issues include who has the responsibility to determine non-compliance and against what criteria, whether a single compliance regime would apply to all aspects of the Kyoto Protocol (including the mechanisms) and the potential penalties for non-compliance (ranging from public approbation, loss of rights under the Protocol, financial penalties and trade sanctions). By Friday afternoon,

it was clear that a useful set of next steps on compliance would be agreed and a workshop would be held in October to continue the discussion of the characteristics of a compliance regime.

Transfer of Technologies

The decision on this topic made progress in addressing the central issue of the terms of transfer, who will bear the costs and by what means the transfer will be facilitated and carried out. The decision also establishes that there will be regional workshops before CoP-5 and the Government of Canada is particularly keen to have Canadian industry participate in the African regional workshop to be held in August in Tanzania. The objective is to outline practical experience gained by industry when delivering projects in Africa. The example of Hydro Québec work on the electricity grid in Senegal is given as an experience countries could learn from when planning projects in Africa.

Sinks

The sinks issue continued to be an ongoing item of considerable discussion and complexity. With the main issue being the IPCC's special report on sink methodologies -- which will only be ready for consideration at the meeting of the subsidiary bodies next June -- discussions continued around the margins and not a lot of progress was evident. It appeared that a number of Parties, including Brazil speaking on behalf of the G-77 Group, did not want to discuss sinks until the IPCC special report is delivered. Moreover, with Germany and France leading the EU position decisions were consistently slowed. Germany and France have apparently decided they will never make use of sinks and fear others who will use sinks will gain a competitive advantage.

The Protocol obligation that needs to be addressed is the first sentence in Article 3.4 of the Protocol that establishes Parties included in Annex I of the Convention shall provide data to establish its level of carbon stocks in 1990 and to enable an estimate to be made of its changes in carbon stocks in subsequent years. Some Parties were simply saying "lets see the data and we will talk later". In the last few days of the meeting, however, the EU relented and this led to a middle ground position.

Other Matters

Many observers at the sessions noted subtle hints coming from the US that could mean a change in the US position on the Kyoto Protocol may be in the offing. For example, various members of the US delegation were saying that the US agreed to a 7% reduction as their target based on having an array of flexibility mechanisms and the ability to fully use them. That the US could be considering shifting somewhat reflects perhaps the realization that IET at the end of negotiations may not be as flexible and unencumbered by rules as the US may have wished when it agreed to the target in Kyoto. Also, members of the US delegation had only one Congressional staff member attending the meetings and because of this could have been more candid than usual about how difficult the target would be to reach if anything less than full flexibility was agreed. Also, there is a high rate of change in the US and EU delegations to the

point where the members of the US delegation were encouraged to get to know their opposite numbers. This was described as "hug a EU delegate day".

Conclusions

As always in United Nations negotiations the complex geo-political dynamics are as important as the issues themselves. Relations between the EU and the rest of the OECD continue to ebb back and forth. While the issue of the cap on flexibility mechanisms has not been as explosive as some had predicted, it is clear that on key issues EU interests are very different from those of its traditional allies in the developed world. And while they do their best to present a united front, EU members are not monolithic in interest nor in style. Evidence of this can be found in their failure to agree on a EU-wide carbon tax and the very difficult negotiations they had in trying to find a common position on the "concrete ceiling". With the pragmatic Finns taking over the chair of the EU next month, it will be interesting to see how this will affect EU negotiating positions in the run-up to COP-5.

Gaps within the G-77 group of developing countries are more evident than ever. The old guard (China, India, Philippines) together with OPEC seem content to delay and block substantive progress on most issues. The countries of Africa and Latin America on the other hand do feel they have something to gain from this agenda (in particular the prospects of new investments through the CDM) and increasingly disassociate themselves from the hard line tactics of others. Francophone countries, especially in Africa, have developed an affinity for Canada and this seems to translate into a keener interest in CDM investments and a willingness to be supportive and cooperative on the flexibility mechanisms.

John Dillon
Business Council on National Issues

Pierre A. Guimond
Canadian Electricity Association

ENGO Report

United Nations Framework Convention On Climate Change Report On The 10th Meeting Of Subsidiary Bodies May 31 - June 11, 1999, Bonn

I. Introduction

This was the first such meeting attended by this reporter which was further complicated by the need to leave early because of other pressing matters in Canada. However, the six days of meetings in Bonn did reveal some concerns and opportunities.

II. Sinks

Canada is a strong supporter of sinks, in advance of the Special Report of the IPCC, and its hope to include changes in agricultural practice as a legitimate carbon sequestration activity, though possibly scientifically valid, is a concern. The apparent push to use sinks rather than emission reduction to reach the Kyoto target could result in greater difficulty obtaining the agreement of the G77 countries. Pressing to utilize sinks in North America appears to be viewed by the G77 as an alternative to the flexibility mechanisms and could therefore help Annex 1 Countries avoiding investing in developing countries. It was obvious to this observer G77 countries are determined to ensure assistance for and investment in developing countries by Annex 1 countries. This may be a non-science based approach, but it is the obvious reality of the present negotiations.

In the long run it is more important to ensure the involvement of all countries in the convention - so outcome will result in significantly lower emissions and the vast expansion of sinks - than it is to find inexpensive means of reaching the Kyoto target. This may require Canada and United States to delay the use of sinks until the needs of the G77 countries are met. Emphasizing sinks now may represent a potential saving for Canada in the present, but will only be useful if in the end the entire international community participates in emission reductions.

III. AIJ

The failure of the international community to ensure an even distribution of AIJ projects around the world i.e. concentrating in Eastern Europe and Latin America (Cost Rica) has resulted in a growing suspicion on the part of African countries. Statements by the G77, during the discussions of the review of AIJ, made it clear that some countries believe discrimination was involved and are concerned that the flexibility mechanisms will not result in investment in Africa. Efforts should be made to identify and develop projects for African countries in order to ensure their continuing involvement in the negotiations and ultimate participation in the convention.

IV. Opportunities

During the UNEP-World Business Council presentation the progress of the Peruvian government in determining its potential emission reductions was

discussed. Peru has identified 13 different areas where it could make significant emission and economic improvements. The one project mentioned was the replacement of industrial boilers. Canadian officials should investigate the possibility of assisting Peru in developing its projects. Participating in these projects could lead to positive economic benefits to Canada as well as emission reductions.

A private discussion with the Cook Islands Delegation revealed the hope of this Pacific state to find funding and technical assistance to construct four 100-200 kilowatt solar plants on four of its islands. The project would also allow the people of the Cook Islands to virtually eliminate the use of diesel fuel to meet their electrical needs. Assisting the Cook Islands would bring positive attention to Canada and would undoubtedly qualify as a Clean Development Mechanism Project. Involvement in a such a project by the fledgling Canadian Solar Industry would provide a vast amount of experience that could be applied in Canada down the road.

I urge the government of Canada to pursue both these opportunities.

V. Delegation

Members of the Canadian Delegation were very supportive and helpful to this reporter and could be seen working hard throughout the meetings and in the hall ways.

By John Bennett
Sierra Club of Canada

31 May 1999 (18:15)

Statement to the tenth sessions
of the
Subsidiary Body for Scientific and Technological Advice (SBSTA)
and the
Subsidiary Body for Implementation (SBI)

31 May 1999 , ,

Michael Zammit Cutajar
Executive Secretary, UNFCCC

Thank you for the opportunity to share a few thoughts with you at the beginning of these sessions. They have to do with the work of both subsidiary bodies and I have obtained the indulgence of their Chairmen to speak just this once at this first opportunity. I would like you to consider that I am addressing a joint meeting of the two bodies and propose that this statement be so recorded in their reports.

My remarks will address two topics. The first is the current and future work programme and the second is COP 5 and its possible outcomes.

A. Work programme

Let me first apologize for the late availability in print of many documents prepared by the secretariat. We shall seek to do better in preparing documents for the next round of meetings in October and November. In particular, we shall launch work on documents immediately after the close of the current sessions and seek to put off until the summer holidays the drop in creative tension that inevitably follows our involvement in a major intergovernmental event.

One additional cause of delay this time around arose from our planned work on documents being to a large extent displaced by the work that we had to devote to organizing the technical workshops mandated by COP 4. These workshops posed a new organizational challenge to the secretariat and were more difficult to deliver than we had expected. We were caught between the need to issue invitations and make other arrangements as early as possible and the lack of funds in the bank that would give credibility to those arrangements. We found that we had to devote considerable energy to keeping participation within limits, i.e. to keeping people out, whereas we usually work to bring people in. We also sought to provide remote access through video-conferencing and reports via the Internet.

The secretariat will, no doubt, make progress in developing a routine for organizing such events and may even be able to attract the necessary supplementary funding well in advance.

However, it would be illusory to imagine that workshops could become a regular feature of our work programme without displacing other secretariat activities or without additional secretariat staff dedicated to them. This is a point to be pursued in considering the programme budget in the SBI.

Another SBI agenda item, that on arrangements for intergovernmental meetings, provides an opportunity to evaluate the use of workshops within the context of an assessment of the whole intergovernmental process. There is a clear need to achieve a more rational distribution of the entire workload over time and to ensure that all individual initiatives on different topics fit within a feasible plan. While more money can help to deliver more outputs, time remains a real constraint, in particular for delegates. One thought worth considering is that workshops could be used not only as an inter-sessional addition to the intergovernmental process but also as an in-session substitute. Would it have been productive, for example, to limit the current sessions to one week - the second week - preceded by a week of workshops? This could be a cost-effective approach to be explored in future.

Meanwhile, looking ahead to the period leading to COP 5, a few words of caution are necessary regarding workshop plans:

- The only mandated workshop that is firmly in the secretariat's sights in this period is that on "adverse effects" (Article 4.8 and 4.9), due to be held in September. We also have in mind the possibility of organizing a round of high-level consultations including Ministers, before COP 5;
- Other workshops are in various stages of planning. For example, the Chairman of SBSTA has been working hard to advance preparations for the consultative process on transfer of technology. Such plans, however, are subject to the following caveats:
 - Any new workshop to be organized by the secretariat before COP 5 needs to be fully funded by 30 June;
 - No new workshop should be scheduled in isolation, since there is a risk of congestion, particularly in September.

I shall ask the COP 4 Bureau, which is to meet on 8 June, to review the overall schedule leading into COP 5 and trust that, in the meantime, any new plans for workshops and other such events will be considered as tentative.

B. COP 5 outcomes

Consultations undertaken since COP 4 have started to give some shape to a scenario for COP 5, including a "preparatory week" of subsidiary body meetings from 25 to 30 October and a high-level segment on 1 and 2 November. The organizational scenario for COP 5, including the formal start of COP 5 on 1 November, is to be firm up by the SBI; the main outstanding question appears to be whether or not to establish a Committee of the Whole. It is also important

that delegates in both bodies focus on substantive questions and seek to identify possible politically-significant outcomes of this year's conference. It is on COP 6 that the Buenos Aires Plan of Action has focussed attention, as a deadline for a number of important decisions. Nevertheless, COP 5 can be a stepping stone, an occasion to produce some outcomes that will build political momentum and confidence.

Allow me to suggest three topics on which such outcomes could be sought.

First, COP 5 could make progress in mobilizing support for strengthening and maintaining national capacities in developing country Parties, as well as in Annex I Parties with economies in transition. Capacity-building was the main overriding theme of COP 4. The follow up through the Convention process and through the work of cooperating organizations must produce practical results. For its part, the secretariat has been working with a number of organizations in the UN family with a view to promoting coherence in their responses to the needs of the Parties in this area and mobilizing additional funding for their climate change activities. We also welcome the beginnings of a strategic response by the GEF to capacity-building needs.

A second useful outcome of COP 5 would be a decision on the consideration of initial national communications from non-Annex I Parties. The preparation of national communications is a significant commitment of developing countries, one for which they need sustained support. It confirms the inclusion of climate change in their national priorities for sustainable development. These communications offer an opportunity for developing country Parties to pin-point the support they would welcome in carrying forward their national climate change programmes. They also provide a means for developing countries to obtain recognition for contributions that they are making towards the objective of the Convention. We know, for example, that some developing countries have made great strides in reducing the "emissions intensity" of their economic growth, even without being bound by legal commitments to do so. Such success stories can be brought to light and given political credit through an effective and open process of communication and consideration - one that is not threatening or intrusive but constructive and supportive.

Third, and last of my examples, a decision on the closure of the AIJ pilot phase by the end of the decade - however that may be defined - could be taken at COP 5 in such a way as to ensure a productive transition to the project-based mechanisms envisaged in Articles 6 and 12 of the Kyoto Protocol. I am not suggesting that work on AIJ projects should be brought to a shuddering halt - rather that a process should be set up that will ensure that the results of that work are not lost and that the winding-down of AIJ will not inhibit the eventual start-up of the CDM. I believe such an advance could be achieved at COP 5 without disaggregating the "mechanisms package" to which many delegations are attached.

While the focus over the next two weeks will be on COP 5, COP 6 is not far off. I hope that we will know by the end of these sessions where and when COP 6 will take place. That aside, I urge you to consider what inputs will be needed on your part and on the part of the secretariat to bring COP 6 to a successful conclusion and what decisions to this end may need to

be taken by COP 5. There is a need to look not only at the resources of the secretariat but also at the frequency and type of intergovernmental meetings in the period between COP 5 and COP 6, the role of workshops and other informal events, and the integration of different outputs into a coherent whole, as envisaged in decision 8/CP.4. Many would agree that "business as usual" will not suffice to complete all the tasks expected at COP 6. I hope that delegations are ready to innovate. The secretariat is ready to explore new options with you.

* * * * *

DRAFT

DRAFT UNEDITED VERSION

Distr.
GENERAL

FCCC/SBSTA/1999/6
XX XXXX 1999

// Original: ENGLISH

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE

REPORT OF THE SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE ON ITS TENTH SESSION BONN, 31 MAY - 11 JUNE 1999

CONTENTS

	<u>Paragraphs</u>	<u>Page</u>
I. OPENING OF THE SESSION (Agenda item 1)	1 - 4	4
II. ORGANIZATIONAL MATTERS (Agenda item 2)	5 - 10	5
A. Adoption of the agenda	5 - 7	5
B. Organization of the work of the session	8 - 10	6
III. COOPERATION WITH RELEVANT INTERNATIONAL ORGANIZATIONS (Agenda item 3)	11 - 22	7
A. Scientific organizations	11 - 14	7
B. United Nations bodies	15 - 18	8
C. Other conventions	19 - 22	9

	<u>Paragraphs</u>	<u>Page</u>
IV. NATIONAL COMMUNICATIONS FROM PARTIES INCLUDED IN ANNEX I TO THE CONVENTION (Agenda item 4)	23 - 34	9
A. Guidelines for the preparation of national communications	23 - 27	9
B. Review process related to greenhouse gas inventories ..	28 - 30	11
C. Work programme on methodological issues related to Articles 5, 7 and 8 of the Kyoto Protocol	31 - 34	12
V. METHODOLOGICAL ISSUES (Agenda item 5)	35 - 46	13
A. Land-use, land-use change and forestry (decision 1/CP.3, paragraph 5(a))	35 - 41	13
B. Emissions resulting from fuel used for international transportation	42 - 46	15
C. Other matters	47 - 57	16
VI. ARTICLE 6 OF THE CONVENTION: EDUCATION, TRAINING AND PUBLIC AWARENESS (Agenda item 6)	58 - 61	18
VII. DEVELOPMENT AND TRANSFER OF TECHNOLOGIES (Agenda item 7)	62 - 70	19
VIII. RESEARCH AND SYSTEMATIC OBSERVATION (Agenda item 8)	71 - 75	21
IX. IMPLEMENTATION OF ARTICLE 4, PARAGRAPHS 8 AND 9, OF THE CONVENTION (DECISION 3/CP.3 AND ARTICLES 2.3 AND 3.14 OF THE KYOTO PROTOCOL): PROGRAMME OF WORK (Agenda item 9)	76 - 80	22

	<u>Paragraphs</u>	<u>Page</u>
X. PROCEDURES AND MECHANISMS RELATING TO COMPLIANCE UNDER THE KYOTO PROTOCOL: ORGANIZATIONAL MATTERS RELATED TO THE JOINT WORKING GROUP (Agenda item 10)	81 - 84	23
XI. ACTIVITIES IMPLEMENTED JOINTLY UNDER THE PILOT PHASE (Agenda item 11)	85 - 89	24
XII. MECHANISMS PURSUANT TO ARTICLES 6, 12 AND 17 OF THE KYOTO PROTOCOL (Agenda item 12)	90 - 95	26
XIII. REPORT ON THE SESSION (Agenda item 13)	96 - 98	28
XIV. CLOSURE OF THE SESSION	99 - 100	28

Annexes

I. Implementation of Article 4, paragraphs 8 and 9, of the Convention (decision 3/CP.3 and Articles 2.3 and 3.14 of the Kyoto Protocol) Terms of reference for the expert workshop envisaged in the annex (programme of work) to decision 5/CP.4	1 - 4	29
II. List of documents before the Subsidiary Body for Scientific and Technological Advice at its tenth session		31

I. OPENING OF THE SESSION (Agenda item 1)

1. The tenth session of the Subsidiary Body for Scientific and Technological Advice (SBSTA) was held at the Hotel Maritim, Bonn, from 31 May to 11 June 1999.
2. The Chairman of the SBSTA, Mr. Kok Kee Chow (Malaysia), opened the session on 31 May 1999. He welcomed all delegates and observers to the tenth session of the SBSTA. The Chairman noted that this was the first session of the SBSTA since the Buenos Aires Plan of Action (decision 1/CP.4) had been adopted by the Conference of the Parties at its fourth session (COP 4), sixth months earlier. He recalled that the Plan of Action had outlined a series of work programmes aimed both at renewing efforts to implement the Convention and at preparing for the effective future implementation of the Kyoto Protocol. The goals set out in the Plan of Action were ambitious, and Parties would need to work in a determined and focussed manner to meet the challenges ahead. The Chairman highlighted the important role which would be played by the SBSTA in this endeavour, by undertaking in-depth technical and methodological work. The Chairman expressed hope that the technical workshops and informal meetings which had taken place in the inter-sessional period would help advance deliberations at the tenth session. He urged all Parties to strive to demonstrate substantial progress on each element of the Buenos Aires Plan of Action in a spirit of constructive cooperation. The Chairman concluded by extending a special welcome to the officers of the SBSTA Bureau: Mr. Lambert Gnapelet (Central African Republic), Vice-Chairman, and Mr. Andrej Křanjc (Slovenia), Rapporteur.
3. Also at the 1st meeting, on 31 May, a statement was made by the Executive Secretary, addressed to both the SBSTA and the Subsidiary Body for Implementation (SBI). He apologized for the late availability in print of many documents prepared by the secretariat for the session, and undertook to ensure more timely document preparation in the future. The delay had been partly due to the increased workload resulting from the organization of inter-sessional technical workshops mandated by COP 4. The Executive Secretary remarked that an opportunity to assess the role of workshops, including their budgetary implications, would arise in the context of discussions on arrangements for intergovernmental meetings in the SBI. Looking ahead, the Executive Secretary highlighted what he saw as potential politically significant outcomes of COP 5 that would build momentum for success at COP 6, namely, mobilizing support for capacity-building and taking decisions on the consideration of initial national communications from non-Annex I Parties and on the pilot phase of activities implemented jointly.
4. At the joint meeting of the SBSTA and the SBI, held on 1 June, general statements were made by representatives of five Parties, including one speaking on behalf of the African Group, one speaking on behalf of the Alliance of Small Island States, one speaking on behalf of the European Community and its member States and one speaking on behalf of the Group of 77 and China.

II. ORGANIZATIONAL MATTERS

(Agenda item 2)

A. Adoption of the agenda

(Agenda item 2 (a))

5. At its 1st meeting, on 31 May, the SBSTA considered the provisional agenda contained in document FCCC/SBSTA/1999/1.
6. The Chairman noted that, following consultations with the Bureau of COP 4, the provisional agenda did not include items on: the impact of single projects on emissions in the commitment period; and the scientific and methodological aspects of the proposal by Brazil. Consideration of these two items would be deferred until SBSTA 11, and they had also been included on the list of elements for the COP 5 provisional agenda. The Chairman drew the attention of Parties to document FCCC/SBSTA/1999/MISC.3 and Add.1 and Corr.1 on the impact of single projects on emissions in the commitment period, noting that Parties might wish to use that document to prepare for their discussions at SBSTA 11. Statements regarding the provisional agenda were made by representatives of four Parties
7. The SBSTA adopted the following agenda:
 1. Opening of the session.
 2. Organizational matters:
 - (a) Adoption of the agenda;
 - (b) Organization of the work of the session.
 3. Cooperation with relevant international organizations:
 - (a) Scientific organizations;
 - (b) United Nations bodies;
 - (c) Other conventions.
 4. National communications from Parties included in Annex I to the Convention:
 - (a) Guidelines for the preparation of national communications;
 - (b) Review process related to greenhouse gas inventories;
 - (c) Work programme on methodological issues related to Articles 5, 7 and 8 of the Kyoto Protocol.

5. Methodological issues:
 - (a) Land-use, land-use change and forestry (decision 1/CP.3, paragraph 5 (a));
 - (b) Emissions resulting from fuel used for international transportation;
 - (c) Other matters.
6. Article 6 of the Convention: Education, training and public awareness.
7. Development and transfer of technologies.
8. Research and systematic observation.
9. Implementation of Article 4, paragraphs 8 and 9, of the Convention (decision 3/CP.3 and Articles 2.3 and 3.14 of the Kyoto Protocol): programme of work.
10. Procedures and mechanisms relating to compliance under the Kyoto Protocol: organizational matters related to the joint working group.
11. Activities implemented jointly under the pilot phase.
12. Mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol.
13. Report on the session.

B. Organization of the work of the session
(Agenda item 2 (b))

8. The SBSTA considered this sub-item at its 1st meeting, on 31 May. It had before it the tentative schedule of meetings contained in document FCCC/SBSTA/1999/1, annex II. The Chairman noted that the tentative schedule of meetings should be used as a guide to the organization of work of the SBSTA, but that flexibility would be required to respond to the pace of progress.

9. The Chairman underscored that the SBSTA would need to work efficiently to cover the heavy agenda before it and urged Parties to reach a conclusion on as many items as possible by the close of the first week.

10. The Chairman informed the SBSTA that applications for accreditation to the sessions of the subsidiary bodies had recently been received from one intergovernmental and 12 non-governmental organizations. These applications had been screened by the secretariat on the basis of the provisions of Article 7.6 of the Convention and in accordance with the procedures established by the COP for the admission of organizations as observers. The SBSTA agreed to grant these organizations access to the

current session of the SBSTA, pending formal action on their accreditation by the COP at its fifth session.

III. COOPERATION WITH RELEVANT INTERNATIONAL ORGANIZATIONS

(Agenda item 3)

A. Scientific organizations

(Agenda item 3(a))

1. Proceedings

11. The SBSTA considered this sub-item at its 1st and 10th meetings, on 31 May and 10 June, respectively.

12. Statements were made by representatives of six Parties, including one speaking on behalf of the European Community and its member States.

13. At the 1st meeting, on 31 May, a statement was made by the Chairman of the Intergovernmental Panel on Climate Change (IPCC), who also responded to questions.

2. Conclusions

14. At its 10th meeting, on 10 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA expressed appreciation for the statement given by the Chairman of the IPCC and welcomed the *Special Report on Aviation and the Global Atmosphere*. It also welcomed the information provided on preparations for the Third Assessment Report, the special reports on (i) methodological and technological issues in technology transfer, (ii) emissions scenarios of greenhouse gases and aerosol precursors, and (iii) land-use, land-use change and forestry, as well as the report on good practices in inventory management; and

(b) The SBSTA requested the IPCC to continue with its work and looked forward to the reports referred to in sub-paragraph (a) above. It noted the need of the IPCC for sufficient resources to prepare these reports which are important to advancing work under the Convention, and urged Parties to contribute generously to this end.

B. United Nations bodies
(Agenda item 3(b))

1. Proceedings

15. The SBSTA considered this sub-item at its 1st and 10th meetings, on 31 May and 10 June, respectively.
16. Statements were made by representatives of nine Parties, including one speaking on behalf of the European Community and its member States.
17. At the 1st meeting, on 31 May, a statement was made by a representative of the United Nations Environment Programme (UNEP).

2. Conclusions

18. At its 10th meeting, on 10 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) Noting that there are many relevant activities under way in other United Nations bodies the SBSTA expressed the need for these to be brought within the context of the UNFCCC process, and to be consistent with decisions of the COP, in particular with decision 7/CP.4. The SBSTA welcomed the initiative of the secretariat to bring together four United Nations bodies, the United Nations Conference on Trade and Development, the United Nations Development Programme (UNDP), the UNEP and the United Nations Industrial Development Organization, and encouraged it to continue drawing upon their contributions for the development of a joint project on capacity-building for developing countries for the clean development mechanism, taking careful account of relevant decision and conclusions of the COP and its subsidiary bodies, in particular the conclusions on agenda item 12 of the SBSTA at its current session (see paragraph 94). The SBSTA requested the secretariat to make further information available, for consideration at its eleventh session; and

(b) The SBSTA requested the secretariat to continue to explore with these and other United Nations partner organizations, including the Global Environment Facility (GEF) and its implementing agencies, other areas where their expertise and resources could support the various work programmes under the Convention process, and to inform it at subsequent sessions on progress achieved.

C. Other conventions (Agenda item 3(c))

1. Proceedings

19. The SBSTA considered this sub-item at its 1st and 10th meetings, on 31 May and 10 June, respectively.

20. Statements were made by representatives of four Parties, including one speaking on behalf of the European Community and its member States.

21. At the 1st meeting, on 31 May, statements were made by representatives of the secretariats of the United Nations Convention to Combat Desertification (UNCCD) and the Convention on Biological Diversity (CBD).

2. Conclusions

22. At its 10th meeting, on 10 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA noted with appreciation the reports by representatives of the UNCCD and the CBD on the substantive linkages between climate change and their conventions; and

(b) The SBSTA welcomed the efforts of the secretariat to explore possible ways of cooperating with the secretariats of other conventions, in particular the UNCCD and the CBD, in order to strengthen cooperation on issues of common interest, bearing in mind the relevant decisions of the COP. It encouraged the secretariat to continue consultations with the relevant secretariats, and to inform it on the outcome of these consultations at subsequent sessions of the subsidiary bodies.

IV. NATIONAL COMMUNICATIONS FROM PARTIES INCLUDED IN ANNEX I TO THE CONVENTION

(Agenda item 4)

A. Guidelines for the preparation of national communications (Agenda item 4(a))

1. Proceedings

23. The SBSTA considered this sub-item at its 3rd and 10th meetings, on 1 and 10 June, respectively. It had before it the following documents: FCCC/SB/1999/1 and Add.1-2, FCCC/SBSTA/1999/INF.1 and Add.1, FCCC/SBSTA/1999/INF.2, FCCC/SBSTA/1999/INF.3, FCCC/SB/1999/MISC.2 and FCCC/SB/1999/MISC.5 and Add.1. An informal paper entitled

"Methods to estimate emission inventories of hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride" was also made available to Parties by the secretariat.

24. Statements were made by representatives of 13 Parties, including one speaking on behalf of the European Community and its member States.

25. At the 3rd meeting, on 1 June, a statement was made by a representative of the IPCC - Organisation for Economic Co-operation and Development (OECD) - International Energy Agency (IEA) Programme on National Greenhouse Gas Inventories. The Chairman of the Global Climate Observing System (GCOS) Steering Committee also made a statement.

26. Also at its 3rd meeting, the SBSTA agreed to consider this sub-item by way of a contact group, co-chaired by Mr. Mark Mwandosya (United Republic of Tanzania) and Mr. Jim Penman (United Kingdom). The Chairman informed the SBSTA that he had liaised with the Chairman of the SBI on this matter and they had concluded that, in light of the division of labour between the SBSTA and the SBI on the issue of national communications, it would be appropriate for this to be a joint contact group of the SBSTA and the SBI.

2. Conclusions

27. At its 10th meeting, on 10 June, having considered a proposal by the Chairman based on inputs from the contact group, the SBSTA adopted the following conclusions:

(a) The SBSTA decided to forward to the SBI¹ a draft decision on guidelines for the preparation of national communications by Parties included in Annex I to the Convention, part I: UNFCCC reporting guidelines on annual inventories to be recommended for adoption by the COP at its fifth session (see FCCC/SBSTA/1999/6/Add.1²);

(b) The SBSTA advised the SBI to set up a two-year trial period starting in early 2000 to assess the UNFCCC reporting guidelines on annual inventories, particularly the common reporting format, with a view to revising them at COP 7, taking into consideration, *inter alia*, experience gained by the Parties and the secretariat, and input from the IPCC;

(c) The SBSTA encouraged Parties included in Annex I to the Convention to support the efforts of those Annex I Parties undergoing the process of transition to a market economy aimed at improving the quality of their national greenhouse gas inventories, including the reporting of inventory

¹ See FCCC/SBI/1999/8, para. 27

² Document FCCC/SBSTA/1999/6/Add.1 contains the draft decision and the UNFCCC reporting guidelines on inventories (annex I), as well as a common reporting format (annex II) which is an integral part of these guidelines. (The common reporting format has been revised based on the technical corrections referred to in paragraph 27 (e), below).

data using the common reporting format and the archiving of the inventory data;

(d) The SBSTA took note of the information provided by the IPCC-OECD-IEA Programme on National Greenhouse Gas Inventories³ related to its work on uncertainties and good practices. It requested the IPCC to provide its report in time for the twelfth session of the SBSTA and decided to consider the IPCC report on these activities at that session;

(e) The SBSTA requested Parties to submit electronically to the secretariat, by 15 July 1999, any further technical corrections to the common reporting format so that the text of the guideline could be completed in time for the fifth session of the COP;

(f) The SBSTA requested the secretariat, taking into account the advice of the IPCC and other relevant organizations, to develop the software tools needed to facilitate reporting by Parties using the common reporting format;

(g) The SBSTA requested Parties included in Annex I to the Convention that are not using the sectoral background data tables 5A-D on land-use change and forestry of the common reporting format to specify alternative formats, and to submit them to the secretariat by 1 July 2001;

(h) The SBSTA decided to continue discussions at its eleventh session on revisions to the guidelines for the preparation of national communications by Parties included in Annex I to the Convention, part II: UNFCCC reporting guidelines on projections, policies and measures, financial resources and transfer of technology, and other matters⁴. It further decided, upon completion of work, to forward its conclusions for consideration by the SBI with the aim of submitting revisions to part II of the guidelines for adoption at the fifth session of the COP. The SBSTA requested the secretariat to prepare a document reflecting the status of discussions on the draft text of part II of the guidelines at the close of the tenth session.

B. Review process related to greenhouse gas inventories

(Agenda item 4(b))

1. Proceedings

28. The SBSTA considered this sub-item at its 3rd and 9th meetings, on 1 and 9 June, respectively. It had before it the following documents: FCCC/SBSTA/1999/3, FCCC/SBSTA/1999/MISC.4 and FCCC/TP/1999/2.

³ By decision of the XIV Plenary of the IPCC, the functions of the IPCC-OECD-IEA Programme on Inventories will be assumed by the IPCC Task Force on Inventories with a technical support unit to be located in Japan. This transfer is expected to be completed by the end of 1999.

⁴ This part, including its title, is subject to further discussion at the eleventh sessions of the subsidiary bodies.

29. Statements were made by representatives of four Parties, including one speaking on behalf of the European Community and its member States.

2. Conclusions

30. At its 9th meeting, on 9 June, having considered a proposal by the Chairman, the SBSTA adopted the following conclusions:

(a) The SBSTA took note of and supported the technical review process related to greenhouse gas inventories of Annex I Parties outlined by the secretariat in document FCCC/SBSTA/1999/3;

(b) The SBSTA endorsed the following elements of that technical review process: annual initial checks, annual synthesis and assessment, and individual reviews; and

(c) The SBSTA advised the SBI to consider guidelines for such a technical review process at its eleventh session, with a view to a decision on such guidelines being adopted by the COP at its fif session.

C. Work programme on methodological issues related to Articles 5, 7 and 8 of the Kyoto Protocol (Agenda item 4 (c))

1. Proceedings

31. The SBSTA considered this sub-item at its 3rd and 8th meetings, on 1 and 8 June, respectively. It had before it document FCCC/SB/1999/2 and Corr.1.

32. Statements were made by representatives of seven Parties, including one speaking on behalf of the European Community and its member States.

33. At its 3rd meeting, on 1 June, the SBSTA agreed to consider this sub-item in the joint contact group established under sub-item 4(a).

2. Conclusions

34. At its 8th meeting, on 8 June, having considered a proposal by the Chairman on the basis of inputs from the joint contact group, the SBSTA adopted the following conclusions:

(a) The SBSTA took note of the information provided by the secretariat on a work programme on methodological issues related to Articles 5, 7 and 8 of the Kyoto Protocol, contained in

document FCCC/SB/1999/2;

(b) The SBSTA endorsed the work programme referred to in sub-paragraph (a) above, noting that some aspects relating to Article 3 of the Kyoto Protocol may need to be further discussed in relation to Articles 5, 7 and 8 of that Protocol;

(c) The SBSTA decided to consider the characteristics of national systems and issues relating to adjustments, referred to in Article 5 of the Kyoto Protocol, at its eleventh session. It requested Parties to provide views on these items by 15 August 1999, for compilation into a miscellaneous document; and

(d) The SBSTA requested the secretariat to organize a workshop on the topics referred to in sub-paragraph (c) above, subject to the availability of funds, prior to its twelfth session. It also requested the secretariat to develop plans for a second workshop on issues related to Articles 5, 7 and 8, subject to the availability of funds, to be held prior to its thirteenth session, pending the outcome of the first workshop and a decision on the date of the sixth session of the COP.

V. METHODOLOGICAL ISSUES

(Agenda item 5)

A. Land-use, land-use change and forestry (decision 1/CP.3, paragraph 5 (a))

(Agenda item 5 (a))

1. Proceedings

35. The SBSTA considered this sub-item at its 3rd, 5th and 10th meetings, on 1, 2 and 10 June, respectively. It had before it the following documents: FCCC/SBSTA/1999/5, FCCC/SBSTA/1999/INF.5 and FCCC/SBSTA/1999/MISC.2 and Add.1.

36. Statements were made by representatives of 20 Parties, including one speaking on behalf of the Alliance of Small Island States, one speaking on behalf of the European Community and its member States and one speaking on behalf of the Group of 77 and China.

37. At the 3rd meeting, on 1 June, Mr. Paul Maclons (South Africa), co-chair of the second SBSTA workshop on land-use, land-use change and forestry (Indianapolis, United States of America, 26-28 April 1999), provided the SBSTA with an oral report on that workshop.

38. At the same meeting, on 1 June, a statement was made by the Chairman of the IPCC on the status of preparation of the IPCC special report on land-use, land-use change and forestry.

39. Also at the 3rd meeting, on 1 June, statements were made by representatives of the environmental non-governmental organization (NGO) constituency and the local authority constituenc

40. At its 5th meeting, on 2 June, the SBSTA agreed to consider this sub-item by way of a contact group, co-chaired by Mr. Paul Maclons (South Africa) and Mr. Maciej Sadowski (Poland).

2. Conclusions

41. At its 10th meeting, on 10 June, having considered a proposal by the Chairman on the basis of inputs from the contact group, the SBSTA, recalling decision 9/CP.4, adopted the following conclusions:

(a) The SBSTA took note with appreciation of documents FCCC/SBSTA/1999/5 and FCCC/SBSTA/1999/INF.5 prepared by the secretariat. It invited Parties to review, and where possible respond to, the questions posed in tables 1 and 2 of document FCCC/SBSTA/1999/5, and to identify any additional policy or procedural questions. It requested Parties to provide submissions, where possible electronically, on those issues by 16 August 1999, for compilation into a miscellaneous document, and for consideration by the SBSTA at its eleventh session;

(b) The SBSTA invited the IPCC, in conjunction with the SBSTA at its eleventh session, to provide an in-depth progress report, and to convene a special side event, on the draft IPCC special report on land-use, land-use change and forestry;

(c) The SBSTA decided to further consider, at its eleventh session, the process and timing for the analysis of the information to be provided by the IPCC special report, and the process for developing its work programme on land-use, land-use change and forestry in order to fulfil, *inter alia*, the provisions of decision 9/CP.4;

(d) The SBSTA requested the secretariat to organize a workshop, with participation by experts, between SBSTA 12 and COP 6. The purpose of the workshop would be to analyse the IPCC special report in the context of the requirements of the Kyoto Protocol. The SBSTA invited Parties to provide the secretariat with guidance by 1 February 2000 on the scope of this workshop, which may include data, information and a decision-making framework;

(e) The SBSTA invited the IPCC to develop a work plan addressing methodological issues raised in the IPCC special report in the context of the IPCC 1996 Revised Guidelines for National Greenhouse Gas Inventories in the areas of agriculture and land-use change and forestry, to commence as soon as practicable following completion of the special report; and

(f) The SBSTA decided to begin the consideration, at its eleventh session, of the need for country-specific data and information and its relationship to a decision-making framework in the context of the requirements of the Kyoto Protocol. It requested Parties to provide submissions on this subject, where possible electronically, by 16 August 1999, for compilation into a miscellaneous document for consideration by the SBSTA at its eleventh session.

B. Emissions resulting from fuel used for international transportation

(Agenda item 5 (b))

1. Proceedings

42. The SBSTA considered this sub-item at its 5th and 12th meetings, on 2 and 11 June, respectively. It had before it document FCCC/SBSTA/1999/INF.4. The IPCC *Special Report on Aviation and the Global Atmosphere* prepared at the request of the International Civil Aviation Organization (ICAO) and an informal paper entitled "Methods used to collect data and to estimate and report emissions from international bunker fuels" were also made available to Parties by the secretariat

43. Statements were made by representatives of eight Parties, including one speaking on behalf of the European Community and its member States.

44. At the 5th meeting, on 2 June, a statement was made by a representative of the ICAO. In addition, the secretariat informed the SBSTA of the contents of a letter received from the International Maritime Organization (IMO) on matters relevant to this sub-item.

45. At the 12th meeting, on 11 June, the Chairman informed the SBSTA that he had requested Mr. José Romero (Switzerland) to assist him in conducting informal consultations on this sub-item.

2. Conclusions

46. At its 12th meeting, on 11 June, having considered a proposal by the Chairman on the basis of inputs from informal consultations, the SBSTA adopted the following conclusions:

(a) The SBSTA welcomed the IPCC *Special Report on Aviation and the Global Atmosphere* prepared at the request of the ICAO, as a comprehensive assessment of the effects of aircraft on the climate and atmospheric ozone;

(b) The SBSTA noted with appreciation the information provided by ICAO and the IMO on their work regarding emissions from international bunker fuels. It regretted that a representative of IMO could not attend the current session;

(c) In accordance with decision 2/CP.3 and relevant conclusions of the SBSTA at its ninth session⁵:

⁵ FCCC/SBSTA/1998/9, para. 51 (i)

- (i) The SBSTA noted that the data on emissions from international bunker fuels provided by Annex I Parties are often incomplete and inconsistent, as reported in document FCCC/SBSTA/1999/INF.4. It noted that further methodological work is needed to ensure consistent and transparent inventories, including the development and use of consistent definitions, taking into account any guidance by the IPCC on good practice. The SBSTA requested ICAO and IMO to make available their data and expertise on the issue. It invited Annex I Parties to provide, in a transparent manner, emission data and information on methods used to estimate emissions, including the definitions applied, as part of their annual greenhouse gas inventory; and
 - (ii) The SBSTA noted the informal paper "Methods used to collect data and to estimate and report emissions from international bunker fuels" made available to Parties by the secretariat during the session. The SBSTA requested Parties to provide comments on that paper to the secretariat by 16 August 1999. It requested the secretariat to revise the paper, based on these comments provided by Parties, and to make the revised version available as soon as possible.
- (d) Recalling relevant articles of the Convention, decisions of the COP including decision 2/CP.3, and the relevant conclusions of the SBSTA, the SBSTA invited IMO and ICAO to inform it of their work plans relating to emissions based on fuel sold to ships or aircraft engaged in international transport and to provide regular progress reports at future sessions of the SBSTA;
- (e) The SBSTA invited the secretariat to explore ways to further strengthen the exchange of information between ICAO, IMO and the SBSTA. It requested the secretariat to report to it on these issues at its eleventh session; and
- (f) The SBSTA decided to continue its work in accordance with decision 2/CP.3, paragraph 4, and to consider the IPCC *Special Report on Aviation and the Global Atmosphere*, at its eleventh session. It invited Parties to submit their views on these issues to the secretariat by 16 August 1999.

C. Other matters
(Agenda item 5 (c))

1. Proceedings

47. The SBSTA considered this sub-item at its 5th, 9th and 12th meetings, on 2, 9 and 11 June, respectively. It had before it document FCCC/SBSTA/1999/4. An informal paper entitled "Compendium of decision tools to evaluate strategies for adaptation to climate change", was also made available to Parties by the secretariat.

48. At the 5th meeting, on 2 June the Chairman noted that the main issue to be discussed under this item concerned information on impacts, adaptation and mitigation assessment methods.
49. At the same meeting, a statement was made by a representative of UNEP introducing the *Handbook on Methods for Climate Change Impacts Assessment and Adaptation Strategies* prepared by UNEP, in collaboration with the Free University of Amsterdam, and a report entitled *Economics of Greenhouse Gas Limitations: Methodological Guidelines*, prepared by the UNEP Collaborating Centre on Energy and Environment (Risø, Denmark).
50. Statements on this issue were made by representatives of seven Parties, including one speaking on behalf of the European Community and its member States.
51. At the 5th meeting, on 2 June, the delegation of Brazil provided a report on activities undertaken in the inter-sessional period regarding the scientific and methodological aspects of the proposal by Brazil, including the organization of a workshop.
52. A statement on this issue was made by the representative of a Party.
53. At the 12th meeting, on 11 June, the representative of a Party raised a further issue for discussion, namely, inventory and methodological issues relating to harvested wood products.
54. Statements on this issue were made by representatives of six Parties, including one speaking on behalf of the European Community and its member States.

2. Conclusions

55. At its 9th meeting, on 9 June, the SBSTA adopted the following conclusions:
- (a) The SBSTA took note, with appreciation, of the UNEP *Handbook on Methods for Climate Change Impacts Assessment and Adaptation Strategies* and the UNEP Collaborating Centre on Energy and Environment (Risø, Denmark) report, *Economics of Greenhouse Gas Limitations: Methodological Guidelines*. It encouraged Parties to draw upon these reports in the preparation of national communications. It further encouraged Parties and intergovernmental organizations, in providing support for enabling activities, to take note of the availability of these documents;
- (b) The SBSTA further took note of the information provided in the informal report by the secretariat entitled "Compendium of decision tools to evaluate strategies for adaptation to climate change". It invited Parties:
- (i) To review the information, and to provide comments to the secretariat on its

contents by 15 September 1999; and

- (ii) To provide information on other decision tools in a format similar to that in the above-mentioned informal report. The SBSTA requested the secretariat to facilitate the submission of this information electronically on its Web site, to utilize experts nominated by Parties to the roster on methodologies to review the information, and to compile and synthesize the information; and

(c) The SBSTA, recognizing that training in the use of the methods described in the documents referred to in paragraph 1 would be an important means of building the technical and analytical capacities of Parties, encouraged UNEP, the United Nations Development Programme and other relevant institutions to review their activities, including those on a regional basis, and to support capacity-building by using these documents to meet the needs of Parties, particularly developing country Parties.

56. At the same meeting, the SBSTA noted the information provided by the delegation of Brazil on scientific and methodological issues discussed at a workshop organized by that delegation to consider its proposal contained in document FCCC/AGBM/1997/MISC.1/Add.3. The SBSTA decided to consider, at its eleventh session, the scientific and methodological aspects of the proposal by Brazil, and invited the delegation of Brazil to further inform the SBSTA of the results of its workshop and provide with other relevant information at that session.

57. At its 12th meeting, on 11 June, the SBSTA noted that the report on the expert meeting convened by the IPCC-OECD-IEA Programme on National Greenhouse Gas Inventories on "Evaluating approaches for estimating net emissions of carbon dioxide from forest harvesting and wood products" (Dakar, 5-7 May, 1998) was available from the IPCC during the session, and decided to continue its discussion on this issue at its eleventh session⁶.

ARTICLE 6 OF THE CONVENTION: EDUCATION, TRAINING AND PUBLIC AWARENESS

(Agenda item 6)

1. Proceedings

58. The SBSTA considered this sub-item at its 1st meeting, on 31 May. It had before it document FCCC/SBSTA/1999/MISC.1.

59. Statements were made by representatives of two Parties, including one speaking on behalf of

⁶ The meeting report is available on the web at <http://www.iea.org/ipcc>. It may also be ordered from: IPCC/OECD/IEA Programme on National Greenhouse Gas Inventories, 2 rue Andre-Pascal, 75775 Paris Cedex 16, France

the European Community and its member States.

60. The Chairman expressed regret that the small number of submissions received from Parties on possible means of promoting the implementation of Article 6 of the Convention had prevented the secretariat from putting forward proposals on how to integrate Article 6 into the work programme of the SBSTA, as requested by SBSTA at its eighth session.

2. Conclusions

61. At the 1st meeting, on 31 May, the Chairman invited Parties to submit further proposals to the secretariat by 15 October 1999, to serve as a basis for a more substantive discussion at the twelfth session of the SBSTA.

VII. DEVELOPMENT AND TRANSFER OF TECHNOLOGIES

(Agenda item 7)

1. Proceedings

62. The SBSTA considered this sub-item at its 5th, 6th, 7th and 12th meetings, on 2, 3, 4 and 10 June, respectively. It had before it the following documents: FCCC/SBSTA/1999/2, FCCC/SBSTA/1999/MISC.5 and Add.1-3 and FCCC/TP/1999/1.

63. Statements were made by representatives of 25 Parties, including one speaking on behalf of the Alliance of Small Island States, another speaking on behalf of the European Community and its member States and another speaking on behalf of the Group of 77 and China.

64. At the 5th meeting, on 2 June, a statement was made by a representative of the IPCC on the status of preparation of its special report on methodological and technological issues in technology transfer.

65. Also at the 5th meeting, on 2 June, the Chairman informed the SBSTA of the steps taken so far to conduct the consultative process requested by decision 4/CP.4, including the establishment of an informal group with members nominated by Parties to exchange views on an approach for advancing the process. He proposed to hold further meetings of the informal group during the session, to continue discussions on the work plan and other aspects of the consultative process.

66. At the 7th meeting, on 4 June, a statement was made by a representative of the Climate Technology Initiative (CTI) of the International Energy Agency.

67. At the 12th meeting, the representative of a Party highlighted the transition taking place with regard to metered dose inhalers involving the substitution of chlorofluorocarbon (CFC) propellants by hydrofluorocarbons (HFCs) and emphasised the importance of coordination on this issue between

relevant environmental conventions. Two further statements on this issue were made by representatives of Parties and one by the Executive Secretary.

68. Also at the 12th meeting, the representative of a Party, speaking on behalf of the Group of 77 and China, drew attention to the issue of capacity building, and expressed the intention to submit a proposal on the subject for consideration at the fifth session of the COP. Statements on this matter were made by representatives of three Parties.

2. Conclusions

69. At its 12th meeting, on 11 June, the SBSTA adopted the following conclusions with regard to the consultative process on the development and transfer of technologies, with the aim of reaching agreement on a framework for meaningful and effective action as stated in decision 4/CP.4:

(a) The SBSTA noted the submissions from Parties, the Global Environment Facility (GEF) and the International Atomic Energy Agency contained in documents FCCC/SBSTA/1999/MISC.5/Add.1-3;

(b) The SBSTA invited Parties to provide submissions to the secretariat, by 30 November 1999, on how the issues and questions listed in the annex to decision 4/CP.4 should be addressed, as well as suggestions for additional issues and questions. It requested the Chairman, with the assistance of the secretariat, to identify common elements and areas of divergence, based on the abovementioned submissions, for consideration by the SBSTA at its twelfth session;

(c) The SBSTA noted the progress made by the Chairman, with the assistance of the secretariat, in conducting the technology transfer consultative process. It endorsed the proposal by the Chairman that the secretariat organize three regional workshops, one in Africa, one in Asia and the Pacific Islands, and one in Latin America and the Caribbean, taking into account the regional and global perspectives of transfer of technology;

(d) The SBSTA recognized that, given the time and resources available, it would not be possible to complete all regional workshops before the fifth session of the COP, and invited the Chairman of the SBSTA, with the assistance of the secretariat, to complete the regional workshops by early 2000, and to report to the SBSTA at its twelfth session, with a view to taking a decision by COP 6;

(e) The SBSTA welcomed offers by some Parties of financial and/or in-kind support for the consultative process, and encouraged other Parties in a position to do so to provide additional contributions; and

(f) The SBSTA noted the statement made by a representative of the IPCC to the SBSTA on its draft special report on methodological and technological issues in technology transfer.

70. At the same meeting, on 11 June, the SBSTA adopted the following conclusions with regard to other issues:

(a) The SBSTA welcomed the technical paper on coastal adaptation technologies (FCCC/TP/1999/1) prepared by the secretariat and agreed to consider this issue at its eleventh session. It invited Parties to submit, by 16 August 1999, their views regarding options to accelerate and sustain the development and transfer of coastal adaptation technologies for compilation into a miscellaneous document.

(b) The SBSTA requested the secretariat to continue to cooperate with the OECD Development Assistance Committee, in order to improve the availability of climate-relevant data from the reporting system of that committee; and

(c) The SBSTA took note of the information provided by the secretariat in response to decision 13/CP.4, on how Parties, international organizations and other organizations may submit information electronically to the secretariat. It encouraged Parties, international organizations and other organizations to make use of the secretariat's Web site as a means of providing information on ways and means of limiting emissions of HFCs and PFCs. It requested the secretariat to make the information submitted also available on the Web site.

VIII. RESEARCH AND SYSTEMATIC OBSERVATION

(Agenda item 8)

1. Proceedings

71. The SBSTA considered this sub-item at its 1st, 3rd and 8th meetings, on 31 May and 1 and 8 June, respectively. It had before it document FCCC/SB/1999/1/Add.2. The GCOS secretariat draft submission on guidance for reporting on systematic observation, which was prepared for the workshop on revised guidelines for Annex I Party national communications (Bonn, 17-19 March 1999), was also available to Parties.

72. Statements were made by representatives of 12 Parties, including one speaking on behalf of the European Community and its member States.

73. At the 1st meeting, on 31 May, a statement was made by the Chairman of the GCOS Steering Committee, on behalf of the organizations participating in the Climate Agenda, concerning recent activities related to research and systematic observation.

74. At the 3rd meeting, on 1 June, the Chairman invited Ms. Susan Barrell (Australia) and Mr. Philip Gwage (Uganda) to assist him in conducting informal consultations on this item.

2. Conclusions

75. At its 8th meeting, on 8 June, the SBSTA adopted the following conclusions:

(a) The SBSTA noted with appreciation the report of the Chairman of the GCOS Steering Committee, on behalf of the agencies participating in the Climate Agenda;

(b) The SBSTA expressed its appreciation for the preparation by the GCOS secretariat of the preliminary draft guidance for reporting on systematic observation, prepared for the workshop on the revised guidelines for the preparation of national communications by Parties included in Annex I to the Convention (Bonn, 17-19 March 1999).⁷ It noted that the GCOS draft guidance is undergoing further review. The SBSTA decided to consider the issue at its eleventh session and it urged the GCOS secretariat to make the revised draft guidance available in sufficient time for that session;

(c) The SBSTA invited the agencies participating in the Climate Agenda, through the GCOS secretariat, to report to the SBSTA at its eleventh session on their actions and plans, in accordance with decision 14/CP.4, including proposals to hold workshops and, in preparing to do so, to consult widely, including, *inter alia*, with the Convention secretariat, the Chairman of the IPCC and the GEF;

(d) The SBSTA noted with concern reports of the continued degradation of the observing capability in developing countries and urged Parties to enhance support for capacity-building in developing countries to enable them through, *inter alia*, GCOS and related activities, both to reverse that degradation and to improve the collection, exchange and utilization of data to meet local, regional and international needs;

(e) The SBSTA recalled paragraphs 1(c) and 5 of decision 2/CP.4 requesting the GEF to report to the COP on its activities with regard to providing funding to developing countries to build capacity for participation in systematic observational networks; and

(f) The SBSTA also noted that, whilst decision 14/CP.4 focuses on actions to improve global monitoring capabilities for climate to meet the needs of the Convention, Parties also need similarly to support research on climate change, both nationally and internationally.

IX. IMPLEMENTATION OF ARTICLE 4, PARAGRAPHS 8 AND 9, OF THE CONVENTION (DECISION 3/CP.3 AND ARTICLES 2.3 AND 3.14 OF THE KYOTO PROTOCOL): PROGRAMME OF WORK

(Agenda item 9)

⁷ See document FCCC/SB/1999/1/Add.2.

1. Proceedings

76. The SBSTA considered this item at its 7th meeting, on 2 June. It had before it the following documents: FCCC/SB/1999/MISC.6 and FCCC/SBSTA/1999/CRP.1.

77. Statements were made by two Parties, including one speaking on behalf of the Group of 77 and China.

78. At the 7th meeting, on 2 June, the Chairman recalled that the SBI had first taken up this item. He further recalled that the SBI had agreed to convene a group of friends of the Chairmen of the subsidiary bodies to develop terms of reference for the expert workshop envisaged in the annex (programme of work) to decision 5/CP.4 (see annex I below). SBI Vice-Chairman Salamat (Iran) had conducted these consultations on behalf of the Chairmen. At the same meeting, Vice-Chairman Salamat provided the SBSTA with a report on his informal consultations.

79. Also at the 7th meeting, on 2 June, the Chairman circulated a proposal for terms of reference for the above-mentioned expert workshop, contained in FCCC/SBSTA/1999/CRP.1.

2. Conclusions

80. At its 7th meeting, on 2 June, having considered a proposal by the Chairman, the SBSTA adopted the terms of reference for the expert workshop envisaged in the annex (programme of work) to decision 5/CP.4, as set out in annex II below.

X. PROCEDURES AND MECHANISMS RELATING TO COMPLIANCE UNDER THE KYOTO PROTOCOL: ORGANIZATIONAL MATTERS RELATED TO THE JOINT WORKING GROUP

(Agenda item 10)

1. Proceedings

81. This item was considered by the SBSTA at its 2nd and 11th meetings, which were held jointly with the SBI, on 1 and 11 June, respectively. The subsidiary bodies had before them document FCCC/SB/1999/MISC.4 and Add.1-3.

82. At the joint meeting held on 1 June, the Chairman of the SBI reported on the informal consultations on matters related to compliance which had been convened by the subsidiary body Chairmen on 31 May in response to a request contained in decision 8/CP.4. The Chairman noted that agreement had been reached to designate Mr. Harald Dovland (Norway) and Mr. Espen Ronneberg (Marshall Islands) as the co-Chairs of the joint working group on compliance established by decision 8/CP.4. Substantive discussion would be referred to the joint working group, which would be

convened by the designated co-Chairs.

83. At the 11th meeting, held jointly with the SBI on 11 June, Mr. Harald Dovland presented a report on the work of the joint working group on compliance, on behalf of the co-Chairs.

2. Conclusions

84. At its 11th meeting, held jointly with the SBI on 11 June, the SBSTA agreed, jointly with the SBI, that the report of the joint working group on compliance on its work during the tenth sessions of the subsidiary bodies would be annexed to the report of the SBI. (See document FCCC/SBI/1999/8, annex III.)

XI. ACTIVITIES IMPLEMENTED JOINTLY UNDER THE PILOT PHASE

(Agenda item 11)

1. Proceedings

85. This item was considered by the SBSTA at its 2nd, 4th and 12th meetings, which were held jointly with the SBI, on 1 and 11 June, respectively. The subsidiary bodies had before them the following documents: FCCC/SB/1999/INF.1 and FCCC/SB/1999/MISC.1 and Add.1.

86. Statements were made by representatives of 16 Parties, including one speaking on behalf of the African Group, one speaking on behalf of the Alliance of Small Island States, one speaking on behalf of the European Community and its member States and one speaking on behalf of the Group of 77 and China.

87. At the 11th meeting, on 11 June, a statement was made by a representative of the business and industry constituency.

88. At the 4th meeting, on 1 June, the Chairmen of the subsidiary bodies invited Mr. Jos Delbeke (European Commission) and Ms. Margaret Mukahanana (Zimbabwe) to assist them in conducting informal consultations on this item.

2. Conclusions

89. At its 11th meeting, held jointly with the SBI on 11 June, having considered a proposal by the Chairmen on the basis of inputs from the informal consultations, the SBSTA adopted the following conclusions jointly with the SBI:

(a) The SBSTA and the SBI took note of the update on activities implemented jointly (AIJ) under the pilot phase and the compilation of submissions by Parties contained in documents FCCC/SB/1999/INF.1 and FCCC/SB/1999/MISC.1 and Add.1;

(b) The SBSTA and the SBI recognized that AIJ under the pilot phase should provide developing country Parties, in particular the least developed and small island developing States among them, as well as Parties with economies in transition, with the opportunity to enhance their capacity-building, and all Parties with the opportunity to gain experience with AIJ;

(c) The SBSTA and the SBI agreed that the review of the pilot phase referred to in decision 5/CP.1, paragraph 3 (b) and decision 6/CP.4 shall address, *inter alia*, the following issues:

- (i) Geographical distribution of projects, particularly the lack of projects in Africa, and the analysis of contributing factors;
- (ii) Contribution of projects to capacity-building and institutional-strengthening needs of Parties, particularly for host country Parties;
- (iii) Contribution to the host country's sustainable development needs, priorities and strategies;
- (iv) Assessment of environmental benefits related to the mitigation of climate change that would not have occurred in the absence of AIJ covering all relevant sources, sinks and reservoirs of greenhouse gases and the methods used to measure, monitor and independently verify these emissions, including by type of project, and other environmental benefits achieved;
- (v) Contribution of projects and related activities to the transfer of environmentally sound technologies to the host country;
- (vi) Identification of factors that might increase the number of projects implemented under AIJ, taking into account the provisions of decision 5/CP.1, paragraph 1;
- (vii) Assessment of the uniform reporting format and elaboration of options for its improvement, including a list of standardized terminology and common definitions for key terms, *inter alia*, related to costs, baselines, monitoring, reporting and verification;
- (viii) Consideration of costs, including costs of greenhouse gas reductions and transaction costs, and examination of related methodologies;
- (ix) Evaluation of how standardized methodologies for project review and approval, by both the host and sponsoring Parties, may enhance overall transparency and reduce transaction costs; and

- (x) Identification of further work required with respect to baselines, project monitoring, reporting and verification procedures;
- (d) The SBSTA and the SBI requested Parties to submit additional views and information, structured in accordance with the issues mentioned in sub-paragraph (c) above, by 7 July 1999;
- (e) The SBSTA and the SBI further requested the secretariat to prepare a report on the issues identified in sub-paragraph (c) above, in time for consideration by Parties at the eleventh session of the subsidiary bodies, on the basis of submissions from Parties in the context of the reporting framework for the AIJ pilot phase using the uniform reporting format, and additional information submitted by Parties;
- (f) The SBSTA and the SBI invited Parties wishing to engage in AIJ under the pilot phase but which have not yet had the opportunity to do so, to take full advantage of the opportunities to "learn by doing"; and
- (g) The SBSTA and the SBI decided to undertake a comprehensive review of the pilot phase for AIJ, based on information referred to in sub-paragraph (e) above, at their eleventh sessions, with a view to preparing a recommendation to COP 5 on further steps.

XII. MECHANISMS PURSUANT TO ARTICLES 6, 12 AND 17 OF THE KYOTO PROTOCOL

(Agenda item 12)

1. Proceedings

90. This item was considered by the SBSTA at its 2nd, 4th and 11th meetings, which were held jointly with the SBI, on 1 and 11 June, respectively. The subsidiary bodies had before them the following documents: FCCC/SB/1999/4, FCCC/SB/1999/INF.2 and Add.1-3, and FCCC/SB/1999/MISC.3 and Add.1, Add. 2 and Corr.1 and Add.3-6.
91. Statements were made by representatives of 21 Parties, including one speaking on behalf of the Alliance of Small Island States, one speaking on behalf of the European Community and its member States and 10 Central and Eastern European States, and one speaking on behalf of the Group of 77 and China.
92. At the 2nd meeting, on 1 June, a representative of the business and industry constituency provided a report on the "Dakar workshop II to enhance the capacity of African negotiators towards the UNFCCC and the Kyoto Protocol process" (Dakar, 6-9 May, 1999).
93. At the 4th meeting, on 1 June, the subsidiary bodies decided to consider this item by way of a joint contact group, under the chairmanship of Mr Kok Kee Chow (Malaysia), the Chairman of the

SBSTA.

2. Conclusions

94. At its 11th meeting, held jointly with the SBI on 11 June, having considered a proposal by the Chairmen on the basis of inputs from the joint contact group, the SBSTA adopted the following conclusions jointly with the SBI:

(a) The SBSTA and the SBI took note of the synthesis of proposals by Parties on principles, modalities, rules and guidelines on mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol (FCCC/SB/1999/INF.2 and Add.1-3), an initial framework for the plan for facilitating capacity-building under decision 7/CP.4 (FCCC/SB/1999/4), and submissions from Parties contained in documents FCCC/SB/1999/MISC.3 and Add.1, Add. 2 and Corr.1 and Add.3-6;

(b) The SBSTA and the SBI invited Parties to submit further proposals, by 31 July 1999, on:

(i) Issues raised in decision 7/CP.4, paragraph 1 (a), (b) and (c); and

(ii) Elements to be included in the plan for facilitating capacity-building.

(c) The SBSTA and the SBI requested the secretariat to compile the submissions by Parties in miscellaneous documents;

(d) The SBSTA and the SBI requested the Chairmen to prepare, with the assistance of the secretariat, a revised and consolidated synthesis of proposals, identified by sources, for consideration at the eleventh sessions of the subsidiary bodies. This synthesis of proposals should take into account decision 7/CP.4, views by Parties on the first synthesis of proposals at the tenth session of the subsidiary bodies, and submissions under sub-paragraphs (a) and (b)(i) above;

(e) The SBSTA and the SBI requested the secretariat, based on views by Parties expressed at the tenth sessions of the subsidiary bodies and submissions by Parties, to prepare a revised plan for facilitating capacity-building related to the mechanisms, providing options for coordination and orientation, for consideration at the eleventh sessions of the subsidiary bodies; and

(f) The SBSTA and the SBI invited organizations currently undertaking relevant capacity-building activities to provide information to the secretariat by 31 July 1999.

95. At the same meeting, on adopting the above conclusions, the SBSTA and the SBI noted the following clarifications by the Chairmen:

(a) The Chairmen of the subsidiary bodies will have responsibility for determining which

submissions are to be reflected in the synthesis of proposals and which ones will be included in a miscellaneous document only;

(b) In view of the date agreed upon for submissions by Parties and the time needed to compile those submissions, the availability of the respective documents for the eleventh sessions would be delayed; and

(c) Submissions received after the stated deadline would be made available, in a miscellaneous document, by 15 September 1999.

XIII. REPORT ON THE SESSION

(Agenda item 13)

96. At its 12th meeting, on 11 June, the SBSTA considered the draft report on the work of its tenth session (FCCC/SBSTA/1999/L.1), which was introduced by the Rapporteur, Mr. Andrej Kranjc (Slovenia).

97. On adopting the draft report, the SBSTA noted that the secretariat would assess its capacity to carry out the activities requested in the conclusions adopted at this session in the light of the programme budget for 2000-2001 recommended by the SBI for approval by COP 5⁸, and would report back on this matter, as appropriate, to the subsidiary bodies at their eleventh sessions.

98. At the same meeting, on a proposal by the Chairman, the SBSTA authorized the Rapporteur, with the assistance of the secretariat, to complete the report on the session.

XIV. CLOSURE OF THE SESSION

99. At the 12th meeting, on 11 June, statements were made by representatives of two Parties and the Executive Secretary paying tribute to the work of the Chairman of the SBSTA, whose two year term in that position was now coming to an end.

100. At the same meeting, the Chairman remarked on how much he had learnt during his chairmanship of the SBSTA, and how valuable he considered the scientific and technical work of that body to be. He expressed his gratitude to all those who had offered him support and constructive cooperation throughout his chairmanship. After urging Parties to intensify their efforts to move the Convention process forward in the future, the Chairman declared the tenth session closed.

⁸ See FCCC/SBI/1999/8, paragraph 70 and the draft decision on the programme budget contained in annex I.

Annex I

IMPLEMENTATION OF ARTICLE 4, PARAGRAPHS 8 AND 9, OF THE CONVENTION (DECISION 3/CP.3 AND ARTICLES 2.3 AND 3.14 OF THE KYOTO PROTOCOL)

TERMS OF REFERENCE FOR THE EXPERT WORKSHOP ENVISAGED IN THE ANNEX (PROGRAMME OF WORK) TO DECISION 5/CP.4

Objective

In accordance with decision 5/CP.4, the objective of the expert workshop is to produce input for the eleventh session of the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI) through:

1. Identification of factors that will help determine:
 - The adverse effects of climate change;
 - The impacts of implementation of response measures;
2. Identification of information available, existing information gaps, further information needed and views on methodologies, related to:
 - The specific needs and concerns of developing country Parties arising from such adverse effects and impacts;
 - Actions, including actions related to funding, insurance and the transfer of technology, to meet the above-mentioned specific needs and concerns;
 - Minimizing the effects of policies and measures on international trade, and social, environmental and economic impacts;
3. Consideration of the specific needs and special situations of the least developed countries;
4. Consideration of issues raised in national submissions including national communications.

Schedule

The expert workshop will be held from 21 to 24 September 1999, in Bonn. The above-mentioned items will be covered by presentations and discussions related to the developing country Parties covered in Article 4.8 and 4.9 of the Convention.

Day 1

- * General overview.
- * Methodologies related to the adverse effects of climate change.
- * Consideration of the specific needs and special situations of the least developed countries.
- * Countries with arid and semi-arid areas, forested areas, and areas liable to forest decay.
- * Countries with areas liable to drought and desertification.
- * Countries with areas of high urban atmospheric pollution.
- * Countries with areas with fragile ecosystems, including mountainous ecosystems.
- * Land-locked and transit countries.

Day 2

- * Small island countries.
- * Countries with low-lying coastal areas.
- * Countries with areas prone to natural disasters.
- * Methodologies related to impacts of response measures.

Day 3

- * Minimizing adverse effects of the implementation of response measures on:
 - International trade, and social, environmental and economic impacts on developing country Parties identified in Article 4.8 and 4.9 of the Convention;
 - Countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products.

Day 4

- * Conclusions.

Participation

Relevant international and regional organizations and national experts, including from business associations and non-governmental organizations, will be invited to contribute to the workshop, and to present papers on the issues under discussion. The secretariat will explore, in consultation with the invited organizations, what specific contributions they may present at the workshop.

Annex II

LIST OF DOCUMENTS BEFORE THE SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE AT ITS TENTH SESSION

Documents prepared for the session

- | | |
|-----------------------------|---|
| FCCC/SBSTA/1999/1 | Provisional agenda and annotations. Note by the Executive Secretary |
| FCCC/SBSTA/1999/2 | Development and transfer of technologies. Progress report |
| FCCC/SBSTA/1999/3 | National communications from Parties included in Annex I to the Convention. Review process related to greenhouse gas inventories. Elements of a review process |
| FCCC/SBSTA/1999/4 | Methodological issues. Information on impacts, adaptation and mitigation assessment methods |
| FCCC/SBSTA/1999/5 | Methodological issues. Land-use, land-use change and forestry (decision 1/CP.3, paragraph 5(a)). List of policy and procedural issues associated with Article 3.3 and 3.4 of the Kyoto Protocol |
| FCCC/SBSTA/1999/INF.1 | National communications from Parties included in Annex I to the Convention. Guidelines for the preparation of national communications. Report on the workshop on methodological issues related to greenhouse gas inventories |
| FCCC/SBSTA/1999/INF.1/Add.1 | National communications from Parties included in Annex I to the Convention. Guidelines for the preparation of national communications. Report on the workshop on methodological issues related to greenhouse gas inventories. Addendum. Draft revised text of the UNFCCC guidelines for reporting inventory data by Annex I Parties |
| FCCC/SBSTA/1999/INF.2 | National communications from Parties included in Annex I to the Convention. Guidelines for the preparation of national communications. Comparison of greenhouse gas inventories submitted by Parties using own national methodologies with those obtained using the IPCC default methodologies |

FCCC/SBSTA/1999/INF.3

National communications from Parties included in Annex I to the Convention. Guidelines for the preparation of national communications. Effects of recalculation of the greenhouse gas inventories of the base and subsequent years on assigned amounts and on emission limitation and reduction commitments of Annex I Parties

FCCC/SBSTA/1999/INF.4

Methodological issues. Emissions resulting from fuel used for international transportation. Information on emissions resulting from fuel sold to ships or aircraft engaged in international transport

FCCC/SBSTA/1999/INF.5

Methodological issues. Land-use, land-use change and forestry (decision 1/CP.3, paragraph 5). Report on the second SBSTA workshop on land-use, land-use change and forestry related to the Kyoto Protocol

FCCC/SBSTA/1999/MISC.1

Article 6 of the Convention: Education, training and public awareness. Submissions from Parties

FCCC/SBSTA/1999/MISC.2
and Add.1

Methodological issues. Land-use, land-use change and forestry (decision 1/CP.3, paragraph 5(a)). Issues to be considered at the second SBSTA workshop on land-use, land-use change and forestry. Submissions from Parties on Article 3.3 and 3.4 of the Kyoto Protocol

FCCC/SBSTA/1999/MISC.3
and Add.1 and Corr.1

Methodological issues. Analyses of the information provided by the delegation of Iceland. Submissions from Parties

FCCC/SBSTA/1999/MISC.4

National communications from Parties included in Annex I to the Convention. Review process related to greenhouse gas inventories. Submissions from Parties

FCCC/SBSTA/1999/MISC.5
and Add.1-3

Development and transfer of technologies. Projects and programmes incorporating cooperative approaches to the transfer of technologies and responses on how the issues and questions listed in the annex to decision 4/CP.4 should be addressed, as well as suggestions for additional issues and questions. Submissions from Parties

FCCC/SBSTA/1999/L.1

Draft report of the Subsidiary Body for Scientific and Technological Advice on its tenth session

FCCC/SBSTA/1999/L.2	Research and systematic observation
FCCC/SBSTA/1999/L.3	Work programme related to Articles 5, 7 and 8 of the Kyoto Protocol
FCCC/SBSTA/1999/L.4	Review process related to greenhouse gas inventories
FCCC/SBSTA/1999/L.5 and Add.1	National communications from Parties included in Annex I to the Convention: Guidelines for the preparation of national communications
FCCC/SBSTA/1999/L.6	Methodological issues: Other matters
FCCC/SBSTA/1999/L.7	Cooperation with relevant international organizations
FCCC/SBSTA/1999/L.8	Emissions resulting from fuel used for international transportatio
FCCC/SBSTA/1999/L.9	Land-use, land-use change and forestry
FCCC/SBSTA/1999/L.10	Development and transfer of technologies
FCCC/SBSTA/1999/CRP.1	Implementation of Article 4, paragraphs 8 and 9, of the Convention (decision 3/CP.3 and Articles 2.3 and 3.14 of the Kyoto Protocol): programme of work
FCCC/SB/1999/1	Report on clarifications, additions and amendments to the revised guidelines for the preparation of national communication by Parties included in Annex I to the Convention (including part of the reporting guidelines on inventories)
FCCC/SB/1999/1/Add.1	Report on clarifications, additions and amendments to the revised guidelines for the preparation of national communication by Parties included in Annex I to the Convention (including part of the reporting guidelines on inventories). Addendum. Common reporting format
FCCC/SB/1999/1/Add.2	Report on clarifications, additions and amendments to the revised guidelines for the preparation of national communication by Parties included in Annex I to the Convention (including part II of the reporting guidelines on other issues). Addendum. Policies and measures and projections, financial resources and transfer of technology, and other issues

- | | |
|---|--|
| FCCC/SB/1999/2
and Corr.1 | Work programme on methodological issues related to Articles 5, 7 and 8 of the Kyoto Protocol |
| FCCC/SB/1999/4 | Mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol. Plan for facilitating capacity-building under decision 7/CP.4 |
| FCCC/SB/1999/5 | Mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol. Synthesis of proposals by Parties on principles, modalities, rules and guidelines. Note by the Chairmen |
| FCCC/SB/1999/INF.1 | Activities implemented jointly under the pilot phase. Update on activities implemented jointly |
| FCCC/SB/1999/MISC.1
and Add.1 | Views on the review process of activities implemented jointly under the pilot phase and information on experience gained and lessons learned, including on the uniform reporting format. Compilation of submissions from Parties |
| FCCC/SB/1999/MISC.2 | Clarifications, additions and/or amendments to the revised guidelines for the preparation of national communications from Parties included in Annex I to the Convention, the scope of the third national communications, and the scope and modalities of the review process for the third national communications including in-depth reviews, in the context of the Kyoto Protocol. Submissions from Parties |
| FCCC/SB/1999/MISC.3
and Add.1, Add.2
and Corr.1 and Add.3-6 | Principles, modalities, rules and guidelines for the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol. Submissions from Parties |
| FCCC/SB/1999/MISC.4
Add.1-3 | Procedures and mechanisms relating to compliance under and the Kyoto Protocol. Submissions from Parties |
| FCCC/SB/1999/MISC.5
Add.1 | Comments from Parties on methodological issues related to and possible clarifications, additions and amendments to the inventory section of the revised guidelines for the preparation of national communications by Annex I Parties |
| FCCC/SB/1999/MISC.6 | Views on issues to be discussed in the expert workshop on the implementation of Article 4.8 and 4.9 of the Convention (decision 3/CP.3 and Articles 2.3 and 3.14 of the Kyoto |

	Protocol). Submissions from Parties
FCCC/SB/1999/MISC.8	Mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol. National communications from Parties not included in Annex I to the Convention. Submission by a Party
FCCC/SB/1999/L.1	Activities implemented jointly under the pilot phase
FCCC/SB/1999/CRP.1 and Rev.1	Provisional agenda for the joint working group on procedures and mechanisms relating to compliance under the Kyoto Protocol
FCCC/SB/1999/CRP.2	Joint working group on compliance: Work programme on procedures and mechanisms relating to compliance under the Kyoto Protocol
FCCC/SB/1999/CRP.3 and Rev.1	Report of the joint working group on compliance on its work during the tenth sessions of the subsidiary bodies
FCCC/SB/1999/CRP.4	Mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol

Other documents for the session

FCCC/CP/1998/16	Report of the Conference of the Parties on its fourth session, held at Buenos Aires from 2 to 14 November 1998. Part One: Proceedings
FCCC/CP/1998/16/Add.1	Report of the Conference of the Parties on its fourth session, held at Buenos Aires from 2 to 14 November 1998. Addendum. Part Two: Action taken by the Conference of the Parties at its fourth session
FCCC/SBSTA/1998/9	Report of the Subsidiary Body for Scientific and Technological Advice on its ninth session, Buenos Aires, 3-10 November 1998
FCCC/SBSTA/1998/6	Report of the Subsidiary Body for Scientific and Technological Advice on its eighth session, Bonn, 2-12 June 1998
FCCC/SBSTA/1997/6	Report of the Subsidiary Body for Scientific and Technological Advice on its sixth session, Bonn, 28 July - 5 August 1997
FCCC/TP/1999/1	Technical paper: Coastal adaptation technologies

FCCC/TP/1999/2

Technical paper: Report on data comparisons

Documents available for reference only

FCCC/CP/1998/6

Development and transfer of technologies (decision 13/CP.1).
Progress report on transfer of technology: draft work
programme

FCCC/CP/1997/7/Add.1

Report of the Conference of the Parties on its third session, held
at Kyoto from 1 to 11 December 1997. Part Two: Action
taken by the Conference of the Parties at its third session

FCCC/CP/1996/15/Add.1

Report of the Conference of the Parties on its second session,
held at Geneva from 8 to 19 July 1996. Part Two: Action taken
by the Conference of the Parties at its second session

FCCC/CP/1995/7/Add.1

Report of the Conference of the Parties on its first session, held
at Berlin from 28 March to 7 April 1995. Part Two: Action
taken by the Conference of the Parties at its first session

FCCC/SBSTA/1998/INF.1

Methodological issues. Issues related to land-use change and
forestry

SBSTA/SBI 10

Bonn

6/1/99 17:26

CANADA:

AN INTERVENTION ON THE KYOTO MECHANISMS

- Thank you Chairmen. First of all, Canada would like to congratulate the Chair of SBSTA and the Vice Chair of the SBI, for the excellent job they did in managing the workshop on the Kyoto Mechanisms. We believe that the workshop represented important progress in the elaboration of the mechanisms. Particularly in identifying and informing issues to be addressed under the Mechanisms and the range of views on those issues.
- My delegation hopes that we can continue in the same spirit here and seek to reach closure on those technical issues where progress is evident. In our view, the technical foundation of the Mechanisms is essential for decisions by the sixth Conference of the Parties.
- We also recognize and support capacity building efforts on the mechanisms and will provide constructive input on the proposal in order to expedite the implementation.
- Chairmen, timely decisions, in parallel, on the Kyoto Mechanisms are critical in ensuring that the Protocol enters into force in the earliest possible time and are important in sending the right signals to the private sector.
- For this to occur, the elaboration of the Mechanisms should meet a number of critical criteria:
 - First of all, they should be environmentally credible by developing simple and transparent rules for reporting, monitoring, verification and accountability.
 - Secondly, it is incumbent that the Mechanisms promote the principle of economic efficiency, based on a competitive market system, in order to ensure global benefits at lowest possible cost.
 - Finally, it will be critical for my delegation to ensure that decisions reached on the Kyoto Mechanisms should not compromise Canada's sustainable economic growth and international competitiveness.
 - It is in the context of those principles that my delegation would like to take note of the proposal by the European Union for a quantitative cap on the use of the Kyoto Mechanisms. Chairmen, Canada would wish to express its

regret that the EU has chosen this time to propose a specific cap on the use of the Mechanisms.

- The crux of the issue is domestic actions and the achievement of the Kyoto targets. As we have previously stated, it is Canada's intention to achieve the majority of our reductions through domestic actions, both for environmental and economic reasons. We are committed to taking significant domestic actions in reaching our Kyoto target.
- However an internationally binding cap remains unacceptable. First of all, it will complicate domestic implementation dynamics. In addition, a cap on the Mechanisms could work to limit overseas investments related to technology transfer and sustainable development, especially through the Clean Development Mechanism.
- Allow me to now turn to some other issues on the Mechanisms. In regards to Parties inscribed under Article 4 of the Kyoto Protocol, it will be important for Canada that rules covering participation in the Kyoto Mechanisms be elaborated. Including the basis of allocations, as well as other reporting, verification, and accountability requirements.
- Canada would also note that it is critical to develop an overall compliance system that works in concert with the early establishment and implementation of the Kyoto Mechanisms.
- Finally, Canada would note the importance of ensuring that reductions accrued under the Mechanisms are fully fungible, allowing for trades under any Mechanism to be used towards Parties' fulfillment of their Kyoto commitments.
- In closing, Chairmen, we have two paths ahead of us. We can either mire ourselves in contentious issues, or we can put them aside for now and work to develop the foundation for credible decisions on the Mechanisms by CoP 6.
- Let me assure you that my delegation will take the second path and will work in a constructive and cooperative spirit over the next two weeks in the expectation that we can work towards developing a synthesis text that will serve as a useful basis for ongoing negotiations. Thank you Chairmen.

**SBSTA
Tenth Session
June 1, 1999**

A Canadian Intervention on:

**Proposed Work Programme on Methodological Issues Related To Articles
5, 7 and 8 of the Kyoto Protocol**

- Canada notes the Secretariats' work and thanks them for their hard work in putting together a detailed work programme proposal focusing on methodological issues related to Articles 5, 7 and 8.
- Canada agrees that this work is of a priority concern, particularly in support of the smooth implementation of the Kyoto Mechanisms, in particular for emissions trading.
- However, Canada would appreciate more information on the proposed structure of the work programme and in particular is interested in further exploring the proposal for seven clusters. Canada would probably prefer a more streamlined approach, one which recognizes the many linkages that do exist between the proposed clusters. Canada also has some questions on the fiscal implications of such a proposal.
- Finally, Canada also notes the assumption of the Secretariat that changes to current review practices would consistently be in the direction of "strengthening" current provisions in preparation for the "rigorous" needs of the Protocol. My delegation would like to advise some caution here. As we have already stated on the issue of Guidelines for Annex 1 National Communications, and some other Parties have also indicated is that what is most important is the development of review guidelines that are realistic in terms of what can actually be delivered by Parties.

**SBSTA
Tenth Session
June 1, 1999**

An Intervention by Canada:

Annex I National Communication Guidelines

- **Canada is ready to cooperate in reaching a decision on Annex 1 guidelines, but notes that substance, not timing, is the most important consideration on this issue. While Canada could support a possible decision by CoP 5 on this issue, it should be recognized that Canada will do so only if its concerns have been fully addressed.**
- **In respect to the Chair's Draft Text on the Guidelines for the Preparation of National Communications by Parties Included in Annex 1 to the Convention, Canada is willing to follow the direction of the Chair on how we can best go forward. That said, Canada would like to make the following general comments on the proposed negotiating text.**
- **Canada is concerned that the draft decision does not take into account the concerns expressed by Canada and a number of other Parties at the workshop held in Bonn in March: namely that Parties' abilities to report exhaustively on all areas related to their international climate change obligations is impractical and beyond the means of most Parties' budgets.**
- **More specifically, my delegation would like to strongly recommend that the language drafted in this decision be consistent with the previous guidelines for Annex 1 communications, as found in document AC237/55 and Decision 9 of CoP2. Canada, Mr. Chairman, could not realistically be expected to completely fulfill all mandatory elements proposed in the draft decision. We need to take a step back and ask what is actually achievable and can be realistically delivered in an expeditious manner.**
- **On inventories, Canada is pleased to see that the importance of national greenhouse gas inventories has been recognised, particularly in the decision to develop a separate set of reporting guidelines. It is our view that the common reporting format, which consists almost entirely of tables, might only be useful for simple comparisons of inventory data, and is likely to be insufficient for use in reviewing and verifying submissions.**
- **Canada does not agree with the draft guidelines that indicate that only the common reporting tables need be submitted annually and would prefer to see**

the requirement for the submission of an annual inventory report, which would include the common reporting tables.

10/1/1971
10/1/1971

Inventory Report

Inventory Report

The following information was obtained from the inventory report for the year ending 12/31/70. The total number of units in inventory was 1,234,567. The total value of inventory was \$1,234,567. The inventory was valued at cost plus a markup of 20%.

The following information was obtained from the inventory report for the year ending 12/31/71. The total number of units in inventory was 1,234,567. The total value of inventory was \$1,234,567. The inventory was valued at cost plus a markup of 20%.

The following information was obtained from the inventory report for the year ending 12/31/72. The total number of units in inventory was 1,234,567. The total value of inventory was \$1,234,567. The inventory was valued at cost plus a markup of 20%.

The following information was obtained from the inventory report for the year ending 12/31/73. The total number of units in inventory was 1,234,567. The total value of inventory was \$1,234,567. The inventory was valued at cost plus a markup of 20%.

The following information was obtained from the inventory report for the year ending 12/31/74. The total number of units in inventory was 1,234,567. The total value of inventory was \$1,234,567. The inventory was valued at cost plus a markup of 20%.

The following information was obtained from the inventory report for the year ending 12/31/75. The total number of units in inventory was 1,234,567. The total value of inventory was \$1,234,567. The inventory was valued at cost plus a markup of 20%.

Canadian Statement on Land-use, Land-use Change and Forestry

Thank you Mr. Chairman for the opportunity to share Canada's views on the land-use, land-use change and forestry categories. Canada would like to thank the secretariat and the United States for preparing and hosting a second workshop on sinks recently held in Indianapolis. Canada considers these workshops to be extremely useful and looks forward to future discussions on this important issue.

Canada would also like to thank the secretariat for preparing a note on policy and procedural issues and a framework for decision making on adding additional activities for discussion here at SBSTA 10. As you know, Mr. Chairman, Canada considers this issue an important one, and will continue to promote the inclusion of all relevant sinks, including agricultural soils, as a means of meeting our commitments to reduce greenhouse gas emissions, and protect and enhance our sinks.

While the SR is being written, it is clear that discussions can and should continue on issues related to land-use, land-use change and forestry. Policy and procedural issues that deserve consideration by SBSTA while the IPCC Special Report is underway are those related to establishing criteria and guidelines for the inclusion of additional activities, for ensuring consistency in the treatment of sources and sinks in all provisions of the Protocol, and in ensuring confidence that those estimates for which a measure of certainty is less precise, can, in fact, demonstrate compliance.

Canada will work with Parties to refine the definitions, guidelines and rules for measuring carbon stock and reforestation, afforestation and deforestation activities. We will continue to promote the improvement in methodologies and verification procedures, subject to appropriate treatment of natural disturbances and guidelines reflecting our concerns about the treatment of forest products. Canada is further committed at these meetings to working toward guidelines for ensuring that sink activities are verifiable, transparent, achievable and wherever possible, consistent with the IPCC guidelines. Recognizing the need for additional methodological work in this area, Canada urges the SBSTA to give direction to the IPCC.

Thank you.

June 1, 1999

**Joint Working Group on Compliance (JWG)
Bonn, June 2, 1999**

Statement by Canada

Thank you, Mr. Chairman. First of all, Canada would like to express its appreciation for the Secretariat's helpful work on synthesis of submissions by Parties, as well as for providing Parties with background material on compliance procedures.

As you know, Canada has submitted its preliminary views on matters related to compliance and we will not reiterate them here. Canada also welcomes the submissions made by other Parties. Our delegation looks forward to building on emerging areas of convergence and to working within the JWG to develop a workable and effective compliance system in timely fashion.

As noted by many delegations during Monday's informal consultations, the JWG's first task consists in taking stock of the Protocol's compliance related elements (such as relevant obligations and provisions outlining procedural elements of the future compliance system), in identifying gaps and in determining to what extent these gaps are being addressed in other groups or to what extent a suitable forum may have to be found.

In Canada's view, the stock-taking and tracking work is crucial to the JWG's ultimate task of ensuring coherent approaches to developing a compliance system for the Protocol. But it is also important for the more immediate task of developing an effective work program for the JWG.

Canada therefore welcomes the Secretariat's initial approach for the group's workplan, as outlined in the provisional agenda (FCCC/SB/1999/CRP.1). Together with the Secretariat's synthesis paper, we believe the approach outlined by the Secretariat provides a helpful approach to structuring our discussions. For the time being, we simply reiterate that, given the multifaceted nature of the compliance issue, it is crucial that this group ensure not only tracking of relevant work in other groups, but also effective information sharing between the groups. We welcome the Secretariat's thoughts, as well as the views of other Parties, on how this is best accomplished.

Thank you, Mr. Chairman.

**SBI
Tenth Session
June 2, 1999**

An Intervention by Canada:

**Annex I National Communication Guidelines: Financial and Technology
Transfer**

- Thank you Mr. Chairman. We assume that detailed negotiations on the guidelines for financial and technology transfer will take place in the contact group established to address Annex 1 National Communication guidelines.
- Canada takes its responsibilities in reporting on financial and technology seriously. We will take all practical steps in providing as comprehensive a report on those issues as is possible. However, as we have stated in our intervention in the SBSTA yesterday, Canada remains concerned that the draft decision, including those areas covering technology and financial transfer, does not take into account the concerns expressed by Canada and a number of other Parties at the workshop held in Bonn in March: namely that Parties' abilities to report exhaustively on all areas related to their international climate change obligations is impractical and beyond the means of most Parties' budgets.
- More specifically, my delegation would like to strongly recommend that the language drafted in this decision be consistent with the previous guidelines for Annex 1 communications, as found in document AC237/55 and Decision 9 of CoP2.

Canadian Intervention SBSTA 10 (June 1999)
Development and Transfer of Technologies

Thank you for the opportunity to comment on technology transfer, which is a key obligation under the Convention.

Canada continues to hold the view that technology development, diffusion and transfer is critical to achieving the long-term goals of the Convention and the Kyoto Protocol. Canada is actively engaged in activities to develop, facilitate, promote and finance the transfer of environmentally sound technologies to developing countries.

The transfer of appropriate technology and know-how can take many forms, such as that of private sector direct investment, trade in technology goods and services, information exchange, capacity building and public sector investment.

Canada maintains that the private sector should be the main vehicle for technology transfer. Indeed, they own most of the technology to be transferred. To this end we are addressing technology transfer by working to further engage the private sector.

But the challenge does not end there. There is a requirement for an enabling environment to facilitate the transfer of private sector technologies. Establishing this environment and the implementation of innovative enabling activities can lead to increased sustainable technology diffusion. In this regard we look forward to the IPCC special report on technology transfer which, in addition to providing clarification on concepts related to climate change, will highlight key options available to governments. Equally, we look forward to the work of the IPCC third assessment report on the barriers to the transfer of technology.

We would like to compliment the Secretariat for the recent progress report on the development and transfer of technologies *consultative process* (FCC/SBSTA/1999/2), as well as the technical paper on coastal adaptation technologies (FCCC/TP/1999/1). The themes developed in the work plan for the consultative process are promising and Canada is generally supportive of the proposed regional workshops. Canada would also like to thank the Secretariat for its work on identifying the needs of developing countries, which is an important step in identifying appropriate technologies.

Canada is a strong believer in the win-win potential of the Clean Development Mechanism and Joint Implementation, and believes that the investments associated with these mechanisms will be instrumental in the transfer of efficient and effective climate change technologies to non-Annex 1 countries and economies in transition. We are a world leader in developing a number of cutting-edge technologies in these areas. In addition, Canada has launched an office with a mandate to facilitate both CDM and JI project partnering.

Facilitating the linkage between investors and project hosts is a key element of Canadian activities in this area. This is done through, for example, the Technology for Early Action Measures program (TEAM), which is a public / private sector partnership that capitalizes on the

opportunities for host countries and Canadian companies. Through this program, Canada's federal technology departments (including Natural Resources, Industry, Foreign Affairs and Trade, and Environment) work in partnership with the private sector to facilitate technology demonstration and diffusion projects around the world. Examples of these private-public projects include:

- 1) Energy efficiency demonstration projects in Brazil.
- 2) Natural gas vehicle conversion in Romania and Pakistan.
- 3) Small hydro-electric units in Poland.
- 4) Hydro-electric controls in China.

In addition, under its development portfolio, Canada has over 50 climate change technology transfer projects underway in Africa, Asia and the Americas. These projects will continue to involve and complement private sector investment in a co-ordinated regional strategy responding to developing country needs and focused on areas of particular Canadian capacity and expertise with a view to maximizing developmental impact. Projects cover a range of areas including energy, capacity building, adaptation.

The development and transfer of technologies is a key aspect of Canada's climate change efforts. We look forward to continuing to work with other Parties on this very important issue.

**SBI
Tenth Session
June 07, 1999**

Canadian Intervention on CoP6

- **Canada would like to extend welcome to Minister Alsoqoray. As well, we thank the Kingdom of the Netherlands for their offer to host CoP6. We welcome and look forward to the Netherland's Presidency.**
- **Regarding timing of CoP6, we share the views of our colleagues from Japan, Australia and the US, in terms of the scope of work that lies ahead to make CoP6 a success in reaching decisions. Next year is going to be very busy, we need tremendous focus to achieve decisions on the setting of technical foundations around issues like technology transfer, mechanisms and compliance, to name only a few.**
- **Therefore, we must make certain that there is ample opportunity for Subsidiary Body discussions in the year 2000. This, of course, may impact on dates for CoP6.**
- **Regarding CoP5, we would like to continue working with Mr. Radunsky.**
- **I must also say that we expect CoP5 to be a key meeting. Our hope is that the meeting will be one to give guidance for resolution of issues that will facilitate early entry into force of the Kyoto Protocol.**

SBI Agenda items 10 (a)(b)(c)(d)

Bonn

May 31 - June 11, 1999

ADMINISTRATIVE AND FINANCIAL MATTERS

SBI Agenda Item 10

Delegation of Canada

Mr. Chairman, the Secretariat has presented us with a complex and extensive budget proposal, in response to an unprecedented situation. Clearly, a lot of thought has gone into designing the Secretariat's response to Cop 4 decisions. We certainly appreciate the effort, even if in some cases, we have a rather different vision of what needs to be put in place.

Like others, our primary concern lies with the size of the budget, both in terms of the proportional increase as well as the absolute size of projected expenditures. My delegation recognizes that, *par la force des choses*, the Secretariat has had to prepare this budget largely in isolation from Parties.

The result is a rather different vision from our own of how the CoP4 decisions should be implemented and the implications for the Secretariat from that of my delegation. For example, there are various proposals for additional personnel in areas where we had envisioned Parties playing the major role, and the Secretariat a facilitative one. Another example, would be the issue of inventories and data collection, where there are a number of institutions or bodies such as the IEA and the IPCC who are already recording this data - our view is that the Secretariat should link up with them instead of potentially duplicating work. We also have some questions about whether some activities and posts should be provided, as proposed, by the core budget, rather than the voluntary trust fund.

Canada recognizes that some small increase in the budget may be necessary to implement the decisions of CoP4. However, we wish to register that we view the budgetary requirements for the biennium ahead as specific to the particular decisions to which they respond. As such, they do not and should not constitute any kind of precedent or "floor" for subsequent budgetary exercises.

In the view of my delegation, more work is necessary, here in Bonn to generate a common vision of the how the Secretariat is to respond to certain aspects of the CoP4 decisions, and then come to terms with what the financial implications of this shared vision might be.

In conclusion on the issue of the budget and level, Mr. Chairman, let us recall that when the CoP issued the Buenos Aires Action Plan, little or no direction was given by the Parties as to specific intentions, or to the financial implications of what we were agreeing to and accordingly, relatively little administrative or financial guidance was given to the Secretariat. My delegation would submit that financial prudence requires that we be vigilant to make sure that this does not happen again.

With regard to the carry-over, my delegation is sympathetic to the concerns raised by the United States with regard to providing use of the reserve during the period of review, but we are flexible on resolution of this matter. We also appreciate the concerns raised by the USA with regard to coming expeditiously to terms with the conference services issue and are hopeful that a common sense agreement can be found here at this session of the subsidiary bodies.

National communications from Parties not included in Annex 1 to the Convention

Intervention by Canada

- Thank you Mr. Chairman for the opportunity to share Canada's views on the process of consideration of national communications from Parties not included in Annex 1 to the Convention.
- Mr. Chairman, Canada supports the process of consideration of non-Annex 1 national communications. As is evident in the documentation prepared for this session, national communications are an important tool in identifying capacity-building needs as well as a useful information-sharing mechanism. In this respect, Canada also sees the process, as an important means of identifying technology transfer needs.
- The compilation and synthesis report to be prepared by the Secretariat, expected at COP5, will assist considerably in taking the process of consideration further. It will assist in soliciting views and identifying concerns of non-Annex 1 Parties and considering ways of improving subsequent national communications.
- Thank you, Mr. Chairman.

SB-10 Bonn, 31 mai-11 juin 1999

Réunion entre pays francophones

1. Le 9 juin, une réunion entre pays francophones, présidée par le Canada (David Drake) et la République Centrafricaine (Lambert Gnapelet), a été tenue à la salle Liszt de l'hôtel Maritim, site de la réunion SB-10. Deux points figuraient à l'ordre du jour : le bilan de la collaboration entre pays francophones et l'identification d'actions concrètes pour améliorer ce bilan. Les présidents ont exprimé leur reconnaissance à l'égard de l'IEPF pour la préparation de cet ordre du jour. La réunion a surtout porté sur les actions concrètes que la communauté francophone devrait mener dans le cadre des changements climatiques.
2. Les délégués se sont félicités du succès qu'ont obtenu les réunions tenues à Dakar et à Abidjan. Le représentant de la France a évoqué les efforts qui ont été entrepris afin de réaliser les mandats qui ont fait l'objet d'un accord à Buenos Aires tout en notant qu'il restait beaucoup de travail à accomplir. Il a rappelé qu'il avait été alors convenu de tenir une courte réunion des pays francophones immédiatement avant la cinquième Conférence des Parties et que la France était disposée à ce que cette réunion se tienne à Paris. Il a également souligné l'importance de promouvoir les échanges en français et d'assurer une meilleure diffusion de l'information, notamment en mettant les textes pertinents à la disposition des pays francophones, en créant des « boîtes de dialogue » et en ayant recours aux moyens informatiques. À cet égard, il conviendrait d'envisager davantage de formation en informatique. Les questions relatives à l'observance (« compliance ») qui soulèvent des problèmes d'ordre sémantique et juridique, notamment en raison des différences qui existent entre la « common law » et le droit civil, devraient également être examinées de plus près. Enfin, le représentant de la France a fait mention de trois ateliers qui sont en préparation, soient les ateliers sur le transfert de technologie, les articles 4.8 et 4.9 et les politiques et mesures. Il a indiqué qu'il faudrait faire en sorte que les intérêts des pays francophones soient pris en compte.
3. S'agissant de la réunion précédant la CdP-5, M. Gnapelet a indiqué qu'il faudra songer à fournir l'assistance financière nécessaire pour permettre à certains pays d'y assister. En ce qui concerne les ateliers portant sur le transfert de technologie et sur les articles 4.8 et 4.9, il faut encore procéder au choix des experts. L'atelier portant sur les politiques et mesures devra non seulement porter sur les actions prises par les Parties ne figurant pas à l'annexe I mais également sur l'impact des politiques et mesures prises par les Parties figurant à l'annexe I sur les Parties ne figurant pas à l'annexe I.
4. Le président de l'Organe subsidiaire de mise en oeuvre de la Convention (Bakary Kante), assistant à la réunion en tant que représentant du Sénégal, a évoqué les programmes relatifs au renforcement des capacités et à l'adaptation mis en oeuvre par les Pays-Bas et a exprimé le souhait que l'on profite du prochain Sommet de Moncton

pour lancer des programmes semblables qui pourraient être gérés dans le cadre de l'IEPF. Il a également proposé, dans le cadre du fonds français pour l'environnement mondial, qu'une politique soit établie en vertu de laquelle à qualité égale, il faudrait donner priorité aux activités/projets dans des pays francophones. Tout au moins, il conviendrait d'élaborer une politique en vue de donner un « coup de pouce » aux projets francophones.

5. La représentante du Maroc a souligné que pour être en mesure de faire un bilan efficace de la collaboration existant entre pays francophones, il serait utile de déterminer quel est le nombre de projets qui ont été réalisés ou qui sont en voie de réalisation entre pays francophones figurant à l'annexe I et ceux ne figurant pas à l'annexe I. À son avis, ce nombre est peut-être très peu élevé. Elle a exprimé le souhait que les pays francophones figurant à l'annexe I mettent sur pied un plus grand nombre de projets qui vont dans le sens de la mise en oeuvre de la Convention, notamment en ce qui concerne la phase pilote des activités mises en oeuvre conjointement et le mécanisme pour un développement propre. Elle a également proposé qu'une liste d'experts francophones dans le domaine des changements climatiques soit établie afin de renforcer les capacités des pays francophones. De plus, elle a fait remarquer qu'il n'existe pas de modèle climatique en français et que l'élaboration de tels modèles à l'échelle régionale serait particulièrement utile. Enfin, la représentante du Maroc a fait mention de la tenue d'un atelier francophone au Maroc en février 2000 portant sur le mécanisme pour un développement propre. Les participants à la réunion ont chaleureusement accueilli la tenue d'un tel atelier.
6. Se référant à la matrice développement durable/carbone élaborée à Abidjan, le représentant du Sénégal a indiqué qu'il serait souhaitable que deux ou trois projets soient mis en place. Il s'est également félicité du succès de l'atelier qui s'est tenu à Dakar. Toutefois, il a indiqué qu'il faudrait que le secteur privé s'implique davantage. Il a également souligné qu'il faut continuer à sensibiliser les parlementaires aux questions relatives aux changements climatiques.
7. Compte tenu du fait que presque tout ce qui concerne les changements climatiques se fait en anglais, il a été proposé de mettre sur pied une équipe d'experts bilingues qui serait chargée de préparer et de faire circuler immédiatement des rapports quotidiens sur les travaux en cours lors de futures sessions ou de conférences des Parties, y compris lors des réunions du G77 et la Chine et du groupe africain.
8. Le représentant des Comores a souligné l'importance de disposer de documents en français avant la tenue de réunions. Il a exprimé le souhait que les séminaires organisés par les pays francophones soient étendus à l'ensemble des pays francophones.
9. Pour la représentante du Laos, il n'y a pas suffisamment de contact et d'échange d'information entre les pays francophones. Elle a proposé que l'on mette sur pied un réseau d'échange d'informations qui s'appuierait sur les possibilités offertes par l'internet ou le courrier électronique et a insisté sur le besoin d'intensifier ces

échanges avant la tenue des sessions ou des conférences des Parties. Elle a indiqué que le fonds français pour l'environnement mondial pourrait servir à financer la mise sur pied d'un tel réseau. La représentante du Laos a également rappelé que l'ensemble des pays francophones comprend également certains pays d'Asie.

10. En réponse à cette intervention, M. Gnapelet a souligné que l'Université d'Été Francophone offrira une formation à l'internet du 5 au 9 juillet 1999 à St-Étienne en France et qu'un certain nombre de bourses était disponible. Il a été suggéré que les pays francophones figurant à l'annexe I y envoient un délégué.
11. Le représentant du Congo a proposé que la possibilité de stages bilingues soit examinée.
12. Le représentant du Burkina Faso a évoqué le fait que les premières communications nationales des pays ne figurant pas à l'annexe I doivent être présentées d'ici la fin de l'année. Il a proposé l'organisation d'une session de formation d'une ou deux semaines à cette fin. En ce qui concerne la cinquième Conférence des Parties, il a proposé que les pays francophones tiennent deux réunions durant la Conférence, soit une réunion à chaque semaine et que ces réunions portent surtout sur les aspects scientifiques et techniques des questions sur lesquelles portent les négociations.
13. Une représentante du PNUD a proposé que l'organisation qu'elle représente pourrait envisager d'organiser un atelier francophone sur les communications nationales.
14. M. Drake a conclu cette réunion en notant le large consensus parmi les participants à la réunion en ce qui concerne les trois réunions qu'il est proposé de tenir autour de la CdP-5, soient une réunion préparatoire d'un ou deux jours à Paris ainsi que deux réunions au cours de la Conférence. Il a également recommandé qu'à l'occasion des réunions des pays francophones en marge de la CdP-5, on dresse un bilan des actions qui auront été entreprises d'ici là ainsi qu'un plan d'actions portant sur des initiatives futures.

Liste des participants à la réunion

1. Belgique
2. Bénin
3. Burkina Faso
4. Cameroun
5. Canada
6. Comores
7. Congo
8. France
9. Guinée
10. Guinée Bissau
11. Mauritanie
12. Niger
13. PNUD
14. République Centrafricaine
15. Sénégal
16. Suisse

Liste d'actions possibles

1. Mise sur pied d'un réseau (internet, courrier électronique) en vue
 - d'assurer une meilleure diffusion de l'information
 - de mettre les textes pertinents à la disposition des pays francophones avant la tenue de réunions
2. Tenue de réunions à thèmes durant la prochaine Conférence des Parties, notamment l'examen des problèmes d'ordre sémantique et juridique concernant les questions relatives à l'observance
3. Organisation de deux réunions portant sur les aspects scientifiques et techniques des négociations qui se tiendront lors de la prochaine Conférence des Parties
4. Participation dans l'organisation des ateliers portant sur le transfert de technologie, les articles 4.8 et 4.9 et les politiques et mesures (par exemple, choix des experts)
5. Organisation d'une session de formation sur les premières communication nationales
6. Participation à la réunion de Paris (fin octobre 1999)
 - soutien financier
 - examen des documents
7. Participation à l'atelier du Maroc sur le mécanisme pour un développement propre (février 2000)
 - soutien financier
 - experts
8. Assistance financière aux pays ne figurant pas à l'annexe I afin qu'ils participent aux ateliers
9. Détermination du nombre de projets relatifs aux changements climatiques entre pays francophones (par exemple, lors de la phase pilote des activités de la mise en oeuvre conjointe)
10. Définition d'une politique visant à donner priorité, à qualité égale, aux projets dans des pays francophones
11. Établissement d'une politique visant à promouvoir les projets des pays francophones
12. Lancement de programmes concernant le renforcement des capacités et l'adaptation qui pourraient être gérés par l'IEPF
13. Elaboration et diffusion d'une liste d'experts francophones en changement climatique
14. Mise sur pied d'une équipe d'experts bilingues chargée de la préparation de rapports quotidiens en français sur les négociations (G77, groupe africain)
15. Recherche et élaboration de modèles climatiques régionaux
16. Sensibilisation et implication du secteur privé (par exemple, transfert de technologie)
17. Sensibilisation des parlementaires aux questions relatives aux changements climatiques

SB-10 Bonn, 31 mai-11 juin 1999

Réunion entre pays francophones

Veillez trouver ci-joint une première ébauche du rapport portant sur la réunion entre pays francophones qui s'est tenue le 9 juin. Veuillez faire parvenir vos commentaires à David Drake ou Alain Richer de la délégation canadienne aux adresses suivantes :

David Drake

Directeur

Direction des changements climatiques et de l'énergie

Ministère des Affaires étrangères et du Commerce international

Édifice Lester B. Pearson

Tour B, 4ième étage

125, promenade Sussex

Ottawa (Ontario) K1A 0G2

Canada

Tél : (613) 992-6026

Fax : (613) 944-0064

Courrier électronique : david.drake@dfait-maeci.gc.ca

Alain Richer

Conseiller juridique

Direction du droit économique, des océans et de l'environnement

Ministère des Affaires étrangères et du Commerce international

Édifice Lester B. Pearson

Tour C, 7ième étage

125, promenade Sussex

Ottawa (Ontario) K1A 0G2

Canada

Tél : (613) 996-4615

Fax : (613) 992-6483

Courrier électronique : alain.richer@dfait-maeci.gc.ca

POSITION PAPER OF THE GROUP OF 77 AND CHINA

Delivered by Ms. Alison Drayton,
Head of the Delegation of Guyana
10th Session of the Subsidiary Bodies to the UNFCCC
Bonn, 1 June 1999

Basic Approach

The Group of 77 and China reiterates the importance of taking a balanced approach to the forthcoming discussions - a balance between the need to continue to implement the Convention effectively and the work needed to prepare an eventual entry into force of the Kyoto Protocol. In view of the very low targets reached under the Kyoto Protocol, the Group of 77 and China considers this approach as particularly important with respect to the discharge of Annex I responsibilities. Scientific assessments show that now and in the foreseeable future, adverse effects of climate change will continue to be borne most particularly by developing countries and the most vulnerable among us. The Group underlines the importance of adaptation and capacity-building as cross-cutting issues on all agenda items.

The Group of 77 and China stresses the need for continuity of the inter-governmental process that Parties to this Convention are undertaking as a treaty body, and as the supreme body of this Convention. Priority should be accorded to the implementation of the Buenos Aires Plan of Action which contains specific decisions and indicative time-frames. The Group reiterates Decision 1/CP.4 which resolves to demonstrate substantial progress on each of the issues in the Buenos Aires Plan of Action, in accordance with their respective time-frames.

National Communications

The Group of 77 and China considers national communications as an essential obligation of all Parties to the Convention. Their contents, manner of consideration, and timing of submissions must conform to the provisions of the Convention and the decisions taken by the Conference of the Parties. Annex I communications should inform on the implementation of commitments under the Convention, in particular as provided for in Article 12.2 and 12.3 of the Convention, on policies and measures taken to demonstrate that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention, and details of measures taken in accordance with Article 4, para.3, on the provision of new and additional financial resources; para. 4 on assistance on meeting costs of adaptation, and para. 5 on transfer of technology and enhancement of endogenous capacities of developing country Parties.

On non-Annex I Parties' national communications, the guidelines as contained in Decision 10/CP.2, shall remain valid for the developing country Parties' national communications, and shall also continue to serve as policy guidance for the operating entity of the financial mechanism, the Global Environment Facility. It is of primary importance to the Group of 77 and China that the provision of the agreed full costs of the preparation of non-Annex I initial and subsequent national communications be met by the operating entity of the financial mechanism, in particular for the maintenance and enhancement of relevant national capacity, taking into account the guidelines

adopted by the Conference of the Parties.

Development and transfer of technologies

The Group of 77 and China underlines the need to move forward in the effective transfer of technology to developing countries, and the implementation of Decision 4/CP.4 which would ensure the full participation of developing countries in the consultative process, and strengthening endogenous capacities and capabilities in developing countries.

Mechanisms of the Kyoto Protocol

The Group of 77 and China reiterates that a common understanding on the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol must be reached among the Parties, and that the nature and scope of the mechanisms must be defined at the outset. Hence, due effort is required to identify and define the principles for the mechanisms and the other fundamental parameters. This work must commence soon so that the methodological and operational questions pertaining to the mechanisms can be guided accordingly.

The Group of 77 and China wishes to emphasize the importance of following the Work Programme on the Mechanisms of the Kyoto Protocol defined in Decision 7/CP.4. These elements must be addressed with priority to be given to the Clean Development Mechanism.

The Group of 77 and China reaffirms its position that domestic action by the developed countries should be their primary means of greenhouse gas limitation and reduction. Not until the Kyoto Protocol has entered into force and domestic compliance measures are undertaken, can these mechanisms be availed of to meet targets of developed countries. The objective of sustainable development for developing countries in the CDM can only be defined by these countries at the national level.

Articles 4.8 and 4.9 of the Convention

These Articles relate to the serious concerns of all developing countries, in particular the least-developed countries, arising from adverse effects of climate change and the impacts of the implementation of response measures. The Group of 77 and China underlines the importance of the implementation of the Programme of Work contained in Decision 5/CP.4.

Activities Implemented Jointly under the pilot phase

The Group of 77 and China abides by Decision 6/CP.4 which decides to continue the pilot phase to provide all developing countries with the opportunity to enhance their capacity-building, and all Parties to gain further experience with AIJ. The Group is prepared to begin discussions on the preparations for a review process of the pilot phase at these tenth sessions.

Administrative and Financial Matters

The Conference of the Parties, the Subsidiary Bodies, and the Secretariat should function in accordance with the provisions of the Convention regarding their responsibilities and division of labour. Activities should be undertaken in accordance with decisions of the COP, and guided by the intergovernmental process of this treaty body. Resources should be focused on supporting

capacity-building in developing countries and their full participation in the Convention process.

Capacity-building

Capacity-building for developing countries is an essential component in the implementation of the Buenos Aires Plan of Action. The Group of 77 and China stresses that capacity-building must be accomplished for, by and in developing countries. Transfer of and access to technology, including information technology and enhancement of endogenous technologies, and the provision of financial resources, in particular for the full participation of developing countries in the implementation of these decisions, are necessary for developing countries to build their institutional and human capacities.

Group of 77 and China

INITIAL SUBMISSION ON ARTICLE 6 OF THE KYOTO PROTOCOL ARTICLE 6 PROJECTS

Further elaboration will be made on the paragraphs below

1. Article 6 of the Kyoto Protocol to the Convention has provided that "For the purpose of meeting its commitments under Article 3, any Party included in Annex I may transfer or acquire from any other such Party emission reduction units resulting from projects aimed at reducing anthropogenic emissions..... , provided that:
 - (a) Any such projects has the approval of the Parties involved;
 - (b) Any such projects provides a reduction in emissions by sources , or an enhancement of removals by sinks, that is additional to any that would otherwise occur;
 - (c) It does not acquire any emission reduction units if it is not in compliance with its obligations under Article 5 and 7; and

The acquisition of emission reduction units shall be supplemental to domestic actions for the purpose of meeting commitments under Article 3." Accordingly, during COP-4, the G-77 and China submitted relevant Elements, inter alia, on "Article 6 projects", as contained in FCCC/CP/1998/MISC.7/Add.3.

2. Due to time constraints, the G-77 and China has not yet been able to elaborate its views on "Article 6 projects". However, the G-77 and China is of the view that the following Elements are basic and need to be addressed first, so as to enable the COP/moP to "further elaborate guidelines for the implementation of this Article....."(Article 6.2 of the Kyoto Protocol) :

- (1) Participation of Parties in Article 6 projects
- (2) Supplementarity to domestic actions by the participating Annex I Parties
- (3) Criteria for Article 6 projects
- (4) Climate change effectiveness
- (5) Transparency
- (6) Criteria for project base lines
- (7) Acquisition and transfer of emission reduction units (ERUs), as provided for under Article 3.10 and 3.11
- (8) Parties' authorization and involvement of legal entities
- (9) Guidelines for monitoring, verification and reporting
- (10) Consequences of non-compliance
- (11) Guidelines for review of implementation of Article 6 of the Kyoto Protocol.

Group of 77 & China

**INITIAL SUBMISSION ON ARTICLE 12 OF THE KYOTO PROTOCOL
THE CLEAN DEVELOPMENT MECHANISM**

All the paragraphs bellow are subject to further elaboration by the
Group of 77 and China

Introduction

1. Article 12 of the Kyoto Protocol to the U.N. Framework Convention on Climate Change (FCCC) has defined a clean development mechanism (CDM) with the following two-fold purpose: (1) to assist developing country Parties in achieving sustainable development and in contributing to the ultimate objective of the Convention, and (2) to assist developed country Parties in achieving compliance with part of their quantified emission limitation and reduction commitments under Article 3, and therefore each CDM project activity should meet the above two-fold purpose.
2. Decision 7/CP.4 has stipulated a work programme on the mechanisms of the Kyoto Protocol, including a list of elements. The programme has given priority to the CDM. The CDM must be taken up first for discussion and decision.
3. This submission is following the format in the earlier submission made by the Group of 77 & China on 12 November, 1998: "Initial Work programme on Mechanisms of the Kyoto Protocol"(FCCC/CP/1998/MISC.7/Add.3).

Principles

4. The principles for the CDM and other basic elements must be decided first. These principles must be in keeping with Article 3 of the FCCC. These principles for the CDM are, *inter alia*: the nature and scope of the mechanisms; equity and transparency; complementarity; climate change effectiveness; institutional framework; capacity-building; adaptation; compliance; purpose of cdm projects; complementarity to domestic action for achieving compliance with reduction commitments under Article 3; compatibility with sustainable development priorities/strategies; special needs of least-developed countries; criteria for project eligibility; adaptation; and transparency, non-discrimination, prevention of distortion of competition. The methodological and operational questions will be guided accordingly.

Nature and Scope of CDM

5. The CDM is a project-based mechanism conceived and introduced in the Protocol with a two-fold purpose (see paragraph 1). Unlike the other mechanisms provided for in the Kyoto Protocol, the CDM is the only mechanism of the Protocol which involves the participation in CDM project activities by both the developed and developing country Parties. Developed country Parties will fund projects in developing country Parties which will assist sustainable development. Developed country Parties may involve private and/or public entities for such funding. In return, the developed country Party, funding the project, will be enabled to meet part of its emission reduction commitment. The Protocol has made provision for certifying the emissions reduced from a CDM project. Accordingly, "certified emission reductions" (CERs) will accrue. The CERs will enable the participating developed country Party to contribute to compliance with part of its quantified emission limitation and reduction commitments under Article 3 to the extent permissible under the principle of "supplementarity" to be decided. It must be ensured that "a share of the proceeds from certified project activities" is used to meet costs of adaptation. For this purpose, *inter alia*, a CDM adaptation fund should be established.

Equity and transparency

6. The principle of equity in the Convention must apply to all aspects of the CDM based on equitable developmental rights and balanced regional activity. The principle of transparency must be observed in the design and application of all CDM activities including project identification and approval, certification and verification, establishment of baselines, and the operations of the executive board.

Supplementarity

7. The design and implementation of the CDM must not in any way compromise the modification of longer-term trends in greenhouse gas anthropogenic emissions and concentrations. All the mechanisms, including the CDM, must be supplemental to domestic actions for GHG limitation and reduction. Guidelines on supplementarity must be developed taking into account Articles 2 and 3.2 of the Kyoto Protocol. Commensurate non-compliance processes must be put in place. Developed country access to the CDM mechanism should be contingent on satisfaction of prescribed domestic effort in fulfillment of commitments under Article 3.

Climate Change Effectiveness

8. Climate change effectiveness must be in terms of real, measurable and long-term benefits related to the mitigation of climate change at the project level.

Institutional Framework

9. The institutions as provided for in Article 12 of the Kyoto Protocol shall follow the principles and the nature and scope of the CDM. At the same time, it is recognized that the institutional framework will be based on representativity.

Capacity Building

10. Capacity-building is central for ensuring wider participation, and should be incorporated in all CDM project activities. Capacity building should include the build-up of endogenous expertise for identifying technology needs and helping enhance capacities for assimilation of technology. Developing country Parties will also need to develop capacity in monitoring, reporting and verifying emissions; and in the design, implementation and evaluation of CDM project activities. In implementation of the CDM project activities, to the extent possible, the capacity and capability of developing country Parties at the national, sub-regional and regional levels, through bilateral and multilateral approaches should be explored. At the national level, these approaches should be informed by the widest possible participation.

Adaptation

11. As provided for and listed in Article 4.8 of the Convention, and Article 12.8 of the Protocol, developing country Parties that are particularly vulnerable will be assisted to meet the costs of adaptation. For this purpose, *inter alia*, a CDM adaptation fund should be established. The institutional and organizational aspects related to adaptation in the context of certified project activities require elaboration in detail. Developing country Parties should identify adaptation projects for funding, and should follow a process of adaptation options identification. Consideration of this aspect should be consistent with ongoing work on adaptation under the Convention. Developing country Parties should be assisted with capacity building at all levels in order to be able to carry out such activities.

Compliance

12. Appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol should be established. The procedures and mechanisms should be underpinned by the principles of the Convention. These need further elaboration.

Purpose of CDM projects

13. See paragraph 1, above.

Supplementarity to domestic action for achieving compliance, etc.

14. The design and implementation of the CDM must not in any way compromise the modification of longer-term trends in greenhouse gas anthropogenic emissions and concentrations. All the mechanisms, including the CDM, must be supplemental to domestic actions for GHG limitation and reduction. Guidelines on supplementarity must be developed taking into account Articles 2 and 3.2. of the Kyoto Protocol. Commensurate non-compliance processes must be put in place. Developed country Parties' participation in CDM project activities should be contingent on satisfaction of prescribed domestic effort in fulfillment of commitments under Article 3. This will be further elaborated.

Sustainable Development priorities

15. Sustainable development priorities are set by national authorities. The priorities depend upon the specific requirements of a developing country Party. CDM project activities must contribute to sustainable development. The developing country Party where the CDM project activity is proposed to be set up shall be the sole judge for deciding whether that project activity meets its national sustainable development objectives and priorities.

Special needs of least developed countries

16. The special needs of least developed countries have to be addressed both from the point of view of identifying their special technology needs and of capacity building. The capacity building effort should be in the direction of build-up of endogenous expertise for identifying technology needs and helping enhance capacities for assimilation of technology. Least developed country Parties need assistance to build up capacity in monitoring, reporting and verifying emissions; and in the selection, design and evaluation of CDM project activities.

Criteria for Project Eligibility

17. Eligible project activities, apart from meeting national sustainable development priorities, must ensure access to environmentally-sound technology needed by the developing country Party participating in the CDM project activity. This will be elaborated further.

Transparency, non-discrimination, prevention of distortion of competition

18. All developing country Parties can participate in CDM project activities. No unilateral measures for CDM participation should preclude a developing country Party from participating in any CDM project activity. Transparency should be encouraged in all CDM project activities, including for project identification, design and implementation; and verification, monitoring, and reporting, as well as regarding all costs, risks and liabilities to be incurred by the developing country Party.

"Part of" Annex I Commitments

19. It must be ensured that CDM project activities shall be supplemental to domestic actions by developed country Parties to meet part of their quantified emission limitation or reduction commitments. Further elaboration will be made by the Group.

Additionality criteria in project funding

20. Funding for the CDM project shall be additional to ODA, GEF and other financial commitments of the developed country Parties.

Criteria for real, measurable and long-term benefits related to climate change

21. This issue, which is related to paragraph 8 above, should be addressed by taking into account the additional reduction in emissions at the CDM project level as against the

baseline of the CDM project activity. The benefits related to a project activity would be recognized as real if the actual greenhouse gas (GHG) emissions can be shown to be less than the project baseline. The benefits would be recognized as measurable if the actual level of GHG emissions of the project case and the level of GHG emissions in the project baseline can be established with a reasonable degree of certainty. The benefits of a project activity would be recognized as long-term if the emission reduction persists over an appropriate period of time taking into account the differences in the life-spans of different CDM project activities, and bearing in mind Article 2 of the Convention.

Criteria for certification

22. The operational entities to be designated by the COP/moP shall certify the emission reductions resulting from each project activity on the basis laid out in Article 12.5 of the Protocol. Guidelines to carry out the certification should be elaborated.

Criteria for project baseline

23. The establishment of baselines for the determination of emissions reduction should be made on a project-by-project basis. The establishment of the baseline will quantify the level of emissions that most likely would have occurred in the absence of the certified CDM project activity. This will be further elaborated.

Definition of the concept of certified emissions reductions

24. The Protocol has made provision for certification of the emission reductions resulting from each CDM project activity. Accordingly, "certified emission reductions" (CERs) will accrue to the developed country Party participating in the project activity, to enable that country to contribute to compliance with quantified emission limitation and reduction commitments under Article 3.

Systems for independent auditing and verification of project activities

25. Independent auditing of project activities may be done by public or private sector entities not involved in the identification, development or management of the project. There is need to develop uniform auditing practices. Verification has to be carried out by independent entities that have had no operational or financial links with the project, and that are fully accountable to COP/moP which shall exercise authority and guidance over all aspects of the CDM. The composition of any team should be approved by the developing country Party participating in the CDM project activity.

Format for Reporting

26. The format for reporting must be in a standardized format across all CDM projects. The reporting requirements should be as simple as possible so as to enable local human resources to fulfil these requirements.

Implication of Article 12.10 of the Protocol

27. SBSTA should be requested to study the implications of Article 12.10 of the Protocol and to propose recommendations. Submissions from Parties could be requested by SBSTA on their views on these implications.

Outcome of methodological work on Articles 3.3 and 3.4

28. The outcome shall be awaited.

Acquisition of certified emission reduction units

29. Article 3.12 of the Protocol states: "Any certified emission reductions which a party acquires from another Party in accordance with the provisions of Article 12 shall be added to the assigned amount for the acquiring Party."

Determination of share of proceeds from certified project activity for adaptation

30. Developing country Parties that are particularly vulnerable, as listed in Article 4.8 of the Convention, will be assisted to meet the costs of adaptation from, *inter alia*, a CDM adaptation fund. The COP/moP of the Protocol shall ensure that a share of the proceeds from certified project activities is used to cover these costs. Detailed modalities will be required.

Determination of share of proceeds from certified project activity for administration

31. The COP/moP shall also ensure that a share of the proceeds from certified project activities is used to cover administrative expenses for these activities. Detailed modalities will be required.

Approval by involved parties of sustainable development

32. The developing country Party participating in the project activity should be the sole judge for determining whether any CDM project under consideration meets its sustainable development requirements.

Authority and guidance of the COP

33. As stated in Article 7 of the FCCC, the COP is the supreme body of the Convention which shall keep under regular review the implementation of the Convention and any related legal instruments that the COP may adopt, such as the Kyoto Protocol.

Accountability of the Executive Board to the COP/moP

34. There shall be full accountability of the executive board to the COP/moP which shall exercise authority and guidance over all aspects of the CDM.

Functions of, relationship among and operational procedures of the COP, COP/moP, etc.

35. The COP, as stated in paragraph 33 above shall keep under regular review the implementation of the Protocol. The COP, in implementation of Decision 1/CP.3, started work on items related to specific provisions of the Kyoto Protocol. Accordingly, the COP adopted Decisions 5/CP.4 (Implementation of Article 4.8 and 4.9 of the Convention, decision 3/CP.3 and Articles 2.3 and 3.14 of the Kyoto Protocol); 7/CP.4 on the Work programme on mechanisms of the Kyoto Protocol; and Decision 8/CP.4 on Preparations for the first session of the COP/moP. The CDM shall be subject to the authority and guidance of the COP/moP and be supervised by an executive board of the CDM. The COP/moP shall review periodically the implementation of CDM project activities and their geographical spread, and take appropriate action to promote the principle of equity.

Executive Board - constitution, composition, etc.

36. The executive board shall be fully accountable to the COP/moP. Its composition shall be on the basis of equitable geographical representation, and it should be functionally small. Under the authority and guidance of the COP/moP the executive board shall supervise the CDM, and shall provide guidance for the involvement of private and/or public entities in CDM project activities.

Guidance regarding involvement of public and/or private entities

37. Parties are responsible for the involvement of their private and/or public entities in CDM project activities subject to the guidance provided by the executive board.

Operational entities - identification/designation/accreditation, etc.

38. Operational entities to certify emissions reductions resulting from each CDM project activity shall be designated by the COP/moP.

Responsibility of Parties

39. The Parties participating in the CDM project activities must be responsible at all stages and in all aspects for the project activity in which they are participating. Any costs, risks or liabilities that have not been expressly accepted by the developing country Party before approval of the CDM project activity shall be assumed to be the responsibility of the participating developed country Party.

Group of 77 & China

INITIAL SUBMISSION ON ARTICLE 17 OF THE KYOTO PROTOCOL

Further elaboration will be made on the paragraphs below

Introduction

1. The purpose of "emissions trading" under Article 17 of the Kyoto Protocol is to assist Parties included in Annex B in fulfilling part of their commitments under Article 3. Article 17 states: "Any such trading shall be supplemental to domestic actions for the purpose of meeting quantified emission limitation and reduction commitments" under that Article.

Principles

2. The principles for Article 17 and the other basic elements pertaining to this article must be decided first and formulated accordingly. These principles and basic elements must be in conformity with Article 3 of the Convention. The methodological and operational issues must be guided accordingly. Of fundamental importance is the environmental integrity of the system to be brought in place under Article 17 and its credibility. It must be ensured that the system does not have dormant any possibility or potential of freezing or perpetuating existing inequities between Annex B Parties and developing country Parties. The right to development of developing countries must not be affected adversely in any way. It is recognized that the Protocol has not created or bestowed any right, title or entitlement.

Nature and Scope of Article 17

3. Annex B Parties have quantified greenhouse gas (GHG) emission limitation and reduction commitments stipulated in Annex B of the Protocol. Annex B Parties, individually or jointly, have to ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the GHGs listed in Annex A of the Protocol do not exceed their assigned amounts, calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B, with a view to reducing their overall emissions of such gases by at least 5 per cent below 1990 levels in the quantified emission limitation and reduction commitment period, from 2008 to 2012. The assigned amount for each such Party, in the commitment period from 2008 to 2012, shall be equal to the percentage inscribed for it in Annex B of its aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases (GHGs) listed in Annex A of the Protocol in 1990, or the base year or period determined in accordance with paragraph 5 of Article 3 of the Protocol, multiplied by five. If an Annex B Party is able to limit or reduce its GHG emissions over and above its commitment, such excess limitation or reduction can be transferred to any other Annex B Party under the provisions of Article 17. Such excess limitation and reduction of emissions shall be subtracted from the assigned amount for the transferring Party, and be added to the assigned amount for the acquiring Party.

Eligibility

4. Parties included in Annex B shall be eligible to "transfer" or "acquire" part of the assigned amount, if they:
- (a) are in compliance with Articles 3, 5 and 7 of the Protocol and are responsible for meeting their commitments under the Protocol;
 - (b) are not in violation of the compliance procedures as referred to in Article 18 of the Protocol;
 - (c) have a transparent national system for registration and verification of such "transfers" and "acquisitions".

Supplementarity

5. The design and implementation of any system under Article 17 must not in any way compromise the modification of longer-term trends in GHG anthropogenic emissions and concentrations. Commensurate non-compliance processes must be put in place. Annex B Parties access to Article 17 should be contingent on satisfaction of prescribed domestic effort in fulfilment of commitments under Article 3.

Climate Change Effectiveness

6. Any system established under Article 17 of the Protocol shall contribute to and bring about real, measurable and long-term benefits related to mitigation of climate change. It should not lead to overall increase in the GHG emissions of the developed country Parties.

Rules

7. The rules to be formulated must conform to the principles. Rules have to determine that part of the assigned amount which would be transferable by an Annex B Party to another acquiring Annex B Party under Article 17. The rules will lay down the conditions which must be fulfilled before any such transfers and acquisitions can occur. The rules will ensure that no right, title or entitlement in any manner gets attached to the assigned amount or any part of the assigned amount which is transferred or acquired.

Modalities

8. Any Annex B Party participating in the system to be established under Article 17 shall establish and maintain a transparent national registration of "transfers" and "acquisitions". Such information shall be communicated regularly to the Convention Secretariat. Annex B Parties participating in the transfers and acquisitions of parts of assigned amounts under Article 17 of the Protocol, shall include in their national inventory, to be communicated to the Secretariat under Article 7.1 of the Protocol, information on any part of an assigned amount added to or removed from its national registration during the relevant year. If an Annex B Party is in non-compliance with its commitments, that part of the assigned amount that has been "transferred" shall be invalidated.

**STATEMENT BY GERMANY ON BEHALF OF THE
EUROPEAN COMMUNITY, ITS MEMBER STATES AND
BULGARIA, CROATIA, CZECH REPUBLIC, ESTONIA,
HUNGARY, LATVIA, LITHUANIA, SLOVAK REPUBLIC
AND SLOVENIA**



Bonn, 31 May - 11 June 1999

**SBI 10 - Agenda item 8
SBSTA 10 - Agenda item 12**

**MECHANISMS PURSUANT TO ARTICLES 6, 12 AND 17 OF THE KYOTO
PROTOCOL**

Germany, on behalf of the European Community, its Member States and Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Slovak Republic and Slovenia, welcomes the synthesis of proposals by Parties on principles, modalities, rules and guidelines for the Kyoto mechanisms in document FCCC/SB/1999/INF. 2 and its addenda. We are convinced that the report provides a solid basis for further discussion and we hope that this will facilitate drafting of a negotiating text for CoP 5 with a view to reaching decisions at CoP 6. A great number of issues regarding the Kyoto mechanisms have already been discussed. But more has to be done to enable conclusive decisions to be taken. The EU and other Parties believe that it is now time to move on from questions and discuss specific suggestions on principles, rules, modalities, guidelines and procedures for the mechanisms.

The EU and other Parties put submissions forward for the operation of the mechanisms in advance of the Bonn workshop which delegations can find in document FCCC/SB/1999/MISC.3. Since then further elements have been elaborated by the EU and other Parties which you can find in our revised submissions which we make available together with this Statement. The EU and other Parties hope that the proposals can serve as an input to discussions amongst all Parties and emphasise that we are also keen to discuss the proposals of other Parties. Let me highlight the following elements of our submission on the Kyoto mechanisms:

The EU and other Parties believe that positive developments since CoP 4 on technical issues and options have taken place. The EU and other Parties are pleased to note the emerging consensus on the need for a comprehensive compliance system, for strong monitoring and reporting requirements under Articles 5, 7 and 8 of the Protocol and for effective baselines for the project based mechanisms. Further work in this field will help to make the mechanisms what they were intended to be: instruments to foster sustainable development and a cost effective means to meet the objectives under Article 3 of the Protocol. The EU and other Parties believe that the Kyoto mechanisms can provide benefits for all Parties to the Convention.

However, the EU and other Parties strongly believe that domestic action should provide the main means of meeting the commitments under Article 3 of the Kyoto Protocol. The principles, rules, modalities, guidelines and procedures for the Kyoto mechanisms should ensure that they do not undermine this principle or weaken these commitments. The mechanisms must be supplemental to domestic action and not lead to overall emission reductions being lower than would otherwise be the case. They must result in real, measurable and long-term emission reductions. For this purpose a concrete ceiling on the use of the mechanisms has to be defined in quantitative and qualitative terms based on equitable criteria.

In the view of the EU and other Parties a properly defined ceiling will encourage Annex B Parties to develop strong domestic policies and measures in order to modify long term emission trends, the technological structure, especially long-lived infrastructure, and production and consumption patterns. Thereby it will also contribute to preparing the path for more ambitious commitments in the second and subsequent commitment periods. Such a ceiling should also contribute to limiting the displacement of domestic action by "hot air".

The EU and other Parties recognise that there are different ways of approaching the definition of supplementarity, taking into account inter alia the uncertainty that still exists on the structure of the Kyoto mechanisms. In order to provide a basis for further negotiations with other Parties whom we urge to join us in this endeavour, we propose the following definition for a ceiling on both net acquisitions and net transfers by an Annex B Party for all three Kyoto mechanisms together:

■ Net acquisitions must not exceed the higher of the following alternatives:

5 % of: its base year¹ emissions multiplied by 5 plus its assigned amount²,

2

or

50% of: the difference between its annual actual emissions in any year of the period from 1994 to 2002, multiplied by 5, and its assigned amount.

■ Net transfers must not exceed:

5% of: its base year¹ emissions multiplied by 5 plus its assigned amount.

2

However, the ceiling on net acquisitions and on net transfers can be increased to the extent that an Annex B Party achieves emission reductions larger than the relevant ceiling in the commitment period through domestic action undertaken after 1993, if demonstrated by the Party in a verifiable manner and subject to the expert review process to be developed under Article 8 of the Kyoto Protocol.

¹ or average annual emissions in the base period as provided for in Article 3 paragraph 5 of the Kyoto Protocol

² As defined in Article 3 of the Kyoto Protocol.

Furthermore the EU and other Parties reaffirm the need for an early agreement of the CoP on the determination of the part of the emission limitation and reduction commitment under Article 3 that can be met through certified emission reductions accruing from CDM projects in accordance with Article 12.3 (b) of the Kyoto Protocol.

The EU and other Parties believe that any Party in transferring or acquiring emission reductions through Joint Implementation, Clean Development mechanism, or Emissions Trading must meet certain eligibility requirements. Each such Party must:

- have ratified the Kyoto Protocol,
- be bound by a compliance system adopted by CoP/MoP, and
- be in compliance with its reporting commitment under Article 12 of the Convention.

An Annex I Party shall also be in compliance with its commitments under Articles 5 and 7 of the Kyoto Protocol as set out in our various submissions.

The EU and other Parties believe that legal entities may take part in the operation of the Kyoto mechanisms subject to guidance by and approval of the Parties involved.

The EU and other Parties envisage that the operation of Joint Implementation and the Clean Development Mechanism could involve a similar two step approach through, first, validation of projects and, second, certification of emission reductions. Validation will require project participants to provide specific information on the project activity, and must take place before the resulting emission reductions may be certified. Certification of emission reductions will take place after the emission reductions have occurred and will ensure that the reductions are additional, real, measurable and long-term. The independence of operational entities will be crucial in ensuring this. Validating and certifying operational entities shall be institutionally and economically independent from, and not entitled to participate in, the identification, development or financing of any project.

In the view of the EU and other Parties adaptation projects funded under the provision of Article 12.8 of the Protocol, must be consistent with relevant international agreements and internationally agreed programmes of action for sustainable development. They shall be country driven and in conformity with the individual Party's sustainable development strategies and priorities and shall be implemented in a cost-effective manner.

The EU and other Parties are of the view that an Annex B Party which authorises legal entities to participate in Emissions Trading under its responsibility must maintain a national system for accurate monitoring and verification and a publicly accessible national registry recording all relevant details.

The further elaboration of a comprehensive, coherent, unified, strong, efficient and effective compliance system is of highest importance also for the sound operation of the Kyoto mechanisms.

The EU and other Parties look forward to receiving other Parties' views on these principles, rules, modalities, guidelines and procedures for the Kyoto mechanisms. The EU and other Parties also look forward to the views of Parties on other relevant issues that have not been addressed in this statement, including how sustainable development could best be achieved, baseline determination, environmental effectiveness, transparency, accessibility and verifiability, technical questions on guidelines on the establishment, maintenance and international compatibility of national systems, national registries and institutional questions.

Check against delivery

**SUBMISSION BY GERMANY ON BEHALF OF THE EUROPEAN
COMMUNITY, ITS MEMBER STATES AND BULGARIA, CROATIA,
CZECH REPUBLIC, ESTONIA, HUNGARY, LATVIA, LITHUANIA,
POLAND, SLOVAK REPUBLIC AND SLOVENIA
ON**

JOINT IMPLEMENTATION (ART. 6 KP)

With the Buenos Aires Plan of Action, COP 4 has decided on a work programme on the mechanisms of the Kyoto Protocol with a view to taking a decision on all mechanisms at COP 6. According to Article 6 of the Kyoto Protocol the Conference of the Parties serving as the meeting of the Parties (COP/MOP) may, at its first session or as soon as practicable thereafter, elaborate guidelines for implementing this Article.

The European Community, its Member States and Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic and Slovenia have prepared a revised first proposal on guidelines for implementing Article 6, which is hereafter referred to as Joint Implementation (JI), hoping that it can serve as an input for the discussion amongst all Parties.

The EU and the above Parties recall their position that a concrete ceiling on the use of the Kyoto mechanisms should be defined in quantitative and qualitative terms based on equitable criteria. In the view of the EU and the above Parties, a properly defined ceiling will encourage Annex B Parties to develop strong domestic policies and measures in order to modify long term emission trends, the technological structure, especially long-lived infrastructure, and production and consumption patterns. Thereby it will also contribute to preparing the path for more ambitious commitments in the second and subsequent commitment periods. Such a ceiling should also contribute to limiting the displacement of domestic action by "hot air".

The above Parties recognise that there are different ways of approaching the definition of complementarity, taking into account inter alia the uncertainty that still exists on the structure of the Kyoto mechanisms. In order to provide a basis for further negotiations with other Parties whom we urge to join us in this endeavour, we propose a definition for such a ceiling in para 8 of this submission.

The proposal from the above Parties on guidelines for implementing Article 6 does not yet cover all of the issues that we believe need to be addressed. We suggest that those issues dealing with baselines and monitoring be elaborated on in an appendix to these guidelines or in a separate decision by COP/MOP. Institutional questions, we believe, will have to be discussed once there is some more common understanding on other basic issues.

To clarify the JI process envisioned by the EU and the above Parties, the following terms in the set of guidelines shall be understood as follows:

Verification encompasses

- i) validation of a JI project: an assessment that a specific project under Art.6 KP meets the requirements laid down in the guidelines for JI, in the Kyoto Protocol and in the UNFCCC; and
- ii) certification of emission reductions: an assessment of how many additional, real, measurable and long-term emission reductions have resulted from the JI project.

The above Parties are looking forward to discussions with other Parties.

Draft Set of Guidelines for Joint Implementation

Para 1

The following guidelines apply for any project set up under Art. 6 of the Kyoto-Protocol (KP).

Para 2 Participation of Parties

1. Parties included in Annex I of the UN Framework Convention on Climate Change (UNFCCC) shall only transfer or acquire emission reduction units (ERUs) from a project under Art.6 KP, if they
 - a) have ratified the KP,
 - b) are bound by a compliance regime adopted by COP/MOP,
 - c) have not been excluded from participation in JI according to the procedures and mechanisms under the above mentioned compliance regime, and
 - d) are in compliance with their commitments under Art. 12 UNFCCC.
2. A Party included in Annex I shall only acquire emission reductions units resulting from project activities under Art.6 KP to contribute to compliance with its quantified emission limitation and reduction commitments under Art. 3 KP, if the Party is in compliance with its commitments under Art.5 and 7 KP

Para 3 Responsibility of the Parties

Legal entities can participate in JI with the approval of the Parties involved in such projects. Participation of legal entities in projects resulting from Art.6 KP projects does not affect the responsibility of Parties included in Annex I for the fulfilment of their commitments under the KP.

Para 4 Validation of JI projects

1. Validation is the binding assessment by an independent entity upon request of a project participant that a specific project under Art.6 KP meets the requirements laid down in the guidelines for JI, in the Kyoto Protocol and in the UNFCCC. A project needs to be validated before emission reductions resulting from that project may be certified.
2. Independent entities shall validate the project under Art. 6 KP upon request of a project participant. Such entities shall be institutionally and economically independent from, and not entitled to participate in, the identification, project development or project financing of any JI project
3. A project shall be validated only if it meets all of the following requirement:
 - a) The project has the approval of the Parties involved.
 - b) All legal entities involved in the project demonstrate that they are entitled to participate in JI according to para 11 below.

- c) The project participants provide a determination of baselines to the independent entity in accordance with Appendix A upon which the environmental additionality of the project is calculated. It must be demonstrated that the emission reductions from the project are real, measurable and long-term and that the emissions occurring with the project are lower than the emissions that would have occurred in the absence of the project. The latter are the baseline for the project and shall be determined according to the guidance provided for in Appendix A.
- d) The project participants provide information to the independent entity on their procedures for accurate, systematic and periodic monitoring of the project in accordance with the guidance provided for in Appendix B.
- e) Independent entities publish their decisions on the validation of projects in a suitable manner.

Para 5 Certification of emission reductions

1. Certification is the binding assessment by an independent entity upon request of a project participant of how many additional, real, measurable and long-term emission reductions have resulted from a validated project. The certification process concludes with the issuing of certificates for these emission reductions.
2. Independent entities shall certify the emission reductions resulting from a validated project upon request of a project participant. Independent entities shall be institutionally and economically independent from, and not entitled to participate in, the identification, project development or project financing of any JI project.
3. Additional emission reductions resulting from a project shall be calculated on the basis of the baselines set up according to Para 4.3c above. They shall be certified after they have occurred, only if
 - a) a participant of the project applies for the certification of the emission reductions resulting from the project during a specific period of time,
 - b) the project has been validated and continues to meet the requirements under Para 4 above,
 - c) all Parties involved are entitled to participate in JI according to Para 2 above,
 - d) the applicant submits the necessary monitored data proving that
 - the project has resulted in additional emission reductions by sources, or an additional enhancement of removals by sinks,
 - these emission reductions or enhancements of removals by sinks are real, measurable and long-term.
4. Emission reductions shall be denominated in emission reduction units (ERUs). One ERU shall be equal to one metric ton of CO₂ equivalent emissions calculated using the global warming potentials defined by Decision 2/CP.3 or as subsequently revised in accordance with Art.5.3 KP.

5. Issued certificates shall contain the following information and data:
 - the project and the project participants, including the Parties involved;
 - the number of emission reduction units that have resulted from the project and their serial numbers.
6. Each ERU shall have a unique serial number that reflects the project, country of origin, the year of certification and the certifying independent entity.
7. Independent entities shall inform the applicant on their decision in writing immediately after the completion of the certification process.
8. Independent entities publish their decisions on the certification of emission reductions in a suitable manner.

Para 6 Reporting by Parties

1. Parties included in Annex I shall report annually on their projects under Art. 6 within the framework of their reporting commitments under Art. 7.1 and 7.2 KP. Reporting under JI will follow the guidelines to be developed under Art. 7.4 KP.
2. Parties involved in JI projects shall also report in their national communications on JI projects.

Para 7 Transfer and Acquisition of ERUs

1. In accordance with Art. 3.10 KP any ERUs from a verified JI project which a Party acquires from another Party in accordance with the provisions of Art. 6 KP shall be added to the assigned amount for the acquiring Party.
2. In accordance with Art. 3.11 KP any ERUs from a verified JI project which a Party transfers to another Party in accordance with the provisions of Art. 6 KP shall be subtracted from the assigned amount for the transferring Party.

Para 8 Supplementarity

Net acquisitions by an Annex B Party for all three Kyoto mechanisms together must not exceed the higher of the following alternatives:

5 % of: its base year¹ emissions multiplied by 5 plus its assigned amount²,

2

or

50% of: the difference between its annual actual emissions in any year of the period from 1994 to 2002, multiplied by 5, and its assigned amount.

Net transfers by an Annex B Party for all three Kyoto mechanisms together must not exceed:

5% of: its base year¹ emissions multiplied by 5 plus its assigned amount.

2

¹ or average annual emissions in the base period, as provided for in Article 3 para. 5 of the Kyoto Protocol

² As defined in Article 3 of the Kyoto Protocol.

However, the ceiling on net acquisitions and on net transfers can be increased to the extent that an Annex B Party achieves emission reductions larger than the relevant ceiling in the commitment period through domestic action undertaken after 1993, if demonstrated by the Party in a verifiable manner and subject to the expert review process to be developed under Article 8 of the Kyoto Protocol.

Para 9 COP/MOP

[...]

Para 10 Independent entities

[...]

Para 11 Legal entities

[...]

Para 12 Reporting by institutions involved

[...]

Para 13 Review of these rules

1. COP/MOP shall review the guidelines governing the joint implementation, as set out in paras 1-12 above. The first review shall be carried out no later than the year 2012. Further reviews shall be carried out periodically thereafter.
2. Any revision of these guidelines shall take effect in the commitment periods subsequent to that of their adoption.

Appendix A

Baselines: to be elaborated

Appendix B

Monitoring: to be elaborated

**SUBMISSION BY GERMANY ON BEHALF OF THE EUROPEAN
COMMUNITY, ITS MEMBER STATES AND BULGARIA, CROATIA,
CZECH REPUBLIC, ESTONIA, HUNGARY, LATVIA, LITHUANIA,
POLAND, SLOVAK REPUBLIC AND SLOVENIA
ON THE**

CLEAN DEVELOPMENT MECHANISM (ART. 12 KP)

With the Buenos Aires Action Plan COP 4 has decided on a work programme on the mechanisms, with a priority given to the CDM and with a view to taking a decision on all mechanisms at COP 6. According to Article 12 of the Kyoto Protocol (KP) the Conference of the Parties serving as the meeting of the Parties (COP/MOP) at its first session shall elaborate modalities and procedures for the Clean Development Mechanism (CDM).

In addition to previous papers tabled, the European Community, its Member States and Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic and Slovenia have prepared a revised first proposal on modalities and procedures for the CDM hoping that it can serve as an input for the discussion amongst all Parties, and in particular between Parties included in Annex I and Parties not included in Annex I.

The EU and the above Parties recall their position that a concrete ceiling on the use of the Kyoto mechanisms should be defined in quantitative and qualitative terms based on equitable criteria. In the view of the above Parties a properly defined ceiling will encourage Annex B Parties to develop strong domestic policies and measures in order to modify long term emission trends, the technological structure, especially long-lived infrastructure, and production and consumption patterns. Thereby it will also contribute to preparing the path for more ambitious commitments in the second and subsequent commitment periods. Such a ceiling should also contribute to limiting the displacement of domestic action by "hot air".

The above Parties recognise that there are different ways of approaching the definition of complementarity, taking into account inter alia the uncertainty that still exists on the structure of the Kyoto mechanisms. In order to provide a basis for further negotiations with other Parties whom we urge to join us in this endeavour, we propose a definition for such a ceiling in para 9 of this submission.

Furthermore, the EU and the above Parties reaffirm the need for an early agreement of the COP on the determination of the part of the emission limitation and reduction commitment under Article 3 that can be met through certified emission reductions accruing from CDM projects in accordance with Article 12.3 (b) of the Kyoto Protocol.

The proposal from the above Parties on modalities and procedures for the CDM does not yet cover all of the issues that we believe need to be addressed. Therefore a number of places in this draft proposal have been left blank.

We suggest that those questions dealing with technical aspects related to baselines, monitoring and adaptation measures could be elaborated on in an appendix to the draft modalities and procedures or in a separate decision by COP/MOP. Institutional questions, including those related to the specific tasks of the Executive Board and operational entities, we believe, will have to be further discussed once there is some more common understanding on other basic issues. Issues that the EU and the above Parties would in particular like to discuss with others are the content of the appendices and the questions included at the end of the submission.

The EU and the above Parties are looking forward to discussions with other Parties.

Draft modalities and procedures for the CDM

Para 1

The following modalities and procedures apply for any project activity set up under the Clean Development Mechanism (CDM) set forth in Art.12 Kyoto Protocol (KP).

Para 2 Participation of Parties

1. Parties included in Annex I shall only use certified emission reductions to contribute to compliance and Parties not included in Annex I shall only benefit from project activities under Art.12 KP, if the Party
 - a) has ratified the KP,
 - b) is bound by a compliance regime adopted by COP/MOP,
 - c) has not been excluded from participation in the CDM according to the procedures and mechanisms under the above mentioned compliance regime,
 - d) and is in compliance with its commitments under Art.12 UNFCCC.
2. A Party included in Annex I shall only use certified emission reductions resulting from project activities under Art.12 KP to contribute to compliance with its quantified emission limitation and reduction commitments under Art. 3 KP, if the Party is in compliance with its commitments under Art.5 and 7 KP.

Para 3 Responsibility of the Parties

Private and/or public entities can participate in the CDM with the approval of the Parties involved in CDM projects. Participation of private and/or public entities in project activities under Art.12 KP does not affect the responsibility of Parties included in Annex I for the fulfillment of their commitments under the KP.

Para 4 Validation of project activities

1. Validation is the binding assessment by an operational entity upon request of a project participant that a specific project activity under Art.12 KP meets the requirements laid down in the rules for the CDM, in the Kyoto Protocol and in the UNFCCC. A project activity needs to be validated before emission reductions resulting from that project activity may be certified.
2. Operational entities shall validate the project activities under Art.12 KP upon request of a project participant. Operational entities shall be institutionally and economically independent from, and not entitled to participate in, the identification, project development or project financing of any CDM project

3. A project activity shall be validated only if it meets all of the following requirement:

- a) All Parties involved have approved the project activity.
- b) All public and/or private entities involved in the project activity demonstrate that they are entitled to participate in the CDM according to Para 17.
- c) The project participants provide a determination of baselines to the operational entity in accordance with Appendix A upon which the environmental additionality of the project activity is calculated. It must be demonstrated that the emission reductions from the project activity are real, measurable and long-term and that the emissions occurring with the project activity are lower than the emissions that would have occurred in the absence of the project activity. The latter are the baseline for the project and shall be determined according to the guidance provided for in Appendix A.
- d) If public funds are used, the project participants provide information on the funding of the project activity proving that CDM investment will not result in a diversion of or competition with ODA and GEF funding.
- e) The Party not included in Annex I involved in the project activity confirms in a written statement how the project activity
 - assists that Party in achieving sustainable development taking into account its economic, environmental and social conditions according to its own priorities and needs and the need to minimize adverse environmental, social and economic effects taking into account existing guidance for sustainable development;
 - contributes to the ultimate objective of the UNFCCC.
- f) The project activity and its results are consistent with all relevant international agreements relating to sustainable development to which the Parties involved are a Party.
- g) The project participants provide information to the operational entity on their procedures for accurate, systematic and periodic monitoring of the project in accordance with the guidance provided for in Appendix C.
- h) Operational entities publish their decisions on the validation of project activities in a suitable manner.

Para 5 Certification of emission reductions

1. Certification is the binding assessment by an operational entity upon request of a project participant of how many additional, real, measurable and long-term emission reductions have resulted from a validated project activity. The certification process concludes with the issuing of certificates for these emission reductions.

2. Operational entities shall certify the emission reductions resulting from a validated project activity upon request of a project participant. Operational entities shall be institutionally and economically independent from, and not entitled to participate in, the identification, project development or project financing of any CDM project.
3. Additional emission reductions resulting from a project activity shall be calculated on the basis of the baselines set up according to Para 4 (2c) above. They shall be certified after they have occurred, only if
 - a) a participant of the project activity applies for the certification of the emission reductions resulting from the project activity during a specific period of time,
 - b) the project activity has been validated and continues to meet the requirements under Para 4 above,
 - c) all Parties involved are entitled to participate in the CDM according to Para 2 above,
 - d) the applicant submits the necessary monitored data proving that
 - the project activity has resulted in emission reductions that are additional to any that would have occurred in the absence of the project activity,
 - these emission reductions are real, measurable and long-term.
4. Issued certificates shall contain the following information and data:
 - the project activity and the project participants, including the Parties involved;
 - the number of certified emission reduction units that have resulted from the project activity and their serial numbers.
5. Emission reductions shall be denominated in emission reduction units. One certified emission reduction unit shall be equal to one metric ton of CO₂ equivalent emissions calculated using the global warming potentials defined by Decision 2/CP.3 or as subsequently revised in accordance with Art.5.3 KP.
6. Each certified emission reduction unit shall have a unique serial number that reflects the project activity, country of origin, the year of certification and the certifying operational entity.
7. Operational entities shall inform the applicant on their decision in writing immediately after the completion of the certification process.
8. Operational entities publish their decisions on the certification of emission reductions in a suitable manner.

Para 6 Supervision

1. The operational entities and their activities and decisions are subject to a supervision by the executive board as mandated for by the COP/MOP.
2. The executive board, if mandated for by the COP/MOP, to this Protocol shall carry out sample checks of the performance of the operational entities and the certification process. To this end it may designate operational entities not involved in the chosen certification process.
3. The executive board, if mandated for by the COP/MOP, decides independently or on request of the COP/MOP about which operational entity will be checked upon.
4. If the executive board, if mandated for by COP/MOP, concludes that the requirements for the certification of the emission reductions according to Para 5.2 above have not been fulfilled, COP/MOP may, upon recommendation of the board, decide that the operational entities involved are no longer entitled to certify emission reductions according to Para 5 above.

Para 7 Reporting by Parties

1. Parties included in Annex I using the CDM shall report annually on their activities under Art.12 KP within the framework of their reporting commitments under Art.7.1 and 2 KP. Reporting under the CDM will follow the guidelines to be developed under Art.7.4 KP.
2. Parties involved in CDM projects shall report in their national communications on CDM projects, on how they have assisted non-Annex I Parties in achieving sustainable development and in contributing to the ultimate objective of the Convention, and how they have assisted Annex I Parties in achieving compliance with their commitments under Art.3 KP.

Para 8 Acquisition of certified emission reduction units

In accordance with Art.3.12 KP any certified emission reductions which a Party acquires from another Party in accordance with the provisions of Art.12 KP shall be added to the assigned amount for the acquiring Party.

Para 9 Supplimentarity

Net acquisitions by an Annex B Party for all three Kyoto mechanisms together must not exceed the higher of the following alternatives:

5 % of: its base year¹ emissions multiplied by 5 plus its assigned amount²,
2

or

50% of: the difference between its annual actual emissions in any year of the period from 1994 to 2002, multiplied by 5, and its assigned amount.

Net transfers by an Annex B Party for all three Kyoto mechanisms together must not exceed:

5% of: its base year¹ emissions multiplied by 5 plus its assigned amount.

2

However, the ceiling on net acquisitions and on net transfers can be increased to the extent that an Annex B Party achieves emission reductions larger than the relevant ceiling in the commitment period through domestic action undertaken after 1993, if demonstrated by the Party in a verifiable manner and subject to the expert review process to be developed under Article 8 of the Kyoto Protocol.

Para 10 Determination of „part of“ according to Art.12. 3b KP

[...]

Para 11 Share of proceeds

1. A share of proceeds from each project activity shall be used to cover administrative expenses of the CDM as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.
2. The share of proceeds shall be calculated on the basis of the certified emission reductions units resulting from each project activity.

[...]

Para 12 Administration

1. A share of proceeds according to Art.12.8 KP shall be used to cover all administrative expenses of the CDM.
2. Administrative expenses of the CDM cover the administration of the executive board and of the share of proceeds for adaptation.

[...]

¹ or average annual emissions in the base period, as provided for in Article 3 para. 5 of the Kyoto Protocol

² As defined in Article 3 of the Kyoto Protocol.

Para 13 Adaptation

1. A share of proceeds according to Art.12.8 KP shall be used to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.
2. Project activities and measures that help developing country Parties to adapt to the adverse effects of climate change shall be financed by the share of proceeds, only if they meet the following requirements:
 - a) They shall be consistent with all relevant international agreements and internationally agreed programmes of action for sustainable development.
 - b) They shall be country-driven and in conformity with the national strategies and priorities for sustainable development of the Parties concerned.
 - c) They shall be implemented in a cost-effective manner.

[...]

3. Adaptation project activities and measures to be implemented under Art.12.8 KP shall be guided by information from national communications and the three stage approach as set out in Dec. 11/CP.1 and on the guidance provided for in Appendix B.
4. The share of proceeds for adaptation projects shall be channelled through an existing international institution to be determined by COP/MOP.
5. The allocation of the share of proceeds for adaptation projects shall be reviewed by COP/MOP five years after the adoption of these modalities and procedures.

Para 14 Implementation of Art.12.10 KP

Project activities generating emission reductions between the year 2000 and the date of adoption of the modalities and procedures for the CDM may be validated and emission reductions resulting from these validated project activities may be certified, provided the project activities and emission reductions comply with the agreed set of rules for the CDM.

Para 15 COP/MOP

The CDM shall be subject to the authority and guidance of COP/MOP in accordance with Art.12.4 KP. COP/MOP shall, inter alia,

- determine the part of the quantified emission limitation and reductions commitments under Art. 3 KP which Parties included in Annex I can meet through certified emission reductions from CDM projects in accordance with Art.12.3b KP,
- designate the operational entities in accordance with Art.12.5 KP,
- elaborate modalities and procedures with the objective of ensuring transparency, efficiency and accountability through independent auditing and verification of project activities in accordance with Art.12.7 KP,

- ensure that a share of proceeds from certified project activities is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation in accordance with Art.12.8 KP,
- decide which institutions shall carry out which functions under the CDM.

Para 16 Executive Board

1. In order to supervise the CDM under the authority and guidance of COP/MOP in accordance with Art.12.4 KP, the Executive Board of the CDM shall carry out all instructions and all other functions assigned to it by COP/MOP.
 2. Within this framework the Executive Board shall supervise project activities under Art.12 KP to ensure that these are in conformity with the UNFCCC, the Kyoto Protocol and all relevant decisions by COP/MOP.
 3. The Executive Board shall report on its operations to each session of COP/MOP.
 4. Insofar authorised by COP/MOP, the Executive Board shall provide guidance for participants as set out in Art.12.9 KP.
 5. The Executive Board may assign certain functions to other institutions under Art.12 KP within the framework provided for by COP/MOP.
 6. The Executive Board shall consist of [...] members. It shall be constituted so as to deal efficiently, effectively and transparently with its responsibilities on the basis of decisions taken by the COP/MOP.
 7. The Secretariat of the UNFCCC may within its functions outlined in Art. 8 UNFCCC support the Executive Board as necessary.
- [...]

Para 17 Operational entities

Entities shall be designated as operational entities only if they meet the following requirements:

1. They shall provide for the necessary expertise and the necessary means to validate project activities according to Para 4 above and to certify emission reductions according to Para 5 above and to carry out sample checks if mandated for according to Para 6.2 above.
2. They shall work in a credible, independent, non-discriminatory and transparent manner and ensure, where appropriate, that the certification is based on internationally agreed standards.
3. Guidelines on the implementation of Para 17.1 and 17.2 above shall be adopted by COP/MOP.

Para 18 Private and/or public entities

[...]

Para 19 Reporting by institutions involved

[...]

Para 20 Review

1. COP/MOP shall review these modalities and procedures five years after their adoption and periodically thereafter.
2. Any revision of these modalities and procedures will not have an impact on emission reductions already certified.

Appendix A

Baselines: *[to be elaborated]*

Appendix B

Adaptation measures: *[to be elaborated]*

Appendix C

Monitoring: *[to be elaborated]*

Further points for discussion

This proposal does not cover all of the issues that the EU and Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Látvia, Lithuania, Poland, Slovak Republic and Slovenia believe need to be addressed. We are looking forward to a fruitful discussion also on the following questions:

1. Definition of part under Art. 12.3 (b):

In accordance with Art 12.3 b, the part of a Party's quantified emission limitation and reduction commitments under Art.3 that can be met through CERs in any one commitment period must be determined by the COP/MOP.

- How should this „part“ be defined?
- What would be an appropriate level?

2. Baselines

Accurate definitions of baselines must ensure environmental additionality of CDM projects.

- What criteria will be required for the determination of baselines?
- Who should be responsible for ensuring the validity of the baseline?
- How regularly should baselines be reviewed?

3. Additionality

- How can environmental additionality be ensured?
- How can financial additionality be ensured?

4. Share of proceeds

- On what basis should the share of proceeds be calculated?
- What portion should be allocated to administrative expenses and adaptation?
- What criteria could be used for the allocation of means for adaptation? How should these criteria be developed?

5. Institutional arrangements

The identity, role, funding, appointment, accountability, etc. of the Executive Board and Operational Entities are important for the operation of the CDM.

- Could validation and certification be carried out by the same operational entity?

6. Sustainable Development

- How can the CDM assist in achieving sustainable development?
- How can capacity building be furthered by the CDM?

7. Project Sector Eligibility

- Which project sectors will be eligible for CDM projects?

**SUBMISSION BY GERMANY ON BEHALF OF THE EUROPEAN
COMMUNITY, ITS MEMBER STATES AND BULGARIA, CROATIA,
CZECH REPUBLIC, ESTONIA, HUNGARY, LATVIA, LITHUANIA,
POLAND, SLOVAK REPUBLIC AND SLOVENIA
ON**

EMISSIONS TRADING (ART. 17 KP)

With the Buenos Aires Plan of Action, COP4 decided on a work programme on the mechanisms with a view to taking a decision at COP6. According to Article 17 of the Kyoto Protocol (KP) the Conference of the Parties (COP) shall define the relevant principles, modalities, rules and guidelines, in particular for verification, reporting and accountability for emissions trading.

In addition to previous position papers tabled, the European Community, its Member States and Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic and Slovenia have prepared a revised first proposal on principles, modalities, rules and guidelines for emission trading hoping that it can serve as an input for the discussion amongst all Parties.

The EU and the above Parties recall their position that a concrete ceiling on the use of the Kyoto mechanisms should be defined in quantitative and qualitative terms based on equitable criteria. In the view of the EU and the above Parties, a properly defined ceiling will encourage Annex B Parties to develop strong domestic policies and measures in order to modify long term emission trends, the technological structure, especially long-lived infrastructure, and production and consumption patterns. Thereby it will also contribute to preparing the path for more ambitious commitments in the second and subsequent commitment periods. Such a ceiling should also contribute to limiting the displacement of domestic action by "hot air".

The above Parties recognise that there are different ways of approaching the definition of complementarity, taking into account inter alia the uncertainty that still exists on the structure of the Kyoto mechanisms. In order to provide a basis for further negotiations with other Parties whom we urge to join us in this endeavour, we propose a definition for such a ceiling in para 2 of this submission.

The proposal from the above Parties on principles, modalities, rules and guidelines for emission trading does not yet cover all of the issues that we believe need to be addressed. We suggest that those questions dealing monitoring, verification and accountability as well as national registries could be elaborated on in an appendix to these principles, modalities, rules and guidelines.

Different options for compliance provisions are mentioned in para 10 of this paper. We note that those options are not mutually exclusive and look forward to discussing them with other Parties. Other issues that we would like to discuss are included.

Draft principles, modalities, rules and guidelines for emissions trading

Para 1

The following principles, rules, modalities and guidelines apply for any acquisitions or transfers of parts of assigned amounts under Art. 17 of the Kyoto Protocol (KP).

Para 2 Supplementarity

Net acquisitions by an Annex B Party for all three Kyoto mechanisms together must not exceed the higher of the following alternatives:

5 % of: $\frac{\text{its base year}^1 \text{ emissions multiplied by 5 plus its assigned amount}^2}{2}$,

or

50% of: the difference between its annual actual emissions in any year of the period from 1994 to 2002, multiplied by 5, and its assigned amount.

Net transfers by an Annex B Party for all three Kyoto mechanisms together must not exceed:

5% of: $\frac{\text{its base year}^1 \text{ emissions multiplied by 5 plus its assigned amount}}{2}$.

However, the ceiling on net acquisitions and on net transfers can be increased to the extent that an Annex B Party achieves emission reductions larger than the relevant ceiling in the commitment period through domestic action undertaken after 1993, if demonstrated by the Party in a verifiable manner and subject to the expert review process to be developed under Article 8 of the Kyoto Protocol.

Para 3 Environmental effectiveness

Emissions trading shall contribute to the achievement of real and verifiable environmental benefits and cost-effectiveness. It should not lead to overall emissions reductions being lower than would otherwise be the case.

Para 4 Eligibility of Parties to participate in emissions trading

A Party included in Annex B shall be eligible to transfer or acquire any part of an assigned amount under the provisions of Art. 17 KP, if the Party:

- a) has ratified the KP,
- b) is bound by a compliance regime adopted by COP/MOP,
- c) has not been excluded from participation in emissions trading according to the procedures and mechanisms under the compliance regime mentioned above,
- d) is in compliance with the provisions of Art. 5 and 7 KP and Art. 12 UNFCCC.

¹ or average annual emissions in the base period as provided for in Article 3 paragraph 5 of the Kyoto Protocol.

² As defined in Article 3 of the Kyoto Protocol.

Para 5 Authorisation of legal entities

1. A Party included in Annex B may authorise legal entities to participate in emissions trading under its responsibility, in accordance with the rules set out in paras 6 to 10 below, if the Party:

a) is in compliance with the provisions of para 4 above,

b) has established and maintains a national system for accurate monitoring, verification, accountability and allocation of parts of assigned amount to any legal entity it chooses to authorise. Guidelines on the establishment, maintenance and international compatibility of these national systems are included in Appendix A to these principles, modalities, rules and guidelines.

2. Participation of legal entities in emissions trading under Art. 17 KP does not affect the responsibility of the Parties included in Annex B for the fulfilment of their commitments under the KP.

Para 6 Definition of parts of assigned amount

1. Transfers and acquisitions of any part of an assigned amount (PAA) by a Party or legal entity that the Party has authorised to participate under its responsibility, shall be denominated in units of one metric ton of carbon dioxide equivalent calculated using the global warming potentials defined by decision 2/CP.3 or as subsequently revised in accordance with Art. 5 KP.

2. Each PAA unit shall be identified by a unique serial number that indicates its Party of origin and its associated commitment period.

3. An invalidated PAA unit, as referred to in para 11 below, cannot be used to meet any Party's commitment under Art. 3 KP, and cannot be further transferred or acquired.

Para 7 Registries

1. Any Party included in Annex B participating in emissions trading under Art. 17 KP or authorising any legal entity to participate in emissions trading under the provisions of para 5 above, shall establish and maintain a national registry which accurately records all holdings, transfers, and acquisitions of any part of an assigned amount by the Party and its authorised legal entities. Information maintained in such a national registry shall be publicly accessible.

2. Guidelines on the establishment, maintenance and international compatibility of national registries are included in Appendix B to this text.

Para 8 Market mechanisms and Transparency

1. Transfers and acquisitions of part of an assigned amount between Parties may take place through an exchange. This exchange shall also be open to legal entities.

2. Any Party wishing to transfer or acquire any part of an assigned amount must publish the amount to be transferred prior to the transfer.

3. The UNFCCC Secretariat shall make information on the Parties that are eligible to participate in international trade publicly available. Each Party shall maintain a record of names and contact details of authorised legal entities within its jurisdiction that it authorises to trade, and such information shall be made available both to the UNFCCC Secretariat and to the public.

[...]

Para 9 Reporting

1. Any Party participating in emissions trading under Art. 17 KP, or authorising any legal entity to participate in emissions trading under the provisions of para 5 above, shall include in its inventory to be submitted to the Secretariat under Art. 7.1 KP, information on any part of an assigned amount added to or removed from its national registry during the relevant year, including the serial number for each unit and the Party to which it was transferred or from which it was acquired.

2. The Secretariat shall include information submitted under para 9.1 above in its annual compilation and accounting of emissions inventories and assigned amounts under Art. 8 KP.

[...]

Para 10 Implementation

If a question of implementation by a Party included in Annex B of the requirements referred to in these principles, modalities, rules and guidelines is identified in accordance with the relevant provisions of Art. 8 KP, transfers and acquisitions of parts of assigned amount may continue to be made after the question has been identified provided that such parts of assigned amount may not be used by a Party to meet its commitments under Art. 3 KP until any issue of compliance has been resolved in favour of the Party in question.

Para 11 Options for liability and compliance

Option 1 - Shared liability

If a Party is found to be in non compliance with its commitments under Art. 3 KP, a portion [x%] of any of its assigned amount that has been transferred to other Parties under the provisions of Art. 17 KP, shall be invalidated and cannot be used for the purpose of meeting commitments under Art. 3 KP or further traded. [The portion [x%] to be invalidated shall be some multiple of the degree of non-compliance. The degree of non-compliance is the percentage difference between emissions in the commitment period and assigned amount.]

Option 2 - compliance reserve

A portion [x%] of every transfer under Art. 17 KP shall be placed in a compliance reserve in which event the units may not be used or traded. The Secretariat, as part of the annual compilation and accounting of emissions inventories and assigned amounts under Art. 8 KP, shall include a report of the units deposited in the compliance reserve. At the end of the commitment period, such units shall be returned to the Party of origin if that Party is in compliance with its commitments under Art. 3 KP, in which case the units can be transferred or banked for future commitment periods. If at the end of the commitment period a Party is not in compliance with its commitments under Art. 3 KP an appropriate number of units

deposited in the reserve account shall be invalidated in which case they may not be further used or traded.

Option 3 - "Trigger"

If a question is raised on a Party's compliance with its commitments under Art. 3 KP and the Party is subsequently found to be in non compliance, any part of its assigned amount that has been transferred to other Parties under the provisions of Art. 17 KP after the point in time at which the question was raised shall be invalidated and cannot be used for the purpose of meeting commitments under Art. 3 KP, or further traded. Such questions can only be raised in particular circumstances to be defined.

[...]

Para 12 Review of these principles, modalities, rules and guidelines

1. The COP shall review the principles, modalities, rules and guidelines governing the operation of the emissions trading system, as set out in paras 1-11 above. The first review shall be carried out no later than the year 2012. Further reviews shall be carried out periodically thereafter.
2. Changes in principles, modalities, rules and guidelines shall take effect in commitment periods subsequent to that of their adoption. Changes in Parties' eligibility to trade or changes pertaining to new entrants that meet the eligibility criteria may occur during the current commitment period.

Appendix A

Guidelines on the establishment, maintenance and international compatibility of national systems : *to be elaborated*

Appendix B

Guidelines on the establishment, maintenance and international compatibility of national registries: *to be elaborated*

Further points for discussion

This proposal does not cover all of the issues that the EU and Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Republic and Slovenia believe need to be addressed. We are looking forward to a fruitful discussion also on the following questions.

1. How can environmental effectiveness be ensured ?
2. How can transparency, accessibility and verifiability be ensured ?
3. Should parts of the assigned amount units be retired annually ?
4. How can emissions trading serve as an incentive for compliance ?

U.S. INTERVENTION ON THE KYOTO MECHANISMS
SBSTA/SBI 10
1 June 1999

Mr. Chairman, the United States appreciates the opportunity, at the beginning of our discussion on the Kyoto mechanisms, to make general observations on the mechanisms contained in various provisions of the Protocol text, including Articles 4, 6, 12, and 17. These mechanisms are integral to achieving the environmental benefits of the Kyoto Protocol. We look forward to the discussion of crosscutting issues to frame our work and help us make progress on the mechanisms. I would like to make five principal points.

First, the United States recognizes the need for domestic action against climate change and the strength of feeling many Parties hold in this regard. The U.S. is in fact already taking substantial action at home:

1. Our Climate Change Technology Initiative – combining both voluntary and regulatory initiatives – is significantly reducing the trajectory of U.S. greenhouse gas emissions. Last year we won a 25% increase in funding for expanded technology deployment programs and for programs to develop the next generation of high-efficiency automobiles, electric power technologies, and clean industries.
2. This year the President's budget renews proposals to nearly double existing climate technology programs, adding tax incentives for deployment of key climate-friendly technologies.
3. All across America, we are seeing new initiatives at all levels of government to change the patterns of suburban sprawl in ways that promise to significantly change trends in greenhouse gas emissions from transportation.
4. As we carry out existing laws, we are taking advantage of synergies among pollutants whenever we can. For example, a single regulation issued by the U.S. EPA a little over a year ago to curb the smog-causing emissions from landfills will also cut methane emissions each year equal to the greenhouse gas output of more than 20 million cars.
5. Finally, the President has proposed to put in place by 2008 the kind of cap-and-trade program for greenhouse gases that has worked so well against other air pollution problems in our country.

In short, we are committed to taking much more action at home – *if* we stay on the path charted at Kyoto and move forward under the agreed framework of ambitious targets and flexible implementation mechanisms. This brings me to my second point.

At the outset of our discussions it is important to remind ourselves of the integral linkage between the full implementation of all of the Kyoto mechanisms and the achievability of the ambitious Annex B targets that we adopted in Kyoto. Those targets are indeed ambitious and a serious initial commitment to protection of our climate system. In our case, our target of 7% reduction below 1990 levels requires more than a 30% reduction in greenhouse gas emissions below the levels otherwise expected during the 2008-2012 period.

To be sure, the targets included in the Protocol for the first commitment period are only a first step in a process that will require much more from Annex B, and from the entire global community, during the coming century. But that does not take away from the ambitiousness of what we have set for ourselves as the first step. And we must be careful not to stumble in taking even this first step.

In Kyoto, there was a recognition that the targets agreed to in Annex B would require the full and timely availability of all of the Kyoto mechanisms. This is as true today as it was in Kyoto. In this regard the U.S. regrets the proposal of the EU to place a quantitative and qualitative cap on those mechanisms.

We agreed in Kyoto to a *package deal* that couples ambitious targets with the implementation flexibility provided by the Kyoto mechanisms. In our view, the EU proposal would reopen and unbalance the package of ambitious commitments and flexible implementation that we all agreed to in Kyoto –

1. By placing artificial ceilings on how much “assigned amount” Parties may acquire through the mechanisms, and
2. By effectively reopening and diminishing the targets of other Parties.

Moreover, the EU proposal reflects a clear double standard in how it applies to the EU and to others. If these cap proposals go forward, they will hurt all Parties and they will hurt the environment. Developing countries would be particular losers, since the restrictions would force a sharp reduction in new private-sector resources for sustainable development through the CDM.

Third, I want to emphasize the great importance the United States places on assuring rigorous emissions measurement, airtight accounting, and strong compliance provisions. These are provisions needed for all Parties, whether or not they use the Kyoto mechanisms, and they are areas where our countries share a strong common interest.

We have made significant progress on these issues since we met last year:

1. A very constructive process is underway under the IPCC to improve measurement methods for all gases and sources.
2. Views are converging on computerized systems for rigorously tracking and reporting every Party’s assigned amount.
3. A very positive process is getting underway to develop an appropriate compliance regime, and

4. A successful UNFCCC workshop has been held on mechanisms that provided expert advice on all the mechanism issues including the development of baselines associated with Article 6 and 12 projects.

Progress in these areas will go a long way to assure that the mechanisms will function in an accountable manner. Many of these issues are primarily technical issues. They will continue to need our focused attention, but they pose no insurmountable obstacles. On all of these issues, we are in a position to make real progress by COP-5 later this year, and to complete the needed rules and guidance at COP-6.

Fourth, we believe it is important to draw out the similarities between Articles 4 and 17. Under the Kyoto Protocol, each Annex B Party is taking on a commitment under Article 3 to cap its emissions at a particular level, taking into account its differentiated circumstances, and to measure and report on its total emissions. Taken together, the Parties' individual commitments will reduce their overall emissions in 2008-2012 by at least 5 percent below 1990 levels.

Within this framework, Article 4 allows a group of Parties to reallocate their individual Article 3 commitments while keeping the aggregate of those commitments unchanged. Likewise, Article 17 allows individual Parties to reallocate their Article 3 commitments while keeping the aggregate of those commitments the same.

The main difference between Articles 4 and 17 is that under Article 4 the reallocation of Article 3 commitments occurs up front through one set of nation-to-nation transfers and acquisitions of assigned amounts, while under Article 17 the reallocation occurs through individual transfers and acquisitions over the course of the commitment period.

Given these similarities, it seems appropriate to have similar approaches to verifying actions taken by countries using these two mechanisms. Likewise, it seems appropriate to have similar approaches to the consequences that come into play in case of a failure to meet Article 3 commitments. What seems particularly inappropriate is to have restrictions on one mechanism that do not apply to the other.

Fifth, the U.S. believes that review and verification are critical to insure the environmental credibility of each of the mechanisms, but their application may differ. In the case of Articles 4 and 17, review and verification procedures are based on the integrity of inventories and the transparency and completeness of reporting under Articles 5 and 7. Consequently, for Articles 4 and 17, review and verification activities must be focused on overall performance at the national level. In fact, these are fundamentals needed by all Parties that are subject to targets, whether they use the mechanisms or not.

The CDM, on the other hand, is designed to promote climate-friendly projects in Parties that do not have either Annex B targets or Article 5 and 7 obligations. Review and verification procedures for Article 12 are based on the use of specialized institutions, the Executive Board and operational entities, and the development of project-based

guidelines and procedures that insure the environmental additionality of each and every project. While these project procedures may take different forms, for example, developing baselines project-by-project or through more standardized approaches, the integrity of CDM involves thorough reviews at all institutional levels from operational entities, to the Executive Board and ultimately by the COP/MOP.

Article 6 projects, which occur only among Annex B Parties, are somewhat of a hybrid. Article 6 requires the investor Party to be in compliance with Articles 5 and 7. Article 6 projects, moreover, take place in the context of national targets. Each transfer of credits under Article 6 must be accompanied by a transfer of assigned amount. This should give the transferring Party an incentive to ensure that any ERUs transferred correspond to actual emission reductions. In meeting their estimation and reporting requirements both Parties to a JI project would provide transparency while ensuring that the transfer of ERUs does not compromise environmental integrity. Further consideration should be given to how to evaluate project-level additionality in the case where both Parties do meet their inventory and reporting requirements. In any case, the procedures and requirements for JI should be built recognizing its unique character.

Mr. Chairman, the United States is eager to produce as much technical progress as possible on the mechanisms at this meeting. In this regard we welcome the procedure suggested by the Secretariat for further work at this session. We note however that the discussions of registries and liability issues should not be confined to emissions trading. With this modification in mind, we look forward to a cooperative discussion.

In summary, Mr. Chairman, the Kyoto Mechanisms have similarities and differences in their implementation, but in each case the procedures for insuring their environmental credibility will be applied differently. That is not a bad thing -- it is an opportunity to achieve the maximum environmental benefit by creating incentives to involve the participation of all Parties, local and regional governments, the business community and NGOs. Our challenge is to grab this opportunity to create innovative mechanisms that will allow us to achieve what we all seek -- the greatest environmental result.

Thank you, Mr. Chairman.

**INITIAL VIEWS OF THE G77 AND CHINA ON PROCEDURES AND MECHANISMS
RELATING TO COMPLIANCE UNDER THE KYOTO PROTOCOL**

The Group of G77 and China has identified the following elements relevant to procedures and mechanism relating to compliance under the Kyoto Protocol. These represent the initial views of the Group on this matter and will be developed further as discussions evolve. The list of questions attached hereto, in addition to those compiled by the Secretariat, will be a useful tool in the preparation of further submissions. It is envisaged that such submissions made by members of the Group of G77 and China on the basis hereof would aid the Group to further develop its position on procedures and mechanisms relating to compliance.

ELEMENTS

Elements that need to be taken into account in the development of a compliance regime are, *inter alia* –

- The objective of the compliance regime should be in line with the objective of the Convention and should as a first priority aim at ensuring that the emission reduction commitments are met by Annex B Parties. ✓
- A comprehensive, strong, efficient and effective compliance system is of vital importance for the successful implementation of the Kyoto Protocol and is therefore imperative for the credibility and integrity of the processes to be developed under the Protocol. ✓
- In line with the provisions of the Convention and the Protocol the principle of common but differentiated responsibility is regarded as a corner stone in the design and implementation of the compliance regime. –
- In the design of the compliance regime due cognizance should be given to the principle of the need for adequate and effective national compliance regimes and enforcement measures in Annex B Parties and how these can support and strengthen the international regime. ^{idea} idea ✓
policies –
- The adoption of legally binding and quantified commitments and the introduction of the Kyoto Protocol mechanisms make the development of non-compliance procedures imperative. 0
- The Protocol must be assessed in its totality with a view to identify the essential elements and tools for anticipating, preventing, identifying and responding to non-compliance. ?
- Compliance rules, procedures and institutions should be such that it would enable the climate change regime to anticipate, prevent, identify and respond to situations of non-compliance. ✓
- The procedures and mechanisms should be effective, fair and equitable and operate in a transparent, timely and efficient manner. ✓
- Aspects to be considered in the development of the compliance regime are the need for, *inter alia* –
 - the elaboration of relevant principles, modalities and guidelines for the verification, reporting and accountability under the Protocol's mechanisms; ✓
 - the potential application to the Protocol of any MCP adopted under the Convention; 0

- 2
- a critical evaluation of the Convention and the Protocol's financial mechanism as a means of assessing both the obligations of Annex I Parties, and the adequacy of the mechanism in assisting non-Annex I Parties to comply with the Protocol.

- 06.11
"6" info
page
- Only Parties that are in compliance with their obligations and are bound by a compliance regime should be allowed to participate in the Kyoto Protocol mechanisms.

- Binding consequences for non-compliance are essential. This will enhance the Parties collective ability to deter non-compliance.

- ✓ • Consequences resulting from non-compliance should be proportional and responsive to the case at hand.

- • In dealing with cases of non-compliance, facilitative as well as enforcement measures should be employed.

- o • It may be desirable to identify cases and/or activities that may constitute non-compliance.

- o • An indicative list of non-compliance consequences, depending on the cause, type, degree and frequency of non-compliance should be devised. These could include *inter alia* –

- Appropriate assistance, including technical and financial expertise and capacity building;
- Issuing cautions;
- Suspension of rights, including ability to participate in Article 6, 12 and 17;
- Penalties, including financial penalties for Annex B Parties.

- • Financial penalties resulting from a non-compliance procedure should be made available to meet the cost of adaptation.

- ✓ • If necessary, an appropriate institution or body may be required to consider each case of non-compliance. Relevant procedures and the review process will need to be determined. The application of the principle of due process should be fully taken into account. The constitution of such an institution or body shall be based on the principle of equitable geographical representation.

- o • The benefits of establishing procedures for imposing automatic consequences in certain circumstances to cases of non-compliance should be explored.

- The compliance regime will be essential to strengthen the domestic and regional arrangements of Annex B Parties.

LIST OF QUESTIONS RELATED TO A COMPLIANCE SYSTEM

Note: These questions are submitted to be used in addition to the list of questions in Annex III of the Non-Paper by the Secretariat.

1. What should be the principles that guide the development of the procedures and mechanisms to implement Article 18 of the Kyoto Protocol?
2. What procedures and mechanisms under Article 18 entail binding consequences? What are the implications of "binding consequences" *vis-à-vis* other consequences of non-compliance, and the amendment of the Protocol?
3. Should procedures and mechanisms "entailing binding consequences" be adopted concerning non-compliance with respect to:
 - a) "Guidelines" for the national systems for estimating emissions of greenhouse gases and removals by sinks, which may be established pursuant to Article 5.1; or "guidelines" for the implementation of Article 6, as provided for in Article 6.2; or "guidelines" for the reporting of certain information in national communications, as provided for in Article 7.4?
 - b) "Modalities, rules and guidelines" adopted pursuant to Article 3.4, concerning how, and which, additional categories of sinks may be added to those contained in Article 3.3?
 - c) "Modalities and procedures" concerning the Clean Development Mechanisms, which may be adopted pursuant to Article 12.7?
 - d) "Principles, modalities, rules and guidelines" concerning emissions trading, which may be adopted pursuant to Article 17?
5. The expert review teams contemplated by Article 8 of the Kyoto Protocol review "information submitted under Article 7 by each Party included in Annex I." In this regard -
 - a) Should we integrate the requirements of Articles 8.3 and 8.5 with the procedures that may be developed to implement Articles 18, 16, and 19? If so, how?
 - b) Although the expert review teams may provide information relevant to whether an Annex I Party is at risk of non-compliance or may not be in compliance, do the teams have authority to make any determination (initial, provisional, or otherwise) that such Party is in non-compliance?
 - c) If the report of the review team (issued after the end of a commitment period of an Annex I Party) does not indicate non-compliance by the Annex I Party with its emissions limitation/reduction commitment under Article 3 of the Protocol, does that preclude any Party from being able to raise an issue of non-compliance?
 - d) Should a review team possess authority to initiate, by its own determination, a procedure adopted pursuant to Article 18 that could result in binding consequences to a Party?
 - e) Should a review team possess authority to initiate, by its own determination, a procedure that may be developed to implement Article 16?
6. Should the idea of "automatic" penalties be used? If so, in what cases?
7. Should financial penalties be used? If so, in what cases? Elaborate, including a description of how and for what purposes the proceeds of financial penalties should be used.

STATEMENT BY GERMANY
ON BEHALF OF THE EUROPEAN
COMMUNITY AND ITS MEMBER STATES



Bonn, 31 May - 11 June 1999

SBI 10 - Agenda item 6
SBSTA 10 - Agenda item 10

MATTERS RELATING TO COMPLIANCE UNDER THE KYOTO PROTOCOL

Germany, on behalf of the European Community and its Member States welcomes the submissions from other Parties on matters relating to compliance under the Kyoto Protocol. We would also like to thank the secretariat for preparing a working document that includes a synthesis of the various submissions in order to facilitate the discussion in the Joint Working Group. Both the submissions and the working document provide an excellent basis for further discussion and for the development of an effective compliance system as a prerequisite for the successful implementation of the Protocol.

In two submissions, the EU expressed its views on several issues relating to compliance. We are convinced that a comprehensive, coherent, unified, strong, efficient and effective compliance system is essential for the successful implementation and application of the Kyoto Protocol. We appreciate the opportunity to provide further thoughts and to have a detailed discussion on that matter.

1. The EU believes that the primary objective of any compliance system should be the prevention of cases of non-compliance from arising. Any compliance system should thus have as a main objective to help Parties fulfil their obligations under the Protocol.
2. However, we strongly support a compliance system that makes use of both soft and hard measures to ensure the full and timely implementation of the Protocol. Both approaches should be compatible with each other and should take into account the nature of the obligation and the seriousness of breach and should include, where appropriate, elements of automaticity.
3. The EU would wish a compliance system to be operated by an independent Compliance Committee of limited size. The members of the Committee should be experts of recognized competence in relevant fields, such as those of science, socio-economics and law. They should be elected and should serve in their personal capacity.

4. We are of the opinion that any compliance system must take into consideration that the Kyoto Mechanisms play a significant role in implementing the obligations under the Protocol and that the terms of eligibility to make use of the mechanisms should be part of a comprehensive compliance system.
5. The EU believes that the availability of sufficient and reliable data is crucial to address cases of possible non-compliance and that the work of the review teams as described in the Protocol is an essential part of a compliance system.

We consider it necessary to make best use of the limited time available in order to complete the work on a comprehensive compliance system at COP 6. In our view, the Joint Working Group at this session should start by identifying the compliance-related elements under the Protocol and by defining its work programme for the process leading up to COP 6 as well as linkages to the work of other groups. Following this, it should try to develop a common understanding on the objectives and principles of a compliance system and should, time permitting, then start discussing the elements of that system.

We are aware of having offered our views only on some of the relevant issues relating to compliance under the Protocol and look forward to receiving other Parties' views on these issues and on issues which have not been addressed here.

Check against delivery

ENGLISH ONLY

SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE

Tenth session

Bonn, 31 May - 11 June 1999

Agenda item 10

SUBSIDIARY BODY FOR IMPLEMENTATION

Tenth session

Bonn, 31 May - 11 June 1999

Agenda item 6

**REPORT OF THE JOINT WORKING GROUP ON COMPLIANCE
ON ITS WORK DURING THE TENTH SESSIONS OF THE
SUBSIDIARY BODIES**

I. OPENING OF THE MEETINGS

1. The meetings of the joint working group on compliance (JWG) were held at the Hotel Maritim, Bonn from 2 to 10 June 1999. Mr. Espen Ronneberg and Mr. Harald Dovland presided over the meeting.

2. The Co-Chair of the JWG, Mr. Espen Ronneberg, opened the meeting at the first meeting, on 2 June 1999. In welcoming the participants, he recalled that the Conference of the Parties, by its decision 8/CP.4 had established the JWG with the mandate to develop a comprehensive compliance system. He noted that the group had an important task as the compliance system will ensure the credibility of, and confidence in, the Kyoto Protocol. He believed that, despite the complexity of the task, the group should be able to fulfil its task.

3. The JWG agreed to organize its work in the current and subsequent meetings according to the following agenda, with the understanding that it could be modified, if needed, in the future.

1. Opening of the meetings.
2. Procedures and mechanisms relating to compliance under the Kyoto Protocol:
 - (a) Identification of compliance-related elements, including gaps and suitable forums to address them;

- (b) Design of a compliance system;
 - (c) Consequences of non-compliance;
 - (d) Other elements as identified in decision 8/CP.4 and in the progress of work.
3. Work programme.
 4. Report on progress to the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI).
 5. Other matters.

II. PROCEDURES AND MECHANISMS RELATING TO COMPLIANCE UNDER THE KYOTO PROTOCOL

(Agenda item 2)

Proceedings

4. The JWG had an initial exchange of views on procedures and mechanisms relating to compliance under the Kyoto Protocol, which will be further elaborated, taking into account all submissions from Parties.

Conclusions

5. The JWG discussed compliance-related elements in the Kyoto Protocol in light of substantive rules, procedures for addressing compliance and the consequences of non-compliance. Regarding substantive rules, it was felt that different types of obligations and rules need to be taken into account in designing a comprehensive compliance system. With respect to procedures, it identified Articles 8, 16, 18 and 19 of the Kyoto Protocol as providing elements for the procedures to address compliance issues, but additional procedures may be needed. It noted that further work is needed to design the consequences of non-compliance.
6. The JWG noted that its work is closely linked to that on Articles 5, 7 and 8 as well as the mechanisms in Articles 6, 12 and 17 of the Kyoto Protocol. The JWG needs to follow the development of this work and exchange information with the bodies or groups working on those issues. The Co-Chairs of the JWG could inform the other groups of its work at the joint meeting of the SBI and SBSTA, and address some common issues.
7. The JWG considered that the objectives of a compliance system, consistent with the objectives of the Kyoto Protocol, could be to facilitate compliance, prevent non-compliance or disputes from arising and promote compliance through cooperative means, such as providing advice to Parties. It was indicated that facilitative and enforcement measures could be applied in a balanced way. Views were expressed that the objective of a compliance system could be in line with the objective of the Convention and could as a first priority aim at ensuring that the emission reduction commitments are met by Annex B Parties. Views

were also expressed about the principle of common but differentiated responsibility as an element in the design and implementation of a compliance system under the Kyoto Protocol.

8. The characteristics of a compliance system were discussed. The range of views expressed included that the system could be strong, coherent, unified, comprehensive, fair and equitable, efficient, credible and transparent; be based on reasonable certainty and due process; and respond to different types of obligations. It was also pointed out that domestic compliance systems could be an efficient means of preventing non-compliance from arising at the international level.

9. With regard to institutional issues in the design of a compliance procedure under the Kyoto Protocol, a number of elements were mentioned, including:

- (a) Coverage and application;
- (b) How this procedure would be triggered;
- (c) Whether an ad hoc or standing body should be established;
- (d) Function and mandate;
- (e) Composition and expertise.

10. Different views were expressed as to whether the procedure could operate through one body or more than one body. Concerns were raised about combining the function of facilitation and adjudication in a single body. It was mentioned, for example, that the multilateral consultative process under the Convention, modified if necessary, could be applied to the Kyoto Protocol. Questions were raised concerning the conclusions of the body or bodies that may be established under the procedure, for example, whether such conclusions would be final or whether appeals would be allowed, and the relationship between a body set up under this procedure and the other bodies of the Kyoto Protocol.

11. The consequences of non-compliance were also addressed. It was pointed out that incentives and sanctions could be imposed in a graduated manner, proportionate to the nature of the obligation and seriousness of the breach, taking into account the cause, type, degree and frequency of non-compliance. It was mentioned that financial penalties resulting from non-compliance could be made available to meet costs of adaption. Views were also expressed that a degree of automatic linkage between certain types of non-compliance and binding consequences may need to be established.

III. WORK PROGRAMME

(Agenda item 3)

Conclusions

12. The JWG, having considered a proposal by its Co-Chairs, adopted the following work programme:

- (a) The work of the JWG during the eleventh session of the subsidiary bodies will be organized according to the agenda contained in paragraph 3 of this document, on the

understanding that additional items, if needed, could be taken up at any time in the future;

(b) The JWG invited Parties to make submissions to the secretariat in response to questions related to a compliance system contained in annex I to this document, by 1 August 1999, to be made available by the secretariat in a miscellaneous document. Parties may also wish to address additional issues raised in decision 8/CP.4 to the extent that those issues are not otherwise covered in their previous submissions;

(c) The JWG requested the Co-Chairs, supported by the secretariat, to produce a synthesis of all proposals by Parties to update the non-paper prepared by the secretariat for the consultation on 31 May 1999 and include elements related to a compliance system under the Protocol, for consideration by the JWG at its next meeting. The JWG noted that this document would be available as a late submission for its work during the eleventh session of the subsidiary bodies;

(d) An informal exchange of views and information will be organized early in October 1999 by the Co-Chairs of the JWG, with the assistance of the secretariat, based on the agenda contained in annex II to this document and guided by the views expressed by the Parties during the tenth sessions of the subsidiary bodies. The purpose will be an informal exchange of views and information, including an exchange of information related to experience in other conventions to help Parties obtain a better understanding of a compliance system needed under the Kyoto Protocol, bearing in mind that this workshop will not be a forum for negotiation. The Co-Chairs will make an informal factual report, with no recommendation, on this workshop to the JWG at the eleventh sessions of the subsidiary bodies. This workshop will be open to Parties and observers under rules 6 and 7 of the draft rules of procedure, as applied (see FCCC/CP/1996/2), taking into account the importance of participation of the developing country Parties. Such participation by the developing country Parties should be facilitated to the extent possible. The JWG urged all Parties in a position to do so to make voluntary contributions for this purpose.

(e) The JWG agreed that a workshop on matters related to a compliance system under the Kyoto Protocol is needed after COP 5 between the eleventh and twelfth sessions of the subsidiary bodies. The JWG noted that the secretariat would assess its capacity to carry out the activities requested in the light of the programme budget for 2000-2001 to be recommended by the SBI for approval by COP 5 and of the overall calendar of meetings and workshops.

IV. REPORT ON PROGRESS TO THE SUBSIDIARY BODY FOR SCIENTIFIC AND TECHNOLOGICAL ADVICE AND THE SUBSIDIARY BODY FOR IMPLEMENTATION

(Agenda item 4)

13. The JWG considered and adopted the draft report on its work. The JWG requested the Co-Chairs, with the assistance of the secretariat to complete the report, taking into account the discussions of the JWG, as well as the need for editorial changes.

V. OTHER MATTERS
(Agenda item 5)

14. No other matters were raised by Parties under this agenda item.
15. The Co-Chairs, after thanking all participants for their constructive cooperation, declared the meetings of the JWG closed.

Annex I

**QUESTIONS RELATED TO A COMPLIANCE SYSTEM
UNDER THE KYOTO PROTOCOL**

General issues

1. What should be the objectives and nature of a compliance system?
2. What should be the principles that guide the development of the procedures and mechanisms to implement Article 18 of the Kyoto Protocol?
3. What types of issue should be addressed under this procedure?
4. How might this procedure differentiate between the timing and character of various commitments under the Protocol?
5. Should procedures and mechanisms "entailing binding consequences" be adopted concerning non-compliance with respect to:
 - (a) "Guidelines" for the national systems for estimating emissions of greenhouse gases and removals by sinks, which may be established pursuant to Article 5.1; or "guidelines" for the implementation of Article 6, as provided for in Article 6.2; or "guidelines" for the reporting of certain information in national communications, as provided for in Article 7.4?
 - (b) "Modalities, rules and guidelines" adopted pursuant to Article 3.4, concerning how, and which, additional categories of sinks may be added to those contained in Article 3.3?
 - (c) "Modalities and procedures" concerning the clean development mechanisms, which may be adopted pursuant to Article 12.7?
 - (d) "Principles, modalities, rules and guidelines" concerning emissions trading, which may be adopted pursuant to Article 17?
6. Is one integrated procedure sufficient or is more than one procedure needed? Is a separate procedure needed (or sub-procedure within a general procedure) for dealing with compliance elements of the mechanisms in Articles 6, 12 and 17?
7. What should be the relationship between this procedure and (a) the expert review process under Article 8 of the Protocol; (b) any procedures and institution established under Article 13 of the Convention; (c) the procedures under Article 19 of the Protocol?

8. The expert review teams contemplated in Article 8 of the Kyoto Protocol review information submitted under Article 7, by each Party included in Annex I. In this regard:

(a) Should we integrate the requirements of Article 8.3 and 8.5 with the procedures that may be developed to implement Articles 18, 16, and 19? If so, how?

(b) Although the expert review teams may provide information relevant to whether an Annex I Party is at risk of non-compliance or may not be in compliance, do the teams have authority to make any determination (initial, provisional, or otherwise) that such Party is in non-compliance?

(c) If the report of the review team (issued after the end of a commitment period of an Annex I Party) does not indicate non-compliance by the Annex I Party with its emissions limitation and reduction commitment under Article 3 of the Protocol, does that preclude any Party from being able to raise an issue of non-compliance?

(d) Should a review team possess authority to initiate, by its own determination, a procedure adopted pursuant to Article 18 that could result in binding consequences to a Party?

(e) Should a review team possess authority to initiate, by its own determination, a procedure that may be developed to implement Article 16?

Institutional issues

9. Who should be able to initiate a procedure for determining and addressing non-compliance with the Protocol?

10. From what sources may such an institutional arrangement seek, receive or consider information?

11. Should such an institutional arrangements be ad hoc or standing in nature?

12. If it is a standing body, how frequently should it be convened?

13. What should be the size and composition of such an institutional arrangement?

14. What expertise should be required of its members and in what capacity should they serve?

15. What rules of procedure should govern its operations? How could these best ensure due process, and the transparency of its operation?

Issues related to consequences of non-compliance

16. What role should the Protocol's other institutions play in (a) the determination of compliance; (b) the secretariat; (c) the subsidiary bodies; (d) the operating entity of the financial mechanism; (e) the executive board of the clean development mechanism; (f) the COP/MOP.

17. What types of non-compliance should be associated with specific consequences in advance?

18. Should the idea of "automatic" penalties be used? If so, in what cases?

19. Should financial penalties be used? If so, in what cases? Elaborate, including a description of how and for what purposes the proceeds of financial penalties should be used.

20. What role should this procedure or institutional arrangement have in approving or reviewing the operation of any "automatic" non-compliance responses provided by the Protocol or agreed by the COP/MOP?

21. What should be the outcome of the compliance system?

22. What procedures and mechanisms under Article 18 entail binding consequences? What are the implications of "binding consequences" *vis-à-vis* other consequences of non-compliance, and the amendment of the Protocol?

Other issues

23. Any other issues related to a compliance system.

Annex II

Agenda for an informal exchange of views and information

1. Opening of the workshop.
2. Exchange of views and information related to relevant experience in other conventions.
3. Informal exchange of views on compliance.
4. Other matters.
5. Closing of workshop.

Annex I

Draft decision proposed by the Group of 77 and China.*

**Initial and subsequent national communications from Parties
not included in Annex I to the Convention**

The Conference of the Parties

Basing itself on Articles 4.3, 4.7, 12.1 and 10.2 (a) of the Convention,

Reiterating the primary importance of the provision of financial and technical support, and related technology transfer, as a means for capacity-building for the preparations of national communications,

Recalling its decisions on communications from Parties not included in Annex I to the Convention, in particular decisions 10/CP.2, 11/CP.2, 2/CP.4, and 12/CP.4,

Underlining paragraph 1 (d) of decision 11/CP.2 which states that the Global Environment Facility should take into account that the preparation of national communications is a continuing process,

Underlining also the grave concern of non-Annex I Parties that lack of support for post-national communication activities has resulted in serious disruption of the implementation of the Convention at the national level,

Deploring the use of workshops on non-Annex I national communications, outside the UNFCCC secretariat process, for purposes which are not compatible with the Convention and contrary to its decisions,

Decides

On guidelines and guidance,

1. that, until full information on the use of these guidelines by all Parties not included in Annex I is obtained from the compilation and synthesis of initial and second national communications as called for in decision 12/CP.4, and a decision taken by the Conference of the Parties to revise these guidelines, the Guidelines for the preparations of initial national communications by Parties not included in Annex I to the Convention, contained in the

* In order to make these submissions available on electronic systems, including the World Wide Web, these contributions have been electronically scanned and/or retyped. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

Annex to decision 10/CP.2, shall remain valid, together with the guidance given to the Global Environment Facility in decision 11/CP.2;

2. that the use of these guidelines shall be the basis of any workshop on non-Annex I communications to be held for the purpose of responding to the needs of developing countries for the preparations of their national communications;

3. that, as stated in para. 2 (c) of decision 10/CP.2, non-Annex I Parties which wish to submit voluntarily additional information may use elements from the guidelines approved for Parties included in Annex I to the Convention when preparing their initial communications, and that they may likewise do so when preparing their subsequent national communications;

On timing of submissions of non-Annex I national communications

4. that, given the small number of developing countries which have as yet submitted their national communications, and given the provision of Article 12.5 stating that the COP shall take into account the differentiated timetable set by that Article in determining the frequency of subsequent communications, as well as the timing of the submissions of first and second national communications from non-Annex I Parties, timetables for submission of subsequent national communications shall differ for each non-Annex I Party. Full information from the operating entity of the financial mechanism on the effective availability of financial resources to the Party, and the timing of the disbursement of these resources to developing countries for the preparations of their initial and second national communications would be necessary to the determination of each non-Annex I Party's timing of submissions, in accordance with Article 4.3 and Article 12.5 of the Convention;

On financial and technical support

5. that a non-Annex I Group of Experts shall be set up, on the basis of nominations received from Governments of non-Annex I Parties in order to assess the availability of financial resources and technical support, to identify gaps, and also for the purposes of exchange of experiences and information, with the objective of enhancing support to preparations, and identifying the difficulties encountered by developing countries in the use of the guidelines, so as to improve the national communications of non-Annex I countries. This Group shall meet regularly, and be given the necessary resources to do so. Results of their meetings, and any recommendations from this Group shall be taken into account by the Subsidiary Bodies in their deliberations, and for any decisions to be taken by the Conference of the Parties on the national communications from non-Annex I Parties (*see Reference*);

6. that the secretariat shall provide the necessary assistance to convene the meetings of the non-Annex I Experts' Group for non-Annex I communications, in accordance with Article 8.2 (c) of the Convention, and as called for in para. 1 (a) of decision 10/CP.2; and

On matters related to consideration of non-Annex I national communications

7. that, as provided for in para. 2 (b) of decision 10/CP.2, and para. 1 (c) of decision 12/CP.4, any consideration of matters related to their national communications should take into account information on the implementation of Articles 4.1, 4.3, 4.4., 4.5, 4.7, 4.8, 4.9 and 4.10, in the light of the provisions of Article 3;

8. that information as compiled and synthesized by the secretariat on non-Annex I communications as stated in para. 7 of decision 12/CP.4, should be taken with the relevant information provided in Annex I Parties' national communications in order to allow the SBI to consider the information communicated in accordance with Article 12, para. 1 of the FCCC, to assess the overall aggregated effect of the steps taken by the Parties in the light of the latest scientific assessments concerning climate change as provided by the SBSTA in accordance with Article 9.2 (a) of the FCCC;

9. that this compilation and synthesis shall be accomplished along the lines of the guidelines contained in decision 10/CP.2, in particular the information to be given in response to paragraphs 19 to 22 of the Annex to these Guidelines, on the identification of financial and technological needs;

On the review of the enabling activities of the Global Environment Facility

10. that the consistency of these enabling activities with the guidelines for the preparations of initial national communications from Parties not included in Annex I to the Convention, as contained in decision 10/CP.2, and the guidance to the Global Environment Facility as contained in decision 11/CP.2, as well as with previous and subsequent guidance provided by the Conference of the Parties to the Global Environment Facility as an operating entity of the financial mechanism of the Convention, shall be fully examined and demonstrated in the review of the enabling activities of the GEF, and

11. that a report shall be requested from the GEF to the Conference of the Parties on the results of this review.

Reference

NON-ANNEX I EXPERT GROUP

STEERING COMMITTEE

Tasks:

1. Define work plan
2. Meet quarterly
3. Define agendas for the expert group meetings

Members: Regional representations (4 per region)
Annex I experts as observers

4 EXPERT GROUP MEETINGS ALONG THEMATIC LINES

Participation: Experts nominated by Parties and selected (if necessary) by the steering committee

Themes: Greenhouse gas inventory
Vulnerability assessment and adaption options
Abatement issues
Preparation of national communications

Duration: Minimum 7 days

Frequency: Each thematic group would meet once a year

Number: ±50 participants/region

Feedback to the process:

- each thematic meeting would breakdown work in regional working groups
- recommendations and conclusions would be made available to the COP/SBS
- recommendations would have "regional" perspectives/dimensions and where appropriate "global" perspectives

Annex II

**Draft decision proposed by the United Kingdom of Great Britain and Northern Ireland
on behalf of the European Community and its member States ****

**Proposal for a COP 5-Decision on the Consideration of national communications of
Parties not included in Annex I and guidelines for second national communications**

The Conference of the Parties

Noting that the preparation and submission of information under Article 12 of the Convention is an evolving process;

Having undertaken a preliminary consideration of the first compilation and synthesis report of communications from Parties not included in Annex I;

A: On consideration of communications of Parties not included in Annex I

1. *Notes*

- a. with appreciation the wealth of information contained in the national communications and their usefulness in assisting the deliberation of the COP;
- b. the need for further enhancing the quality of information particularly in the following areas [...];
- c. the limited number of communications available for the first compilation and synthesis report

2. *Encourages* Parties not included in Annex I which have not yet done so to submit their initial national communications in accordance with the timetable set out in Art. 12.5 of the Convention.

3. *Requests* the secretariat to prepare a second compilation and synthesis report of communication of Parties not included in Annex I based on communications received by [1st of June 2000] and make that report available to the Subsidiary Bodies at their 13th session and to COP 6.

** In order to make these submissions available on electronic systems, including the World Wide Web, these contributions have been electronically scanned and/or retyped. The secretariat has made every effort to ensure the correct reproduction of the texts as submitted.

4. *Decides*

a. that each initial national communication submitted by Parties not included in Annex I should be technically assessed in a facilitative, non-confrontational, open and transparent manner, on the basis of decision 10/CP.2. The purpose of these assessments is to analyse the information, in accordance with Art. 12.1 of the FCCC, contained in these communications, in order to provide

- the COP with accurate, consistent and relevant information to assist it in carrying out its responsibilities;
- Parties not included in Annex I feedback on ways to improve the quality of subsequent communications, to identify gaps of information required by the guidelines for the initial communications and to identify further needs related to the preparation of communications.

b. that the technical assessments will be organised by the FCCC secretariat and undertaken by technical experts nominated by Parties. [*Details on arrangements, methodology and scope t.b.d.*] The technical assessments may, with the consent of the Parties concerned, include country-visits;

c. that a first report on the technical assessments of communications submitted by 1st January 2000 should be made available by the secretariat to the Subsidiary Bodies at their 12th session;

d. that further details on arrangements, methodology and scope will be decided by the SBI on the basis of experiences gained.

5. *Welcomes* the initiative of the secretariat together with the GEF and its implementing agencies to organise workshops and expert group meetings under the National Communications Support Programme (NCSP) which enable Parties to share experiences and information with experts from other interested Parties and to identify barriers and problems encountered in the preparation of communications.

6. *Decides* that initial communications from Parties not included in Annex I shall be considered, in the first instance, by the COP at its 6th session on the basis of (a) the compilation and synthesis reports and (b) the first report on the technical assessments to be provided by the secretariat

B: On guidelines for the second national communications from Parties not included in Annex I

6. *Affirms* that the guidelines for initial national communications of Parties not included in Annex I, as set out in decision 10/CP.2 and its Annex, remain valid for all such initial communications.

7. *Decides* to adopt at its 6th session guidelines for the second national communications of Parties not included in Annex I.

8. *Requests* the secretariat in cooperation with the GEF to prepare reports for the Subsidiary Bodies at their 12th session

- (a) on the application of guidelines for the preparation of initial national communications from Parties not included in Annex I with a view to further enhancing the accuracy, completeness, comparability and focus of national communications. This report should, *inter alia*, draw upon the information contained in the technical assessments of national communications and the conclusions drawn from the workshops and meetings under the NCSP;
- (b) on the GEF review of the support for initial national communications, in order to facilitate the decision by COP 6 on the guidance to the GEF on the support to national communications of Parties not included in Annex I for the preparation of second national communication, on the basis of the enhanced guidelines decided by COP 6.

9. *Requests* Parties not included in Annex I which are not least developed countries and which have submitted initial national communications to submit an annual greenhouse gas inventory update by the end of April each year.

10. *Welcomes* the steps undertaken by the GEF to operationalize and implement the guidance to the operating entity of the financial mechanism provided by the COP at its 4th session.

11. *Urges* the Intergovernmental Panel on Climate Change (IPCC) Inventory Task Force to give high priority to the development of a work plan to prepare a comprehensive database on emission factors, by region and technology, and to coordinate with the FCCC secretariat regarding this work plan and to report on progress to SBSTA at its 12th session.

12. *Requests* the secretariat to develop a paper on regional priorities for the research and development of emission factors, taking into account any conclusions of the regional workshops, the experiences drawn from the technical assessment of greenhouse gas inventories and inputs from Parties and relevant experts and organisations, and to submit this paper for consideration by SBSTA at its 12th session.

13. *Decides* that, in the interim period until guidelines for second national communications are adopted, and in accordance with decision 2/CP.4, the GEF should provide funding to developing country Parties which have submitted initial communications which have undergone the technical assessment provided for in paragraph 4 above

- for the preparation or, as appropriate, the refinement and the reporting of greenhouse gas inventories;

- for further work on local emission factors in accordance with decision 10/CP.2, paragraph 13, and taking into account the activities described in paragraphs 11 and 12 above;
- for developing country Parties which are particularly vulnerable to the effects of climate change, for activities related to the assessment of vulnerability and adaptation options in accordance with decisions 10/CP.2 and 2/CP.4.

14. *Requests* Parties to submit views on the guidelines and timing for second national communications from Parties not included in Annex I by 31 January 2000.

STATEMENT BY GERMANY
ON BEHALF OF THE EUROPEAN
COMMUNITY AND ITS MEMBER STATES



Bonn, 31 May - 11 June 1999

SBSTA 10 - Agenda item 5

METHODOLOGICAL ISSUES:

(a) Land-use, land-use change and forestry

Germany, on behalf of the European Community and its Member States, expresses its satisfaction concerning the progress which has been made in the work on land-use change and forestry.

The EU thanks the Secretariat for organising, and the government of the USA for hosting, the recent SBSTA workshop in Indianapolis. The EU also thanks the Secretariat for the workshop report in document FCCC/SBSTA/1999/INF.5. The mandate of this second workshop was to concentrate on methodological issues and data needs concerning additional Art. 3.4 activities. Specific proposals were presented and methodological issues were discussed on some additional activities or approaches. The process of deciding on additional activities was also discussed. This workshop as well as the first workshop in Rome have demonstrated the usefulness of direct science-policy dialogue. Being aware of the concerns of policy makers will help the writing teams of the IPCC Special Report on Land-use, Land-use Change and Forestry to focus the work on the most relevant issues.

The EU thanks the secretariat for document FCCC/SBSTA/1999/5 on policy and procedural issues. This document and the related submissions by Parties (FCCC/SBSTA/1999/MISC.2 and FCCC/SBSTA/1999/MISC.2/Add.1) are a good basis to consider decision-making under Art. 3.4. The secretariat's document lists five categories for grouping the key policy and procedural issues, namely: clarification of definitions, eligibility of additional activities, the rules governing the use of activities, inventory and reporting guidelines and other issues. The EU considers this list relevant and helpful. The EU emphasizes that it will only be possible to identify all policy issues associated with Art. 3.3 and 3.4 after the completion of the IPCC Special Report and its consideration by the SBSTA. In the following the EU would like to present some related considerations:

The analyses carried out after Kyoto show that the clear **definition** of terms is crucial. Clear definitions with thorough analyses of their implications are prerequisites for clear decisions. In some countries the Art 3.3 activities can constitute either a sink or a source depending on the choice of the definitions. In-depth analysis of different definitions and their implications is being carried out by the IPCC. The EU has always supported greater consistency in the use of different definitions as well as streamlining different reporting frameworks. There are also benefits related to cost-efficiency and accuracy if existing forest inventories can be used.

The EU notes that the determination of 'human induced' ought to be clarified and defined. The IPCC Special Report is expected to provide valuable information on this difficult issue.

Preliminary discussion on the **eligibility of additional activities** started in Indianapolis, and it should be part of the work between now and COP 6. Criteria for eligibility should be established taking into consideration inter alia the following issues:

- The linkage to national commitments - the incentive for emission limitations and reductions should be maintained.
- The permanency of stocks - sinks are vulnerable to climate change and can reverse in sign. The perspective has to be far beyond one commitment period. Parties should have long-term accountability for increases in carbon stocks they use to meet their commitments during a commitment period. Long-term monitoring of enhanced stocks plays a key role here.
- Linkages to changes in the full carbon stock - it is important to guarantee that sink enhancement resulting from an activity will not lead to depletion of other carbon pools. Similarly, stock changes resulting from Art. 3.4 as well as from Art. 3.3 activities should adequately reflect the direction of changes in all carbon stocks. These are some of the reasons why the EU has emphasized the importance of reporting on all carbon stocks in 1990 and why the EU also welcomes the full carbon stock accounting will be analyzed in the Special Report.
- The associated relative uncertainties should not exceed those related to Art. 3.3 activities.
- Verifiability of data - the EU views that verification relates primarily to changes in carbon stocks. Policies and programmes which lead to changes in carbon stocks should not be accounted for as such. In this regard it would be useful to take experiences with regard to related inventory systems into account.
- Consistency with the other Articles of the Protocol and with the Climate Convention is also important.
- Compatibility with the objectives and implementation of other environmental conventions and the UN forest principles is very important. It also helps guarantee multiple environmental benefits. In this context, the EU recalls its Resolution on a Forestry Strategy and underlines that the role of forests as carbon sinks and reservoirs can be best ensured through sustainable forest management.

There is a great need for country-level data for an adequate analysis of several of the aspects mentioned above, and the same applies to the analysis of the implications of different definitions under Art. 3.3. The EU has pointed to this issue in its submissions. This need was also expressed by some IPCC lead authors at the workshop in Indianapolis. The Secretariat's document contains the task for the Parties to submit technical and scientific information. The EU suggests that countries should also be asked to submit relevant country-level data before a workshop to be convened prior to COP6. Although the IPCC Special Report will officially not be released until May 2000, there will already be some information available about possible additional activities several months earlier, and national data could be produced starting from early 2000 onwards.

There is also a clear need for rules governing the use of activities as well as a need for inventory and reporting guidelines. Some items listed in the secretariat's document related, for example, to inventory and reporting, should be considered also before COP6. The IPCC should be requested to prepare inventory guidelines after the activities and the rules governing their use have been decided on.

The EU generally supports the framework for decision-making as set out in figure 1 of FCCC/SBSTA/1999/5. However, it should be made clear that, according to decision 9/CP.4, the COP can only forward draft decisions for adoption at COP/MOP1 and that COP6 can only do this after the consideration of the IPCC Special Report in the SBSTA. The EU recalls its suggestion of a technical SBSTA workshop before COP6 which might facilitate decisions at COP6. In addition, the EU believes that Parties should be requested to submit preliminary data required by the first sentence of Article 3.4 before SBSTA12. Close cooperation with other environmental conventions and organisations which work on land-use change and forestry issues is also essential.

Check against delivery

GREENPEACE

SBSTA-10 Intervention on Land Use, Land Use Change and Forestry

Thank You Mr. Chairman:

We thank you for the opportunity to address the Parties on this issue, and we express our thanks to the Secretariat for its papers, providing a sound foundation from which to build our discussion. This is an extremely important and complex area of work for SBSTA, and one that should only be engaged with a full understanding of the environmental implications for Land Use, Land Use Change and Forestry Activities over the near and long term. Greenpeace would like to take this opportunity to comment on the following three issues:

- (1) The Process for Considering Policy and Procedural Issue
- (2) The Inputs Required for the IPCC to Produce an Output relevant to a COP6 decision
- (3) The First Sentence of Paragraph 4 of Article 3

- (1) Process for considering policy and procedural issues in relation to LUCF under the Kyoto Protocol.**

The Secretariat's paper in Table 1 outlines a range of issues for a decision at COP6. Greenpeace would like to re-iterate several concerns as to when these issues should be considered by SBSTA.

Most of the issues identified in this Table are necessarily contingent upon the proper consideration of the IPCC Special Report on Land Use, Land Use Change and Forestry. Attempts to consider them before SBSTA 12 could be seen as pre-emptive of the scientific assessment of this issue, which is one of the most complex and far-reaching issues to be dealt with in these negotiations. Specifically, all of the issues in Category A "Clarification of definitions" and Category C "Rules governing the use of approved activities" should be deferred until SBSTA can consider the IPCC Special Report. Only in Category B, "Eligibility of additional activities", are there the items where it would be appropriate to moved forward in a parallel fashion in preparation for consideration of the IPCC Special Report. Specifically, Items 1, 2 and 5 in this category may be considered in relation with the need to conform activities with other provisions of the Convention and the Kyoto Protocol, providing they are not pre-emptive of consideration of the IPCC Special Report on Land Use, Land Use Change and Forestry. For example, the need for policy principals to guide decisions at COP6 such as protection of biological diversity, a permanence requirement and the need to ensure that the capacity to stabilize CO₂ at levels that will prevent dangerous climate change is not compromised could be considered.

One omission from the Secretariat's paper under Category A, "Clarification of definitions", is the consideration of the definitions of a forest, afforestation, reforestation and deforestation. These definitions are quite fundamental, and should be addressed starting at SBSTA 12 after the completion of the IPCC Special Report, with a view to taking decisions on this at COP6.

(2) Inputs required for the IPCC to produce output relevant to effective, science-based decision making by COP6 in relation to Articles 3.3 and 3.4

In relation to the consideration of potential additional activities under Article 3.4 of the Kyoto Protocol, we strongly believe that there is a need for governments to put forward quantitative estimates of fluxes of carbon dioxide and other relevant greenhouse gases relating to activities they wish to have considered. Two kinds of quantitative information are needed. Business as usual, or baseline, estimates for the activities being proposed and estimates of the effects of additional human activities since 1990 are needed.

Quantitative estimates of the additional activities being considered by Governments are needed if the IPCC report is to go beyond generalities in this area. Such quantitative estimates will enable the IPCC to produce a report with a much higher degree of relevance to decisions to be made at COP6 relevant to Article 3.4. Quantitative estimates will also help ensure that the decision making on Article 3.4 is based on a sound scientific assessment rather than supposition and hearsay.

Equally it is important that Parties submit quantitative estimates of the implications of different definitions for forests, afforestation, reforestation and deforestation in relation to Article 3.3.

(1) First sentence of paragraph 4 of Article 3

We note that there are a variety of views on this sentence and how Parties should proceed with operationalizing it. Decisions on this sentence, including methodological decisions as well as scope and timing need to wait for the IPCC Special Report on Land Use, Land Use Change and Forestry to be concluded and considered. Operationalizing this sentence should be contingent on a strong understanding of the scientific implications of different approaches to monitoring carbon fluxes in relation to the attribution and verification of additional activities which may be considered and the relationship between these activities and with Article 3.3 issues. The IPCC should be urged to ensure that full consideration is given to this sentence in relation to its consideration of Article 3.3, Article 3.4 and methodological arising from these Articles.

Thank You Mr. Chairman

STATEMENT BY GERMANY
ON BEHALF OF THE EUROPEAN
COMMUNITY AND ITS MEMBER STATES



Bonn, 31 May - 11 June 1999

SBSTA 10 - Agenda item 5

METHODOLOGICAL ISSUES

(b) Emissions resulting from fuel used for international transportation

Germany, on behalf of the European Community and its Member States, thanks the secretariat for document FCCC/SBSTA/1999/INF.4 on emissions resulting from fuel used for international transportation. The EU recalls decision 2/CP.3 through which SBSTA is urged to further elaborate on the inclusion of emissions based upon fuel sold to ships or aircraft engaged in international transport in the national greenhouse gas inventories of Parties.

The EU believes that any decision on the inclusion of emissions from international bunker fuels in the national inventories of Parties should enter into force in the second commitment period, because such a decision would require a change in the Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories which shall be applied in the first commitment period pursuant to Art. 5 of the Kyoto Protocol and decision 2/CP.3. Therefore Parties should report these emissions separately from national totals in the first commitment period.

Issues related to inventories

The EU notes the difficulties of Annex I Parties in fulfilling the requirement to report the emissions from international bunker fuels separately from national totals which are listed in para. 30 of FCCC/SBSTA/1999/INF.4. The EU sees the need for additional guidance to Parties and welcomes that methodological issues with regard to emissions from international bunker fuels were discussed at the IPCC Expert Group Meeting on Good Practices in Inventory Preparation in Prague in April 1999. The EU urges the IPCC to publish the report of this Expert Group Meeting as soon as possible. In addition, the EU urges the secretariat to publish detailed results of the study mentioned in para. 29 of FCCC/SBSTA/1999/INF.4 as soon as possible, inter alia in order to make available the responses to the questionnaire sent to Parties.

Control options

With regard to control options for emissions from international bunker fuels, the EU urges ICAO and IMO to accelerate their work, whereby ICAO should address the issues raised in the IPCC Special Report on Aviation and the Global Atmosphere. In the view of the EU, the findings of the Special Report underline the need to take further action to limit or reduce emissions from international aviation, e. g. CO₂ and NO_x emissions.

The EU suggests that decisions within ICAO and IMO on policies and measures to limit or reduce emissions from international bunker fuels should be taken urgently. In any case they should be taken well before 2005 when progress will already have to be demonstrated according to Art. 3.2 of the Kyoto Protocol. Therefore the EU urges ICAO and IMO to consider first proposals no later than 2001.

In this context, the EU urges Annex I Parties to pursue work through ICAO and IMO to limit or reduce greenhouse gas emissions. The EU underlines that there can be no environmental justification for a tax exemption for aircraft fuel. Also, other market based options should be considered. In addition, the EU suggests that the issue of control options in these areas should also be addressed in the further work regarding best practices in policies and measures in consultation with the Working Group on Market Based Options of the ICAO Committee on Aviation Environmental Protection (CAEP) which is already pursuing this matter.

Inclusion of emissions from international bunker fuels in the national inventories of Parties (allocation)

The EU believes that the issue of the inclusion of emissions from international bunker fuels in the national inventories of Parties should be solved in due time before the negotiations for the second commitment period, i. e. before 2005. Based on the conclusions of SBSTA4, the EU sees three approaches to proceed, noting that different approaches could be pursued for aviation and marine bunker fuels:

- I. *No inclusion of emissions from international bunker fuels in the national inventories of Parties (this is option 1 in document FCCC/SBSTA/1996/9/Add.1) as in the current situation.*

Limitation or reduction of these emissions would be under the responsibility of the international community, to be pursued through ICAO and IMO. Parties would continue to have no direct responsibility for these emissions and therefore would have no direct incentive to limit or reduce them. This would therefore require a rate of progress along the lines mentioned earlier through ICAO and IMO.

- II. *Inclusion of emissions from international bunker fuels in the national inventory of the Party where the fuel is sold (this is option 3 in document FCCC/SBSTA/1996/9/Add.1).* This option seems to be the most practical option. It should increase the incentives to take action at the international level compared to approach I. Certainly, it would lead to quite considerable changes in emission levels at least for some Annex I Parties. Therefore it would have to be taken into account in agreeing differentiated legally binding commitments for Annex I Parties for the second and future commitment periods. In addition, internationally coordinated instruments inter alia taxes should be in place for Parties to be able to influence the level of emissions.

III. Inclusion according to other methods ; particular options 4 (inclusion in the national inventory of the Party according to the nationality of the transporting company, or to the country where the ship or aircraft is registered, or to the country of the operator), 5 (inclusion in the national inventory of the Party according to the country of departure or destination of the ship or aircraft) or 6 (inclusion in the national inventory of the Party according to the country of departure or destination of passengers or cargo) in document FCCC/SBSTA/1996/9/Add.1.

The EU shares the analysis in para. 34 of FCCC/SBSTA/1999/INF.4 that it might take Parties three to five years to put in place adequate systems to collect and report information on emissions from international bunker fuels for these options in a consistent manner. If one of these options should be pursued, the necessary methodological work would have to be initiated very soon. Similar to approach II, the method for inclusion would have to be taken into account in agreeing differentiated legally binding commitments for Annex B Parties for the second and future commitment periods. The incentives to take action seem to be similar as in approach II.

In this context, the EU urges ICAO to make available the results of the work on the elaboration on decision 2/CP.3 mentioned in para. 23 of FCCC/SBSTA/1999/INF.4 as soon as possible. The EU also urges IMO to work on the elaboration on decision 2/CP.3 and to make available the results of its work.

Finally, the EU would welcome regular progress reports of ICAO and IMO on this agenda item at future SBSTA sessions.

Check against delivery

**INTERVENTION BY THE CHAIR OF THE CLIMATE TECHNOLOGY INITIATIVE
TO THE TENTH SESSION OF SBSTA (BONN, GERMANY, 4 JUNE 1999)**

Thank you Mr. Chairman. In my capacity as Chair of the Climate Technology Initiative -- the CTI-- I am pleased to provide a brief report on the lessons CTI has learned that relate to Decision 4/CP.4. As you know, CTI is an increasingly productive multilateral endeavor whose mission is to promote the objectives of the Framework Convention on Climate Change through facilitating the more rapid development and diffusion of climate-friendly technologies and practices for all activities and greenhouse gases.

Under Decision 4 on Development and Transfer of Technologies taken at the Fourth Conference of the Parties last November in Buenos Aires, Mr. Chairman, you were requested to establish a consultative process to consider an extensive list of issues and questions contained in the annex to this decision. Among others, the issues raised in this decision are: (the need to) Promote bilateral and multilateral technology cooperation to facilitate technology transfer.; (the need to) Promote and assist developing country Parties to access technology information.; and, (the need to) Promote capacity-building in developing country Parties through provision of concrete programs. Among others, the questions posed in this decision are: How should Parties promote the removal of barriers to technology transfer?; What areas should be the focus of capacity building and how should it be undertaken?; and What measures, programs and activities can best help to create an appropriate enabling environment for private sector investment? And, of course, there are many, many more. The consideration of these and the other issues and questions listed in Decision 4/CP.4 presents a daunting task for this body.

I am pleased to report that the CTI has already begun supporting and contributing to this consultative process by providing partial answers to these questions through its results-oriented response to technology transfer under the Framework Convention. This response focuses on addressing the issues raised by Decision 4 through a variety of means, including regional seminars, training courses, cooperative technology assessments, and other related activities, such as Web-based information exchange.

In addition to pursuing medium and longer-term solutions to reducing atmospheric concentrations of greenhouse gases through CTI's support of research and development, the CTI is committed to a series of capacity building and technology enhancing activities designed to develop capability within developing and transition countries so that they can effectively implement environmentally sound technologies consistent with their particular sustainable development goals. One of CTI's results-oriented activities is a series of regional seminars on technology diffusion which CTI holds in coordination with our industry partners. This series is designed to bring together government and private sector decision makers to address the very issues identified in Decision 4 by sharing views on the Framework Convention process, on technology needs and barriers to technology deployment, on climate mitigation strategies, on access to technology information, on the potential for project-based flexibility mechanisms, and on many other issues.

Let me highlight one such seminar held in Victoria Falls, Zimbabwe during mid-March this year at the invitation of, and in cooperation with, the Southern African Development Community (SADC). This CTI/Industry Joint Seminar on Technology Diffusion in Southern Africa brought together an impressive number of Ministers, Deputy Ministers, and other senior officials from 10 of the 14 SADC States. It was sponsored by the U.S. Department of Energy, the U.S. Agency for International Development, the Japan New Energy and Industrial Technology Development Organization, and the United Kingdom Department of Trade and Industry. Proceedings of this event were made available at a special CTI event held from 1PM to 3PM yesterday and are now available at the CTI booth located in the hallway outside this room.

During the course of this two and a half day event in Zimbabwe, ministers and other senior officials from the region, developed country government officials, and financial institution, industry and NGO representatives expressed their views, not only on the importance of technology transfer, but also their heart-felt concerns on achieving it. I believe that the presence of so many ministers from the region who heard from industry about the legal and institutional barriers to the transfer of their technology in the region will begin the process of helping bring these barriers down. Industry was also enlightened as, throughout the seminar, representatives of the SADC states made it clear that they are sensitive to environmental issues, including climate change, while at the same time being highly committed to meeting the three basic needs of life -- shelter, food, and clothing -- and to improving their quality of life. This being the case, moving toward more climate-friendly technologies is viewed as both a challenge and an opportunity. To ensure that the quality of life is not degraded for current and future generations, all countries must position themselves to have increased access to contemporary technologies which are environmentally sound.

Let me now share with you, Mr. Chairman, some of the views that were expressed that directly bear on the issues noted in Decision 4/CP.4:

- The focus on access to contemporary technologies was clearly articulated by many of the SADC representatives, including a statement by one minister that his country was ready to work with developed countries and industry, but that it would not become a dumping ground for obsolete technologies in the name of climate change.
- A recurring theme of the seminar was that true capacity building goes beyond merely installing "turn-key" projects. Building indigenous capacity is an important part of technology transfer. However, there was clear sentiment that for it to be meaningful, capacity building must focus on helping to create local and regional infrastructure and know-how that integrates cultural values, existing technologies, and local conditions.
- Although many of the participants readily acknowledged that technology is key to the achievement of the UNFCCC objectives, there are other benefits as well. Technology can assist with eradicating poverty, promoting sustainable development, increasing standard of living, and more. It was felt that technology must be a means to an end, not an end in and of itself.
- Another recurring theme of the Zimbabwe seminar was the difficulty in attracting financing. Discussions centered around the need for countries to create an "enabling environment" to promote investment. In that regard, project developers, bankers,

governments, and others need to explore creative financing schemes to increase access to technologies. For example, the point was raised by some participants that the Kyoto mechanisms, such as the Clean Development Mechanism, might provide incentives for local and regional investment in Southern Africa.

- Of particular note was a discussion on corruption and the clear agreement that corruption was a barrier to attracting financing and technology transfer.

One of the most significant outcomes of the Seminar was in the area of promoting multilateral technology cooperation to facilitate technology transfer. CTI was requested by SADC to jointly conduct a regional technology needs assessment of the energy sector, the first step in our Cooperative Technology Implementation Plan – a CTIP – a methodology we believe, Mr. Chairman, can be used to address many of the questions raised by Decision 4. In fact, CTI has begun a similar assessment with the Government of Thailand. I am happy to report that, since the Seminar in Zimbabwe, more than half of the financial support needed for this endeavor has been offered by the United States from its Agency for International Development. I am optimistic that the balance of the funding will be forthcoming from one or more of the other CTI countries so that this important work can begin.

The next regional CTI seminar on Technology Diffusion will be held from the 14th to the 16th of July in Bratislava, Slovakia for countries in the Eastern European region. This event is being held in cooperation with the UNFCCC Secretariat and co-sponsored by the Directorate for Energy of the European Commission, Japan's New Energy and Industrial Technology Development Organization, and the United States' Agency for International Development and Department of Energy. CTI will again elicit views on the substance of Decision 4 and share these views with the SBSTA, Mr. Chairman. Later this year, another seminar on technology diffusion is planned in Bangkok, Thailand for the Asian region, as well as a similar seminar for Latin America. Additionally, a training course for Asian countries will be held in Japan, and one for Eastern European countries in Germany.

In closing, I want to publicly thank the many CTI-countries, the European Commission, and the International Energy Agency for their generous and enthusiastic support for the CTI since I assumed the position of Chair in December 1997. Further, on behalf of the CTI, I want to express its sincere appreciation to the many countries that have hosted and helped to organize past CTI events and those being currently planned. CTI looks forward to their continued support and I am confident the CTI will continue to make an important contribution to advancing the objectives of the Framework Convention and addressing the questions and issues posed by Decision 4/CP.4. Finally, Mr. Chairman, I want to thank you again for allowing me to report to you on what the CTI has gleaned from its activities and for the opportunity to contribute to the SBSTA as you move forward to address the sensitive and important area of technology transfer.

Report to the 10th Session of SBSTA on the Status of the IPCC

Robert T. Watson, IPCC Chairman

May 31, 1999

Distinguished delegates, it is a real pleasure and honor for me to be invited to address you today. I, and all my colleagues associated with the Intergovernmental Panel on Climate Change (IPCC), appreciate the close collaboration that exists between the IPCC and the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), the subsidiary bodies to the UNFCCC, and the Secretariat to the UNFCCC. There continues to be excellent collaboration with the FCCC and its subsidiary bodies (SBSTA and SBI) through Joint Working Group meetings, and coordinated meetings of SBSTA and IPCC experts, such as those related to Articles 3.3 and 3.4 of the Kyoto Protocol.

Since I last had the opportunity to address you six months ago in Buenos Aires, Argentina, the IPCC has continued to make significant progress. We now have the most intense work program ever, largely in response to requests made by the Subsidiary Body on Technological and Scientific Advice (SBSTA) of the UNFCCC. These requests from SBSTA, I believe, reflect the importance that the UNFCCC places on the high-quality and impartial scientific and technical information that is provided by the IPCC, and acknowledges the expertise and dedication of many hundreds of scientific, technical and socio-economic experts from all over the world from universities, government agencies, the private sector, and non-governmental organizations.

Since Buenos Aires, the IPCC held a Bureau meeting in Geneva in March, 1999 and a Plenary session in Costa Rica in April 1999. It was very encouraging to observe that all delegates to these meetings worked with a common purpose, and were willing to constructively seek compromises when differences of opinion surfaced. I believe that this demonstrates that the IPCC has continued to mature even while the work load has increased and the issues that we have been asked to address by the UNFCCC are becoming scientifically and technically more complex and, at times, closer to policy. However, the IPCC has continued to ensure that while the assessments are policy-relevant, they are policy-neutral and not policy prescriptive.

A major milestone was achieved at the Plenary meeting in Costa Rica. We finally approved the Procedures for the Preparation, Review, Acceptance, Approval and Publication of IPCC Reports, which will become an Annex to the Principles Governing IPCC Work that were approved in Vienna, in October, 1998. The Principles and Procedures will ensure that all aspects of the IPCC, including the selection of coordinating lead authors, lead authors and review editors, and the expert and government/expert review processes, will continue to be open and transparent, hence ensuring the credibility of the IPCC process.

In addition, the IPCC approved and accepted the Special Report on "Aviation and the Global Atmosphere" and approved the list of Policy-Relevant Scientific Questions that will be addressed in the Synthesis Report of the Third Assessment Report (TAR) at the Plenary in Costa

Rica. Substantial progress has also been made on the preparation of the TAR and three Special Reports: (i) Methodological and Technological Aspects of Technology Transfer: Opportunities for Technology Cooperation; (ii) Emissions Scenarios of Greenhouse Gases and Aerosol Precursors; and (iii) Land-Use, Land-Use Change and Forestry.

Let me briefly summarize the status of our current work program, and in particular I would like to focus my comments on the main conclusions from the Special Report on "Aviation and the Global Atmosphere", which was approved and accepted in Costa Rica, and describe the approved list of Policy-Relevant Scientific Questions that will be addressed in the Synthesis Report of the TAR. My brief remarks will be amplified in three side-events/workshops this week, which have been organized to discuss the Special Reports on "Methodological and Technological Aspects of Technology Transfer: Opportunities for Technology Cooperation", "Aviation and the Global Atmosphere", and "Emissions Scenarios of Greenhouse Gases and Aerosol Precursors" on Tuesday, Wednesday and Friday lunch-times, respectively. I urge as many of you as possible to attend these workshops for a more detailed description of the work of the IPCC. These workshops will provide a venue for a discussion between IPCC experts and yourselves on a number of key issues that are of direct relevance to your work. This discussion will also help ensure that the work of the IPCC is appropriately focussed on the issues of greatest importance to the UNFCCC and the Kyoto Protocol.

Special Report "Aviation and the Global Atmosphere"

The IPCC Special Report "Aviation and the Global Atmosphere" was approved/accepted at the IPCC plenary in Costa Rica in April 1999. The Report assesses the effects of the past, present and potential future fleets of subsonic and supersonic aircraft on climate and atmospheric ozone and is the first report for a specific industrial sub-sector. The key findings of the Report include:

- ❖ **Aviation Traffic:** Passenger traffic has grown since 1960 at nearly 9% per year, 2.4 times the average Gross Domestic Product over the same time period. Global passenger air travel is projected to grow by about 5% per year between 1990 and 2015, where-as total aviation fuel use (passenger, freight and military) is projected to increase by about 3% per year, the difference being due largely to improved aircraft efficiency. The assessment developed a number of long-term (1990 – 20250) emissions scenarios for both subsonic and supersonic aircraft, including a reference scenario which used mid-range assumptions for each of the key determinants, using a range of assumptions for economic and traffic growth and fuel burn, which is dependent upon rates of change in technology and air traffic management.
- ❖ **Aircraft Emissions:** Aircraft emit gases and particles directly into the upper troposphere and lower stratosphere where they have an impact on atmospheric composition. These gases and particles alter the concentration of greenhouse gases, including carbon dioxide, ozone, water vapor and methane, trigger the formation of condensation trails (otherwise known as contrails), and may increase cirrus cloudiness – all of which contribute to climate change.

- ❖ ***Radiative Forcing:*** The major contributors from aircraft emissions to the radiative forcing, which is a measure of a change in climate, are carbon dioxide, ozone, methane (negative effect) and contrails, with minor contributions from water vapor, sulfate aerosols (negative effect) and soot. The contribution from cirrus clouds is projected to be positive and could be quite significant, but our current lack of scientific understanding precludes a quantitative assessment of its contribution. While the contributions from carbon dioxide, ozone, methane (opposite sign) and contrails are comparable in magnitude, the uncertainties associated with ozone, methane and contrails are much larger than those associated with carbon dioxide.
- ❖ ***Current Impact of Aviation Emissions on Climate:*** The best estimate of the radiative forcing in 1992 by aircraft is 0.05 Wm^{-2} (0.01 to 0.1 Wm^{-2}) or about 3.5% of the total radiative forcing by all human activities. These estimates of forcing combine the effects of changes in all greenhouse gas concentrations, aerosols and line-shaped contrails, but do not include possible changes in cirrus.
- ❖ ***Projected Impact of Subsonic Aviation Emissions on Climate:*** For the reference scenario used in this assessment, the projected radiative forcing from subsonic aircraft emissions in 2050 is 0.19 Wm^{-2} or 5% of the radiative forcing in the mid-range IS92a scenario. For the full range of scenarios considered in the report, the radiative forcing is projected to grow to 0.13 to 0.56 Wm^{-2} in 2050, 2.6 to 11 times the value in 1992, and compares to the mid-range IS92a scenario of 3.8 Wm^{-2} in 2050.
- ❖ ***Projected Impact of Supersonic Aviation Emissions on Climate:*** One possibility for the future is the development of a fleet of second generation supersonic, high speed civil transportation aircraft. If a fleet of supersonic aircraft were developed to cruise at an altitude of about 19km, they would emit carbon dioxide, water vapor, oxides of nitrogen and sulfur, and soot directly into the lower stratosphere. Assuming a fleet of supersonic aircraft started operation in 2015, growing to a fleet of 1000 by 2040, displacing a portion of the subsonic fleet in the reference scenario, by 2050 the combined subsonic and supersonic fleet is projected to add a further 0.08 Wm^{-2} to the 0.19 Wm^{-2} radiative forcing projected for the reference scenario. Most of this additional forcing is due to the increased concentration of stratospheric water vapor.
- ❖ ***Options to Reduce Aviation Emissions:*** There is a range of options to reduce aviation emissions, including changes in aircraft and engine technology, fuel, operational practices, and regulatory and economic measures. While substantial aircraft and engine technology advances and air traffic management improvements are already incorporated in the aircraft emissions scenarios described above, further measures are feasible. However, it should be recognized that a number of factors will govern the rate at which technology advances and policy options related to technology can reduce aviation emissions: safety of operation, operational and environmental performance, cost, and the typical life expectancy of an aircraft of 25 to 35 years.
- ❖ ***Conclusions and Issues for the Future:*** The Report recognizes that there has been a steady improvement in characterizing the potential impacts of aviation on the global atmosphere,

that the effects of some types of aircraft emissions are well understood, while the effects of others are not because of the many scientific uncertainties, and that aircraft emissions can be reduced through technological advances, infrastructure improvements, and regulatory or market-based measures. However, further work is required to reduce scientific and other uncertainties, to understand better the options for reducing emissions, to better inform decision-makers, and to improve the understanding of the social and economic issues associated with the demand for air transport.

Third Assessment Report

At our Plenary in Vienna, October 1998, the IPCC approved the scope, structure, time-table and lead authors for the three Working Group Reports for the TAR, which will be approved/accepted between late January and late February 2001.

- ❖ Working Group I will assess the scientific aspects of the climate system and climate change;
- ❖ Working Group II will assess the scientific, technical, environmental, economic and social aspects of the vulnerability (sensitivity and adaptability) to climate change of, and the negative and positive consequences (impacts) for, ecological systems, socio-economic sectors and human health, with an emphasis on regional sectoral and cross-sectoral issues;
- ❖ Working Group III will assess the scientific, technical, environmental, economic and social aspects of the mitigation of climate change.

The philosophy of the TAR will emphasize the regional dimensions of climate change, embrace the concept of sustainable development, and place the issue of climate change more centrally within the evolving socio-economic context. In addition, given the emerging recognition that local, regional and global environmental issues need to be addressed in a more integrated manner, the TAR will assess the scientific and policy linkages, and the synergies and trade-offs, among these issues and their impact on sustainable development. The TAR will build upon the Second Assessment Report, the Special Reports and the Technical Papers and will involve an increased number of experts from developing countries, countries with economies in transition, industry, business and environmental NGOs. It will place particular emphasis on:

- ❖ observed trends in climatic parameters and the issue of attribution;
- ❖ regional scale climate projections, non-linearities, and extreme events, natural climate variability (e.g., the El-Nino phenomenon);
- ❖ regional impacts of, and adaptation measures to, climate change;
- ❖ costs and benefits of utilizing a range of technologies, policies and practices, and timeframe for, reducing greenhouse gas emissions;
- ❖ cross-cutting issues, such as uncertainties; development, sustainability and equity; costing methodologies; and decision-making frameworks; and
- ❖ linkages with other local (air pollution), regional (acid deposition), and global (loss of biodiversity, land degradation and stratospheric ozone depletion) environmental issues.

Synthesis Report

In addition to the three Working Group reports of the TAR, the IPCC Plenary in Costa Rica approved the scope, structure, approval/adoption process, and the specific Policy-Relevant Scientific Questions for the Synthesis Report. The Synthesis Report will consist of a 3-5 page Summary for Policymakers and a longer (30-50 pages) report. It will synthesize and integrate materials contained within the Assessments Reports and Special Reports and will be written in a non-technical style suitable for policymakers and address a broad-range of policy-relevant, but policy-neutral questions that were submitted by governments through SBSTA. The Synthesis Report will be completed by mid-summer 2001. The Policy-Relevant Scientific Questions (abbreviated), include:

- ✓ 1. What can scientific, technical and socio-economic analyses contribute to the determination of what constitutes dangerous anthropogenic interference with the climate system as referred to in Article 2 of the Framework Convention on Climate Change?
2. What is the evidence for, causes of, and consequences of changes in the Earth's climate since the pre-industrial era?
3. What is known about the influence of the increasing atmospheric concentrations of greenhouse gases and aerosols, and the projected human-induced change in climate regionally and globally?
- ✓ 4. What is known about the inertia and time-scales associated with the changes in the climate system, ecological systems, and socio-economic sectors and their interactions?
- ✓ 5. What is known about the regional and global climatic, environmental, and socio-economic consequences in the next 25, 50 and 100 years associated with a range of greenhouse gas emissions arising from scenarios used in the TAR (projections which involve no climate policy interventions)?
- ✓ 6. How does the extent and timing of the introduction of a range of emissions reduction actions determine and affect the rate, magnitude, and impacts of climate change, and affect the global and regional economy, taking into account the historical and current emissions?
- ✓ 7. What is known from sensitivity studies about the regional and global climatic, environmental and socio-economic consequences of stabilizing the atmospheric concentrations of greenhouse gases (in carbon dioxide equivalents), at a range of levels from today's to double that or more, taking into account to the extent possible the effects of aerosols. For each stabilization scenario, including different pathways to stabilization, evaluate the range of costs and benefits, relative to the range of scenarios considered in question 5.
8. What is known about the interactions between projected human-induced changes in climate and other environmental issues, e.g., urban air pollution, regional acid deposition, loss of

biological diversity, stratospheric ozone depletion, and desertification and land degradation? What is known about the environmental, social and economic costs and benefits and implications of these interactions for integrating climate response strategies in an equitable manner into broad sustainable development strategies at the local, regional and global levels?

9. What is known about the potential for, and costs and benefits of, and timeframe for reducing greenhouse gas emissions?
10. What are the most robust findings and key uncertainties regarding attribution of climate change and regarding model projections of: (i) future emissions of greenhouse gases and aerosols; (ii) future concentrations of greenhouse gases and aerosols; (iii) future changes in regional and global climate; (iv) regional and global impacts of climate change; and (v) costs and benefits of mitigation and adaptation options?

Special Reports

As noted, the IPCC is currently preparing three Special reports: (i) Methodological and Technological Aspects of Technology Transfer: Opportunities for Technology Cooperation; (ii) Emissions Scenarios of Greenhouse Gases and Aerosol Precursors; and (iii) Land-Use, Land-Use Change, and Forestry. All three reports will be completed early next year, i.e., between January and May.

Land-Use, Land-Use Change, and Forestry: Following the Kyoto Protocol, SBSTA requested IPCC to prepare a Special Report on Land-Use, Land-Use Change and Forestry. At the IPCC plenary in Vienna the scope, structure and lead authors for this report were approved. This Report will contain information of use to Parties in operationalizing the Kyoto Protocol, hence will address a series of scientific and technical issues associated with a number of the Articles of the Kyoto Protocol, in particular, Articles 3 (3.1, 3.3, 3.4 and 3.7), 6, 7.1 and 12. Key issues to be addressed include:

- ❖ the implications of different definitions, including forests, afforestation, deforestation and reforestation;
- ❖ which carbon pools (i.e., above ground biomass, below ground biomass, soil carbon, forest products) should be considered when evaluating the implications for net carbon emissions associated with afforestation, reforestation, deforestation and other land-use activities;
- ❖ what is the accuracy of measurements (stocks and flows) for each type of carbon pool in the full range of forested and non-forested ecosystems;
- ❖ to what extent can the effects of direct post-1990 human interventions be differentiated from pre-1990 actions and indirect human activities;
- ❖ what activities are defined as "direct human-induced activities";
- ❖ what are the factors that need to be taken into consideration in setting baselines;
- ❖ how could issues of "national and cross-border" leakage be addressed;
- ❖ how permanent are carbon sinks;
- ❖ what is the carbon sequestration potential of different ecosystems;

- ❖ what are the implications of land-use, land-use change and forestry activities on other environmental (biodiversity, land degradation, etc.) and socio-economic issues (e.g., poverty, development, employment); and
- ❖ what is the adequacy, or lack there-of, of the IPCC National inventory guidelines.

The close working relationship between the IPCC and SBSTA during the early phases of the preparation of the Special Report on Land-Use, Land-Use Change and Forestry has been very useful. Meetings were held in Rome, Italy to discuss Article 3.3 of the Kyoto Protocol – Afforestation, Reforestation and Deforestation, and in Indianapolis, USA to discuss Article 3.4 – other land use activities. These meetings have ensured that the IPCC experts understand the key issues that governments want to be addressed. These meetings have in no way compromised the independence of the IPCC, yet have provided us with an opportunity to further understand the needs of the Parties to the Kyoto Protocol.

Inventories Work

The inventories work has been given more prominence since the Kyoto Protocol specifically mentions that the IPCC methodologies will be the basis for estimating greenhouse gas emissions. A special task force has been established to oversee the technical aspects of the work, the Joint IPCC/SBSTA Working Group will oversee the policy issues, and the Government of Japan has kindly agreed to establish a technical support unit to manage the program of work.

Communications and Outreach

The IPCC Secretariat and the Technical Support Units of the three Working Groups are placing an increased emphasis on communicating the work of the IPCC through an increased use of the world-wide web system. We are exploring the potential use of the world-wide web system and e-mail as a forum for peer-review of draft IPCC reports and for distribution of final IPCC reports.

We are also enhancing our outreach through booths and side-events at the SBSTA/SBI meetings of the FCCC. For example, as noted earlier, there will be three two-hour workshops at this SBSTA/SBI meeting on the conclusions of the Special Report on “Aviation and Global Atmosphere”; and the status of the ongoing work on “Methodological and Technological Aspects of Technology Transfer: Opportunities for Technology Cooperation”, and “Emissions Scenarios of Greenhouse Gases and Aerosol Precursors”, and I will be meeting with business, industry and environmental NGOs.

Budget

There is however, a significant budget problem because of: (i) the large number of special reports, coincident with the preparation of the TAR; (ii) the enhanced regional emphasis, and (iii)

May 31, 1999

the increased participation of experts from developing countries and countries with economies in transition. Dr's Obasi, Topfer and myself wrote to governments alerting them to this situation, but with limited response to date. At present just a few countries, including those that support the costs of a Technical Support Unit of a working group, provide the majority of the financial resources. If IPCC is to continue to serve the needs of the Parties to the UNFCCC and the Kyoto Protocol additional governments will have to contribute to the IPCC Trust Fund, and those that who routinely contribute will have to increase their contributions. The financial task group is examining alternate sources of funding, e.g. foundations, but this search for funds just adds an additional and unnecessary burden on those who contribute to the work of the IPCC, which is largely a volunteer organization. I appeal to each government representative at this meeting to discuss this serious situation with the relevant agency in your government to help resolve this situation.



**Statement from the
International Civil Aviation Organization (ICAO)
to the Tenth Session of the UNFCCC Subsidiary Body for
Scientific and Technological Advice (SBSTA)**

(Bonn, 31 May - 11 June 1999)

ICAO is pleased to be able to report to SBSTA on the substantial activities underway to respond to the role identified for it under Article 2.2 of the Kyoto Protocol. This provision requires Annex I Parties to pursue limitation or reduction of emissions of greenhouse gases from aviation bunker fuels, **working through ICAO**. We can assure you, that ICAO is fully committed to responding to this challenge in an effective and timely manner.

Today's report will focus on the specific actions that have been taken by ICAO in the relatively short period since the Kyoto Protocol was adopted. The highest body within ICAO, the ICAO Assembly, adopted a resolution at its most recent session in September/October of 1998, calling for its subsidiary bodies to "study policy options to limit or reduce the greenhouse gas emissions from civil aviation" and to report back to the next ordinary session of the Assembly in September/October 2001¹. With this clear mandate, the expert group within ICAO that focuses on environment (the Committee on Aviation Environmental Protection, CAEP) has initiated actions aimed at providing the technical and policy basis for decisions on limiting or reducing greenhouse gases that could be taken by the Council of ICAO or at the next Assembly meeting.

The work in progress on this subject is very dependent on having a clear understanding of the potential impacts of aircraft engine emissions on climate and stratospheric ozone depletion. This is why ICAO requested the IPCC in 1996 to prepare a *Special Report on Aviation and the Global Atmosphere*. Their recently completed report will help to shape ICAO's efforts to limit or reduce greenhouse gas emissions. We wish to express our gratitude to the IPCC and the many experts from government, industry and academia who contributed to the report. It provides a thorough assessment of current understanding of critical atmospheric, technological, and policy issues with emphasis on both what is known and what remains uncertain. Meanwhile, CAEP will continue to foster development of a scientific basis for the assessment of the potential impacts of engine emissions, with resolution of scientific uncertainty as a key objective.

CAEP ACTIVITIES RELATED TO LIMITING OR REDUCING GREENHOUSE GASES

The main thrust of ICAO's efforts to develop a programme aimed at limiting or reducing greenhouse gas emissions is being undertaken by CAEP and its working groups. This work falls into three categories, namely technology and standards, operational measures, and market-based options. Each is summarized below.

Technology and standards

ICAO has been considering to what extent technology can help, through improved engine or airframe design, to achieve reductions in greenhouse gas emissions.

The present ICAO Standards for emissions certification of aircraft engines (contained in Volume II of Annex 16 to the Convention on International Civil Aviation) were originally designed to respond to concerns regarding air quality in the vicinity of airports. As a consequence, they establish limits for emissions of oxides of nitrogen (NO_x), carbon monoxide, unburned hydrocarbons and smoke for a reference Landing and Take-off (LTO) cycle below 915 metres altitude. These limits are expressed in terms of mass of emissions per unit of engine thrust.

While these Standards are expressed in terms of an aircraft's LTO cycle, they also help to limit emissions at altitude. Of particular relevance in this context is the Standard for NO_x, which is a precursor for ozone. At ground level, ozone takes part in the smog chemistry, whilst at altitude it is a greenhouse gas. The Standard for NO_x was first adopted in 1981, then made more stringent in 1993, when the Council of ICAO reduced the permitted levels by 20% for newly certificated engines, with a production cut-off on 31 December 1999. More recently, in April 1998, CAEP recommended a further tightening of about 16% on average for engines newly certificated from 31 December 2003 and, following consultation with States, this was adopted by the Council of ICAO in February of this year. This represents an important development on an issue that had proved difficult in the past.

CAEP is now carrying out assessments of technological advances with a view to further developing the ICAO Standards to specifically address emissions of greenhouse gases. In particular, it is studying alternate emissions methodologies that will encompass all phases of flight (climb and cruise emissions, as well as LTO cycle). In addition to considering the types of emissions already covered by ICAO Standards, the new methodologies will take into account fuel efficiency and productivity of the whole aircraft, which would have a direct bearing on CO₂ emissions. CAEP will also follow developments in the characterization and measurement of other emissions such as particulates that could be relevant to contrail production and additional cirrus cloud formation. This is a very complex task requiring close cooperation with industry and scientific experts, and recommendations for new methodologies are not expected to be completed until 2001. Definition of relevant standards, if appropriate, would follow.

Operational measures

ICAO is considering to what extent operational measures might help to reduce the amount of emissions of greenhouse gases produced, for example through more direct routings, or to reduce their impact.

In April 1998, CAEP established a new working group with two primary tasks. The first is to identify the best operating practices to achieve near-term reductions in aircraft emissions of greenhouse gases together with potential actions to facilitate their broader application. The second task is to evaluate the potential impact of satellite-based Communication, Navigation, Surveillance and Air Traffic Management (CNS/ATM) systems enhancements and recommended actions to facilitate implementation on a regional and global basis.

The working group has focused its efforts in three key areas:

- ➔ the quantification of the emissions benefits of CNS/ATM, starting with the development of a quantification methodology;
- ➔ increased liaison with ICAO's planning and implementation regional groups to help maximize emissions benefits of regional CNS/ATM implementation plans; and
- ➔ identification and development of operational best practices on the ground and in the air to reduce fuel burn.

In addition, at the request of the Council of ICAO, the Secretary General recently drew the attention of States to the environmental benefits that would accrue from early implementation of satellite-based CNS/ATM systems, in terms of reducing fuel consumption and avoiding unnecessary emissions.

Market-based options

ICAO is also considering the use of market-based options as a potentially attractive means of limiting greenhouse gas emissions at the lowest possible cost.

In April 1998, CAEP established another new working group to "identify and evaluate the potential role of market-based options, including emission charges, fuel taxes, carbon offsets, and emissions trading regimes." The focus of this group's work would be to evaluate the possible role that market-based options could play in responding to Article 2.2 of the Kyoto Protocol.

CAEP has traditionally adopted technology-based standards for controlling emissions. Market-based options offer a potentially cost effective approach to achieving environmental objectives. However, their use raises a number of important economic, legal and administrative issues that must be fully evaluated.

The working group has received briefings on:

- ➔ existing programmes related to various market-based options, notably regarding emissions trading ;
- ➔ the past work by CAEP on emission levies (charges or taxes) and on similar recent analyses conducted by the European Commission and others; and
- ➔ flexible mechanisms in the Kyoto Protocol.

In the light of these briefings, the working group has identified and begun to define a range of specific market-based options including: fuel and en-route levies; emissions trading; and voluntary regimes.

It has also begun to develop an evaluation framework which will allow for a transparent comparison of the strengths and weaknesses of these options.

In view of the importance attached to this work by the ICAO Assembly², the goal of the working group is to complete its technical evaluation by late 2000, prior to a policy review by CAEP.

Costs and benefits

On the basis of the work being carried out on these three separate aspects (technology and standards, operational measures and market-based options), policy options are expected to emerge. It will then be necessary to assess the costs and benefits of such policy options, if possible on a common basis. This work will be undertaken by CAEP's Forecasting and Economic Analysis Support Group.

Timescale

The present CAEP work-plan in the emissions field is aimed towards the next full meeting of the Committee (CAEP/5) which is expected to take place in the final quarter of 2000 or the first quarter of 2001. Thereafter, CAEP's recommendations will be reviewed by the Council of ICAO, which meets on a regular basis, and some aspects such as market-based options are also expected to be discussed at the 33rd Session of the ICAO Assembly in late 2001.

It is intended to consolidate these various activities into an ICAO Action Plan on emissions that would provide a road map of tasks and objectives over the next few years. ICAO intends to have it ready later this year before the COP meets.

RELATED ISSUES

There are a number of related issues on which we would like to comment.

Definition of aviation bunker fuels

In our Statement to COP/4 in Buenos Aires, we drew attention to a question that had arisen in the aviation community as to whether Article 2.2 of the Kyoto Protocol is intended to cover emissions from international aviation only, or from both international and domestic aviation. Much depended on how one defines "aviation bunker fuels", a term which is not commonly used in the aviation community.

In the documentation for this week's meeting (FCCC/SBSTA/1999/INF.4, para 10), we note the Secretariat's observation that the terms "international bunkers" and "bunker fuels" in the context of greenhouse gas inventories are generally used to denote the international share of fuel sold to ships and aircraft.

This provides some welcome clarification. If Article 2.2 is read in the same light, it is consistent with ICAO's mandate under the Convention on International Civil Aviation, which does not extend to domestic aviation. At the same time, ICAO's Standards, Recommended Practices and Procedures in many circumstances do have a *de facto* application domestically, in recognition of the need for a consistent policy approach to international and domestic aviation.

The allocation issue

The ICAO Assembly has expressed an interest in how ICAO might assist in furthering discussion on the issue of allocating international aviation emissions. This issue is being examined within CAEP in the context of analysing the potential role of emissions trading as a means of limiting or reducing greenhouse gas emissions from civil aviation.

In this connection, we noted with interest the statement in the Secretariat's document that "It would be up to the Parties to determine whether, and if so when, the inclusion of international bunker fuels into national totals would affect "assigned amounts" as defined in Article 3 of the Kyoto Protocol" (FCCC/SBSTA/1999/INF.4, footnote 1 to para 9), .

Emissions reporting

Finally, ICAO has considerable expertise in the area of data collection in the field of aviation. The Secretariat's document (FCCC/SBSTA/1999/INF.4) focuses on the difficulties that States have experienced in accurately reporting emissions from the aviation sector. We would like to extend an invitation to work more closely with the appropriate organizations (IPCC, SBSTA or the UNFCCC Secretariat) in developing and implementing a plan to improve inventory reporting of greenhouse gases from the aviation sector.

SUMMARY

This short summary is intended to give a comprehensive review of the significant and wide-ranging efforts being made to address the reduction of emissions from aviation. The IPCC report, requested by ICAO, gives a thorough assessment of the relevant issues including the status of research and knowledge about the various impacts of aviation on the atmosphere. ICAO itself is leading investigations into the possible further actions, including new technology, new or revised standards, operational measures and market-based options to achieve the desired results, while taking into account the unique features of civil aviation.

Endnotes

1. Appendix F to Resolution A32-8, *Consolidated statement of continuing ICAO policies and practices related to environmental protection*. Accessible on the ICAO website (www.icao.int).
 2. Appendix H of Resolution A32-8, *Consolidated statement of continuing ICAO policies and practices related to environmental protection*. Accessible on the ICAO website (www.icao.int).
-

Measuring Soil Carbon Stocks

A System for Quantifying and Verifying Change in Soil Carbon Stocks due to Changes in Management Practices on Agricultural Land

Brian McConkey, (mcconkeyb@em.agr.ca) and Wayne Lindwall (lindwallw@em.agr.ca)
Agriculture & Agri-Food Canada, June 1999

Summary

Carbon Soil Sinks:

- Remove CO₂ from the atmosphere
- Encourage sustainable development
- Offer environmental benefits
- Can be measured accurately at reasonable cost

Repaying the Soil Carbon Debt

When land was broken from natural forest or grassland for agriculture, a large amount of the native soil organic matter was lost as CO₂ to the atmosphere. However, if land management practices are changed in ways that increase the soil organic carbon, the reverse occurs and CO₂ is effectively removed from the atmosphere and put into the soil. This

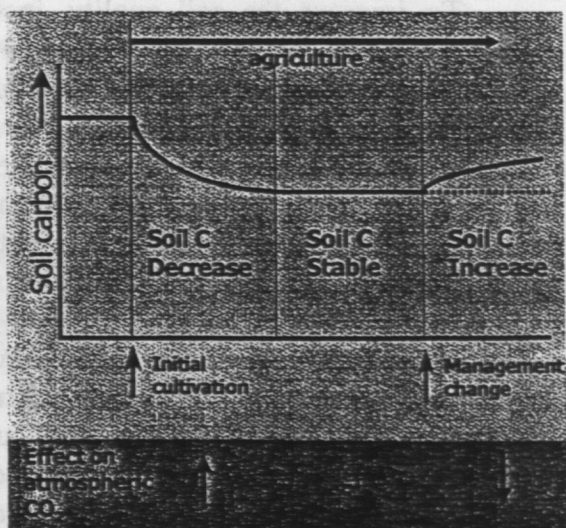


Figure 1. Soil carbon changes due to initial land conversion to agriculture, attainment of a new equilibrium, followed by adoption of management practices that sequester carbon.

process is called *carbon sequestration*. Figure 1 illustrates soil carbon changes over time on agricultural lands.

Land management practices on agricultural land that increase carbon sequestration include reduction in tillage, restoring degraded land, improving pasture management, and reducing fallow periods. In addition to sequestering carbon in the soil, these soil-improving practices also increase soil productivity, enhance the quality of water draining from agricultural land, and provide a more hospitable environment for wildlife inhabiting that agricultural land. Hence, these practices are fundamental to a more sustainable future.

Figure 2 shows an example from western Canada of how improved land management practices restore soil C. In this case, land that had been conventionally

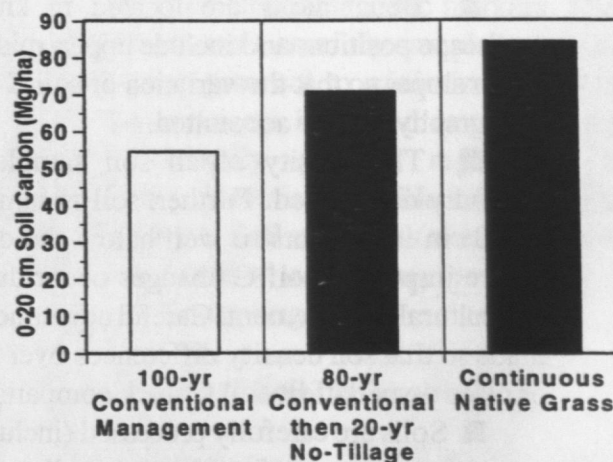


Figure 2 Canadian example of restoration of soil carbon over 20 years from adoption of no-tillage practices.

managed with frequent tillage and fallow has a debt or deficit of 30 Mg/ha or 35% less carbon than adjacent land under native grass. However, the land that had been conventionally managed and then converted 20 years ago to no-tillage without fallow has regained 16 Mg C/ha or about one-half of the soil carbon debt.

Reducing Measurement Variability

When measured through strictly random sampling, the amount of soil carbon appears very variable. Owing to this variability, some have argued that it will be difficult to quantify and verify changes in soil carbon stocks due to changes in land management practices. However, a team of Canadian scientists has developed a reliable method to minimize the variability. This method is the basis for accurately verifying estimates of soil carbon (C) changes due to land management changes. This method involves:

- Measuring soil C changes on the same small benchmark over time. The benchmarks are located carefully to minimize soil variations within the benchmark itself. Multiple soil samples for C analysis are taken within the benchmark. Collectively, these actions greatly reduce the effects of spatial variability for comparisons across time.

- Benchmarks are located in known landscape positions and include upper, mid and lower slopes so that the variation of soil C with topography is fully accounted.

- The density of all soil samples is carefully determined. Further, soil is sampled in 10 cm increments to well below the depth where important soil C changes occur due to agricultural management. Careful adjustment is made so that soil density differences over time or place do not affect soil C stock comparisons.

- Soils are carefully processed (including exacting treatment of surface plant litter and subsurface large plant roots).

- Stored air-dried soil samples from the

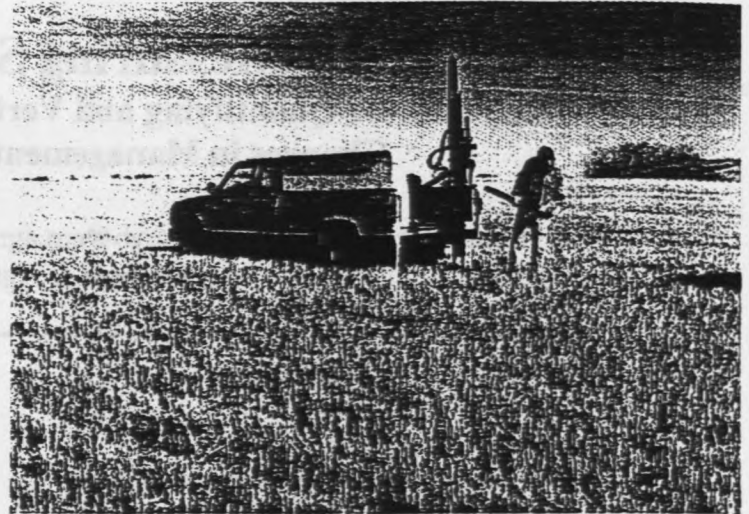


Figure 3. Careful sampling is an essential step to reducing variability of soil carbon measurements.

past are analysed for soil C in a random order along with samples from the current time. This, in combination with rigorous laboratory quality control procedures, eliminates the potential for even minute variation in soil C assessments across time resulting from the slight shifts in the dry-combustion C analysis procedure itself.

System for Quantifying and Verifying Changes in Soil C Stocks

Pilot Project in Canada

To improve the soil quality, including rebuilding soil organic matter, many western Canadian farmers have adopted no-tillage crop production practices. A group of these no-tillage farmers, in cooperation with a team of Canadian scientists from government and universities, has initiated a pilot project using a system to quantify and verify the soil C changes due to this adoption of a no-tillage system. The pilot project involves the province of Saskatchewan, which contains 20 million hectares of the crop land, one-half of Canada's total. Figure 4 is a simplified schematic representation of this soil C quantification and verification system.

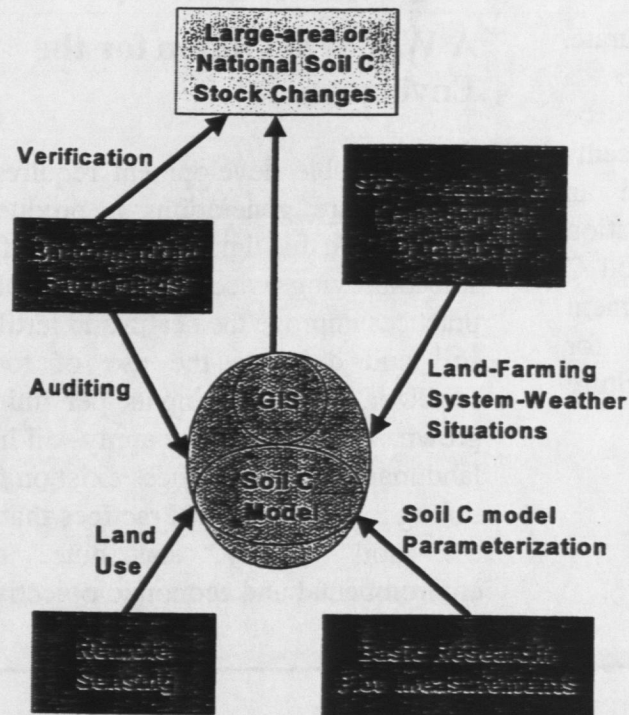


Figure 4 System for quantifying and verifying changes in soil carbon stocks.

System Description

The core of the system is the model of soil C dynamics. This science of soil C dynamics is relatively well developed and several soil C models (e.g. CENTURY) have been used successfully to predict changes in soil C in a wide range of environments. The basic system involves:

1. **Model Refinement:** appropriate C model parameters are derived and the soil C model is thoroughly tested using a large set of soil C research experiments and data.
2. **Define Situations:** From databases of soils, landform, weather, and farm management, important situations that result from a combination of the farming system, land, and regional weather are identified. Remote sensing supplements database information on no-tillage extent. (Remote sensing will be more important when the system is expanded to include soil C changes due to changes in management of pastures, farm

wood lots, and other land use changes involving perennial vegetation).

3. **Scaling Up:** Soil C changes for these situations are predicted with the soil C model. These are integrated to make large-area or national estimates using a Geographical Information System (GIS).
4. **Verification:** The accuracy of the soil C model predictions are audited by comparing the predictions with the rich set of carefully measured C changes in the benchmark situations. Further, if sufficient benchmarks are available so that all important land-farming system situations are represented, an independent estimate of soil C changes is available by scaling up the benchmark soil C changes directly.

A Closer Look at Verification Benchmarks

In the Canadian pilot project, a network of 150 benchmarked fields were established, covering the agriculturally developed portion of the province of Saskatchewan (see Figure 5). The benchmarked fields include every important combination of soil type, texture, and regional climate. The benchmarks were established just before cooperating farmers converted these fields to no-tillage in 1997. On these fields, 2x5m benchmarks were located with Global Positioning System (GPS) and with a buried electromagnetic markers. These benchmarks were carefully sampled according to exacting protocol to minimize variability. The farmers were instructed to manage their fields normally without regard to the benchmark (there is no visible marking of the benchmarks). Soil carbon on the benchmarks will be measured again three years after the initial soil sampling.

Uncertainty of Soil C Changes Low

A well-designed network of passive benchmarks on farm fields is a cost-effective and powerful method of confirming that

estimates of soil C stock changes are accurate. Based on our Canadian pilot project, a benchmark verification system can be implemented for a total cost less than 5 cents (i.e. US \$0.05) per hectare. With an appropriate quantification and verification system, the uncertainty of changes in soil C stocks due to changes in land management practices will be smaller than those for greenhouse gas emissions from agriculture included under the Kyoto protocol.

A Win-Win Option for the Environment

Sustainable development requires that we leave future generations a productive soil resource. In this light, the wisdom of applying soil-improving practices is unarguable. These practices improve the health and fertility of the soil and decrease the use of fossil fuel, fertilizer, and other inputs per unit of food grown. Opportunities to apply soil improving land management practices exist on farm land throughout the world. Practices that improve the soil clearly contribute to both environmental and economic objectives.

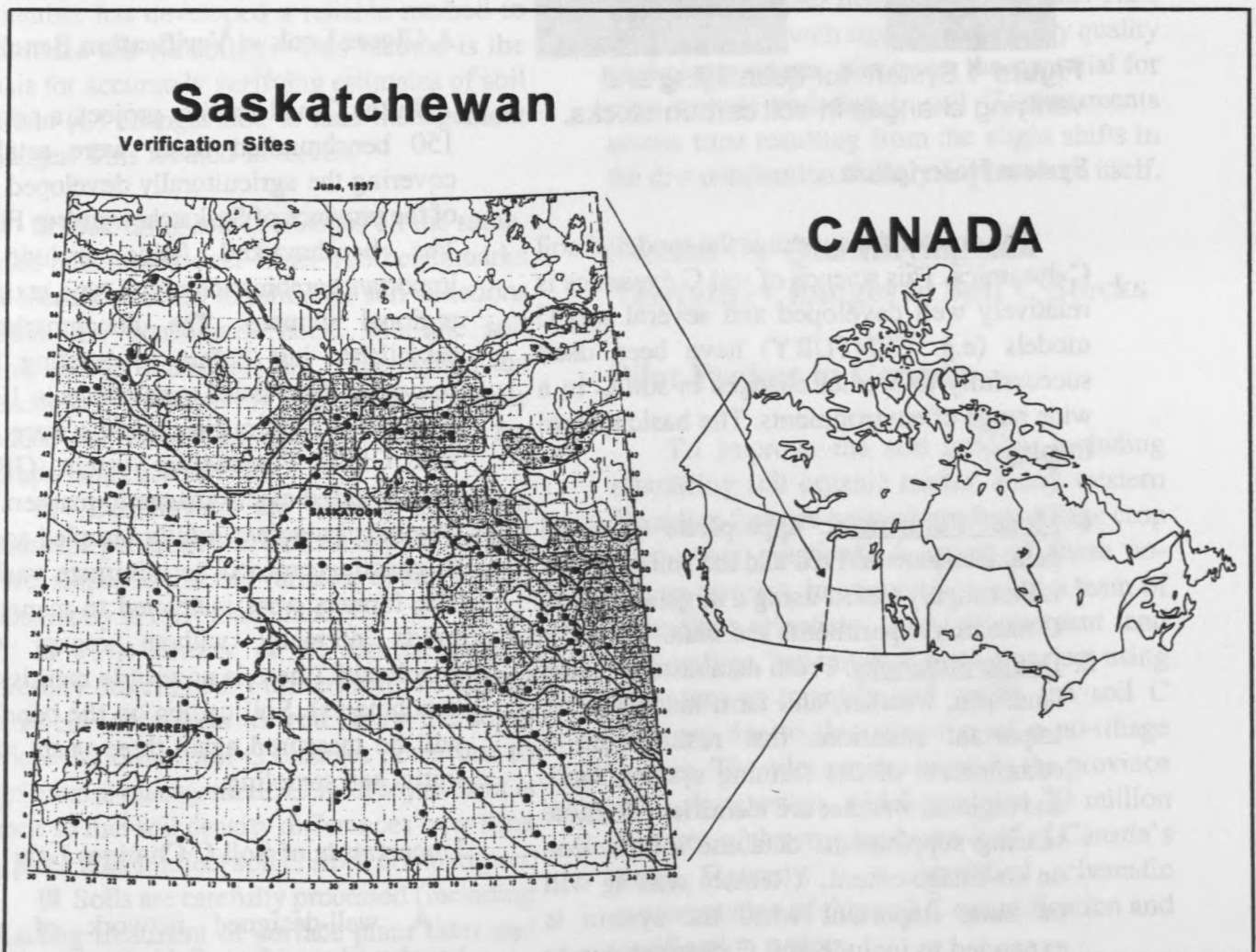


Figure 5 Map of benchmarked fields used in the Canadian pilot project involving the system to quantify and verify soil C stock changes from the adoption of no-tillage farming practices.

LIBRARY E A / BIBLIOTHÈQUE A E



3 5036 01019925 8

DOCS

CA1 EA208 99T25 ENG

Framework Convention on Climate
Change. Canadian Delegation

Tenth session of SBSTA and SBI May
31-June 11, 1999 Bonn : delegation
report. --

19125437

MEMORANDUM FOR THE RECORD

DATE: 10/15/54

TO: SAC, NEW YORK

FROM: SAC, NEW YORK

SUBJECT: [Illegible]

[Illegible text]

[Illegible text]

[Illegible text]

[Illegible text]

[Illegible text]

[Illegible text]

[Illegible text]

[Illegible text]