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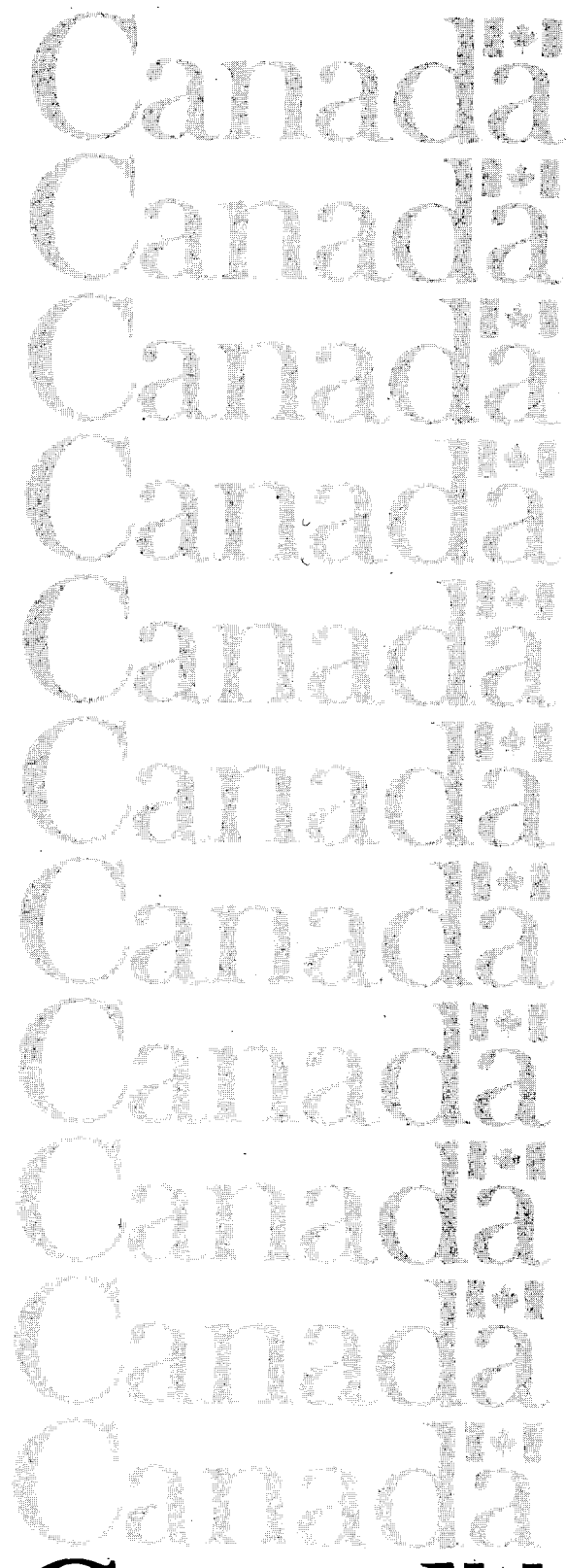

CLAUSE-BY-CLAUSE BRIEFING NOTES ON BILL C-

COMPREHENSIVE NUCLEAR TEST-BAN TREATY IMPLEMENTATION ACT

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INTRODUCTION

THE ACT IMPLEMENTS CANADA'S OBLIGATIONS UNDER THE COMPREHENSIVE NUCLEAR TEST-BAN TREATY. IN PARTICULAR, THE ACT PROHIBITS PERSONS FROM CARRYING OUT, ENCOURAGING OR PARTICIPATING IN THE CARRYING OUT OF A NUCLEAR WEAPON TEST EXPLOSION. PERSONS WHO DO NOT COMPLY WITH THIS BASIC TREATY OBLIGATION ARE LIABLE FOR LIFE IMPRISONMENT.

STAKEHOLDER DEPARTMENTS, NAMELY, HEALTH CANADA AND NATURAL RESOURCES ARE RESPONSIBLE FOR SETTING UP FACILITIES AND LABORATORIES TO PERMIT THE CARRYING OUT OF VERIFICATION MEASURES, AS PART OF THE INTERNATIONAL MONITORING SYSTEM. THE ACT ESTABLISHES A NATIONAL AUTHORITY RESPONSIBLE FOR COORDINATING DOMESTIC IMPLEMENTATION ISSUES, LIAISING WITH THE INTERNATIONAL ORGANIZATION AND FOR ASSISTING IN CLARIFICATION PROCEDURES UNDER THE TREATY. FOR ITS PART, INDUSTRY IS REQUIRED TO NOTIFY THE NATIONAL AUTHORITY WHEN IT CARRIES OUT OR PARTICIPATES IN THE CARRYING OUT OF EXPLOSIONS USING 300 TONNES OR MORE OF TNT – EQUIVALENT BLASTING MATERIAL.

THE ACT ALLOWS FOR WARRANT BASED SEARCH AND SEIZURES, OF PLACES WHERE THERE ARE REASONABLE GROUNDS TO BELIEVE THAT AN OFFENCE IS BEING COMMITTED AND THAT THERE IS EVIDENCE RELEVANT TO THE ESTABLISHING OF THE COMMISSION OF THE OFFENCE. INSPECTORS AND REPRESENTATIVES OF THE NATIONAL AUTHORITY ARE PERMITTED TO ACCOMPANY PEACE OFFICERS IN CONDUCTING THE SEARCH AND SEIZURE.

THE ACT SETS OUT PENALTIES FOR NON-COMPLIANCE AND PROTECTS FROM DISCLOSURE, CONFIDENTIAL INFORMATION.

CLAUSE 1

THE SHORT TITLE OF THE ACT IS THE *COMPREHENSIVE NUCLEAR TEST-BAN TREATY IMPLEMENTATION ACT.*

CLAUSE 2

THIS CLAUSE LISTS THE DEFINITIONS OF WORDS OR TERMS THAT ARE USES IN THE ACT.

CLAUSE 3

THE PURPOSE OF THE ACT IS TO IMPLEMENT CANADA'S OBLIGATIONS UNDER THE ATTACHED *COMPREHENSIVE NUCLEAR TEST-BAN TREATY.*

CLAUSE 4

THE ACT IS BINDING ON BOTH FEDERAL AND PROVINCIAL CROWNS.

CLAUSE 5

THIS CLAUSE PROVIDES THAT THE GOVERNOR IN COUNCIL, MAY BY ORDER, DESIGNATE ANY MEMBER OR MEMBERS OF THE QUEEN'S PRIVY COUNCIL FOR CANADA AS THE MINISTER FOR THE PURPOSES OF ANY PROVISION OF THE ACT. THIS ALLOWS MINISTERS AND THEIR RESPECTIVE DEPARTMENTS TO BE RESPONSIBLE FOR PROVISIONS OF THE ACT WITHIN THEIR AREA OF EXPERTISE.

CLAUSE 6

THIS CLAUSE PROVIDES THE MINISTER WITH AUTHORITY TO DELEGATE PERSONS TO EXERCISE THE POWERS AND PERFORM

THE DUTIES OF THE MINISTER UNDER THIS ACT. PERSONS CAN BE FROM THE PUBLIC OR PRIVATE SECTOR.

CLAUSE 7

THIS CLAUSE SETS OUT THE FUNDAMENTAL PROHIBITIONS IN ARTICLE 1 OF THE TREATY. PERSONS WHO DO NOT COMPLY WITH CLAUSE 7 ARE GUILTY OF AN INDICTABLE OFFENCE AND ARE LIABLE FOR LIFE IMPRISONMENT.

SUB-CLAUSE 7(1)(A) AND (B)

PERSONS ARE PROHIBITED FROM CARRYING OUT, CAUSING OR ENCOURAGING OR PARTICIPATING IN THE CARRYING OUT OF A NUCLEAR WEAPON TEST EXPLOSION OR ANY OTHER NUCLEAR EXPLOSION FOR THE PURPOSE OF THE DEVELOPMENT AND QUALITATIVE IMPROVEMENT OF NUCLEAR WEAPONS OR THE DEVELOPMENT OF NEW NUCLEAR WEAPONS.

SUB-CLAUSE 7(2)

THIS CLAUSE ENSURES THAT CANADIAN CITIZENS WHO COMMIT AN ACT OR OMISSION OUTSIDE CANADA, SUCH AS TO CONSTITUTE AN OFFENCE UNDER SUBCLAUSE 7(1), WILL BE SUBJECT TO THE ACT AS IF THEY HAD COMMITTED THE OFFENCE IN CANADA. PERSONS WHO ARE NOT CANADIAN CITIZENS BUT COMMIT THE ACT OR OMISSION OUTSIDE CANADA, BUT IN A PLACE CONTROLLED BY CANADA, ARE SIMILARLY SUBJECT TO THE ACT AS IF THEY HAD COMMITTED THE OFFENCE IN CANADA.

SUB-CLAUSE 7(3)

THIS CLAUSE PROVIDES THAT PROCEEDINGS IN RELATION TO THE OFFENCE, CAN BE COMMENCED IN ANY TERRITORIAL DIVISION IN CANADA, WHETHER OR NOT THE PERSON IS IN CANADA.

SUB-CLAUSE 7(4)

THE PROVISIONS OF THE *CRIMINAL CODE* RELATING TO APPEAR-

ANCES OF AN ACCUSED APPLY FOR PROCEEDINGS IN SUB-CLAUSE 7(3).

SUB-CLAUSE 7(5)

IF A PERSON WAS TRIED AND CONVICTED, ACQUITTED OR PARDONED FOR AN OFFENCE SIMILAR TO 7(1) BUT IN ANOTHER COUNTRY AND UNDER THAT COUNTRY'S LEGISLATION, THE PERSON COULD NOT BE TRIED AND CONVICTED, ACQUITTED OR PARDONED IN CANADA FOR THAT OFFENCE.

CLAUSE 8

PERSONS WHO CARRY OUT OR ASSIST IN THE CARRYING OUT OF A SINGLE EXPLOSION OR A SERIES OF EXPLOSIONS, USING 300 TONNES OR MORE OF TNT, MUST NOTIFY THE NATIONAL AUTHORITY OF THIS ACTIVITY AND PROVIDE INFORMATION ON THE LOCATION, TIME AND DATE, QUANTITY AND TYPE OF EXPLOSIVE, CONFIGURATION AND PURPOSE OF THE EXPLOSION, AS WELL AS, ANY OTHER RELEVANT INFORMATION.

FOR A SINGLE EXPLOSION, PERSONS MUST PROVIDE NOTICE NO LATER THAN SEVEN DAYS AFTER THE EVENT, OR ELSE THEY WILL BE GUILTY OF AN OFFENCE PUNISHABLE ON SUMMARY CONVICTION.

FOR A SERIES EXPLOSION, PERSONS MUST PROVIDE NOTICE NO LATER THAN 120 DAYS AFTER THE EVENT OR THEY WILL LIKEWISE BE GUILTY OF AN OFFENCE PUNISHABLE ON SUMMARY CONVICTION.

CLAUSES 9, 10 AND 11 ADDRESS THE DUTIES AND FUNCTIONS OF THE DOMESTIC BODY KNOWN AS THE NATIONAL AUTHORITY.

CLAUSE 9

THIS CLAUSE PROVIDES THE MINISTER WITH THE AUTHORITY TO DESIGNATE ANY PERSON OR INSTITUTE, PUBLIC OR PRIVATE, TO

BE THE NATIONAL AUTHORITY AS WELL AS REPRESENTATIVES OF THE NATIONAL AUTHORITY.

THE MINISTER WILL ALSO AUTHORIZE THE ACTIVITIES OF THE REPRESENTATIVES AND THE PLACES THEY WILL HAVE ACCESS TO. THEIR ACTIVITIES AND PLACES OF ACCESS AND ANY CONDITIONS ATTACHED THERETO, WILL BE INDICATED IN A CERTIFICATE WHICH WILL ALSO BE PROVIDED BY THE MINISTER.

CLAUSE 10

THIS CLAUSE SETS OUT THE MAIN DUTIES AND FUNCTIONS OF THE NATIONAL AUTHORITY. THE NATIONAL AUTHORITY IS ALLOWED TO ESTABLISH OR DESIGNATE FACILITIES AND LABORATORIES,AND WHERE NECESSARY, OPERATE, MAINTAIN, EQUIP AND UPGRADE, IN ORDER TO ALLOW VERIFICATION MEASURES AS PART OF THE INTERNATIONAL MONITORING SYSTEM TO BE CARRIED OUT.

OTHER FUNCTIONS OF THE NATIONAL AUTHORITY INCLUDE COMMUNICATING DATA OBTAINED FROM THE VERIFICATION MEASURES TO THE INTERNATIONAL DATA CENTRE, ESTABLISHING OR DESIGNATING FACILITIES UNDER THE NAME OF THE NATIONAL DATA CENTRE, FACILITATING AND ASSISTING IN THE ON SITE INSPECTIONS, PARTICIPATING WITH OTHER STATES PARTIES IN CLARIFICATION MEASURES UNDER THE TREATY, COMMUNICATING AND LIAISING WITH THE MINING INDUSTRY, ETC.

CLAUSE 11

THIS CLAUSE ALLOWS THE NATIONAL AUTHORITY TO DELEGATE ANY OF ITS POWERS, DUTIES AND FUNCTIONS WITH CONDITIONS ATTACHED THERETO, TO PUBLIC OR PRIVATE PERSONS.

CLAUSE 12

THIS CLAUSE REQUIRES THAT THE MINISTER OF HEALTH ESTAB-

LISH OR DESIGNATE FACILITIES OR LABORATORIES AND WHERE NECESSARY, OPERATE, MAINTAIN AND UPGRADE THEM IN ORDER TO DO SAMPLE ANALYSES FROM RADIONUCLIDE MONITORING STATIONS.

THIS CLAUSE ALSO REQUIRES THAT THE MINISTER OF NATURAL RESOURCES DO THE SAME IN ORDER THAT VERIFICATION MEASURES BY MEANS OF SEISMOLOGICAL, HYDROACOUSTIC AND INFRASOUND MONITORING CAN BE CARRIED OUT.

CLAUSE 13

THE MINISTER MAY SEND A NOTICE TO ANY PERSON WHO THE MINISTER BELIEVES HAS INFORMATION OR DOCUMENTS RELEVANT TO THE ADMINISTRATION OR ENFORCEMENT OF THE ACT. PERSONS ARE REQUIRED TO COMPLY WITH THE NOTICE AND PROVIDE THE INFORMATION TO THE MINISTER OR PERSON DESIGNATED WITHIN THE TIME SPECIFIED IN THE NOTICE.

THE MINISTER MAY APPLY TO A COURT FOR A COURT ORDER TO ENFORCE THIS PROVISION.

CLAUSES 14, 15 AND 16 ARE THE MAIN PROVISIONS THAT ADDRESS THE PROCEDURES TO BE FOLLOWED FOR ON-SITE INSPECTIONS

CLAUSE 14

THE MINISTER IS REQUIRED TO ISSUE TO EVERY INSPECTOR OR OBSERVER COMING TO CANADA TO PARTICIPATE IN AN ON-SITE INSPECTION, A CERTIFICATE THAT IDENTIFIES THE PERSON BY NAME, SPECIFY'S THEIR PRIVILEGES AND IMMUNITIES AND ANY OTHER INFORMATION OR CONDITIONS. HOLDERS OF SUCH CERTIFICATES ARE REQUIRED TO SHOW THE CERTIFICATE AT THE REQUEST OF PERSONS IN CHARGE OR CONTROL OF THE PLACE BEING INSPECTED. THE CERTIFICATE AS SUCH CAN BE USED AS EVIDENCE IN A PROCEEDING.

CLAUSE 15

INSPECTORS MAY AT ANY REASONABLE TIME AND WITH THE CONSENT OF THE PERSON IN POSSESSION OR CONTROL OF THE PLACE, ENTER AND INSPECT A PLACE THAT IS SUBJECT TO AN ON-SITE INSPECTION UNDER THE TREATY. THE INSPECTOR MAY BE ACCOMPANIED BY ONE TO THREE OBSERVERS, REPRESENTATIVES OF THE NATIONAL AUTHORITY AND PEACE OFFICERS ONLY AT THE CONSENT OF THE PERSON IN POSSESSION OR CONTROL OF THE PLACE. TO BE VALID CONSENT, THE PERSON IN POSSESSION OR CONTROL OF THE PLACE MUST BE INFORMED OF THE PURPOSE OF THE INSPECTION.

CLAUSE 16

A WARRANT MUST BE OBTAINED TO ENTER AND INSPECT AND SEARCH A PLACE WHERE CONSENT HAS NOT BEEN OBTAINED. IF A JUDGE IS SATISFIED THAT THERE ARE REASONABLE GROUNDS TO BELIEVE THAT AN OFFENCE UNDER S.7 HAS BEEN COMMITTED AND THAT THERE IS INFORMATION IN THAT PLACE THAT IS RELEVANT TO THE COMMISSION OF THE OFFENCE, THE JUDGE MAY ISSUE A WARRANT AUTHORIZING A PEACE OFFICER, ACCOMPANIED BY AN INSPECTOR AND A REPRESENTATIVE TO ENTER THE PLACE AND INSPECT AND SEARCH AND SEIZE EVIDENCE. THE WARRANT MAY ALSO AUTHORIZE ONE TO THREE OBSERVERS TO ACCOMPANY THE INSPECTORS OR REPRESENTATIVES.

THE PROVISIONS OF THE *CRIMINAL CODE* IN RESPECT OF SEARCH AND SEIZURE APPLY.

PEACE OFFICERS MAY CONDUCT SEARCHES OF PERSONS IF THEY HAVE REASONABLE GROUNDS TO BELIEVE THAT THE PERSON HAS INFORMATION RELEVANT TO THE ESTABLISHING THE COMMISSION OF THE OFFENCE.

CLAUSES 17, 18 AND 19 ADDRESS THE PRIVILEGES AND IMMUNITIES OF PERSONS COMING TO CANADA TO CARRY OUT TREATY REQUIREMENTS

CLAUSE 17

CLAUSE 17 IDENTIFIES THE PRIVILEGES AND IMMUNITIES THAT ARE TO BE ACCORDED INSPECTORS AND OBSERVERS WHEN CARRYING OUT THEIR ON-SITE INSPECTIONS. THESE PRIVILEGES AND IMMUNITIES ARE DETAILED IN THE PROTOCOL TO THE TREATY INCLUDING THOSE ENJOYED BY DIPLOMATIC AGENTS UNDER THOSE PROVISIONS OF THE VIENNA CONVENTION ON DIPLOMATIC RELATIONS OF APRIL 1961 THAT ARE SPECIFIED IN THIS CLAUSE, NAMELY, ARTICLE 29, PARAGRAPH 1 OF ARTICLE 30, INVIOLABILITY UNDER PARAGRAPH 2 OF ARTICLE 30, PARAGRAPHS 1, 2, 3 OF ARTICLE 31 AND ARTICLE 34.

CLAUSE 18

SAMPLES AND APPROVED EQUIPMENT CARRIED BY INSPECTORS IN CARRYING OUT THEIR ACTIVITIES IN CANADA ARE INVIOLABLE. NOTWITHSTANDING, DANGEROUS SAMPLES THAT COME WITHIN THE DEFINITION OF DANGEROUS GOODS UNDER THE *TRANSPORTATION OF DANGEROUS GOODS ACT* ARE TO BE TRANSPORTED IN ACCORDANCE WITH THAT ACT. PRESCRIBED SUBSTANCES WITHIN THE MEANING OF THE *ATOMIC ENERGY CONTROL ACT* ARE TO BE TRANSPORTED IN ACCORDANCE WITH THAT ACT.

CLAUSE 19

CLAUSE 19 DESCRIBES THE PRIVILEGES AND IMMUNITIES ACCORDED INSPECTORS IN TRANSIT.

CLAUSE 20

OBSERVERS HAVE THE SAME PRIVILEGES AND IMMUNITIES AS INSPECTORS WITH THE EXCEPTION OF THOSE THAT ARE GRANTED UNDER 18(1) OF THE ACT, RESPECTING SAMPLES AND APPROVED EQUIPMENT CARRIED BY INSPECTORS.

CLAUSE 21

THIS CLAUSE ADDRESSES THE WAIVER OF THE RESPECTIVE IMMUNITIES OF INSPECTORS AND OBSERVERS. THE WAIVER OF PRIVILEGES AND IMMUNITIES MUST BE EXPRESS.

SUB-CLAUSE 22(1)

THIS SUB-CLAUSE PROHIBITS PERSONS FROM KNOWINGLY COMMUNICATING OR ALLOWING INFORMATION OR DOCUMENTS OBTAINED IN CONFIDENCE TO BE COMMUNICATED TO ANY PERSON, OR TO ALLOW PERSONS TO HAVE ACCESS TO SUCH INFORMATION, WITHOUT THE WRITTEN CONSENT OF THE PERSON WHO PROVIDED THE INFORMATION. THE EXCEPTIONS TO THE PROHIBITION ARE PROVIDED IN PARAGRAPHS 22(2)(A) AND (B) OF THE ACT.

SUB-CLAUSE 22(2)(A)

SUCH INFORMATION CAN BE RELEASED FOR PUBLIC INTERESTS RELATING TO HEALTH, SAFETY AND PROTECTION OF THE ENVIRONMENT WHERE THAT INTEREST CLEARLY OUTWEIGHS ANY FINANCIAL OF MATERIAL LOSS, OR PREJUDICE FROM A COMPETITIVE POSITION, AND ANY DAMAGE TO THE PRIVACY, REPUTATION OR HUMAN DIGNITY OF AN INDIVIDUAL.

SUB-CLAUSE 22(2)(B)

SUCH INFORMATION CAN BE RELEASED IF IT IS NECESSARY FOR THE ENFORCEMENT OF THIS ACT OR ANY OTHER ACT OF PARLIAMENT, OR FOR GIVING EFFECT TO THE TREATY.

SUB-CLAUSE 22(3)

SUCH INFORMATION OBTAINED IN CONFIDENCE IS NOT TO BE USED AS EVIDENCE IN LEGAL PROCEEDINGS UNLESS THE PROCEEDINGS ARE FOR PURPOSES OF ENFORCING THIS ACT OR ANY OTHER ACT OF PARLIAMENT.

CLAUSE 23

THIS CLAUSE PROVIDES THE GOVERNOR IN COUNCIL WITH DISCRETIONARY AUTHORITY TO MAKE REGULATIONS FOR CARRYING OUT AND GIVING EFFECT TO THE TREATY.

CLAUSE 24

AMENDMENTS TO THE SCHEDULE INCORPORATING AMENDMENTS TO THE TREATY SHALL BE DONE BY MINISTERIAL ORDER IN A TIMELY MANNER.

SUB-CLAUSE 25(1)

SUB-CLAUSE 25(1) IS THE OFFENCE PROVISION FOR SUBSECTION 22(1). THE HYBRID OFFENCE ALLOWS ENFORCEMENT OFFICERS TO DETERMINE, DEPENDING ON THE GRAVITY OF THE OFFENCE, WHETHER OR NOT TO PROCEED IN THE MORE SERIOUS INSTANCES WITH AN INDICTABLE PROCESS, OR ON THE OTHER HAND, IF THE DETERMINATION IS MADE THAT THE OFFENCE IS MORE MINOR, THE MORE SIMPLE SUMMARY CONVICTION PROCEDURE IS AVAILABLE.

SUB-CLAUSE 25(2)

PERSONS WHO CONTRAVENE THE OFFENCE PROVISIONS OF REGULATIONS MADE UNDER S.23 OF THE ACT ARE PUNISHABLE BY WAY OF SUMMARY PROCEEDINGS.

CLAUSE 26

WHERE THERE HAS BEEN A CONVICTION UNDER THIS ACT AND THINGS HAVE BEEN SEIZED IN RESPECT OF THE COMMISSION OF AN OFFENCE, THIS CLAUSE PROVIDES THAT A JUDGE HAS THE DISCRETION TO ORDER WHETHER THE THING SEIZED SHOULD BE FORFEITED TO THE CROWN. THE MINISTER AS WELL, HAS THE DISCRETION AS TO HOW THE THING SEIZED IS TO BE DISPOSED OF.

CLAUSE 27

THIS CLAUSE LIMITS THE TIME, WITHIN WHICH A PROCEEDING BY WAY OF SUMMARY CONVICTION MAY BE BROUGHT, UP TO TWO YEARS AFTER THE DAY ON WHICH THE SUBJECT MATTER OF PROCEEDINGS AROSE.

CLAUSE 28

WHEN THE *NUCLEAR SAFETY ACT* COMES INTO FORCE IT WILL REPLACE THE *ATOMIC ENERGY CONTROL ACT* MENTIONED IN SUBSECTION 18(2)(B).

CLAUSE 29

THIS CLAUSE PROVIDES FLEXIBILITY FOR THE ENTIRE BILL OR ANY PROVISION OF THE BILL TO COME INTO FORCE ON SUCH DAY AS IS FIXED BY ORDER OF THE GOVERNOR IN COUNCIL.

CTBT QUESTIONS AND ANSWERS

SEPTEMBER, 1998

CTBT QUESTIONS AND ANSWERS
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THE TREATY

A1. What is the CTBT?

The CTBT is a comprehensive treaty reflecting the culmination of lengthy efforts to ban all nuclear weapons testing. At first, the nuclear-weapon States tested in the atmosphere, underwater and underground. Over the last forty years, progress was made in reducing the scope of testing. A Limited (Partial) Test Ban Treaty (LTBT) came into force in 1963, which prohibited tests of nuclear devices in the atmosphere, in outer space, and underwater. The LTBT did not ban underground nuclear testing, so long as radioactive debris did not cross outside the territorial limits of the testing state. However, two nuclear powers, France and China, did not sign the LTBT and they continued nuclear tests as late as 1996 and 1992 respectively. In 1967, the Outer Space Treaty was signed banning the placement of "weapons of mass destruction" including nuclear weapons in orbit around the earth. Regional nuclear free zones have been established: the Treaty of Tlatelolco forming the Latin America Nuclear Free Zone (1967); the Treaty of Rarotonga forming the South Pacific Nuclear Free Zone (1985); and the Treaty of Pelindaba forming an African Nuclear Free Zone (1996). But previous attempts to develop a universal and comprehensive nuclear test ban treaty failed in 1963 and 1980, mainly because of doubts about effective verification. After years of inconclusive discussions, in November 1993, the Geneva-based Conference on Disarmament (CD) received a strong mandate from the United Nations General Assembly (UNGA) to negotiate a comprehensive nuclear test ban treaty. These negotiations were successful and on 24 September 1996, the Treaty was opened for signature in New York.

A2. What was Canada's position and role regarding the CTBT?

Canada has advocated the conclusion of an universal nuclear test ban treaty since the 1960s. This commitment has been reiterated many times by successive Governments. Canada strongly supported and took a leading role in the negotiation of the CTBT. Upon conclusion of the CTBT negotiations, some member states, led by India, opposed several elements in the text and blocked the required consensus. To counteract this, Canada and several other states introduced the draft treaty directly at a Special Session of UNGA in September 1996. The Treaty was adopted by an overwhelming majority and declared open for signature in New York on September 24, 1996. Canada was among the first states to sign the CTBT that day.

A3. What is the point of the Treaty if India, Pakistan and North Korea do not join?

The CTBT remains a remarkable achievement in strengthening the non-proliferation regime even without the immediate participation of India, Pakistan and North Korea. Without the Treaty, there would be no International Monitoring System to detect nuclear explosions throughout the world. The IMS in turn provides a great deterrence to any state which might entertain the clandestine development of nuclear weapons. The Treaty limits the ability of the five declared nuclear-weapon States to develop additional nuclear weapons; which in turn provides them with reciprocal assurances, thus encouraging them towards further nuclear weapons disarmament. The Treaty reflects a significant international norm adhered to by the vast majority of states to eschew nuclear explosions and give the international community a potent tool to effect the eventual adherence of India, Pakistan and North Korea.

A4. What is the point of the Treaty if the United States will not ratify it?

It is erroneous to conclude that the United States will not ratify the CTBT, notwithstanding statements to the contrary made by some senators, notably Jesse Helms (Chairman of the Senate Foreign Relations Committee). Polls in the US indicate that 77% of citizens support early ratification of CTBT. The US is committed to ratification and has prepared implementation legislation. US officials are active in the Preparatory Commission for the implementation of the CTBT and the President has publicly stated his intention to pursue early ratification. On 1 September 1998, the US Senate authorized the US contribution to the CTBTO Preparatory Commission.

A5. How will the Treaty ensure compliance?

The Treaty provides for an International Monitoring System (IMS) to detect, locate and characterize nuclear explosions, and On Site Inspections to clarify whether a suspicious event is a nuclear explosion.

A6. How reliable will this compliance system be?

The IMS is being put into place over the next several years in advance of Entry into Force of the Treaty. The IMS will detect and identify with a high degree of confidence all explosions greater than one kilotonne in the atmosphere, underwater or underground, anywhere on earth. As explosions below the one kilotonne threshold may also be detected by the IMS, and as on-site inspections can be requested, there is great level of deterrence to carrying out very small nuclear explosions. While not yet operational, the current, partial system was easily able to detect and identify the recent Indian and Pakistani nuclear tests explosions.

Criticism has been levelled at the inability of the current, partial IMS to positively determine the number of Indian and Pakistani tests. However, the nature of the events was clearly determined, and after Entry into Force such a determination would suffice to trigger requests for on-site inspection. While some concerns have been expressed that the inability of the IMS to detect small explosions makes verification of strict compliance with a comprehensive ban on testing impossible, any State Party may also use any other evidence when requesting an on-site inspection, including for example satellite imagery, signal intelligence or human intelligence.

A7. What constitutes a banned nuclear explosion according to the CTBT?

The CTBT bans any nuclear weapon test explosion or any other nuclear explosion to constrain the development and qualitative improvement of nuclear weapons, and ends the development of advanced new types of nuclear weapons. It is not the intention of the Treaty to ban certain types of nuclear fusion experiments conducted using lasers, particle accelerators or inertial confinement. Such experiments are important in civil scientific research, particularly in the development of fusion power.

A8. Are zero-yield tests banned?

The issue of whether so called sub-critical or "zero-yield" tests are banned by the Treaty is open to interpretation. Some states, notably the US, have maintained that such experiments are not prohibited, since no net nuclear energy release is produced. They furthermore insist that such experiments are critical to the maintenance of a safe and effective nuclear stockpile as a continuing deterrent. It can be argued that "zero-yield" tests are nonetheless nuclear explosions and are banned. However, the IMS would not be able to detect "zero-yield" tests and where such tests are not announced by the state, they would most likely go undetected. There will be opportunity for States Party to the Treaty to address this issue during review conferences after the Treaty enters into force.

A9. Is the CTBT then just a moral norm?

No, the CTBT is more than just a noble gesture and is a major step forward towards global nuclear disarmament. The ultimate non-proliferation value of the Treaty is that it establishes a global norm against nuclear testing for all nations, even for those states that may not immediately join. Notwithstanding the possibility of "zero-yield" tests, states will be limited in their ability to make technical improvements to their arsenals and the Treaty will prevent states from using nuclear tests as provocative symbols of power. In this way, the Treaty will restrict proliferation and ultimately facilitate disarmament. It is true that, irrespective of the Treaty, states can still develop and deploy a basic nuclear capability without nuclear explosion testing. But a sophisticated nuclear capability cannot be achieved without such explosion testing. Further, all signatories are obliged under the *Vienna Convention on the Law of Treaties (1980)* not to undertake any nuclear explosion, as referenced in the CTBT, until the Treaty enters into force.

A10. Is the Treaty strong enough to effect a nuclear-weapons-free world?

The CTBT deals with one aspect of our quest to eradicate all nuclear weapons. The advantage of the CTBT is that it will constrain the development and qualitative improvement of nuclear weapons and the development of advanced new types of nuclear weapons, constituting an effective measure of nuclear disarmament and non-proliferation in all its aspects. Through the verification regime, the CTBT Organization will be able to detect quickly and accurately any nuclear explosion, anywhere in the world. It also provides a challenge mechanism, an opportunity to set up and conduct very quickly an inspection, where there are doubts about the credibility and good faith of any State Party to the Treaty. In the assessment of most experts in the field, this will be sufficient deterrent for the States Party to refrain from weapons testing through nuclear explosions. However, a nuclear-weapons-free world requires that the nuclear-weapon States eliminate their stockpiles. Progress will also depend on the co-operation of states that have no declared nuclear weapons capability. The long road towards ridding the world of nuclear weapons is complicated. The CTBT, with its verification and on-site-inspection regime, is a stronger deterrent to the development of nuclear weapons than all previous disarmament treaties and is a major contribution to a practical and sustainable step-by-step approach to the reduction and eventual elimination of nuclear weapons.

A11. How would the CTBT deal with violators?

If it is determined by the CTBT Organization that a citizen of a State Party has violated the Treaty by exploding a nuclear device, the Organization will expect that the National Authority of the State Party will pursue criminal charges against the violator. If the violator is the State Party itself, then the CTBTO shall inform all States Party of the violation. Censure can follow and the matter can be referred to the UN Security Council, which may then decide to deal with the violating state through sanctions, embargoes or other actions. The CTBT Organization itself, however, does not have any sanction capabilities of its own.

A12. How is the CTBT related to the Nuclear Non-Proliferation Treaty?

The basic objective of the two treaties is nuclear non-proliferation and disarmament. However, they are independent from each other and their implementation regimes are different.

In 1968, the Nuclear Non-Proliferation Treaty (NPT) created a non-proliferation regime which legally bound the five nuclear-weapon States (NWS: those who had exploded nuclear devices before 1967; France, China, Russia, the UK and the US) not to transfer their military nuclear technology to non-nuclear-weapon States (NNWS), and for NNWS not to pursue the development or acquisition of nuclear weapons. By 1970, when the NPT came into force, 40 states had ratified it, including Canada, the US, the UK and the USSR (its NPT obligations have been assumed by Russia). France and China did not ratify the NPT until 1992. India and Pakistan, states who have declared their nuclear weapons programs, have not signed the NPT. For Israel and North Korea, states which are suspected of possessing nuclear weapons capabilities, only North Korea has signed and ratified the NPT. NNWS are legally obliged to accept IAEA safeguards on all source or special fissionable material under their control, while all States Party (including the NWS) are obliged to pursue negotiations in good faith on effective measures relating to the early cessation of the nuclear arms race and to nuclear disarmament.

The CTBT continues the non-proliferation regime by banning the testing of nuclear weapons through nuclear explosions that would enable states to develop nuclear weapons. However, the NWS states are still permitted to maintain their present arsenals. In most cases, countries which have not signed the NPT also have not signed the CTBT, except for Israel which has signed the CTBT but not the NPT.

ENTRY INTO FORCE

B1. When will the Treaty enter into force?

The Treaty will enter into force 180 days after it has been ratified by 44 designated states which include the declared nuclear-weapon States (China, France, Russia, the UK and the US), as well as threshold states (India, Pakistan, North Korea, and Israel) and states with peaceful nuclear energy or research facilities (including Canada). As of September 1, 1998, 150 states have signed the Treaty, including 41 of the designated states, representing all five declared nuclear-weapon States. North Korea, India and Pakistan are the three designated states who have not signed the Treaty. 21 states have ratified the Treaty; of which ten are designated states, including two nuclear-weapon States (France and the UK). It is unlikely that the Treaty will enter into force (EIF) in the next year. The five nuclear-weapon States have declared a moratorium on weapons testing until the Treaty enters into force.

B2. Have all the designated states signed the Treaty?

Of the 44 states whose ratification is a pre-condition for the Treaty's entry into force (EIF), only India, Pakistan and North Korea have yet to sign. We are actively encouraging them, both unilaterally and in concert with others, to sign the Treaty immediately and unconditionally.

B3. Why won't India, Pakistan and North Korea sign the CTBT?

India has vigorously protested that the NPT is discriminatory since it legitimizes the possession of nuclear weapons by five countries. India claims that repeated calls for nuclear disarmament have been ignored or rebuffed by the five nuclear powers. India has stated that it will not sign the CTBT and the NPT nor give up its nuclear program unless the nuclear- weapon States commit themselves to a timetable for the elimination of their arsenals. India seems to want to keep open its option to develop nuclear weapons. While India claims that changes to the format and language of the CTBT could eventually elicit its agreement, successive Indian governments have failed to suggest what actual changes India requires. Pakistan has indicated that it will not sign the CTBT (and NPT) unless India does.

North Korea is not a highly integrated actor in the international system. However, North Korea is a non-nuclear-weapon State Party to the Non-Proliferation Treaty, which binds it not to test. Of course, that is not the same as signing the CTBT, and we want North Korea to sign and ratify.

B4. Would Canada's nuclear policy change towards North Korea, India, Pakistan if they sign and ratify the CTBT?

Not necessarily. Canada suspended nuclear cooperation with India following its detonation of a nuclear device in 1974. Following this event, Canada strengthened its nuclear non-proliferation policy and the conditions under which it would undertake international nuclear cooperation. Canada will not authorize nuclear cooperation with non-nuclear weapon States unless such a state makes a binding commitment to nuclear non-proliferation through becoming a Party to the NPT, or an internationally equivalent agreement, and thereby accepts IAEA fullscope safeguards. In addition, any state wishing to enter into nuclear cooperation with Canada must conclude a legally binding Nuclear Cooperation Agreement that contains additional nuclear non-proliferation assurances.

Canada ended bilateral nuclear cooperation with India and Pakistan in 1976 when neither country would agree to the requirements of Canada's strengthened nuclear non-proliferation policy. India, Pakistan and North Korea presently are not willing to meet the requirements of Canadian nuclear non-proliferation policy and therefore are not eligible for bilateral nuclear cooperation. If they were to meet these requirements, it would then have to be determined what level of nuclear cooperation would be appropriate.

B5. Have all of the 41 other designated states who signed the treaty ratified it?

Not yet. Ratification requires most countries to prepare, pass and promulgate domestic implementation legislation. Two years after the Treaty was opened for signature, we now are beginning to see the pace of ratification pick up. Ten of the designated states have already ratified the Treaty. Canada, as a designated state, will shortly ratify the Treaty. There are no reasonable indications that any of the 41 designated states will fail to ratify the Treaty.

B6. What happens if all 44 designated states do not ratify the Treaty?

At present, unless all 44 designated nuclear states ratify the Treaty, it cannot enter into force. However, in anticipation of such a scenario, beginning three years after opening for signature (September 1999), Article XIV of the Treaty permits annual review conferences to consider alternate ways to have the Treaty enter into force. Canada was instrumental in drafting this article during the Treaty's negotiation. The format for a review conference in 1999 is yet to be determined. However, it seems likely that this will be discussed at the UN General Assembly this autumn.

TECHNOLOGIES

C1. What technologies are being used for detection in the CTBT?

The International Monitoring System uses radionuclide, seismological, hydroacoustic and infrasound monitoring technology. These technologies separately and in concert can detect nuclear tests in the atmosphere, under water, outer space and underground. Assuming that any clandestine testing most likely would occur underground, the seismic network is the most important element of the monitoring system.

C2. Is there a provision to introduce new technologies?

Article IV, Paragraph 11 specifically makes each State Party responsible for cooperating with the CTBT Organization and with other States Party to improve the verification regime, and to examine the verification potential of additional monitoring technologies. The States Party are also urged to continue to examine and evaluate appropriate measures to enhance the efficiency and cost-effectiveness of the verification system. Simply stated, if one of the four technologies becomes redundant, it would be replaced with newer technology. In such cases, the rules pertaining to Amendments to the Treaty, Article VII, shall apply.

C3. What are the technical benefits to Canada from CTBT? How is Canadian industry involved with the existing and emerging technologies?

With its vast geography, Canada has a vital interest in the use of remote sensing techniques to help manage its resources and environment. CTBT provides an additional impetus to foster such technologies. Canadian agencies and companies have developed unique skills in the area and are well situated to apply these skills and technologies to work that is essential for national and international security.

C4. The IMS appears to be costly. Are there other uses for the system? Will the data be freely available for scientific and environmental purposes?

The data will certainly improve our understanding of the earth's environment - more precise global monitoring of earthquakes, better models for atmospheric transport, improved understanding of sound propagation in the ocean. Though there would be confidentiality caveats, the data is expected to be broadly available to States Party to the Treaty.

ON-SITE INSPECTIONS

D1. What happens when the monitoring system detects a suspicious event?

The CTBTO will request clarification from the implicated State Party. When the event is not clarified to the satisfaction of the CTBTO or any other State Party, a State Party can request an on-site inspection. The Executive Council of the CTBTO would then rule on this request. Clarification and on-site inspections can also be requested based on other data than the international monitoring system, such as satellite observation or other national technical means. It is anticipated that inspections under the CTBT will be rare, and given the highly specialized nature of such inspections, most of the inspectors will be drawn from resources made available by signatories. Canadians will be eligible as inspectors. Every signatory is allowed to reject an inspector in advance of inspections in its jurisdiction, but inspectors cannot be rejected once an inspection is launched.

D2. What happens if a country refuses an on-site inspection?

If the membership at large orders an on-site inspection, the implicated State Party must comply or face censure. Censure can include a variety of measures including, in urgent cases, referral to the United Nations Security Council.

D3. What authority will inspectors have?

The inspection team will have a mandate to inspect a limited area using specified techniques. The team is only allowed to collect relevant information i.e. evidence that may be used to decide whether or not a nuclear test has taken place. Collection of irrelevant information is not allowed. The Treaty allows managed access in sensitive areas. Representatives of the implicated National Authority will be responsible for ensuring that the inspection team has the access it needs to execute its mandate and that it does not make unwarranted intrusions into the lawful activities of its corporate and private citizens. The inspectors will have privileges and immunities similar to those of a diplomat.

D4. How effective will on-site inspections be?

Timely on-site inspection will be effective in confirming or eliminating the possibility that a nuclear explosion took place. Inspection will easily determine the presence or absence of fission products. The collection of evidence proving that the ambiguous event was caused by a natural event or other permitted activity would equally reflect a highly effective inspection.

D5. What happens if the on-site inspection determines that a nuclear explosion took place?

If the explosion was undertaken by corporate or private citizens, the implicated State Party would be expected to prosecute these citizens. If the explosion was undertaken by the State Party itself, it could be censured by other states, including referral to the United Nations Security Council.

D6. Do the recent India/Pakistan tests call into question the effectiveness of the CTBT regime?

On the contrary, there already was sufficient evidence from the partially completed IMS to indicate that nuclear explosions had occurred. If the Treaty had been in force with India and Pakistan as members, there would have been sufficient evidence to justify an on-site inspection, which then would have determined that a Treaty violation had occurred. It is not of great concern whether the IMS measured the number of devices detonated as the measurement was sufficient to register an explosion. Similarly, the purported failure of the partially completed IMS to detect two smaller explosions may be of little concern, since if the explosions did occur at very shallow depths as the Indian Government claimed, some venting of radioactive material, and subsequent detection by the yet to be installed radionuclide system of the IMS, would be expected.

CANADA AND THE CTBT

E1. What is Canada presently doing to further the implementation of the CTBT?

Canada is proceeding with domestic implementation legislation which will criminalize the carrying out of nuclear explosions, and the aiding and abetting of the carrying out of nuclear explosions; make obligatory the reporting by Canadian industry of very large chemical explosions; and mandate the respective roles of Foreign Affairs and International Trade, Natural Resources Canada and Health Canada. This legislation will then allow Canada to ratify the Treaty. We are completing the installation of our monitoring stations, laboratories and the National Data Centre, and are liaising with Canadian companies, provinces and territories regarding the reporting of chemical explosions.

With respect to international activity, we are continuing our leadership role in the CTBT Organization. We are assisting the establishment of the International Monitoring System in other countries, and the development of an effective on-site-inspection system. We have taken a leadership role in calling for a conference to review the Treaty's entry into force provisions, as provided under Article XIV. We are identifying procurement opportunities for Canadian industry arising from the IMS and the Global Communications Infrastructure.

E2. What is our long-term goal for the CTBT?

Canada's long-term goal is to ensure that the Treaty enters into force, continues to be an effective non-proliferation instrument, and contributes to the ultimate elimination of all nuclear weapons.

E3. How is CTBT related to Canada's nuclear policy?

Canada's nuclear policy is to promote the peaceful uses of nuclear energy with like-minded states and ensure Canadian nuclear exports are used only for peaceful, non-explosive uses, to support strengthening the nuclear non-proliferation regime and to further arms control and nuclear disarmament efforts. Canada will authorize nuclear exports to non-nuclear weapon states only when such a state has made a binding commitment to nuclear non-proliferation through becoming Party to the NPT, or an internationally equivalent agreement, and thereby accept International Atomic Energy Agency fullscope safeguards. In addition, any state wanting nuclear cooperation with Canada must conclude a legally binding bilateral Nuclear Cooperation Agreement which contains further nuclear non-proliferation assurances.

The CTBT makes an important contribution to furthering our nuclear policy. The Treaty limits the ability of the five declared nuclear-weapon States to develop additional nuclear weapons, which in turn provides them with reciprocal assurances, thus encouraging them to further nuclear weapons disarmaments initiatives. It deters other states that may consider developing nuclear weapons programs. Ratification of the Treaty is a further demonstration of a country's commitment to nuclear non-proliferation.

E4. What are Canada's other disarmament initiatives?

Canada has worked strenuously to promote and reinforce efforts which contribute to constraining the proliferation of weapons of mass destruction and their delivery systems. Canada was one of the most active countries in the process of extending and strengthening the NPT. Indeed, the concept of "enhanced reviews" was a Canadian creation, and we co-authored the Principles and Objectives for Nuclear Non-Proliferation and Disarmament, which forms an integral part of the agreement. We have championed the ratification, entry-into-force & effective implementation of the Chemical Weapons Convention; the strengthening of the Biological and Toxin Weapons Convention (BTWC); and partnership with like-minded countries to contain the proliferation of the ballistic missile systems necessary to deliver these weapons (MTCR).

Canada continues to call for and support efforts for: universal adherence to the NPT; the earliest possible entry-into-force of the CTBT; and negotiations of a treaty banning the production of fissile material for nuclear weapons or other nuclear explosive purposes (FMCT). Canada's Ambassador to the United Nations for Disarmament was recently appointed Chairman of the Committee established to begin negotiating an FMCT.

E5. Doesn't the CTBT contradict our NATO commitments?

No. Canadian adherence to the CTBT does not conflict with our membership commitments in NATO. The CTBT is a nuclear test ban treaty which does not address the possession of nuclear weapons; NATO deterrence strategy is designed to prevent the use of nuclear weapons. The CTBT and NATO are complementary as both assure our peace and security. All NATO member states are parties to the CTBT.

E6. What is Canada's contribution to the IMS?

Currently, Canada is putting in place 15 monitoring stations (3 primary and 6 auxiliary seismic, 4 radionuclide, 1 hydroacoustic and 1 infrasound) and a radionuclide laboratory as our portion of the IMS. The monitoring facilities in seismic, hydroacoustic and infrasound technologies are managed by the Geological Survey of Canada (GSC) of Natural Resources Canada (NRCan) and the GSC will also operate the National Data Centre to collect all information in Canada. Radionuclide technology falls under the purview of Health Canada, in conjunction with Environment Canada. The Canadian National Authority of the CTBT, chaired by the Department of Foreign Affairs and International Trade (DFAIT), and including all relevant federal departments, has the overall responsibility to implement the Treaty and to serve as Canada's focal point for liaison with the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), located in Vienna, and with other States Parties.

E7. How much is the Treaty going to cost Canada?

The total cost to Canada is expected to vary from $5 to $6 million per year. The CTBT Organization, which will eventually include the completed IMS of 321 monitoring stations and 16 certified radionuclide laboratories around the globe, is funded out of assessed contributions from signatory states based on the UN scale of assessments adjusted for membership in the CTBT signatories group. For 1998, Canada's share of the budget is approximately 3.15% or US$1.8 million ($2.7 million). Over the next five years, assuming the same relative share, our contribution in current dollars is projected to grow to US$2.8 million ($4.2 million) as a larger portion of the CTBTO is put in place. Our contribution is projected to stabilize and potentially decline around 2003 once the International Monitoring System, the Global Communication Infrastructure (GCI), and the International Data Centre (IDC) are fully operational.

DFAIT will assume additional costs related to the establishment and operation of the National Authority resident in DFAIT, and related to the additional mandate of the Permanent Mission of Canada to the International Organizations (VPERM) in Vienna. Natural Resources Canada will have additional costs related to the establishment and operation of 11 monitoring stations in seismic, hydroacoustic and infrasound technologies. Health Canada, in conjunction with the Atmospheric Environment Service of Environment Canada's Canadian Meteorological Centre, will have additional costs related to the establishment and operation of four radionuclide monitoring stations and one laboratory.

According to CTBTO regulations, the incremental cost of verification operation incurred by a State Party will be refunded to them through reduced assessment of contribution or some other means. Canada has claims pending for assessed contribution reductions arising from costs incurred in 1997 and 1998.

RATIFICATION

F1. What is ratification?

Ratification is the process by which a State Signatory to the Treaty binds itself to fulfil the Treaty's commitments and brings it into domestic effect. The state guarantees that all legal and domestic procedural steps have been taken to enforce all Treaty stipulations. Since the CTBT requires 44 designated states to ratify for entry into force, it is essential that all States Parties, and in particular all designated states, should ratify the Treaty as soon as possible.

F2. Is it essential for Canada to ratify the CTBT?

Yes. Canada is one of the 44 designated states whose ratification is essential for the Treaty to enter into force. The Treaty is of great importance to Canada. It is the culmination of almost 40 years of effort by Canadian peacemakers. As the preamble makes clear, the Treaty will constrain the development and qualitative improvement of nuclear weapons, and will end the development of advanced new types of nuclear weapons, a concept supported by 93% of Canadians in a recent poll.

F3. What is the level of public support for nuclear weapons non-proliferation and for CTBT ratification in Canada?

Two 1998 Angus Reid polls on nuclear non-proliferation showed that Canadians strongly support a global ban on nuclear weapons. 93% support Canadian involvement in global negotiations to abolish nuclear weapons. 76% support a leadership role for Canada in such negotiations. 91% of Canadians believe that it is unacceptable for developing countries such as India and Pakistan to have nuclear weapons. 77% said that it is unacceptable for the five original nuclear powers to have nuclear weapons. Therefore, it can be concluded that a strong majority of Canadians equally support ratification of the CTBT.

F4. Why have we taken so long to ratify the CTBT which all of us support, while allies such as Britain and France have already ratified it? How does this reflect on our leading role in the CTBT forum?

Of 150 signatories, only 21 have ratified the CTBT to date, reflecting the process of preparing, passing, and promulgating domestic legislation. Our allies Britain and France have only just ratified the CTBT in 1998 and we expect to ratify it in the same year. Legislation to allow us to ratify will be introduced in Parliament in September. Completion of the ratification process before the end of 1998 will leave us in good company among the first group of countries to ratify and will support our leading position in the CTBT forum.

CTBT IMPLEMENTATION LEGISLATION

G1. Why do we need implementation legislation?

CTBT implementation legislation is required for three reasons. It gives the Government (The Minister of Foreign Affairs, along with the Minister of Health and the Minister of Natural Resources Canada) authority to implement respective parts of the Treaty in Canada. It criminalizes the act of, or aiding and abetting the act of, exploding a nuclear device in Canada. It obligates reporting of chemical explosions of a 300 tonne or greater TNT equivalent by making the failure to report an offence.

G2. How would a person be dealt with under the legislation for planning or taking part in a nuclear explosion?

According to the proposed legislation, any person found guilty of carrying out a nuclear explosion or causing, encouraging or participating in a nuclear explosion or a nuclear weapon test explosion is liable to a term of up to imprisonment for life.

G3. What happens if somebody forgets to report a chemical explosion as required under the Act?

Any person who does not provide notice to the CTBT National Authority within seven days after carrying out a single chemical explosion with equivalent strength of 300 TNT or more, or does not provide notice within 120 days of a series of explosions with cumulative equivalent strength of 300 TNT or more, is guilty of an offence punishable on summary conviction, of up to six months in jail and a $2000 fine.

G4. Does the legislation only apply within Canada?

No. The legislation equally applies to anyone outside Canada in a place under the control of Canada, such as a Canadian military base or Embassy.

G5. Could a Canadian working in a laboratory outside Canada involved with a nuclear explosions program be prosecuted under our CTBT legislation?

Yes. Canadian citizens outside Canada who commit an act or omission that would, if committed in Canada, constitute an offence under the CTBT implementation legislation can be prosecuted in Canada as if the offense occurred in Canada.

CANADIAN INDUSTRY AND THE CTBT

H1. How is the CTBT implementation legislation going to affect Canadian industry?

The National Authority has already requested that Canadian industry voluntarily provide details, and if possible, prior notification of any chemical explosion using 300 tonnes or more of TNT-equivalent material. We have been assured by a number of companies that the reporting requirement is not onerous. The CTBT legislation will obligate the reporting of this information.

H2. How are we informing industry of the reporting requirements?

The Canadian National Authority is in the process of notifying all companies who might detonate large chemical explosions of 300 tonnes of TNT equivalent, as well as provinces and territories, of the reporting requirement under the CTBT implementation legislation. As the affected companies are overwhelmingly in the mining industry, this notice will be included with the annual questionnaire to some 700 mining companies undertaken each September by the Minerals and Mining Sector of the Natural Resources Canada. Other companies which may be affected will be contacted separately.

H3. How many explosions are we talking about per year on average?

It is estimated that about 50 such blasts occur each year involving some 20 mining companies. While single blasts of 300 tonnes are very rare in Canada, other chemical explosions such as "ripple-fired" blasts in mining, where drilled holes in rows each are filled with explosive and detonated over a period of seconds over an area roughly the size of a football field are more common. In addition, on occasion, some construction projects such as dam building or rock cuts for highway construction may use similarly large explosions.

H4. Are there other events that may need reporting?

Other occurrences, such as an earthquake, an abandoned mine collapse or blasts of less than 300 tonnes of TNT equivalent, may register on the IMS. It is the responsibility of the National Authority to clarify any event that registers on the IMS. Where industry is involved, their cooperation will be solicited but can be made mandatory through regulation.

H5. Why does the reporting requirement appear in Canadian legislation and not in the legislation of other signatory states?

Large explosive blasts are typical for Canada. UK and France do not set off blasts of such size and decided not to include this in their legislation.

H6. What are our reporting requirements to CTBTO?

The National Authority must report any single explosion of 300 tonnes of TNT-equivalent or larger as soon as possible to the CTBTO. Other explosions are to be reported no later than on a n annual basis. Also, the National Authority must investigate and clarify to the satisfaction of the CTBTO any anomalous event that may register in the IMS, or be brought to the attention of the CTBTO by another State Party. These anomalous events may include earthquakes, abandoned mine collapse, and blasts of less than 300 tonnes of TNT equivalent. The purpose of the reporting is to help eliminate the possibility that a nuclear explosion occurred.

H7. What are the roles of the provinces and territories?

While mining, the most implicated industry for CTBT reporting purposes, is a provincial responsibility, the reporting requirements do not interfere with or contradict provincial jurisdiction in this area. The National Authority has consulted with relevant provinces and territories and will continue to work closely with them to ensure that the smooth working relationship continues.

Canada and the banning of nuclear weapons testing

Nuclear Disarmament

The Indian and Pakistani nuclear tests in May 1998 once again brought home to Canadians the dangers of the proliferation of nuclear weapons. Public reaction against the nuclear tests demonstrated wide support among Canadians for banning all nuclear tests.

Canadians have a proud history of leadership in the non-proliferation, arms control and disarmament arena. Immediately after the Second World War, we were among the first nations to pursue a nuclear non-proliferation treaty to establish an essential framework for nuclear non-proliferation and nuclear disarmament efforts, and for international cooperation in the peaceful uses of nuclear energy. The Nuclear Non-Proliferation Treaty (NPT) entered into force in 1970 and was extended indefinitely in 1995. It has 186 State Parties. Canada's continued activism in the disarmament arena is evident in the selection of Ambassador Mark Moher as Chairman of the Ad-Hoc Committee to begin negotiations for a Convention to Halt the Production of Fissile Material for Explosive Purposes.

CTBT Implementation Legislation

Canada is enacting domestic legislation to implement the CTBT. The legislation:

- makes it a crime to carry out -- or help carry out -- a nuclear weapons test explosion which is intended to develop or improve nuclear weapons;
- requires Canadian industry to report large chemical explosions which could be confused with a nuclear explosion;
- sets out the respective roles of the departments of Foreign Affairs and International Trade, Natural Resources Canada and Health Canada.

Once passed by Parliament, the legislation will allow Canada to ratify the Treaty.

Comprehensive Nuclear-Test-Ban Treaty

Successive Canadian Governments have advocated a truly comprehensive nuclear test ban treaty and the conclusion of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) fulfils this longtime pursuit by Canada. In November 1993, the Geneva-based Conference on Disarmament received a strong mandate from the United Nations General Assembly to negotiate such a treaty. These negotiations were successful and on September 24, 1996, the Treaty was opened for signature in New York and as of September 1, 1998, has been signed by 150 nations. Canada was among the first states to sign the CTBT that day.

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The CTBT is the culmination of lengthy efforts to ban all nuclear testing in all environments. The Treaty recognizes that halting all nuclear weapon test explosions and all other nuclear explosions constitutes an effective measure of nuclear disarmament and non-proliferation by stopping the development and improvement of nuclear weapons through testing.

New Verification Regime

An important difference between the CTBT and all the previous test ban treaties lies in the permanent monitoring system which will be more extensive than that of any other arms control or disarmament treaty in history. The principal components of its verification regime are an International Monitoring System (IMS); International Data Centre (IDC); and provision for On-Site Inspections (OSIs).

International Monitoring System and International Data Centre

The IMS, an international network of 321 monitoring stations, will continuously measure shock-waves in air, water and rock, and measure atmospheric radioactivity, using one or more of four relevant technologies. Each station will transmit data back to the IDC in Vienna, for collation and analysis.

The scientific experts who proposed the number, composition and distribution of the monitoring stations consider that the network will be capable of detecting, identifying and locating nuclear explosions anywhere in the world, down to a yield of at least one kiloton (a unit of explosive power equivalent to 1,000 tons of conventional high explosive trinitrotoluene (TNT)). The system may also detect significantly smaller explosions. Although the IMS still is only partially completed, it successfully detected the recent Indian and Pakistani nuclear explosions.

Technologies Used by the IMS

The four technologies of the IMS were selected for their technical and cost effectiveness, and the synergy between them. Three of the four technologies deal directly with the mechanical effects of nuclear explosions and the fourth deals with the detection of radioactive products:

- seismological monitoring measures shock waves through the earth;
- hydroacoustic monitoring measures shock waves in water;
- infrasound monitoring measures low frequency pressure fluctuations in the atmosphere.
- radionuclide monitoring detects certain radioactive fission products in the atmosphere and enables an event to be identified as a nuclear explosion in origin.

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The application of all four technologies enables an accurate time and an estimate of the location of the event to be provided after some hours, followed by the nuclear test "fingerprinting" after some days.

The Treaty specifically makes each State Party responsible for cooperating with the CTBT Organization (CTBTO) and with other State Parties to improve the verification regime, and to examine the verification potential of additional monitoring technologies.

On-Site Inspections

Any State Party to the Treaty will have the right to request an OSI on the territory of another State Party, to establish whether a suspect event is a nuclear explosion. A country may base its request on evidence from the IMS, or on evidence it has collected itself using methods, which can include satellite imagery.

Censuring Violators

If it is determined by the CTBTO that a citizen of a State Party has violated the Treaty, the Organization will expect the National Authority of the State Party to pursue criminal charges against the violator. If the violator is the State Party itself, then the CTBTO shall inform all State Parties of the violation. Censure can follow and the matter can be referred to the United Nations Security Council, which would then decide how to respond most appropriately. The CTBTO itself does not have any sanction capabilities of its own.

Canada's Contribution to the CTBT Regime

Currently, Canada is putting in place 15 monitoring stations (3 primary and 6 auxiliary seismic, 4 radionuclide, 1 hydroacoustic and 1 infrasound) and a radionuclide laboratory as our portion of the IMS. The monitoring facilities in seismic, hydroacoustic and infrasound technologies are managed by the Geological Survey of Canada (GSC) of Natural Resources Canada and the GSC will also operate the National Data Centre to collect all information in Canada. Radionuclide technology falls under the purview of Health Canada, in conjunction with Environment Canada. The Canadian National Authority of the CTBT, chaired by the Department of Foreign Affairs and International Trade, and including all relevant federal departments, has the overall responsibility to implement the Treaty in Canada and to serve as Canada's focal point for liaison with the Comprehensive Nuclear-Test-Ban Treaty Organization located in Vienna, and with other State Parties. It is hoped that the installation of our monitoring stations, laboratories and the National Data Centre will be completed before the Treaty enters into force.

Canadian National Authority for CTBT

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15 September 1998

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Introduction

The Comprehensive Nuclear-Test-Ban Treaty (CTBT) is a landmark international agreement which recognizes that the cessation of all nuclear weapon test explosions and all other nuclear explosions, by constraining the development and qualitative improvement of nuclear weapons and ending the development of advanced new types of nuclear weapons, constitutes an effective measure of nuclear disarmament and non-proliferation in all its aspects. It also mandates an intrusive verification regime of extensive and thorough monitoring, and obligatory on-site inspections (OSI) of suspected breaches of the Treaty.

The CTBT has been a longstanding priority of successive Canadian Governments, which have considered it an important step on the road to nuclear disarmament. Canada signed the CTBT on September 24, 1996, the day it opened for signature. A Memorandum to Cabinet (MC) seeking authority to ratify the agreement and to proceed with the necessary actions, both interim and in the longer term, to meet Canada's obligations was approved prior to the signing of the Treaty. The *Comprehensive Nuclear-Test-Ban Treaty Implementation Act*, which is necessary for Canada to ratify the Treaty, is expected to be tabled in Parliament in Fall 1998. The CTBT Act implements Canada's obligations under the Treaty including the creation of the National Authority.

CTBT National Authority

The Comprehensive Nuclear-Test-Ban Treaty (Article III - Section 3) provides that a State Party to the Treaty shall set up a National Authority to serve as that State's focal point for liaison with the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), located in Vienna, and other States Party.

Canada is effecting its treaty obligations by undertaking the following initiatives:

- Canada's CTBT National Authority has been set up to interface effectively between Canada and the CTBTO and other States Party.

- All pertinent measures are being taken to prohibit any person anywhere in Canada or in any other place under its jurisdiction or control from undertaking any activity prohibited under this Treaty.

- Treaty specified facilities, International Monitoring System (IMS) stations and laboratories, have already been or in the process of being established:

    - to provide data obtained from these facilities in Canada to the CTBTO and other States Party,
    - to participate, as appropriate, in consultation and clarification processes,
    - to cooperate in the conduct of on-site inspections as specified in the Treaty, and
    - to participate, as appropriate, in confidence-building measures (CBM).

Organization

Canada's CTBT National Authority will administer the provisions of the *Comprehensive Nuclear-Test-Ban Treaty Implementation Act* (to be legislated). In the interim, it will interface between Canada and the CTBTO and other States Party and prepare for the implementation of the CTBT in Canada.

The CTBT Steering Committee provides policy direction to the National Authority, based on Canadian foreign policy objectives, encompassing all aspects of Canadian implementation of the CTBT and striving to maintain the Canadian lead in the area of nuclear-test-ban technologies. This committee consists of three Permanent Members: Department of Foreign Affairs and International Trade (DFAIT) responsible for the Secretariat of the National Authority which serves as Canada's point of contact with the CTBTO; Natural Resources Canada (NRCan) responsible for the Geophysical Operation and the National Data Centre (NDC); and Health Canada (jointly with Environment Canada) responsible for the Radionuclide Operation. As lead department in the CTBT implementation process, DFAIT chairs the Committee. In addition, members from other departments such as Department of National Defence (DND), Atomic Energy Control Board (AECB) and Canadian International Development Agency (CIDA) may be engaged on an as-needs basis. Advisors may also be invited to the Committee meetings. The Committee meets regularly and decisions are taken on a consensus basis among the Permanent Members. The Permanent Members also meet regularly to formulate the agenda of the next Steering Committee meeting, to assess progress of CTBT implementation and to discuss other operational issues at hand.

The Secretariat of the National Authority is located within the Nuclear, Non-proliferation and Disarmament Implementation Agency (IDN) of DFAIT. It executes the following to fulfil the responsibilities of the National Authority:

- coordinating with lawyers from the Department of Justice on the drafting of a *Comprehensive Nuclear-Test-Ban Treaty Implementation Act* and accompanying regulations;
- ensuring provision of data from Canada to the International Data Centre (IDC) of the CTBTO in Vienna, in cooperation with Natural Resources Canada and Health Canada;
- disseminating in Canada, as necessary, information including verification-related data from the CTBTO and States Party;
- liaising with the relevant Canadian industry sectors to ensure notification, as required by the Treaty;
- coordinating, managing and assuring the conduct of on-site inspections in Canada;
- undertaking domestic outreach activities to raise the awareness of CTBT's nuclear disarmament objectives and Canada's obligations under the Treaty;

- consulting with domestic stakeholders on treaty implementation modalities;
- providing support to the Canadian Delegation to the CTBTO;
- coordinating with the Department of National Defence (DND) and National Data Centre (NDC) in the provision of intelligence support to assist in developing Canadian positions;
- liaising with CTBTO and other States Party, and participating in CTBTO meetings; and
- administering a Comprehensive Nuclear-Test-Ban Treaty Action Fund (CTBTAF) to facilitate an outreach program for encouraging ratification and implementation of the CTBT by other States, in particular, States Party considered among the Least Developed Countries (LDC).

The Geophysical Operation is located at the Geological Survey of Canada (GSC) of NRCan. It executes the following to fulfil the responsibilities of the National Authority:

- operating the 11 IMS monitoring stations in Canada for the seismic, hydroacoustic and infrasound technologies;
- providing geophysical monitoring data to the National Data Centre (NDC) for transmission to the International Data Centre (IDC) of the CTBTO;
- participating in the technical committees of the CTBTO on an as-needed basis;
- leading Canadian participation in the CTBTO in the areas of seismic, hydroacoustic and infrasound technologies, and IDC including Infrastructure/Communications; and
- liaising with relevant Canadian industry sectors to ensure technical standards of reporting.

The Radionuclide Operation is located at the Radiation Protection Bureau of Health Canada. It executes the following to fulfil the responsibilities of the National Authority:

- operating the 4 IMS monitoring stations and 1 laboratory in Canada for the radionuclide monitoring technologies;
- coordinating its activities with the Atmospheric Environment Service of Environment Canada's Canadian Meteorological Centre for the atmospheric modelling necessary for radionuclide monitoring;
- providing radionuclide monitoring data to the NDC for transmission to the IDC;

- participating in the technical committees of the CTBTO on an as-needed basis; and
- leading Canadian participation in the CTBTO in the areas of radionuclide monitoring technologies.

The National Data Centre (NDC)is located at the Geological Survey of Canada (GSC) of NRCan, with direct communications links to an NDC annex at the Radiation Protection Bureau of Health Canada. It executes the following to fulfil the responsibilities of the National Authority:

- receiving data from Canadian IMS stations and onward transmission via the Global Communications Infrastructure (GCI) to the International Data Centre (IDC) of the CTBTO;
- acting as central repository for information provided by Canadian industrial organizations and other bodies, to provide routine reporting of the Treaty-stipulated Confidence Building Measures (CBM);
- receiving technical data from IDC for use by the National Authority for verification of compliance with CTBT, and disseminating in Canada such verification-related data to appropriate organizations; and
- participating in nuclear explosion event identification exercises, as necessary.

What's Ahead

The Treaty has been signed by 150 States Party and ratified by 21 as of September 15, 1998. For entry into force, it requires 44 designated States to ratify. India, Pakistan and North Korea are the only three designated States that have not signed. In the aftermath of the recent Indian and Pakistani nuclear tests, it still remains uncertain whether these States would join the CTBT regime. Canada is expected to ratify the Treaty in Fall 1998. A review conference is expected to take place in Fall 1999 to accelerate the ratification process in order to facilitate the early entry into force of the Treaty.

The National Authority expects that all Canadian IMS stations will be fully operational before the Treaty enters into force, in accord with the CTBTO time lines. The National Authority, along with domestic CTBT stakeholders, will continue to work together with the Provisional Technical Secretariat of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty (PTS/CTBT) and other States Party to fulfil our shared international commitments.

CTBT/IMS Stations and Laboratories located in Canada

Station/Laboratory	*Location*	*Latitude*	*Longitude*	*Type*
Stations				
1. Seismic (Primary)	*ULMC Lac du Bonnet, Man.*	*50.2 N*	*95.9 W*	*3-C*
2. Seismic (Primary)	*YKAC Yellowknife, N.W.T.*	*62.5 N*	*114.6 W*	*array*
3. Seismic (Primary)	*SCH Schefferville, Quebec*	*54.8 N*	*66.8 W*	*3-C*
4. Seismic (Auxiliary)	*FRB Iqaluit,N.W.T.*	*63.7 N*	*68.5 W*	*3-C*
5. Seismic (Auxiliary)	*DLBC Dease Lake, B.C.*	*58.4 N*	*130.0 W*	*3-C*
6. Seismic (Auxiliary)	*SADO Sadowa, Ont.*	*44.8 N*	*79.1 W*	*3-C*
7. Seismic (Auxiliary)	*BBB Bella Bella, B.C.*	*52.2 N*	*128.1 W*	*3-C*
8. Seismic (Auxiliary)	*MBC Mould Bay, N.W.T.*	*76.2 N*	*119.4 W*	*3-C*
9. Seismic (Auxiliary)	*INK Inuvik, N.W.T.*	*68.3 N*	*133.5 W*	*3-C*
10.Radionuclide	*Vancouver, B.C.*	*49.3 N*	*123.2 W*	
11.Radionuclide	*Resolute, N.W.T.*	*74.7 N*	*94.9 W*	
12.Radionuclide	*Yellowknife, N.W.T.*	*62.5 N*	*114.5 W*	
13.Radionuclide	*St. John's, N.L.*	*47.0 N*	*53.0 W*	
14.Hydroacoustic	*Queen Charlotte Islands, B.C.*	*53.3 N*	*132.5 W*	*T-phase*
15.Infrasound	*Lac du Bonnet, Man.*	*50.2 N*	*95.9 W*	
Laboratory				
1. Radionuclide Laboratory	*Health Canada Ottawa, Ont.*			

Comprehensive Nuclear-Test-Ban Treaty
21 States that have Ratified
(as of September 11, 1998)

STATE		SIGNATURE		RATIFICATION
FIJI	24	September, 1996	10	October, 1996
QATAR	24	September, 1996	3	March, 1997
UZBEKISTAN	3	October, 1996	29	May, 1997
JAPAN	24	September, 1996	8	July, 1997
MICRONESIA	24	September, 1996	25	July, 1997
MONGOLIA	1	October, 1996	8	August, 1997
CZECH REPUBLIC	24	September, 1996	12	September, 1997
PERU	25	September, 1996	12	November, 1997
TURKMENISTAN	24	September, 1996	20	February, 1998
SLOVAKIA	30	September, 1996	3	March, 1998
AUSTRIA	24	September, 1996	13	March, 1998
UNITED KINGDOM	24	September, 1996	6	April, 1998
FRANCE	24	September, 1996	6	April, 1998
TAJIKISTAN	7	October, 1996	10	June , 1998
AUSTRALIA	24	September, 1996	9	July, 1998
BRAZIL	24	September, 1996	24	July, 1998
SPAIN	24	September, 1996	31	July, 1998
GRENADA	10	October, 1996	19	August, 1998
GERMANY	24	September, 1996	20	August, 1998
JORDAN	26	September, 1996	25	August, 1998
EL SALVADOR	24	September, 1996	11	September, 1998

États qui ont ratifié le traité (en date du 1er septembre 1998)

ÉTAT	DATE DE LA SIGNATURE	DATE DE LA RATIFICATION
FIDJI	24 septembre 1996	10 octobre 1996
QATAR	24 septembre 1996	3 mars 1997
UZBÉKISTAN	3 octobre 1996	29 mai 1997
JAPON	24 septembre 1996	8 juillet 1997
MICRONÉSIE	24 septembre 1996	25 juillet 1997
MONGOLIE	1er octobre 1996	8 août 1997
RÉPUBLIQUE TCHÈQUE	24 septembre 1996	12 septembre 1997
PÉROU	25 septembre 1996	12 novembre 1997
TURKMÉNISTAN	24 septembre 1996	20 février 1998
SLOVAQUIE	30 septembre 1996	3 mars 1998
AUTRICHE	24 septembre 1996	13 mars 1998
ROYAUME-UNI DE GRANDE-BRETAGNE ET D'IRLANDE DU NORD	24 septembre 1996	6 avril 1998
FRANCE	24 septembre 1996	6 avril 1998
TADJIKISTAN	7 octobre 1996	10 juin 1998
AUSTRALIE	24 septembre 1996	9 juillet 1998
BRÉSIL	24 septembre 1996	24 juillet 1998
ESPAGNE	24 septembre 1996	31 juillet 1998
GRENADE	10 octobre 1996	19 août 1998
ALLEMAGNE	24 septembre 1996	20 août 1998
JORDANIE	26 septembre 1996	25 août 1998

STATE	*SIGNATURE*	*RATIFICATION*
Bulgaria *	24 September, 1996	
Burkina Faso	27 September, 1996	
Burundi	24 September, 1996	
Cambodia	26 September, 1996	
Cameroon		
Canada *	24 September, 1996	
Cape Verde	1 October 1996	
Central African Republic		
Chad	8 October, 1996	
Chile *	24 September, 1996	
China *	24 September, 1996	
Colombia *	24 September, 1996	
Comoros	12 December, 1996	
Congo	11 February, 1997	
Congo, Dem. Republic of*	4 October, 1996	
Cook Islands	5 December, 1997	
Costa Rica	24 September, 1996	
Croatia	24 September, 1996	
Cuba		
Cyprus	24 September, 1996	
Czech Republic	24 September, 1996	12 September, 1997
Côte d'Ivoire	25 September, 1996	
Denmark	24 September, 1996	
Djibouti	21 October, 1996	
Dominica		

STATUS OF SIGNATURES AND RATIFICATIONS

193 States: 150 Signatories (including 21 ratifiers), and 43 Non-signatories
***One of 44 Designated States for Entry into Force**

STATE	*SIGNATURE*	*RATIFICATION*
Afghanistan		
Albania	27 September, 1996	
Algeria *	15 October, 1996	
Andorra	24 September, 1996	
Angola	27 September, 1996	
Antigua and Barbuda	16 April,1997	
Argentina*	24 September, 1996	
Armenia	1 October, 1996	
Australia *	24 September, 1996	9 July, 1998
Austria *	24 September, 1996	13 March, 1998
Azerbaijan	28 July, 1997	
Bahamas		
Bahrain	24 September, 1996	
Bangladesh *	24 October, 1996	
Barbados		
Belarus	24 September, 1996	
Belgium*	24 September, 1996	
Belize		
Benin	27 September, 1996	
Bhutan		
Bolivia	24 September, 1996	
Bosnia and Herzegovina	24 September, 1996	
Botswana		
Brazil*	24 September, 1996	24 July, 1998
Brunei Darussalam	22 January, 1997	

STATE	*SIGNATURE*	*RATIFICATION*
Dominican Republic	3 October, 1996	
Ecuador	24 September, 1996	
Egypt *	14 October, 1996	
El Salvador	24 September, 1996	11 September, 1998
Equatorial Guinea	9 October, 1996	
Eritrea		
Estonia	20 November, 1996	
Ethiopia	25 September, 1996	
Fiji	24 September, 1996	10 October, 1996
Finland*	24 September, 1996	
France*	24 September, 1996	6 April, 1998
Gabon	7 October, 1996	
Gambia		
Georgia	24 September, 1996	
Germany*	24 September, 1996	20 August, 1998
Ghana	3 October, 1996	
Greece	24 September, 1996	
Grenada	10 October, 1996	19 August, 1998
Guatemala		
Guinea	3 October, 1996	
Guinea-Bissau	4 April, 1997	
Guyana		
Haiti	24 September, 1996	
Holy See	24 September, 1996	
Honduras	25 September, 1996	

STATE	*SIGNATURE*	*RATIFICATION*
Hungary *	25 September, 1996	
Iceland	24 September, 1996	
India*		
Indonesia*	24 September, 1996	
Iran*	24 September, 1996	
Iraq		
Ireland	24 September, 1996	
Israel*	25 September, 1996	
Italy*	24 September, 1996	
Jamaica	11 November, 1996	
Japan*	24 September, 1996	8 July, 1997
Jordan	26 September, 1996	25 August, 1998
Kazakhstan	30 September, 1996	
Kenya	14 November, 1996	
Kiribati		
Korea, Democratic Rep.*		
Korea, Republic of*	24 September, 1996	
Kuwait	24 September, 1996	
Kyrgyzstan	8 October, 1996	
Laos	30 July, 1997	
Latvia	24 September, 1996	
Lebanon		
Lesotho	30 September, 1996	
Liberia	1 October, 1996	
Libyan Arab Jamahiriva		

STATE	*SIGNATURE*	*RATIFICATION*
Liechtenstein	27 September, 1996	
Lithuania	7 October, 1996	
Luxembourg	24 September, 1996	
Macedonia		
Madagascar	9 October, 1996	
Malawi	9 October, 1996	
Malaysia	23 July, 1998	
Maldives	1 October, 1997	
Mali	18 February, 1997	
Malta	24 September, 1996	
Marshall Islands	24 September, 1996	
Mauritania	24 September, 1996	
Mauritius		
Mexico*	24 September, 1996	
Micronesia (Federated States)	24 September, 1996	25 July, 1997
Moldova	24 September, 1997	
Monaco	1 October, 1996	
Mongolia	1 October, 1996	8 August, 1997
Morocco	24 September, 1996	
Mozambique	26 September, 1996	
Myanmar	25 September, 1996	
Namibia	24 September, 1996	
Nauru		
Nepal	8 October, 1996	
Netherlands*	24 September, 1996	

STATE	*SIGNATURE*	*RATIFICATION*
New Zealand	27 September, 1996	
Nicaragua	24 September, 1996	
Niger	3 October, 1996	
Nigeria		
Niue		
Norway*	24 September, 1996	
Oman		
Pakistan*		
Palau		
Panama	24 September, 1996	
Papua New Guinea	25 September, 1996	
Paraguay	25 September, 1996	
Peru*	25 September, 1996	12 November, 1997
Philippines	24 September, 1996	
Poland*	24 September, 1996	
Portugal	24 September, 1996	
Qatar	24 September, 1996	3 March, 1997
Romania*	24 September, 1996	
Russian Federation*	24 September, 1996	
Rwanda		
St Kitts and Nevis		
St Lucia	4 October, 1996	
St. Vincent & Grenadines		
Samoa	9 October, 1996	
San Marino	7 October, 1996	

STATE	*SIGNATURE*	*RATIFICATION*
Sao Tome and Principe	26 September, 1996	
Saudi Arabia		
Senegal	26 September, 1996	
Seychelles	24 September, 1996	
Sierra Leone		
Singapore		
Slovakia*	30 September, 1996	3 March,1998
Slovenia	24 September, 1996	
Solomon Islands	3 October, 1996	
Somalia		
South Africa*	24 September, 1996	
Spain*	24 September, 1996	31 July, 1998
Sri Lanka	24 October, 1996	
Sudan		
Suriname	13 January, 1997	
Swaziland	24 September, 1996	
Sweden*	24 September, 1996	
Switzerland*	24 September, 1996	
Syrian Arab Republic		
Tajikistan	7 October, 1996	10 June, 1998
Tanzania		
Thailand	12 November, 1996	
Togo	2 October, 1996	
Tonga		
Trinidad and Tobago		

STATE	*SIGNATURE*	*RATIFICATION*
Tunisia	16 October, 1996	
Turkey*	24 September, 1996	
Turkmenistan	24 September, 1996	20 February,1998
Tuvalu		
Uganda	7 November, 1996	
Ukraine*	27 September, 1996	
United Arab Emirates	25 September, 1996	
United Kingdom*	24 September, 1996	6 April, 1998
United States of America*	24 September, 1996	
Uruguay	24 September, 1996	
Uzbekistan	3 October, 1996	29 May, 1997
Vanuatu	24 September, 1996	
Venezuela	3 October, 1996	
Viet Nam*	24 September, 1996	
Yemen	30 September, 1996	
Yugoslavia		
Zambia	3 December, 1996	
Zimbabwe		

COMPREHENSIVE NUCLEAR-TEST-BAN TREATY
Designated States pursant to Article XIV of the Treaty

Total:
Designated States: 44
Designated and Ratified States: 10
* indicates state already ratified the Treaty

1. Algeria
2. Argentina
3. Australia *
4. Austria *
5. Bangladesh
6. Belgium
7. Brazil *
8. Bulgaria
9. Canada
10. Chile
11. China
12. Colombia
13. Congo, Dem. Republic of
14. Egypt
15. Finland
16. France*
17. Germany
18. Hungary
19. India (non-signatory)
20. Indonesia
21. Iran
22. Israel
23. Italy
24. Japan*
25. Korea, North (non-signatory)
26. Korea, South
27. Mexico
28. Netherlands
29. Norway
30. Pakistan (non-signatory)
31. Peru*
32. Poland
33. Romania
34. Russian Federation
35. Slovakia
36. South Africa
37. Spain*
38. Sweden
39. Switzerland
40. Turkey
41. Ukraine
42. United Kingdom*
43. United States of America
44. Viet Nam

COMPREHENSIVE NUCLEAR-TEST-BAN TREATY
STATES NOT SIGNED YET
as of September, 1998

Total Number of States: 193
Signatures: 150
Non Signatories: 43

1. Afghanistan
2. Bahamas
3. Barbados
4. Belize
5. Bhutan
6. Botswana
7. Cameroon
8. Central African Republic
9. Cuba
10. Dominica
11. Eritrea
12. Gambia
13. Guatamala
14. Guyana
15. India*
16. Iraq
17. Kiribati
18. Korea, North*
19. Lebanon
20. Libyan Arab Jamahiriya
21. Macedonia, former Yugoslav Republic of
22. Mauritius
23. Nauru
24. Nigeria
25. Niue
26. Oman
27. Pakistan*
28. Palau
29. Rwanda
30. Saint Kitts and Nevis
31. Saint Vincent and the Grenadines
32. Saudi Arabia
33. Sierra Leone
34. Singapore
35. Somalia
36. Sudan
37. Syrian Arab Republic
38. Tanzania
39. Tonga
40. Trinidad and Tobago
41. Tuvalu
42. Yugoslavia
43. Zimbabwe

*** Designated State for Entry into Force**