
APPENDIX XIV: SUMMARY OF THE COMPREHENSIVE NUCLEAR- TEST-BAN TREATY (CTBT)

Opened for Signature: 24 September 1996.

Duration: Unlimited.

PREAMBLE TO THE TREATY

“The States Parties to this Treaty (hereinafter referred to as ‘the States Parties’),

Welcoming the international agreements and other positive measures of recent years in the field of nuclear disarmament, including reductions in arsenals of nuclear weapons, as well as in the field of the prevention of nuclear proliferation in all its aspects,

Underlining the importance of the full and prompt implementation of such agreements and measures,

Convinced that the present international situation provides an opportunity to take further effective measures towards nuclear disarmament and against the proliferation of nuclear weapons in all its aspects, and declaring their intention to take such measures,

Stressing therefore the need for continued systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons, and of general and complete disarmament under strict and effective international control,

Recognizing 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,

Further recognizing that an end to all such nuclear explosions will thus constitute a meaningful step in the realization of a systematic process to achieve nuclear disarmament,

Convinced that the most effective way to achieve an end to nuclear testing is through the conclusion of a universal and internationally and effectively verifiable comprehensive nuclear-test-ban treaty, which has long been one of the highest priority objectives of the international community in the field of disarmament and non-proliferation,

Noting the aspirations expressed by the Parties to the 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time,

Noting also the views expressed that this Treaty could contribute to the protection of the environment,

Affirming the purpose of attracting the adherence of all States to this Treaty and its objective to contribute effectively to the prevention of the proliferation of nuclear weapons in all its aspects, to the process of nuclear disarmament and therefore to the enhancement of international peace and security,

Have agreed as follows:..”

Under article 1 of the Comprehensive Nuclear-Test-Ban Treaty:

- “1. Each State Party undertakes not to carry out any nuclear weapon test explosion or any other nuclear explosion, and to prohibit and prevent any such nuclear explosion at any place under its jurisdiction or control.
2. Each State party undertakes, furthermore, to refrain from causing, encouraging, or in any way participating in the carrying out of any nuclear weapon test explosion or any other nuclear explosion.”

Adoption and signature of the Treaty

Negotiations on a Comprehensive Nuclear-Test-Ban Treaty began at the Conference on Disarmament at Geneva in January 1994. The final draft, sponsored by 127 States, was submitted to the United Nations General Assembly two years later and adopted on 10 September 1996. The Treaty was opened for signature on 24 September 1996 at United Nations Headquarters in New York.

Arrangements until entry into force

At a meeting of States Signatories on 19 November 1996, a Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization was established. The Preparatory Commission is an interna-

tional organization financed by the States Signatories, which has been set up to establish the global verification regime of the Treaty and to prepare for its entry into force. The Preparatory Commission consists of two organs: a plenary body composed of all the States Signatories – also known as the Preparatory Commission – and the Provisional Technical Secretariat.

Preparatory Commission

The Preparatory Commission appointed Wolfgang Hoffmann of Germany as its Executive Secretary on 3 March 1997. The Executive Secretary is head of the Provisional Technical Secretariat, which started work at its offices in the Vienna International Centre on 17 March 1997.

The Preparatory Commission has three subsidiary bodies: Working Group A on administrative and budgetary matters, Working Group B on verification issues, and the Advisory Group on financial, budgetary and associated administrative issues. The working groups make proposals and recommendations for consideration and adoption by the Preparatory Commission at its plenary sessions.

Verification of the Treaty

The Treaty has a Protocol under which an International Monitoring System (IMS) and an International Data Centre (IDC) are being established as part of the global verification regime foreseen under article IV (Verification).

IMS will consist of a global network of 321 monitoring stations, as well as 16 laboratories, capable of detecting nuclear explosions worldwide. This network of 170 seismic, 80 radionuclide, 60 infrasound and 11 hydroacoustic stations, as well as 16 radionuclide laboratories - comprising a total of 337 facilities - will supply data for processing and analysis to IDC. Both

the raw and processed data will be available to all the States parties. If a suspicious occurrence cannot be resolved through consultation and clarification, each State party has the right to request an on-site inspection.

Entry into force of the Treaty

Under article XIV (Entry into force), the Treaty will not enter into force until it has been signed and ratified by the 44 States listed in annex 2 to the Treaty. This list comprises the States that formally participated in the 1996 session of the Conference on Disarmament, and that appear in table I of the December 1995 edition of “Nuclear Research Reactors in the

World” and table I of the April 1996 edition of “Nuclear Power Reactors in the World”, both compiled by the International Atomic Energy Agency.

If the Treaty has not entered into force “three years after the date of the anniversary of its opening for signature”, a conference of those States that have already ratified it may be held to decide what measures may be taken to accelerate the ratification process and to facilitate the Treaty’s entry into force.

History of the Treaty

The Treaty is the culmination of 40 years of efforts. In April 1954, almost 10 years after the first nuclear weapon test was conducted in July 1945, Prime Minister Jawaharlal Nehru of India proposed that nuclear weapon testing be suspended. His proposal was the first initiative of its kind.

The Partial Test Ban Treaty of 1963 prohibited all nuclear explosions in the atmosphere, in outer space and under water, but not underground. The Threshold Test Ban Treaty of 1974 limited the yield of underground nuclear weapon tests to 150 kilotons (the equivalent of the explosive force of approximately 150,000 tonnes of trinitrotoluene (TNT)).

Over 2,000 nuclear weapon test explosions were registered during the 51 years between the conduct of the first nuclear test and the opening for signature of the Treaty in September 1996.

SUMMARY OF THE TREATY

The Comprehensive Nuclear-Test-Ban Treaty consists of a preamble, 17 articles, two annexes and a Protocol. The Protocol describes verification procedures and contains two annexes. One annex lists the 337 facilities comprising the International Monitoring System (IMS) and the other annex describes parameters for standard event screening by the International Data Centre (IDC).

Scope

The preamble stresses the need for “continued systematic and progressive efforts to reduce nuclear weapons globally” with the ultimate goal of their elimination and of “general and complete disarmament under strict and effective international control”. It recognizes that “the cessation of all nuclear weapon test explosions and all other nuclear explosions ... constitutes an effective measure of nuclear disarmament and non-proliferation in all its aspects”.

Under article I (Basic Obligations): “1. Each State party undertakes not to carry out any nuclear weapon

test explosion or any other nuclear explosion, and to prohibit and prevent any such nuclear explosion at any place under its jurisdiction or control. 2. Each State party undertakes, furthermore, to refrain from causing, encouraging, or in any way participating in the carrying out of any nuclear weapon test explosion or any other nuclear explosion.”

Implementing organization

Article II (The Organization) establishes the Comprehensive Nuclear-Test-Ban Treaty Organization to ensure the Treaty’s implementation and provide a forum for consultation and cooperation. With its seat in Vienna, it will comprise three organs. The Conference of the States Parties will oversee the Treaty’s implementation and the activities of the other two organs. The Executive Council, with a membership of 51 States parties, will be the principal decision-making body of the Organization and responsible for supervising its activities. The Technical Secretariat, headed by a Director-General, will assist States parties to implement the Treaty and carry out verification and other functions. It will supervise and coordinate the operation of the International Monitoring System (IMS) and operate the International Data Centre (IDC) at Vienna.

Article III (National implementation measures) requires each State party to take any necessary measures to implement its obligations under the Treaty, including the establishment of a National Authority for liaison with the Organization and other States parties.

Verification and compliance

Article IV (Verification) and the Protocol establish the verification regime. Such a regime - consisting of IMS, IDC, consultation and clarification, on-site inspections and confidence-building measures - “shall be capable of meeting the verification requirements of the Treaty” at its entry into force.

Verification activities should be based on objective information, limited to the subject matter of the Treaty, and carried out on the basis of full respect for the sovereignty of States parties and in the least intrusive manner possible consistent with the effective and timely accomplishment of

their objectives. Each State party, however, “shall refrain from any abuse of the right of verification”.

International Monitoring System.

The purpose of IMS is to detect and identify nuclear explosions prohibited under article I. As set out in annex 1 to the Protocol, IMS will consist of 50 pri-

mary and 120 auxiliary seismological stations equipped to detect seismic activity and distinguish between natural events - such as earthquakes - and nuclear explosions. It will also include 80 radionuclide stations - 40 of them capable of detecting noble gases - designed to identify radioactive particles released during a nuclear explosion. The radionuclide stations will be supported by 16 laboratories. In addition, 60 infrasound and 11 hydroacoustic stations will be designed to pick up the sound of a nuclear explosion in the atmosphere or under water, respectively.

International Data Centre.

The monitoring stations will transmit data to the International Data Centre (IDC) at Vienna. As set out in part I of the Protocol, IDC will produce integrated lists of all signals detected by IMS, as well as standard event lists and bulletins, and screened event bulletins that filter out events that appear to be of a non-nuclear nature. Both raw and processed information will be available to all States parties.

Consultation and clarification.

The consultation and clarification component of the verification regime encourages States parties to attempt to resolve, either among themselves or through the Organization, ambiguous events before requesting an on-site inspection. A State party must provide clarification of an ambiguous event within 48 hours of receiving such a request from another State party or the Executive Council.

On-site inspection.

If the matter cannot be resolved through consultation and clarification, each State party can request an on-site inspection. The procedures for on-site inspections, which “shall be carried out in the area where the event that triggered the on-site inspection request occurred” are established in part II of the Protocol.

Confidence-building measures.

To reduce the likelihood that verification data may be misinterpreted, each State party will voluntarily notify the Technical Secretariat of any single chemical explosion using 300 tonnes or more of TNT-equivalent blasting material on its territory. In order to calibrate the stations of IMS, each State party may liaise with the Technical Secretariat in carrying out chemical calibration explosions or providing information on chemical explosions planned for other purposes.

Article V (Measures to redress a situation and to ensure compliance, including sanctions) empowers the

Conference inter alia to restrict or suspend a State Party's rights and privileges under the Treaty and to recommend to States parties collective measures in conformity with international law. The Conference, or alternatively, if the case is urgent, the Executive Council, may bring the issue to the attention of the United Nations.

Disputes

Article VI (Settlement of disputes) describes the mechanisms by which disputes concerning the application or interpretation of the Treaty may be settled. Subject to certain conditions, the International Court of Justice may be requested to give an advisory opinion.

Amendments and review

Article VII (Amendments) gives each State party the right to propose amendments to the Treaty, the Protocol or the annexes to the Protocol at any time after the Treaty's entry into force. The proposed amendment requires the approval of a majority of States parties at an amendment conference with no party casting a negative vote.

Article VIII (Review of the Treaty) stipulates that a conference to review the operation and effectiveness of the Treaty will be held 10 years after its entry into force, "unless otherwise decided by a majority of the States Parties". Such review would take into account "any new scientific and technological developments". Further review conferences may be held with the same objective at intervals of 10 years thereafter, or less, if the Conference so decides in the preceding year.

At the request of any State party, the conference may "consider the possibility of permitting the conduct of underground nuclear explosions for peaceful purposes". If it permits such explosions by consensus, then the review conference "shall commence work without delay, with a view to recommending to States Parties an appropriate amendment to this Treaty that shall preclude any military benefits of such nuclear explosions".

Duration and withdrawal

Article IX (Duration and withdrawal) states that the Treaty is of unlimited duration.

Other provisions

The next four articles (X, XI, XII and XIII) deal with the status of the Protocol and the annexes; signature; ratification; and accession.

Entry into force

Under article XIV (Entry into force), the Treaty will enter into force 180 days after the 44 States listed in annex 2 to the Treaty have deposited their instruments of ratification with the Secretary-General of the United Nations, "but in no case earlier than two years after its opening for signature". This list comprises the States that formally participated in the 1996 session of the Conference on Disarmament, and that appear in table 1 of the December 1995 edition of "Nuclear Research Reactors in the World" and table 1 of the April 1996 edition of "Nuclear Power Reactors in the World", both compiled by the International Atomic Energy Agency.

If the Treaty has not entered into force "three years after the date of the anniversary of its opening for signature", the Secretary-General of the United Nations, as Depositary of the Treaty, could, at the request of a majority of States that had ratified it, convene a conference to examine

the situation and to "decide by consensus what measures consistent with international law may be undertaken to accelerate the ratification process" in order to facilitate the Treaty's early entry into force.

Additional provisions

Article XV (Reservations) states that the Treaty's provisions are not subject to reservations.

Article XVI (Depositary) establishes the Secretary-General of the United Nations as the Treaty's Depositary.

Under article XVII (Authentic texts), the Treaty texts in Arabic, Chinese, English, French, Russian and Spanish are equally authentic.

Protocol

Part I describes the International Monitoring System (IMS) and outlines the functions of the International Data Centre (IDC). Part II sets up the procedures for on-site inspections. It specifies the process of designation of inspectors and inspection assistants, their privileges and immunities, points of entry, arrangements for use of non-scheduled aircraft, approved

inspection equipment, on-site inspection requests, inspection mandate and notification of inspection. Pre-inspection activities and the conduct of inspections are described in detail. Part III deals with confidence-building measures under article IV (Verification) of the Treaty.

Further information can be obtained from: Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO PrepCom)

<http://www.ctbto.org>