PREPARATORY COMMITTEE FOR THE SPECIAL
SESSION OF THE GENERAL ASSEMBLY
DEVOTED TO DISARMAMENT

A COMPARATIVE STUDY OF THE SCOPE ORIGINALLY PROPOSED OR AIMED
AT IN DRAFT MULTILATERAL DISARMAMENT TREATIES OF A UNIVERSAL
CHARACTER CONCLUDED UNDER UNITED NATIONS AUSPISES AND THE SCOPE
FINALLY FIXED IN THOSE TREATIES, INCLUDING THE CONTEMPLATED
MEASURES FOR EXPANDING THAT SCOPE

Working paper prepared by the Secretariat

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1. By resolution 31/189B of 21 December 1976, the General Assembly decided to convene a special session devoted to disarmament, to be held in New York in May/June 1978. It further decided to establish a Preparatory Committee for the Special Session of the General Assembly Devoted to Disarmament, composed of 54 Member States appointed by the President of the Assembly on the basis of equitable geographical distribution, with the mandate of examining all relevant questions relating to the special session, including its agenda, and to submit to the Assembly at its thirty-second session appropriate recommendations thereon.

2. The General Assembly also requested the Secretary-General to render the Preparatory Committee all necessary assistance, including the provision of essential background information, relevant documents and summary records.

3. At its meeting in May 1977, the Preparatory Committee requested the Secretariat to prepare certain working papers. Included among them was "A comparative study of the scope originally proposed or aimed at in draft multilateral disarmament treaties of a universal character concluded under United Nations auspices and the scope finally fixed in those treaties, including the contemplated measures for expanding that scope".

4. In response to this request of the Preparatory Committee, the Secretariat has prepared this paper, which covers the following six multilateral disarmament treaties: Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water (Partial Test Ban Treaty) of 5 August 1963; Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (Outer Space Treaty) of 27 January 1967; Treaty on the Non-Proliferation of Nuclear Weapons (NPT) of 1 July 1968; Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil Thereof (Sea-Bed Treaty) of 11 February 1971; Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (Biological Convention) of 10 April 1972; and Convention on the Prohibition of Military or any Other Hostile Use of Environmental Modification Techniques (ENMOD Convention) of 18 May 1977.
II. TREATY BANNING NUCLEAR WEAPON TESTS IN ATMOSPHERE, IN OUTER SPACE AND UNDER WATER (PARTIAL TEST BAN TREATY) *

Introduction

5. The suggestions for conclusion of an agreement to ban the testing of nuclear weapons, either as an independent measure on its own merits or as one item in an agreement on more comprehensive forms of disarmament was first suggested by India in 1954. It was, thereafter, discussed in the five-Power Sub-Committee of the Disarmament Commission as well as in the General Assembly. By the end of 1956, the initial positions of various countries on this question were as follows: the Soviet Union and India, maintaining that no significant testing could go undetected, called for an early and separate agreement on the banning of all nuclear tests, the provisions on supervision not being required; Yugoslavia urged conclusion of an agreement with such controls as might prove necessary; and the Western Powers regarded the limitation and eventual banning of nuclear testing, with adequate supervision, as part of a comprehensive disarmament programme.

6. Although consideration of the question continued, some progress was made only in mid-1958 when the United States and the Soviet Union agreed to convene a conference of experts to study the possibility of detecting violations of an agreement on the suspension of nuclear tests. The conference was held from 1 July to 21 August 1958 at Geneva. The work of the Conference and its report paved the way to convening the Conference on the Discontinuance of Nuclear Weapon Tests, with the participation of the Soviet Union, the United Kingdom and the United States. France made it known that it would not sign a test ban treaty unless it were accompanied by other measures of disarmament.

7. The Conference was held at Geneva from 31 October 1958 to January 1962. A voluntary suspension of nuclear-weapon tests by the negotiating powers went into effect at the time negotiations commenced in October 1958.

8. At the outset of the work of the Conference, the Soviet Union tabled a draft treaty which provided for an obligation by the three nuclear Powers to cease all tests of nuclear weapons. 1/ The United States and the United Kingdom, in rejecting the Soviet draft, emphasized that any agreement on the discontinuance of nuclear tests must be based on an effective international system of control and, also, be depended on progress being made on other disarmament issues. However, in a statement on 19 January 1959, the two Western Powers announced that they no longer considered a nuclear test suspension contingent on progress in other disarmament areas and made it clear that such an agreement depended only on the requirements of effective control. 2/ The question of control became then the main issue and the core of the negotiations.

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* The Treaty was open for signature on 5 August 1963 at Moscow. It entered into force on 10 October 1963.


2/ Document GEN/DNT/PV.37, pp. 3-10.
3.

**Question of the scope**

9. On 11 February 1960 the United States, supported by the United Kingdom, presented to the Conference a proposal for "a phased treaty" which called for a ban on all tests in those environments where effective control could be established. 2/ The proposal was formulated as follows:

"The first phase of the agreement—which could be put into effect in the near future—should provide for the cessation of all nuclear-weapon tests in the earth's atmosphere, in the oceans, and in outer space up to the greatest height with respect to which agreement can be reached on the installation of effective controls."

The United States also suggested that this phase should include provision for the cessation of underground nuclear tests above a seismic magnitude "threshold" of 4.75 (corresponding, according to U.S. estimates, to a 19-kiloton yield) since with regard to those events adequate control was feasible. For this purpose, it suggested two alternative systems of on-site inspections. It also stated that when a research programme resulted in improved capabilities for identification of small underground disturbances, the "threshold" could be progressively lowered to match such improvements.

10. The Soviet response was positive, in principle, but its counterproposal of 19 March 1960 did not provide for any on-site inspection of those events above seismic magnitude 4.75. 4/ It stated its readiness:

"To conclude a treaty on the cessation of all nuclear-weapon tests in the atmosphere, in the oceans and in outer space, and of all underground tests which produce seismic oscillations of magnitude 4.75 conventional units or above."

In addition, it agreed to participate in a research programme with the view to improving capabilities for identification of such underground disturbances below this "threshold". The proposal and agreement were, however, based on the understanding that all parties to the treaty would "assume at the same time the obligation not to carry out during that period any nuclear-weapon tests producing seismic oscillations of magnitude 4.75 conventional units or below".

11. In a joint declaration of 29 March 1960, the United Kingdom and the United States agreed to the Soviet proposal provided that the moratorium would be for a fixed period only. 5/ Nevertheless, little further progress was made at the Conference due to differences which arose in connexion with other sensitive issues, such as the composition of the control commission and the question of decision-making in this body.

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12. When the Conference resumed its work early in 1961, the United States and the United Kingdom submitted on 18 April a draft treaty which incorporated a number of new elements. 6/ The scope was formulated as follows:

"1. Each of the Parties to this Treaty undertake, subject to the provisions of this Treaty and its Annexes:

A. to prohibit and prevent the carrying out of nuclear-weapon test explosions at any place under its jurisdiction or control and

B. to refrain from causing, encouraging, or in any way participating in, the carrying out of nuclear-weapon test explosions anywhere.

"2. The obligations under paragraph 1 of this Article shall apply to all nuclear-weapon test explosions except those underground explosions which are recorded as seismic events of less than magnitude 4.75."

The moratorium on underground tests below the 4.75 seismic threshold was fixed at three years. The proposal still required an international system of control concerning underground events above seismic magnitude of 4.75, although it reduced by two the number of control posts on Soviet territory and provided for a sliding scale of annual inspections ranging from twelve to twenty on-site inspections.

13. The deterioration in political relations between the two sides which became apparent in the second half of 1961 had a strong bearing not only on the progress of the negotiations but also on the conduct of their respective nuclear programmes. Thus, on 30 August 1961, the Soviet Government declared that it had been compelled, in order to strengthen its security, to take a number of steps, including the carrying out of experimental nuclear-weapon explosions. From 1 September to 4 November, the Soviet Union conducted a series of tests, mostly thermo-nuclear. The United States resumed underground testing on 15 September.

14. Upon the resumption of the Geneva Conference on 26 November 1961, the Soviet Union reiterated its opposition to any test ban treaty under international control while the arms race continued, and said that a new approach was necessary. To this end, it put forward a draft agreement on the discontinuance of nuclear weapon tests in the atmosphere, in outer space and under water, which provided for supervision of the ban to be carried out through the existing national means of detection and also for a moratorium on underground tests until a control system had been developed as part of a system of control over general and complete disarmament. The relevant provisions read as follows: 7/

**Article 1**

"The States Parties to this Agreement solemnly undertake not to conduct tests of any kind of nuclear or thermonuclear weapons in the atmosphere, in outer space or under water.

..."
5.

Article III

"The States Parties to this Agreement undertake not to conduct any underground tests of nuclear weapons until they have agreed together on a system of control over such tests as a constituent part of an international system of control over compliance with an agreement on general and complete disarmament."

15. The United States and the United Kingdom rejected the proposal, inter alia, because in their opinion it contravened the recommendations of the 1958 conference, as well as the terms of General Assembly resolution 1649 (XVI) calling for the establishment of international control over a test ban agreement.

16. After the Conference had adjourned in January 1962, the question of nuclear-weapon tests was taken up in the Eighteen-Nation Committee on Disarmament (ENDC) when it started its work in March that year. In fact, the question was continued by a Sub-Committee, composed of the same three nuclear-weapon Powers: the Soviet Union, the United Kingdom and the United States. Their initial positions in the Sub-Committee reflected, however, the same views that they had advocated in previous negotiations. In order to break the impasse in the negotiations the eight non-aligned members of the ENDC - Brasil, Burma, Ethiopia, India, Mexico, Nigeria, Sweden and the United Arab Republic - submitted, on 16 April 1962, a joint memorandum 8/ in which they emphasized the possibilities of establishing a system for continuous observations and effective control on a purely scientific basis. The memorandum also referred to the possibility of setting up an international commission, consisting of a limited number of highly qualified scientists, possibly from non-aligned countries, entrusted with processing all data and reporting on any nuclear explosions. All three nuclear-weapon Powers accepted the memorandum as one of the bases for negotiations. There was, however, a difference of opinion between them on the interpretation of the memorandum, in particular whether it set forth obligatory or permissive provisions for on-site inspection.

17. On 9 August 1962, the United States made a new move by proposing a comprehensive ban. Its proposal was still based on the principle of compulsory on-site inspection but it provided for: (a) an unspecified reduction in the annual number of on-site inspections, as compared with the previous proposal for a sliding scale of twelve to twenty; and, (b) reduction in the number of control posts from 180 to about 80, including a change in the manning of such posts - instead of being internationally manned and operated, the posts would accept an international observer but would be manned by nationals of the country being inspected.

18. On 27 August 1962, the United States and the United Kingdom submitted two alternative draft treaties. One was a comprehensive treaty in harmony with the proposals of 9 August, envisaging a ban on tests in all environments and making provision for a quota of on-site inspections in the case of suspicious underground events. 9/ The other contemplated a test ban in the three non-controversial environments - in the atmosphere, in outer space and under water -

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9/ Ibid., ENDC/58.
without international verification. 10/ The United States and the United Kingdom, while stating that they preferred a comprehensive treaty, explained that the partial treaty was submitted as a first step, as the Soviet Union was still opposed to compulsory on-site inspection in a comprehensive treaty. They would not, however, accept an uncontrolled moratorium of underground tests in any form whatsoever. On 31 August, the United States and the United Kingdom proposed 1 January 1963 as the cut-off date for tests as part of either the comprehensive treaty or the partial one. The scope of the partial treaty, formulated in Article I, read:

"1. Each of the Parties to this Treaty undertakes to prohibit and prevent the carrying out of any nuclear-weapon tests explosion at any place under its jurisdiction or control:

(a) in the atmosphere, above the atmosphere, or in the territorial or high seas; or

(b) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted.

"2. Each of the Parties to this Treaty undertakes furthermore to refrain from causing, encouraging, or in any way participating in, the carrying out of any nuclear-weapon test explosion anywhere which would take place in any of the environments described, or have the effect prescribed, in paragraph 1 of this Article."

Both the comprehensive and partial drafts contained provisions concerning explosions for peaceful purposes which were to be permitted under strictly specified conditions.

19. The Soviet Union rejected the United States proposals of 9 August and the United States–United Kingdom comprehensive treaty on the grounds that they ran counter to the eight-Power memorandum and did not depart from the principle of obligatory on-site inspection. The Soviet Union also rejected the partial treaty on the ground that it excluded underground tests, but was not opposed to considering such a partial treaty if underground tests were voluntarily suspended until a final solution of the problem was reached. It supported a Mexican proposal that there should be a cessation of all tests from 1 January 1963. 11/

20. Expressing still its preference for a comprehensive ban the Soviet Union, on 10 December 1962, offered a new guarantee for effective control of such agreement. 12/ In addition to existing manned national means of detection, it proposed the use of automatic seismic stations ("black boxes"). Two or three such stations, the Soviet Union said, could be established on the territories of each of the nuclear-weapon Powers and some in the neighbouring countries. In the USSR, there were three major

10/ Ibid., ENDC/59.


seismic zones—the Far East, Central Asia and the Altai mountain region—where "black boxes" could be usefully located. The sealed boxes containing the instruments would be periodically replaced and carried from and to the headquarters of the international commission by Soviet personnel on Soviet aircraft, but personnel of the international body could participate in the delivery and removal of the "black boxes" with appropriate precautionary measures.

21. The United States agreed that the "black boxes" might be a useful adjunct to manned detection stations if used in sufficient numbers and if properly equipped, operated and located. It also noted that the proposed participation of international personnel in the placing and retrieval of the boxes had many interesting aspects. But it stated that such stations would not substantially decrease the number of significant unidentified events nor eliminate the need for manned stations or on-site inspections.

22. The United Kingdom formally proposed that the whole question be examined by experts, without any pre-conditions. The Soviet Union rejected the proposal, insisting that the United Kingdom and the United States first accept the idea of "black boxes" in principle before there was any discussion of details.

23. These were the respective positions of the Soviet Union, the United Kingdom and the United States when the ENDC went into recess on 20 December 1962. The three-Power Sub-Committee on nuclear testing did not meet thereafter. When the ENDC reconvened on 12 February 1963, it again concentrated on a comprehensive treaty banning tests in all environments. The discussion revealed that there was agreement mainly on the following principles: (a) utilization of nationally manned and nationally controlled seismic stations for detection and identification of seismic events; (b) installation of automatic (unmanned) seismic stations in the territories of nuclear Powers and adjacent countries as a check on the proper functioning of the nationally manned stations, on the understanding that delivery and removal of equipment and records of these stations would be carried out with the participation of foreign personnel under arrangements safeguarding the security of the States concerned; and (c) an annual quota of on-site inspections as a means to determine the nature of suspicious events.

24. There was disagreement on the number of annual inspections and on the number of automatic seismic stations. The Soviet Union proposed two to three on-site inspections a year; the United States proposed eight to ten, a figure which was later reduced to seven on condition that the verification system eventually elaborated would be effective. The Soviet Union proposed the establishment of three automatic seismic stations; the United States proposed seven such stations.

25. On 10 June 1963, the non-aligned members of the Committee—Ethiopia, Nigeria and the United Arab Republic, submitted a joint memorandum suggesting that for the time being "three, four or so truly effective inspections a year— or an adequately proportioned figure spread over more years", might be needed to dispel mutual suspicions and to facilitate reaching a settlement. Such a compromise quota of inspection would be contingent upon agreement on adequate and effective modalities of inspection. They also expressed the conviction that direct talks between the three nuclear-weapon Powers on a high level, might prove of great value in reaching a solution of the problem.

26. On 10 June, it was announced that the Soviet Union, the United States and the United Kingdom had agreed to hold talks in Moscow in mid-July on the cessation of nuclear tests. On 2 July, the Soviet Union stated that the United States and the United Kingdom insistence on on-site inspections made an underground ban impossible; the Soviet Union was therefore prepared to sign a limited treaty banning tests in the three non-controversial environments — in the atmosphere, in outer space and under water. It also abandoned its previous demands that a partial test ban must be accompanied by a moratorium on underground testing. 14/

27. The negotiations which began on 15 July ended on 25 July when the text of the Treaty was initialled. It was opened for signature on 5 August. 15/ The scope of the Treaty is defined as follows:

**Article I**

"1. Each of the Parties to this Treaty undertakes to prohibit, to prevent, and not to carry out any nuclear-weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control:

(a) in the atmosphere; beyond its limits, including outer space; or under water, including territorial waters or high seas; or

(b) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the State under whose jurisdiction or control such explosion is conducted. It is understood in this connexion that the provisions of this sub-paragraph are without prejudice to the conclusion of a treaty resulting in the permanent banning of all nuclear test explosions, including all such explosions underground, the conclusion of which, as the Parties have stated in the Preamble to this Treaty, they seek to achieve.

"2. Each of the Parties to this Treaty 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, anywhere which would take place in any of the environments described, or have the effect referred to, in paragraph 1 of this Article."

**Further measures**

28. The operative part of the Treaty does not contain any provision concerning measures for further expanding of the Treaty's scope. However, such a goal was proclaimed in the Preamble of the Treaty which states the determination of the Parties to seek "to achieve the discontinuance of all test explosions of nuclear weapons for all time", and to this end to continue negotiations. The same determination was recalled in the Preamble of the Treaty on the Non-Proliferation of Nuclear Weapons in 1968.

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14/ Ibid., ENDC/112.

15/ Treaty Series, Treaties and International Agreements registered or filed and recorded with the Secretariat of the United Nations, Vol. 480, p. 43, Legal Registration Number 6964.
29. These efforts were, in fact, continued immediately following the conclusion of the partial agreement in 1963. Differing views on verification, which had prevented inclusion of underground tests in that treaty, have continued for years to block any further agreement. It was not before 1974 that some progress was achieved. On 3 July 1974 the United States and the Soviet Union signed a Treaty on the Limitation of Underground Nuclear Weapon Tests, with a Protocol to the Treaty. 16/ Under the terms of the Treaty, each Party agreed not to carry out any tests of weapons having a yield in excess of 150 kilotons after 31 March 1976, to keep its underground tests to a minimum, and to work towards ending all underground nuclear-weapon tests. Verification will be carried out by national means of detection, but provisions are included in the Protocol to ensure that nuclear-weapon tests under the threshold will be carried out in specific areas under the jurisdiction or control of the Parties. Article III of the Treaty stated that its provisions would not apply to nuclear explosions for peaceful purposes; and that these "shall be governed by an agreement which is to be negotiated and concluded by the Parties at the earliest possible time."

30. On 28 May 1976, the Soviet Union and the United States concluded a Treaty on Underground Nuclear Explosions for Peaceful Purposes, together with a Protocol and an Agreed Statement. 17/ The Treaty applies to all underground nuclear explosion for peaceful purposes conducted by the Parties after 31 March 1976. Individual explosions with yields greater than 150 kilotons are prohibited, as well as group explosions exceeding 1,500 kilotons. In accordance with Article IV, for the purpose of ensuring compliance with the Treaty each Party shall use national technical means of verification and provide information and access to sites of explosions.

31. The question of underground nuclear-weapon tests has been actively considered in the Conference of the Committee on Disarmament (CCD), where a number of suggestions and proposals have been submitted both by nuclear and non-nuclear-weapon States. During the 1977 session of the Committee, there have been a number of significant developments. On 22 February the Soviet Union introduced a draft treaty on the complete and general prohibition of nuclear-weapon tests. 18/ Under the Soviet draft, first submitted to the General Assembly in 1975 and later revised, 19/ nuclear-weapon tests would be prohibited in all environments. Provisions are included in Article II to ensure compliance with the treaty through the use of national means of control supplemented by cooperation in an international exchange of seismic data, as well as by on-site inspection in case of doubts regarding the nature of a seismic event. Article III excludes from the prohibition any underground nuclear explosions conducted by nuclear-weapon States on their jurisdictions or in accordance with Article V of the Treaty on the Non-Proliferation of Nuclear Weapons.

16/ Document A/9698, Annexes I and II.
17/ Document A/31/125.
18/ Document CCD/523.
19/ Document A/C.1/31/7.
32. On 5 July, Sweden tabled a draft treaty banning nuclear-weapon test explosions in all environments. By Article I, the prohibition would apply to any nuclear-weapon test explosion, or any explosion of other nuclear devices. Verification would be carried out both by an effective international exchange of seismological data and on-site inspection. In accordance with Article III, States Parties would engage the services of a consultative committee to ensure the full observance and implementation of the provisions of the Treaty. As regards peaceful nuclear explosions, they might be carried out only under international supervision and control. Transitional arrangements are also contemplated to ensure the cessation of nuclear-weapon tests.

33. In pursuance of the decision of the Conference of the Committee on Disarmament, (CCD) of 22 July 1976, the Ad Hoc Group of Scientific Experts to Consider International Co-operative Measures to Detect and Identify Seismic Events held during 1977 its second, third and fourth sessions in Geneva. The Group is expected to specify the characteristics of an international monitoring system and estimate the detection and identification capability of such a system; it should then provide factual results of its analysis for the benefit of Governments.

34. On 28 July, the representatives of the United Kingdom, the Soviet Union and the United States announced in the CCD the conclusion of the first round of tripartite consultations on a comprehensive test ban treaty, which took place in Geneva from 13 to 27 July. The United Kingdom expressed the hope that the next round would enable the three delegations to work towards an agreement which would command universal respect. The Soviet Union stressed that it would, for its part, exert all efforts in order to achieve the objective of a complete and general prohibition of nuclear-weapon tests. The United States said that it looked forward to the resumption of those negotiations and expressed the hope that this would prepare the way for fruitful negotiations in the CCD towards the goal of a truly effective comprehensive test ban treaty.

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21/ Document CCD/PV.757.
III. TREATY ON PRINCIPLES GOVERNING THE ACTIVITIES OF STATES IN THE EXPLORATION AND USE OF OUTER SPACE, INCLUDING THE MOON AND OTHER CELESTIAL BODIES */
(OUTER SPACE TREATY) */

Introduction

35. Early efforts to prevent the spread of the arms race to outer space were made in the Sub-Committee of the Disarmament Commission and the General Assembly in the late 1950s. On 29 August 1957, in the Sub-Committee of the Disarmament Commission, Canada, France, the United Kingdom and the United States submitted proposals for partial disarmament measures, including one by which a technical committee would be established to study the features of an inspection system designed to assure that the launching of objects through outer space would be exclusively for peaceful and scientific purposes. 1/ This proposal became one of the provisions of General Assembly resolution 1148 (XII), adopted on 14 November 1957.

36. The debate of the item "Question of the peaceful uses of outer space" in 1958 at the thirteenth session of the General Assembly ultimately led to the adoption of resolution 1348 (XIII), by which the General Assembly established an Ad Hoc Committee on the Peaceful Uses of Outer Space. The Committee reported to the Assembly at the fourteenth session. As a result of the debate the General Assembly, recognizing the common interest of mankind in furthering the peaceful use of outer space and the great importance of international co-operation in this field, adopted resolution 1472 (XIV) of 12 December 1959 by which a Committee on the Peaceful Uses of Outer Space was permanently established. It was, however, understood that the new Committee would, inter alia, "study practical and feasible means for giving effect to programmes in the peaceful uses of outer space which could appropriately be undertaken under United Nations auspices", while other organs at the United Nations would perform the task of facilitating progress on disarmament.

Question of the scope

37. The military aspects of the use of outer space were then taken up in the Ten-Nation Committee on Disarmament. Several proposals put forward by the Western Powers contained provisions for a ban on the placing of weapons of mass destruction in outer space. 2/ However, these provisions were integral parts of programmes on general and complete disarmament and, therefore, treated the issue of outer space in conjunction with other disarmament measures. This was also the case with the Soviet draft treaty on general and complete disarmament submitted to the General Assembly in September 1960, which linked the question of demilitarization of outer space with such issues as the abolition of foreign military bases. 3/ Thus, the relevant section of that proposal read:


2/ The five Powers (Canada, France, Italy, the United Kingdom and the United States) plan of 16 March 1960 (document TNCD/3) and the United States programme on general and complete disarmament of 27 June 1960 (document DC/154).

"4. From the very beginning of the first stage and until the final destruction of all means of delivering nuclear weapons, the placing into orbit or stationing in outer space of any special devices, the leaving of their territorial waters by warships and the flying beyond the limits of their national territory by military aircraft capable of carrying weapons of mass destruction, will be prohibited."

38. The question of the prevention of the spread of the arms race to outer space was raised again in 1962 in the course of the work of the newly established Eighteen-Nation Committee on Disarmament (ENDC). Both the Soviet and United States plans for general and complete disarmament submitted to the Committee dealt in appropriate sections with this issue. 4/ Although the proposals were generally welcomed, a number of States, in particular Canada, Italy and Mexico, argued that the question of demilitarization of outer space should be considered independently of general and complete disarmament and, to this effect, suggested that this issue should be given priority. No definite action was taken on these suggestions during 1962, but at the General Assembly's seventeenth session, that year, the United States declared its readiness to enter into such an agreement.

39. In order to facilitate and, at the same time, give fresh impetus to the considerations of the issue as an independent disarmament measure, Mexico submitted to the ENDC on 21 June 1963 a working paper containing the outline of a draft treaty. 5/ The scope of the treaty, defined in article I, was much broader than previous proposals which were concerned only with nuclear weapons and other weapons of mass destruction. The Mexican draft provided not only for denuclearization but for a complete demilitarization of outer space. It read as follows:

"1. Outer space and the celestial bodies shall be utilized exclusively for peaceful purposes. Accordingly, every military measure, among others, such as the placing in orbit and the stationing in space of nuclear weapons or weapons of mass destruction or of vehicles capable of delivering such weapons, is prohibited. Tests of the said weapons of destruction, or of any other war-like device for military purposes, are likewise prohibited, as is the stationing or placing in orbit of bases for launching weapons of any type whatsoever.

"2. Nothing in this treaty shall prevent the employment of military personnel or equipment, provided that they are used exclusively for scientific research or for some other peaceful purpose."

40. In introducing the draft, Mexico reiterated its view that the "question of placing weapons of mass destruction, or of stationing special devices in space which can serve as vehicles for these weapons is ... a question sui generis". In its opinion, the ideas and objectives contained in the draft "answer the universal desire to keep outer space free of nuclear weapons". 6/


41. The matter was not immediately pursued any further. However, during the General Assembly's eighteenth session in 1963 both the Soviet Union and the United States announced their readiness to work towards reaching an agreement on the preservation of outer space for peaceful purposes. In view of this, at the initiative of Mexico, the General Assembly adopted on 17 October 1963 resolution 1887 (XVIII), welcoming the intention of the two nuclear-weapon Powers. It also contained a call upon all States to refrain from military activities in outer space, which was, however, restricted in scope to activities concerning nuclear weapons and other weapons of mass destruction. It read:

"2. Solemnly calls upon all States:

(a) to refrain from placing in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, installing such weapons on celestial bodies, or stationing such weapons in outer space in any other manner;

(b) to refrain from causing, encouraging or in any way participating in the conduct of the foregoing activities."

42. Thereafter, the matter was considered in the Committee on the Peaceful Uses of Outer Space and by the General Assembly. Nevertheless, the text of an agreement was worked out mainly in bilateral negotiations between the United States and the Soviet Union in 1965 and 1966. The draft was finalized in September 1966 and thereafter submitted to the General Assembly for its approval. Resolution 2222 (XXI), adopted by acclamation on 14 December 1966, commended the treaty. The principal disarmament provisions of the Treaty 7/ are contained in article IV. It provides for two different scopes depending on the area of the Treaty's application. Thus, the scope is narrower with regard to military activities in orbit around the Earth and in outer space. The prohibitions cover only nuclear weapons and other weapons of mass destruction and not other military activities. As far as the moon and other celestial bodies are concerned the scope is much wider -- it provides for their complete demilitarization. Article IV reads:

"States Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.

"The moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military manoeuvres on celestial bodies shall be forbidden. The use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies shall also not be prohibited."

7/ Treaty Series, Treaties and International Agreements registered or filed and recorded with the Secretariat of the United Nations, Vol.610, p.205, Legal Registration Number 8843.
43. A system of verification of obligations under article IV is envisaged in article XII of the Treaty. It is, however, limited only to verification of activities with regard to the moon and celestial bodies. It stipulates: "All stations, installations, equipment and space vehicles on the moon and other celestial bodies shall be open to representatives of other States Parties to the Treaty on a basis of reciprocity".

44. No specific provisions for expanding the Treaty's scope with regard to the military activities in orbit around the Earth and in outer space were envisaged in the Treaty.
IV. TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS *

Introduction

45. The earliest efforts in the United Nations to a draft treaty which would ensure that the newly discovered atomic energy would be used exclusively for peaceful purposes had as one of its aims the prevention of the spread of nuclear weapons. The dissemination of knowledge of nuclear technology, as distinct from its use for military purposes, was accelerated in the 1950s when the United States and the Soviet Union undertook to render extensive technical assistance in the field of peaceful uses of atomic energy. In addition, the policies of the major Powers and their strategic concepts led to the building up of military alliances and other collective defence arrangements, including in some cases the stationing of armed forces with nuclear weapons on the territory of countries which themselves did not possess nuclear weapons. The Soviet Union proposed, in 1956, a zone of limitation and inspection of armaments in Central Europe and, in particular, a ban on the stationing of atomic military formations and the location of atomic and hydrogen weapons of any kind in that zone. 1/

46. The following year, the United States submitted a package of partial disarmament proposals 2/ whereby, from the date of the cessation of production of fissionable material for weapons purposes, each party would undertake not to transfer out of its control any nuclear weapons or to accept transfer to it of such weapons except where, under arrangements between the transferer and the transferee, their use would be restricted to the eventuality of an armed attack placing the parties in the situation of individual or collective self-defence.

47. There thus developed two different approaches to the problem of preventing the spread of nuclear weapons, namely, the creation of nuclear-free zones in which all nuclear weapons would be prohibited and, secondly, agreement on a treaty which would specifically ban the dissemination of nuclear weapons by the nuclear Powers and the acquisition of nuclear weapons by States not possessing them.

48. During the period from 1958 to 1965, when the first draft treaties to prevent the spread of nuclear weapons were submitted, 3/ the question of non-proliferation was intensively considered in various bodies dealing with disarmament problems. At the initiative of Malta in 1958, the issue was also taken up in the General Assembly which, by a number of resolutions adopted in the subsequent years, contributed towards laying down the basis of an agreement on the non-proliferation

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* The Treaty was open for signature on 1 July 1968 at Moscow, London and Washington. It entered into force on 5 March 1970.


3/ The draft treaties on general and complete disarmament introduced by the Soviet Union and the United States contained provisions, among the measures of the first stage, to prevent the dissemination or acquisition of nuclear weapons by non-nuclear-weapon States.
of nuclear weapons. The discussions that took place during this period revealed, however, substantive differences in approach to this issue not only between the nuclear-weapon States, but also between these States and the non-nuclear-weapon States. Thus, while the Soviet Union placed a special emphasis on the provisions banning both the transfer of, and control over, nuclear weapons, and the stationing of these weapons on the territory of non-nuclear States, the United Kingdom and the United States were concerned mainly with the transfer of and control over nuclear weapons, since the other question, i.e. the stationing of nuclear weapons, tended, in their opinion, to prejudge their strategic military arrangements. On the other hand, the non-aligned States suggested that, as a first step, the nuclear-weapon States should agree to freeze the levels of nuclear armaments. They also pointed out that other steps, such as a ban on nuclear weapon tests, would also help to prevent the proliferation of nuclear weapons.

49. Towards the mid-1960s, the consideration of the issue became further complicated with the question of access to nuclear weapons through military alliances, in view of the proposed plans under discussion at the time by the Western allies for establishing a NATO multilateral nuclear force (MLF). The United Kingdom and the United States maintained that the projected establishment of the MLF was not in violation of the principle of non-proliferation as it did not envisage a transfer of, and control over nuclear weapons. The Soviet Union, in contrast, claimed that such an arrangement, in fact, would not quite preclude direct or indirect access to nuclear weapons by non-nuclear-weapon Powers, and that therefore it was contrary to the idea of non-proliferation. The draft treaties submitted by the United States and the Soviet Union on 17 August and 24 September 1965 respectively, reflected their different positions on this issue.

50. The United States draft 4/ defined the scope of the treaty in articles I and II as follows:

**Article I**

"1. Each of the nuclear States Party to this Treaty undertakes not to transfer any nuclear weapons into the national control of any non-nuclear States, either directly, or indirectly through a military alliance, and each undertakes not to take any other action which would cause an increase in the total number of States and other organizations having independent power to use nuclear weapons.

"2. Each of the nuclear States Party to this Treaty undertakes not to assist any non-nuclear State in the manufacture of nuclear weapons.

**Article II**

"1. Each of the non-nuclear States Party to this Treaty undertakes not to manufacture nuclear weapons; each undertakes not to seek or to receive the transfer of such weapons into its national control, either directly, or indirectly through a military alliance; and each undertakes not to take any other action which would cause an increase in the total number of States and other organizations having independent power to use nuclear weapons.

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"2. Each of the non-nuclear States Party to this Treaty undertakes not to seek or to receive assistance in the manufacture of nuclear weapons, or itself to grant such assistance."

51. While explaining the draft treaty the United States emphasized that since it prohibited direct and indirect forms of transfer into national control of non-nuclear-weapon States, no additional nuclear-weapon Power could emerge, whether national or international. But, the United States added: "The treaty would not, however, preclude the establishment of nuclear arrangements -- such as a multilateral force within NATO -- so long as such arrangements would not constitute an additional organization or entity having the power to use nuclear weapons independently of the participating nations presently possessing nuclear weapons. A new organization having such independent power could come into existence only if a present nuclear nation should voluntarily turn over its entire stockpile of nuclear weapons to a collective entity and should also voluntarily renounce its right of veto over the collective force. Even in the event of such a possibility, however, no non-nuclear nation could acquire independent power to use nuclear weapons under the draft treaty. This would be barred by the provisions which preclude any transfer into the national control of a non-nuclear country." 5/

52. The Soviet Union and its allies restated their strong objections to the principle upon which the United States draft was based. They said that the draft treaty failed to close all avenues of possible proliferation and contained loopholes which would enable the use of nuclear weapons by the NATO countries which could gain access to nuclear weapons indirectly. Poland maintained that a non-proliferation treaty must introduce an absolute and comprehensive ban on all forms of nuclear proliferation and, more specifically, should freeze the present status of all States with respect to physical access to nuclear weapons, their ownership, disposition, operation and control, as well as training in their use and nuclear planning.

53. The Soviet draft 6/ dealt with the scope of the treaty in articles I - III. They read as follows:

**Article I**

"1. Parties to the Treaty possessing nuclear weapons undertake not to transfer such weapons in any form -- directly or indirectly, through third States or groups of States -- to the ownership or control of States or groups of States not possessing nuclear weapons and not to accord to such States or groups of States the right to participate in the ownership, control or use of nuclear weapons.

"The said Parties to the Treaty shall not transfer nuclear weapons, or control over them or over their emplacement and use, to units of the armed forces or military personnel of States not possessing nuclear weapons, even if such units or personnel are under the command of a military alliance.

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2. Parties to the Treaty possessing nuclear weapons undertake not to provide assistance -- directly or indirectly, through third States or groups of States -- to States not at present possessing nuclear weapons in the manufacture, in preparations for the manufacture or in the testing of such weapons and not to transmit to them any kind of manufacturing, research or other information or documentation which can be employed for purposes of the manufacture or use of nuclear weapons.

Article II

1. Parties to the Treaty not possessing nuclear weapons undertake not to create, manufacture or prepare for the manufacture of nuclear weapons either independently or together with other States, in their own territory or in the territory of other States. They also undertake to refrain from obtaining nuclear weapons in any form -- directly or indirectly, through third States or groups of States -- for purposes of ownership, control or use and shall not participate in the ownership, control or use of such weapons or in testing them.

"The said Parties to the Treaty shall not seek to acquire control over nuclear weapons or over their emplacement and use for units of their armed forces or personnel thereof, even if such units or personnel are under the command of a military alliance.

2. Parties to the Treaty not possessing nuclear weapons undertake not to obtain or seek to obtain, from States possessing nuclear weapons, assistance in the manufacture of such weapons or relevant manufacturing, research or other information or documentation which can be employed for purposes of the manufacture or use of nuclear weapons.

Article III

The Parties to this Treaty shall refrain from offering any support, encouragement or inducement to States seeking to own, manufacture or exercise control over nuclear weapons".

54. The United States objected to the draft on the grounds that it was intended to bar the existing practice for the deployment of United States nuclear weapons, under its own control, on the territory of its allies and preclude consultations on nuclear strategy between NATO allies.

55. The positions of other States to the problem of the non-proliferation also reflected differences in emphasis. The United Kingdom and Canada supported the United States draft as did Italy. However, Italy at the same time stressed that the treaty should not remain an isolated disarmament step but should be accompanied by a freeze on production of nuclear weapons and by actual reduction of nuclear stockpiles. In addition, on 14 September 1965, Italy submitted a draft unilateral declaration of non-acquisition of nuclear weapons, whereby States would unilaterally undertake for an agreed period of time: (1) not to manufacture or acquire
national control over nuclear weapons; (2) not to seek or receive assistance from other States in manufacturing these weapons; and (3) to accept application of the IAEA or equivalent international safeguards on nuclear activities. These obligations could be prolonged, depending on progress on international disarmament agreements, such as a non-proliferation treaty, halting of the arms race and reduction of nuclear arsenals. Parties would reserve all freedom of action if any State acquired national control of nuclear weapons.

56. On the other hand, India proposed the conclusion of a two-stage non-proliferation agreement. The first stage (or a partial non-proliferation agreement) would apply only to nuclear-weapon Powers who would undertake, under a formula acceptable to the two Power blocs: (1) not to pass on weapons or technology to other States; (2) to cease all production of nuclear weapons and delivery vehicles, and to agree on the beginning of a programme of reduction of their stocks; and (3) to agree also to incorporate other measures. After this treaty had come into force and steps had been taken by the nuclear Powers to stop all production and to embark on reduction of stocks, the second stage of the treaty (or the comprehensive treaty) would begin, which would provide for an undertaking by non-nuclear Powers not to acquire or manufacture nuclear weapons. The transition between the first stage and the second stage of the treaty, or between the partial treaty and the comprehensive non-proliferation treaty, might be regulated by the Italian proposal. Later, India declared that it would not press for beginning the reduction of nuclear stocks before a non-proliferation treaty was signed. However, the renunciation by non-nuclear Powers of the production, acquisition and control of and access to nuclear weapons should be simultaneous with the renunciation by nuclear Powers of further production of these weapons and with agreement on reduction of existing nuclear stockpiles.

57. Sweden suggested that an agreement on a comprehensive test ban would be the most practical measure to prevent an increase in the number of nuclear Powers, since it was improbable that a nuclear Power could emerge without an extensive programme of nuclear testing. Sweden restated its preference for a solution of the non-proliferation problem within a package of measures, including a comprehensive test ban and a cut-off of production of weapon-grade fissile materials. It supported the Italian proposal as a temporary solution and suggested that, in order to make acceptance by some non-nuclear States easier, the time-limit for a moratorium envisaged by the Italian formula should be relatively short.

58. On 15 September 1965 the eight non-aligned members of the ENDC - Brazil, Burma, Ethiopia, India, Mexico, Nigeria, Sweden and the UAR - submitted a joint memorandum on non-proliferation of nuclear weapons, which expressed their belief that a treaty on non-proliferation was not an end in itself, but only a means to an end, namely, the achievement of general and complete disarmament and, more particularly, nuclear disarmament. They were "convinced that measures to prohibit the spread of nuclear weapons should, therefore, be coupled with or followed by tangible steps to halt the nuclear arms race and to limit, reduce and eliminate the stocks of nuclear weapons and the means of their delivery".

8/ Ibid., document ENDC/158.
59. In order to remove the main obstacles between the two sides on the question of control of nuclear weapons within the framework of military alliances, on 21 March 1966, the United States submitted amendments to its draft treaty of 17 August 1965 by which, inter alia, (1) it defined "control" in the context of non-proliferation as the "right or ability to fire nuclear weapons without the concurrent decision of an existing nuclear-weapon State"; (2) it made clear that each of the nuclear-weapon States party to the treaty would undertake not to transfer nuclear weapons, not only into the national control of any non-nuclear-weapon State, but also into the control of any association of non-nuclear-weapon States; (3) it stipulated that the obligation not to assist any non-nuclear-weapon State in the manufacture of nuclear weapons extended to "preparation for such manufacture" as well as "the testing of nuclear weapons", and "encouragement or inducement to manufacture or otherwise acquire its own nuclear weapons". None of the actions prohibited by the treaty could be taken either directly, or indirectly through third States or associations of States, or through units of the armed forces or military personnel of any State, even if such units or personnel were under the command of a military alliance. It stressed, however, that it favoured the right of military allies to consult each other on the nuclear defence of the alliance and implied that the issue was not negotiable. The relevant articles of the draft 2/ were formulated as follows:

Article I

"Each of the nuclear-weapon States party to this treaty undertakes:

1. Not to transfer nuclear weapons into the national control of any non-nuclear-weapon State, or into the control of any association of non-nuclear-weapon States.

2. Not to provide to any non-nuclear-weapon State or association of such States
   
   (a) assistance in the manufacture of nuclear weapons, in preparation for such manufacture, or in the testing of nuclear weapons; or
   
   (b) encouragement or inducement to manufacture or otherwise acquire its own nuclear weapons.

3. Not to take any other action which would cause an increase in the total number of States and associations of States having control of nuclear weapons.

4. Not to take any of the actions prohibited in the preceding paragraphs of this Article directly, or indirectly, through third States or associations of States, or through units of the armed forces or military personnel of any State, even if such units of personnel are under the command of a military alliance".

2/ Ibid., document ENDC/152.
21.

Article II

"Each of the non-nuclear-weapon States party to this treaty undertakes:

"1. Not to manufacture nuclear weapons, and not to seek or to receive the transfer of nuclear weapons into its national control or into the control of any association of non-nuclear-weapon States of which it is a member.

"2. Not to seek or receive, and not to provide, whether alone or in any association of non-nuclear-weapon States:

(a) assistance in the manufacture of nuclear weapons, in preparations for such manufacture, or in the testing of nuclear weapons; or

(b) encouragement or inducement to manufacture or otherwise acquire its own nuclear weapons.

"3. Not to take any other action which would cause an increase in the total number of States and associations of States having control of nuclear weapons.

"4. Not to take any of the actions prohibited in the preceding paragraphs of this Article directly, or indirectly through third States or associations of States or through units of its armed forces or its military personnel, even if such units or personnel are under the command of a military alliance".

In response, the USSR and its allies restated their position, indicating that they would not sign a non-proliferation treaty which did not rule out all forms of participation by the NATO non-nuclear powers in the control of a multilateral nuclear deterrent.

60. As far as the non-aligned States were concerned, they reiterated in the ENDC their primary emphasis on the need for an acceptable balance of mutual responsibilities and obligations of nuclear and non-nuclear-weapon States. On 19 August 1966, they submitted a joint memorandum 10/ which stated, inter alia, that the question of nuclear defence arrangements within military alliances was the concern mainly of the major nuclear Powers and their allies, whereas for the non-nuclear, non-aligned countries, the question of the balance of mutual responsibilities and obligations between the nuclear and the non-nuclear Powers was of particular importance. A non-proliferation treaty, the memorandum said, should impose an obligation of the non-nuclear Powers to refrain from the acquisition of nuclear weapons; and, in order to assure the desired balance of mutual obligations and responsibilities the nuclear Powers should undertake a number of tangible steps to halt the arms race and to limit, reduce or eliminate stocks of

nuclear weapons and their means of delivery. A comprehensive nuclear test ban, a complete cessation of the production of fissionable material for weapon purposes, a freeze on, and an gradual reduction of, nuclear weapon stocks and means of delivery, a ban on the use of nuclear weapons, and security assurances to the non-nuclear States were among the measures proposed in the memorandum, for possible incorporation in a treaty or as a declaration of intent.

61. The USSR, the United Kingdom and the United States held that it would be harmful to the cause of non-proliferation if the non-aligned members of the Committee were to insist on making the non-proliferation treaty dependent on the implementation of other disarmament measures. The agreement of the three nuclear Powers on this issue was soon followed by a significant reconciliation of their positions with regard to the scope of the treaty. Thus, on 24 August 1967, 11/ separate but identical drafts of a non-proliferation treaty were submitted to the ENDC by the United States and the Soviet Union. Articles I and II were formulated as follows:

**Article I**

'Each nuclear-weapon State Party to this Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices'.

**Article II**

'Each non-nuclear-weapon State Party to this Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices'.

62. In presenting the draft, both the United States and the Soviet Union, stated that it was based on a compromise approach and that it took into account a number of views put forward by the non-aligned States. Although the draft was welcomed in general, it invited additional comments and proposals, particularly from the non-aligned States. Some of them were directed towards a widening of the scope concerning both the commitments of the non-nuclear and nuclear-weapon Powers. The United Arab Republic, for instance, proposed that the language of articles I and II be strengthened

to preclude transfer of nuclear weapons in any form whatsoever, including gifts and partial ownership. 12/ Romania, however, suggested that the nuclear Powers commit themselves, in a separate article, to adopt specific measures with a view to halting the manufacture of nuclear weapons, the reduction of stocks and the final destruction of nuclear weapons and delivery vehicles. Similarly, India continued to express the over-all objection that the treaty's scope must not only prevent "horizontal proliferation", i.e. the acquisition of nuclear weapons by non-nuclear-weapon States, but also "vertical proliferation", i.e. the further expansion of existing stocks and the development of new nuclear weapons. Brazil, Burma and Ethiopia also made references to the need of including in the treaty a firm undertaking of the nuclear Powers concerning their own nuclear disarmament.

63. On 18 January 1968 the United States and the Soviet Union submitted to the ENDC new identical revised drafts 13/ which included some important changes in the previous texts, none of them in the basic provisions on scope. However, in order to accommodate the views of non-nuclear-weapon States, the sponsors inserted Article V on the availability of the potential benefits of peaceful nuclear explosions, Article VI containing an undertaking to pursue negotiations with a view to the cessation of the nuclear arms race, and Article VII on the right of States to conclude agreements on nuclear-weapon-free zones.

64. A number of suggestions were made by non-nuclear-weapon States in the ENDC for the purpose of introducing further improvements to the draft, but only some of them referred to the question of the scope. Brazil tabled amendments to Articles I and II which would permit non-nuclear-weapon States to possess nuclear explosive devices for peaceful purposes 14/ and the United Arab Republic re-stated its proposal for the strengthening of the prohibitions contemplated in those Articles.

65. On 11 March 1968 the sponsors submitted to the Committee a joint draft treaty 15/ which incorporated some of the suggestions made by delegations. No changes were made in Articles I, II and VI. The new text was submitted to the General Assembly together with the proposals and working papers introduced in the ENDC 16/.

66. At the resumed twenty-second session of the General Assembly, the joint draft treaty was again revised, mainly the preamble and Articles IV and V, in order to reflect the comments made by several delegations during the debate. Thus the relevant articles concerning the scope of the Treaty 17/ which was commended by General Assembly resolution 2372 (XXII) of 12 June 1968, read as follows:

12/ Ibid., ENDC/197.
14/ Ibid., ENDC/201/Rev.2.
15/ Ibid., annex II, ENDC/222.
17/ Treaty Series, Treaties and International Agreements registered or filed and recorded with the Secretariat of the United Nations, vol. 729, p.161, Legal Registration Number 10485.
Article I

"Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear-weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices."

Article II

"Each non-nuclear-weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices."

Article VI

"Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control."

Further measures

67. On 1 July 1968, the same day that the Treaty on the Non-Proliferation of Nuclear Weapons had been opened for signature, the Soviet Union and the United States announced their intention to enter into bilateral discussions on the "limitation and reduction of both offensive and defensive strategic nuclear-weapon delivery systems and systems of defense against ballistic missiles". On 16 April 1970 the strategic arms limitation talks opened in Vienna. In addition, both powers have conducted negotiations on other measures.

68. Since the Treaty entered into force on 5 March 1970, the following agreements have been concluded by the Soviet Union and the United States, either in the context of SALT or other bilateral consultations:

1. Agreement on Measures to Improve the USA-USSR Direct Communications Link, signed at Washington on 30 September 1971 18/ and amended by an exchange of letters on 29 April 1975.

2. Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War, signed at Washington on 30 September 1971. 19/

18/ Treaty Series, Treaties and International Agreements registered or filed and recorded with the Secretariat of the United Nations, Vol. 806, p.402, Legal Registration Number 6839.

3. Agreement on the Prevention of Incidents on and over the High Seas, signed at Moscow on 25 May 1972. 20/

4. Interim Agreement on Certain Measures with respect to the Limitation of Strategic Offensive Arms, with a Protocol, and Treaty on the Limitation of Anti-Ballistic Missile Systems, signed at Moscow on 26 May 1972. 21/

5. Protocol to the Agreement on the Prevention of Incidents on and over the High Seas, signed at Washington on 22 May 1973. 22/

6. Agreements on Basic Principles of Negotiations on the Further Limitation of Strategic Offensive Arms and on the Prevention of Nuclear War, signed at Washington on 21 and 22 June 1973. 23/


8. Joint Statement giving guidance for further negotiations on the limitation of strategic offensive arms, issued at Vladivostok on 24 November 1974. 25/


69. The General Assembly has adopted a number of resolutions on SALT. In 1968, by resolution 2456 D (XXIII), the General Assembly urged the two countries to enter at an early date into bilateral discussions on the limitation of offensive strategic nuclear-weapon delivery systems and systems of defence against ballistic missiles.

20/ Statement of Treaties and International Agreements, ST/LEG./SER.A/310, p.13, Legal Registration Number 12214.


22/ Statement of Treaties and International Agreements, ST/LEG./SER.A/325, p.30, Legal Registration Number 12214.


24/ Ibid., Twenty-ninth Session, Annexes, agenda item 35 (A/9698).

25/ Ibid., Thirtieth Session, Annexes, agenda item 41 (A/C.1/1069).

26/ Document A/31/125.
70. The following year the General Assembly adopted resolution 2602 (XXIV). After noting with satisfaction that, on 17 November 1969, the Governments of the USSR and the United States had initiated bilateral negotiations on the limitation of offensive and defensive strategic nuclear-weapon systems, the Assembly appealed to the two Governments to agree, as an urgent preliminary measure, on a moratorium on further testing and deployment of new offensive and defensive strategic nuclear-weapon systems.

71. In 1970, the General Assembly adopted resolution 2661 A (XXV) by which, after noting with satisfaction the continuation of the SALT negotiations and expressing the belief that the chances for rapid success in these bilateral talks would increase if the nuclear-weapon Powers halted the development of new weapons, the Assembly urged the nuclear Powers to end the nuclear arms race and to cease all testing and development of nuclear weapon systems.

72. The question was again considered by the General Assembly in 1972, when it adopted resolution 2952 B (XXVII) which, noting with satisfaction the results of SALT I, appealed to the USSR and the United States to expedite further agreements including important qualitative limitations and substantial reductions of strategic weapon systems.

73. By resolution 3184 A (XXVIII), the General Assembly appealed in 1973 to the USSR and the United States to bear in mind the necessity and urgency of reaching agreement on important qualitative limitations and substantial reductions of strategic nuclear-weapon systems.

74. In 1974, by resolution 3261 C (XXIX), the General Assembly shared the concern raised by the USSR and the United States over the gravity of the situation created by existing nuclear arsenals and the continued nuclear arms race; urged these two Powers to broaden the scope and accelerate the pace of their SALT negotiations and stressed once again the necessity and urgency of reaching agreement on important qualitative limitations and substantial reductions of their nuclear-weapon systems.

75. At its thirtieth session in 1975, the General Assembly adopted resolution 3484 C (XXX) by which it regretted the lack of positive results at the SALT negotiations during the last two years, expressed its concern over the high numerical ceilings and the absence of qualitative limitations in the Vladivostok Agreement and urged the two Powers concerned to accelerate the talks and reach agreement on important qualitative limitations and substantial reductions in their nuclear arms.

76. At its thirty-first session, in 1976, by resolution 31/189 A, the General Assembly regretted the absence of positive results during the last three years of the SALT negotiations, expressed its concern over the very high numerical ceilings and the absence of qualitative limitations of nuclear arms, and urged the Soviet Union and the United States to accelerate the talks and reach agreement on important qualitative limitations and substantial reductions of their nuclear weapons.

77. At each of its regular sessions since 1972, when it approved resolution 2932 B (XXVII), the General Assembly has adopted resolutions requesting the Soviet Union and the United States to keep it informed of the progress of their negotiations. While the Soviet Union and the United States have made frequent references to their talks and to the results achieved so far, they have held the view that the negotiations
were not within the purview of the General Assembly and should therefore proceed along the lines set by the States concerned.

78. In accordance with Article VIII.3 of the Treaty on the Non-Proliferation of Nuclear Weapons, a Review Conference of the Parties to the Treaty was held in Geneva from 5 to 30 May 1975, to review its operation with a view to assuring that the purposes of its Preamble and provisions were being realized. As regards Articles I and II of the Treaty, the Final Declaration27/ confirmed that their provisions had been faithfully observed by all Parties. In reviewing Article VI, the Conference welcomed the various agreements on arms limitation and disarmament concluded over the last few years. At the same time, it expressed its serious concern that the arms race, in particular the nuclear arms race, was continuing unabated, and urged constant and resolute efforts by the Parties to the Treaty, in particular by the nuclear-weapon States, to achieve an early and effective implementation of Article VI. Interpretative statements were made by various delegations with respect to the Final Declaration. Some of them, made by the Group of 77, contained proposals concerning the implementation of Article VI of the Treaty.28/

27/ NPT/CONF./35/1.

28/ Ibid.
V. TREATY ON THE PROHIBITION OF THE EMPLACEMENT OF NUCLEAR WEAPONS AND OTHER WEAPONS OF Mass DESTRUCTION ON THE SEA-BED AND THE OCEAN FLOOR AND IN THE SUBSOIL THEREOF (SEA-BED TREATY) */

Introduction

77. Growing interest in the use of the resources of the sea-bed and the ocean floor and the subsoil thereof beyond the limits of national jurisdiction developed in the 1960s as it became clear that advances in science and technology would permit man to benefit from the potential riches of the area. At the same time, it was recognized that an international régime would have to be established to forestall potential rivalries and to ensure that exploration and exploitation of the sea-bed and the ocean floor would be carried out for peaceful purposes and for the benefit of all mankind.

78. At the initiative of Malta, the whole question was taken up in 1967 by the twenty-second session of the General Assembly which, by its resolution 2340 (XXII), established an Ad Hoc Committee with the main task of exploring practical means of promoting international co-operation in the exploration, conservation and use of the sea-bed, the ocean floor and the subsoil thereof beyond the limits of national jurisdiction. The debate revealed widespread support for the principle of reserving this area exclusively for peaceful purposes and many delegations referred to the Antarctic Treaty and the Outer Space Treaty as precedents in this regard. At the same time, it was felt that the effort to ward off the danger of an arms race in the sea-bed should be pursued in the context of disarmament negotiations, since the issues at stake concerned matters relating to national and international security.

79. The question of an international agreement limiting the military use of the sea-bed and the ocean floor was first formally raised as a disarmament measure by the Soviet Union in its Memorandum on some urgent measures for stopping the arms race and for disarmament of 1 July 1968, 1/ submitted to the Eighteen-Nation Committee on Disarmament (ENDC). In the memorandum the Soviet Union stated that advances of technology in this field made it possible to consider the question of establishing a régime such as would ensure "the utilization of the sea-bed beyond the limits of the present territorial waters solely for peaceful purposes" and, in particular, prohibit the establishment of fixed military installations in that area, and proposed that the ENDC start negotiations towards that end. The President of the United States, in his message of 16 July 1968 to the ENDC, 2/ urged the Committee to begin negotiations on an agreement "which would prohibit the use of the new environment for the emplacement of weapons of mass destruction". The Committee welcomed these suggestions and agreed that the subject could be considered under the heading "other collateral measures", one of the four principal items of the provisional agenda.


2/ Ibid., ENDC/228.
80. The decision of the Committee met with widespread support at the twenty-third session of the General Assembly in 1968. At the same time, the discussion of the problem revealed the existence of substantial differences of opinion as to the best method of accomplishing this goal. A number of States, including the Soviet Union, supported a complete demilitarization of the area, while the United States and a number of other member States favoured consideration of an agreement prohibiting only the emplacement of weapons of mass destruction.

81. The General Assembly did not take a position on either approach. In its resolution 2454 B (XXIII) on general and complete disarmament it only called for urgent measures to negotiate collateral measures of disarmament, which by implication included the question of the sea-bed and the ocean floor. 3/

Question of the scope

82. During the 1969 spring session of the ENDC both the Soviet Union and the United States submitted specific proposals on the military uses of the sea-bed and the ocean floor, which fully reflected the positions which these two Powers had expressed in the General Assembly.

83. The Soviet draft treaty was submitted on 18 March 1969. 4/ In presenting the draft the Soviet Union emphasized that it was guided by General Assembly resolution 2340 (XXII) which, having noted that developing technology was making the sea-bed and the ocean floor and the subsoil thereof accessible and exploitable for military purposes, called upon all States to use the sea-bed and the ocean floor exclusively for peaceful purposes. In order to meet this request, the Soviet Union stated, the draft provided for a complete demilitarization of the environment beyond a coastal zone of 12 miles. In the Soviet view this was a necessary prerequisite for the successful development of international co-operation in opening up that environment for peaceful purposes. 5/ Article I of the draft read as follows:

"The use for military purposes of the sea-bed and the ocean floor and the subsoil thereof beyond the twelve-mile maritime zone of coastal States is prohibited.
"It is prohibited to place on the sea-bed and the ocean floor and the subsoil thereof objects with nuclear weapons or any other types of weapons of mass destruction, and to set up military bases, structures, installations, fortifications and other objects of a military nature."

3/ At the same time, the General Assembly by its resolution 2467 (XXIII) transformed the Ad Hoc Committee into a permanent forty-two member Committee on the Peaceful Uses of the Sea-Bed and the Ocean Floor Beyond the Limits of National Jurisdiction (Sea-Bed Committee). The military aspects having been brought to the attention of the ENDC, it was understood that the Sea-Bed Committee would direct its efforts, primarily, though not exclusively, towards the study of the non-military aspects of the exploration and exploitation of the sea-bed and the ocean floor.


5/ ENDC/PV. 395.
84. The response of the members of the Committee to the Soviet draft varied. Thus, Bulgaria, Czechoslovakia, Ethiopia, Mexico, Poland, Romania, Sweden and the United Arab Republic expressed, explicitly or in principle, their preference for a complete demilitarization of the sea-bed and the ocean floor beyond the national jurisdiction. 6/ In this connexion Poland stated that the limitation of the scope of the treaty to weapons of mass destruction "might also be interpreted by some States as complete freedom to set up conventional military installations on the sea-bed and the ocean floor, for example, in the vicinity of the territorial waters of other States, which would inevitably lead to the escalation of international tension". 7/ Sweden pointed out that the most striking possible use of the sea-bed for military purposes concerned underwater missile bases for nuclear weapons. Other possible military uses concerned, in its opinion, anchoring mines, storing vital supplies, such as fissionable material or weapons in "caches" in the sea-bed, communications facilities and monitoring devices, base facilities for submarines, as well as the introduction of defence structures against various weapons. Sweden also noted that establishments for civilian purposes, such as oil extraction units, could be combined with a military installation, such as a missile base or an observation post. In its opinion "the potential realization of new developments will be dependent mainly on the underwater depth at which the various installations can be placed, for technical or economic reasons". 8/

85. While supporting in general complete demilitarization of the sea-bed and the ocean floor, Brazil 9/ and India 10/ considered that if, due to the prevailing international situation, it proved impossible to reach a comprehensive solution, at least an agreement should be concluded prohibiting the use of nuclear weapons and other weapons of mass destruction on the sea-bed and the ocean floor. As to other activities of a military nature, in the opinion of India, they should also be prohibited but after a thorough exchange of views and without "interfering with the legitimate rights of maritime nations in respect of communication links, navigational aids and other requirements".

86. Several members of the Committee however expressed doubts with regard to the Soviet proposal. The United States, for instance, while fully supporting peaceful

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7/ ENDC/PV.406, para. 19.

8/ ENDC/PV.405, para. 71.

9/ ENDC/PV.413

10/ ENDC/PV.404.
uses of the sea-bed and the ocean floor, pointed out that in examining the question of arms control on the sea-bed it should not be forgotten that some sea-bed uses, such as communication and navigational aids, were for both military and non-military purposes. In its opinion the existence of submarine fleets required States to take action in self-defence, such as establishing warning systems on the sea-bed. In addition, much useful scientific research on the sea-bed was supported or carried out by military personnel using military non-weapons equipment. Therefore, it concluded, complete demilitarization would be "unworkable and probably harmful". Moreover, it would be completely impractical to try to prohibit conventional weapons on the sea-bed since "that type of prohibition would raise insuperable verification problems". In view of this the United States considered "that the most urgent problem is the danger of the emplacement of weapons of mass destruction on the sea-bed. Such deployment, whether nuclear, chemical, biological or radiological in nature, should be banned". 11/

87. The United Kingdom supported this view, suggesting that priority should be given to the prohibition of those weapons on which there was agreement, that is, on nuclear weapons and other weapons of mass destruction. As to other proposals for specific bans they should be considered on their own merits. 12/ A similar position was also taken by Italy, which considered that complete demilitarization was "not a realistic or acceptable basis for an agreement" since there were "certain uses of a typically defensive nature - for example, the emplacement of means of communication or the installation of acoustic systems for detecting and facilitating underwater navigation - which, in our opinion, should continue to be authorized in any case". 13/

88. While supporting in principle the reservations of the sea-bed and the ocean floor exclusively for peaceful purposes, Canada considered that the problem of de-militarization of this environment should be approached on a practical basis, which would assure the agreement of a large number of States. In order to facilitate this effort Canada 14/ suggested that, in elaborating an agreement on the subject, consideration should be given to the prohibition of:

"(a) all nuclear weapons and all weapons of mass destruction;
(b) all components of nuclear weapons and weapons of mass destruction;
(c) storage containers, launching platforms or vehicles for deployment or delivery of nuclear weapons and weapons of mass destruction;
(d) all other weapons, military activities, undersea bases or fortifications from which military action could be undertaken against the territory, territorial sea or air space of another State, including but not limited to:
   (i) shore bombardement weapons or systems"

11/ ENDC/PV.397, para. 35.
12/ ENDC/PV.404.
13/ ENDC/PV.410, para. 48.
14/ ENDC/PV.410, para. 5.
(ii) devices capable of disrupting communications, air and maritime navigation and other peaceful pursuits
(iii) devices to counter, disrupt, neutralize or render ineffective any defensive instruments of another State – that is, detection, surveillance, defensive first control and so on,
(iv) installations from which incursions could be mounted against another State
(v) chemical or other means of destroying or denying the sea-bed resources of another State."

89. Responding to some of the objections the Soviet Union made clarifications of certain provisions of its draft which dealt with scope. 15/ It pointed out that the concept of demilitarization covered specific matters, namely, renunciation of the right to station troops and to deploy objects and structures of a military character. In view of this definition it followed, in its opinion, "that demilitarization in no way implies the destruction, or prohibition of the emplacement and use, of means of communication, beacons and other installations having no direct military purpose". With regard to the objections that a considerable part of scientific research work was carried out by military personnel, the Soviet Union stated that it had become widely recognized that such personnel and military auxiliary equipment could be used for peaceful scientific research, especially in areas where the carrying out of such research met with considerable difficulties. Consequently, this question "cannot and should not constitute an obstacle to the complete demilitarization of the sea-bed and the ocean floor". As far as the question of a tracing system for the use of submarines for purposes of self-defence was concerned, the Soviet Union stated: "In this connexion we should like to point out that the Soviet draft treaty provides for the establishment of a twelve-mile coastal zone which would not be covered by the treaty and which would therefore be within the area in which States would have freedom of action, including the freedom to place submarine tracing stations. This provision of the draft treaty adequately meets the interests of States seeking to safeguard the security of their own territory. As for States which plan to place such stations far from their own coasts in neutral waters, the question naturally arises as to whether such stations are really being established for purposes of self-defence or for some other purpose."

90. On 22 May 1969, the United States submitted its own draft treaty. 16/ Articles I and II of the draft read as follows:

Article I

"1. Each State Party to this Treaty undertakes not to emplant or emplace fixed nuclear weapons or other weapons of mass destruction or associated fixed launching platforms on, within or beneath the sea-

15/ ENDC/PV.4/00.

bed and ocean floor beyond a narrow band, as defined in Article II of this Treaty, adjacent to the coast of any State.

"2. Each State Party to the Treaty undertakes to refrain from causing, encouraging, facilitating or in any way participating in the activities prohibited by this Article."

Article II

"1. For the purpose of this Treaty, the outer limit of the narrow band referred to in Article I shall be measured from baselines drawn in the manner specified in paragraph 2, hereof. The width of the narrow band shall be three (3) miles.

"2. Blank (Baselines)

"3. Nothing in this Treaty shall be interpreted as prejudicing the position of any State Party with respect to rights or claims which such State Party may assert; or with respect to recognition or non-recognition of rights or claims asserted by any other State, relating to territorial or other contiguous seas or to the seabed and ocean floor."

91. In presenting the draft the United States restated its belief that the only practicable way to prevent an arms race on the sea-bed would be an agreement banning the emplacement or fixing of nuclear weapons and other weapons of mass destruction. Such an agreement would remove the major threat to the peaceful uses of the sea-bed. At the same time, it would reduce the verification problem to manageable proportions and would be consistent with the security interests of coastal States." 17/

92. These differences in approach among members of the Committee, formalized by the submission of the different drafts, persisted for some time. In the course of the subsequent work of the Committee positions that had been taken by the member States were reiterated. Japan, having joined the Committee, declared itself in favour of complete demilitarization, but in view of the existing differences urged, at least, conclusion of an agreement prohibiting nuclear weapons and other weapons of mass destruction on the sea-bed and the ocean floor. 18/ In reiterating its position in support of partial demilitarization of the environment, the United States emphasized that "some non-nuclear but very clearly military uses of the sea-bed ... strictly defensive, are presently essential to our security and that of others and therefore must not be subject to treaty prohibitions". 19/ The Soviet Union, however, maintained that it did not see any grounds for limiting the problem of prohibiting military activities to prohibition of nuclear weapons and other weapons of mass destruction,

17/ ENDC/PV.414, para. 6.
18/ ENDC/PV.420.
19/ ENDC/PV.421, para. 36.
in other words to such weapons as could be used for striking against the territory of States. It believed "that weapons which may be designed to strike at ships and to disrupt sea communications with a view to interrupting economic and trade relations between States represent no less danger to peace and world security." We must consider the question of prohibiting the emplacement of both nuclear and conventional weapons on the sea-bed in its entirety without trying to introduce any artificial limitations". 20/

93. After a series of informal consultations, a compromise solution on the scope was finally agreed. On 7 October 1969 the USSR and the United States jointly submitted a draft treaty, 21/ whose Articles I and II reads as follows:

Article I

"1. The States Parties to this Treaty undertake not to emplant or emplace on the seabed and the ocean floor and in the subsoil thereof beyond the maximum contiguous zone provided for in the 1958 Geneva Convention on the Territorial Sea and the Contiguous Zone any objects with nuclear weapons or any other types of weapons of mass destruction, as well as structures, launching installations or any other facilities specifically designed for storing, testing, or using such weapons.

"2. The undertakings of paragraph 1 of this Article shall also apply within the contiguous zone referred to in paragraph 1 of this Article, except that within that zone they shall not apply to the coastal State.

"3. The States Parties to this Treaty undertake not to assist, encourage or induce any State to commit actions prohibited by this Treaty and not to participate in any other way in such actions."

Article II

"1. For the purpose of this Treaty the outer limit of the contiguous zone referred to in Article I shall be measured in accordance with the provisions of Section II of the 1958 Geneva Convention on the Territorial Sea and the Contiguous Zone and in accordance with international law.

"2. Nothing in this Treaty shall be interpreted as supporting or prejudicing the position of any State Party with respect to rights or claims which such State Party may assert, or with respect to recognition or non-recognition of rights or claims asserted by any other State, related to waters off its coasts, or to the sea-bed and the ocean floor."

20/ ENDC/PV.423, para. 45.

94. Introducing the draft the Soviet Union emphasized that its objective was to settle at this stage the most important part of the problem of the demilitarization of the sea-bed, namely to prohibit the emplacement of the most dangerous types of weapons - weapons of mass destruction. This prohibition constituted only a first step towards complete demilitarization to which end the preamble stated the determination of the parties to continue negotiations concerning further measures. 22/ The United States, for its part, gave a detailed explanation of the scope. Thus, it stated that the provisions of Article I should be interpreted to prohibit, inter alia, nuclear mines that were anchored to or emplaced on the sea-bed, and that facilities specifically designed for using prohibited weapons would not, because they could also use conventional weapons, be exempted from the prohibitions. On the other hand, the United States remarked, the treaty would not apply to facilities for research or for commercial exploitation not specifically designed for storing, testing or using weapons of mass destruction. Neither would it apply to vehicles which would navigate in the water above the sea-bed, including submarines when either resting on or anchored to the sea-bed. Finally, it stressed that the prohibitions of the treaty were "not intended in any way to affect the conduct of peaceful nuclear explosions or to affect applications nuclear reactors, scientific research, or other non-weapons applications of nuclear energy, consistent with other treaty obligations". 23/

95. On 30 October, a revised joint draft 24/ was tabled in the Committee by the two co-sponsors in an attempt to meet the reservations of a number of delegations. As regards the question of scope, the next text introduced an additional paragraph 2 in Article I which reads as follows:

"2. The undertakings of paragraph 1 of this Article shall also apply within the contiguous zone referred to in paragraph 1 of this Article, except that within that zone they shall not apply to the coastal State."

96. At the twenty-fourth session of the General Assembly, many delegations commented on the draft treaty and some of them submitted proposals suggesting further changes in Articles I and II. Argentina tabled a working paper providing a text for those Articles, 25/ designed to remove its objections to the reference to the 1958 Geneva Convention. In a working paper 26/ containing considerations and proposals concerning the draft treaty, Mexico suggested the deletion of the reference to that Convention.

22/ ENDC/PV.440.


24/ Document A/7741 (DC/233), Annex A.


26/ Ibid., document A/C.1/995.
97. By resolution 2602 F (XXIV), the General Assembly welcomed the submission of the draft treaty and the various proposals and suggestions made in regard to it, and called on the CCD to continue its work on the subject.

98. On 23 April 1970, the Soviet Union and the United States submitted a revised draft treaty 27/ with Articles I, II and IV, substantially identical with the Argentine proposal in the General Assembly. A new revised draft, 28/ tabled by the co-sponsors on 1 September, introduced additional changes in other provisions, while the above-mentioned Articles remained as in the 23 April version. The scope of the Treaty, 29/ commended by General Assembly resolution 2660 (XXV), reads as follows:

**Article I**

"1. The States Parties to this Treaty undertake not to emplant or emplace on the sea-bed and the ocean floor and in the subsoil thereof beyond the outer limit of a sea-bed zone, as defined in article II, any nuclear weapons or any other types of weapons of mass destruction as well as structures, launching installations or any other facilities specifically designed for storing, testing or using such weapons.

"2. The undertakings of paragraph 1 of this article shall also apply to the sea-bed zone referred to in the same paragraph, except that within such sea-bed zone, they shall not apply either to the coastal State or to the sea-bed beneath its territorial waters.

"3. The States Parties to this Treaty undertake not to assist, encourage or induce any State to carry out activities referred to in paragraph 1 of this article and not to participate in any other way in such actions."

**Article II**

"For the purpose of this Treaty, the outer limit of the sea-bed zone referred to in article I shall be coterminous with the twelve-mile outer limit of the zone referred to in part II of the Convention on the Territorial Sea and the Contiguous Zone, signed at Geneva on 29 April 1958, and shall be measured in accordance with the provisions of part I, section II, of that Convention and in accordance with international law."

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28/ Document CCD/269/Rev. 3.

Article IV

"Nothing in this Treaty shall be interpreted as supporting or prejudicing the position of any State Party with respect to existing international conventions, including the 1958 Convention on the Territorial Sea and the Contiguous Zone, or with respect to rights or claims which such State Party may assert, or with respect to recognition or non-recognition of rights or claims asserted by any other State, related to waters off its coasts, including, inter alia, territorial seas and contiguous zones, or to the sea-bed and the ocean floor, including continental shelves."

Further measures

99. The agreement on the partial demilitarization of the sea-bed and the ocean floor, did not close the matter of the scope all together. Many States expressed the view that the issue should be further pursued and that, therefore, appropriate provisions should be included for the continuation of negotiations on the further demilitarization of the area. In response to this concern, in their joint draft of 7 October 1969, the co-sponsors included a provision in the third preambular paragraph which stated the determination of the parties to continue negotiations for the exclusion of the sea-bed and the ocean floor from the arms race. Although many delegations welcomed it as an appropriate commitment, many others were of the view that it was not sufficiently strong. Sweden, for example, considered it would be preferable to include such provision in the operative part of the Treaty, and to this effect put forward the text of a draft article, 30/ which read:

"Each of the Parties to the Treaty undertakes to continue negotiations in good faith on further measures relating to a more comprehensive prohibition of the use for military purposes of the sea-bed and the ocean floor and the subsoil thereof."

100. This view was shared by Bulgaria and Czechoslovakia, which supported the Swedish suggestion. However, in spite of the large measure of agreement among all the delegations that such a provision should find its place in the Treaty, differences persisted concerning the need of a separate article. Consequently, neither the first nor the second joint revised drafts, submitted on 30 October 1969 31/ and 23 April 1970, 32/ introduced any changes in this regard. Nevertheless, in the course of the deliberations, Sweden, supported by Bulgaria, Czechoslovakia, Hungary, Japan, Nigeria and Poland, reiterated on several occasions its proposal for a separate article covering the commitment on further negotiations. The same proposal was contained in a working paper submitted on 30 July 1970 by nine non-aligned members of the Committee - Burma, Ethiopia, Mexico, Morocco, Nigeria, Pakistan, Sweden, the United Arab Republic and Yugoslavia. 33/ Since the substance of the proposed provision did not seem to be

31/ Ibid., annex A, CCD/269/Rev. 1.
33/ Ibid., CCD/297.
controversial, the co-sponsors agreed to accommodate the demands for a separate article. The third, and at the same time the last joint revised draft, submitted to the CCD on 1 September 1970, included a new article, Article V, containing an undertaking by the Parties to continue negotiations. Although the wording was somewhat changed, in substance it corresponded to the non-aligned proposal. Without any further changes it was included in the final text of the Treaty as follows:

Article V

"The Parties to this Treaty undertake to continue negotiations in good faith concerning further measures in the field of disarmament for the prevention of an arms race on the sea-bed, the ocean floor and the subsoil thereof."

101. The questions relating to the scope of the Treaty and the commitment of Parties to continue negotiations were taken up again at the Review Conference of the Parties to the Treaty, which was held from 4 June to 1 July 1977 at Geneva, in pursuance of Article VII. The Article stipulates that "five years after the entry into force of this Treaty, a conference of Parties to the Treaty shall be held in Geneva, Switzerland, in order to review the operation of this Treaty with a view to assuring that the purposes of the preamble and the provisions of the Treaty are being realized".

102. Although the Conference unanimously concluded that the obligations undertaken pursuant to Article I have been faithfully observed by States Parties, several participants, notably Iran, Romania, Sweden and Yugoslavia referred to the need of examining carefully the possibilities of expanding the Treaty's scope. In this connexion a number of States recalled the provisions of Article V, many of them expressing concern over the fact that the commitment contained in that article had not yet been fulfilled. The Soviet Union, for its part, expressed its readiness to negotiate an international agreement or agreements to ban the emplacement on the sea-bed and the ocean floor of military objects that are not covered by the existing Treaty and other measures to reverse or contain the arms race on the sea-bed and the ocean floor. 34/ Even those States which considered that there was little prospect for an arms race on the sea-bed, including Australia, Canada, Denmark, Norway and the United States, agreed that the issue should be kept under review. Consequently, the Final Declaration, 35/ unanimously adopted, expressed the following in this respect:

"The Conference affirms the commitment undertaken in Article V to continue negotiations in good faith concerning further measures in the field of disarmament for the prevention of an arms race on the sea-

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34/ SBT/CONF./SR.2.

35/ SBT/CONF./24.
bed, the ocean floor and the subsoil thereof. To this end, the Conference requests that the Conference of the Committee on Disarmament, in consultation with the States Parties to the Treaty, taking into account the proposals made during this Conference and any relevant technological developments, proceed promptly with consideration of further measures in the field of disarmament for the prevention of an arms race on the sea-bed, the ocean floor and the subsoil thereof."
VI. CONVENTION ON THE PROHIBITION OF THE DEVELOPMENT, PRODUCTION AND STOCKFILING OF BACTERIOLOGICAL (BIOLOGICAL) AND TOXIN WEAPONS AND ON THEIR DESTRUCTION (Biological Convention)*/

Introduction

103. In its first resolution (1(I) of 24 January 1946, the General Assembly envisaged not only the elimination of atomic weapons, but also "of all other major weapons adaptable to mass destruction". Also, in resolution 41(I) of 14 December 1946, the General Assembly made specific recommendations to ensure the elimination of "atomic and all other major weapons adaptable now or in the future to mass destruction". In disarmament negotiations conducted in various bodies prior to the establishment of the Eighteen-Nation Committee on Disarmament (ENDC) in 1962, many references had been made to the elimination of "all weapons of mass destruction", and suggestions for the control and the elimination of chemical and biological weapons had been explicitly included in various proposals put forward at the time, but no detailed discussion took place on the subject. Only in recent years has this question moved closer to the forefront of disarmament negotiations.

104. In the "Joint statement of agreed principles for disarmament negotiations" of 1961,1/ one of the principles agreed to by the Soviet Union and the United States and accepted by the General Assembly in resolution 1722 (XVI), was that a programme for general and complete disarmament should contain provisions for the "elimination of all stockpiles of nuclear, chemical, bacteriological and other weapons of mass destruction, and the cessation of the production of such weapons". Both the Soviet Union and the United States drafts for general and complete disarmament, submitted to the ENDC in 1962, contained provisions for the elimination of chemical and biological weapons.2/

105. During the 1963 session of the ENDC, the Committee adopted a provisional agenda which, under the heading "non-nuclear measures", envisaged the discussion of the question of chemical and bacteriological warfare. A number of proposals on the subject were also made during the session. One of them was a working paper on microbiological warfare submitted by the United Kingdom,3/ in which it was asserted that, for a number of reasons, the Geneva Protocol of 1925 was not an entirely satisfactory instrument for dealing with the question of chemical and microbiological warfare, and it was suggested that the problem could become more manageable by considering chemical and microbiological methods of warfare separately. In view of this, the United Kingdom proposed the early conclusion of a new convention for the prohibition of microbiological methods of warfare, which would "supplement but not supersede" the Geneva Protocol. This Convention would ban the use for hostile purposes of micro-


biological agents causing death or disease by infection in man, other animals, or crops, and it would also include a ban on the production of microbiological agents "which was so worded as to take account of the fact that most of the microbiological agents that could be used in hostilities are also needed for peaceful purposes."

106. The Soviet Union was of the opinion that the British proposal meant the re-opening of issues which were long solved. In its view, the Geneva Protocol was not obsolete and its prohibitions covered not only methods and agents of warfare which existed at the time the Protocol had been concluded, but also the new methods and agents of warfare that had emerged since then.

107. The consideration of the issue subsequently resulted in the adoption by the General Assembly of resolution 2454 A (XXIII), requesting the Secretary-General to prepare, with the assistance of a group of experts, a report on the effects of the possible use of chemical and bacteriological means of warfare. After the submission of the report,4/ the ENDC gave considerable attention to the question of chemical and bacteriological (biological) weapons.

108. In compliance with its approach to this issue, which called for separate regulation of chemical and biological weapons, the United Kingdom submitted on 10 July 1969 a draft convention for the prohibition of biological methods of warfare.5/ The scope of the draft convention read as follows:

**Article I**

"Each of the Parties to the Convention undertakes, insofar as it may not already be committed in that respect under Treaties or other instruments in force prohibiting the use of chemical and biological methods of warfare, never in any circumstances, by making use for hostile purposes of microbial or other biological agents causing death, damage, or disease by infection or infestation to man, other animals, or crops, to engage in biological methods of warfare."

**Article II**

"Each of the Parties to the Convention undertakes:

(a) not to produce or otherwise acquire, or assist in or permit the production or acquisition of:

(i) microbial or other biological agents of types and in quantities that have no independent justification for prophylactic or other peaceful purposes;

(ii) ancillary equipment or vectors the purpose of which is to facilitate the use of such agents for hostile purposes;

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(b) not to conduct, assist or permit research aimed at production of the kind prohibited in sub-paragraph (a) of this Article; and

(c) to destroy, or divert to peaceful purposes, within three months after the Convention comes into force for that Party, any stocks in its possession of such agents or ancillary equipment or vectors as have been produced or otherwise acquired for hostile purposes."

109. The United States supported the British position and stressed the difference between the two types of weapons. It pointed out that chemical weapons, unlike biological weapons, had actually been used in warfare and that, consequentially, many States would be reluctant to give up the possession of chemical weapons without reliable assurances that other States were not developing, producing and stockpiling chemical weapons. It held that biological weapons presented less intractable problems, and that an agreement on banning them should not be delayed until agreement on a reliable prohibition of chemical weapons could be reached.

110. In objecting to the British approach, the Soviet Union agreed that chemical and biological weapons had been treated together in the Geneva Protocol and in the General Assembly resolutions, as well as in the report of the Secretary-General, and should therefore continue to be dealt with in the same instrument. In its opinion, a separate convention covering only biological weapons, might serve to intensify the chemical arms race.

111. On 19 September 1969 the Soviet Union, together with Bulgaria, the Byelorussian SSR, Czechoslovakia, Hungary, Mongolia, Poland, Romania and the Ukrainian SSR submitted a draft convention on the prohibition of the development, production and stockpiling of chemical and bacteriological (biological) weapons, and on the destruction of such weapons. The relevant provisions of the draft were formulated as follows:

**Article I**

"Each State Party to this Convention undertakes not to develop, produce, stockpile or otherwise acquire chemical and bacteriological (biological) weapons."

**Article II**

"Each State Party to this Convention undertakes to destroy within a period of .......... - observing all the necessary precautions - or to divert to peaceful uses all previously accumulated chemical and bacteriological (biological) weapons in its possession."

**Article III**

"Each State Party to the Convention undertakes not to assist, encourage or induce any particular State, group of States or international organizations to develop, produce or otherwise acquire and stockpile chemical and bacteriological (biological) weapons."

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112. The draft convention won explicit support from a number of States which for a long time had favoured a comprehensive prohibition. Some other States, while welcoming the comprehensive approach, pointed out that it would be acceptable only with an adequate control system.

113. On 25 November 1969, the United States unilaterally renounced the first use of lethal or incapacitating chemical agents and weapons, and unconditionally renounced all methods of biological warfare. On 14 February 1970 the ban was extended to cover toxins. This action was followed by a number of other States. Thus, Canada, Sweden and the United Kingdom announced that they had no biological weapons nor the intention to produce them. Although these unilateral actions were widely welcomed, it was generally recognized that they should be followed by a binding international commitment. A breakthrough was made on 30 March 1971 when the Soviet Union, together with Bulgaria, Czechoslovakia, Hungary, Mongolia, Poland and Romania submitted to the CCD a new draft convention limited in scope to biological weapons and toxins. I

Its pertinent provisions read as follows:

**Article I**

"Each State Party to this Convention undertakes not to develop, produce, stockpile or otherwise acquire:

(1) microbiological or other biological agents or toxins of such types and in such quantities as are not designed for the prevention of disease or for other peaceful purposes;

(2) auxiliary equipment or means of delivery designed to facilitate the use of such agents or toxins for hostile purposes."

**Article II**

"Each State Party to this Convention undertakes to destroy within a period of three months after the entry into force of the Convention - observing all the necessary precautions - or to divert to peaceful uses all previously accumulated weapons in its possession as well as the equipment and means of delivery mentioned in Article I of the Convention."

**Article III**

"Each State Party to the Convention undertakes not to assist, encourage or induce any particular State, group of States or international organizations to take action contrary to the provisions of this Convention."

114. A number of States, in particular non-aligned, while welcoming the draft in general, reiterated their preference for a comprehensive prohibition

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of both chemical and biological weapons. Objections were raised to Article I, as the proposed ban did not cover research work. In view of this, the United Arab Republic submitted a specific proposal with the purpose of including it among the activities to be prohibited.8/

115. Those States which had advocated a separate regulation of biological weapons welcomed the draft convention as an acceptable basis for further negotiations. They also made it clear that it was the only possible way of approaching this issue if unnecessary delay was to be avoided. Following further exchanges of views, on 5 August 1971, the co-sponsors of the 30 March draft and the United States submitted separate but identical texts of a draft convention on bacteriological (biological) and toxin weapons.9/ All three articles dealing with the scope were further improved by widening it. For example, the undertaking in Article II to destroy, or to divert to peaceful purposes, the agents, weapons and materials possessed by the Parties, as specified in Article I, was extended to cover those under their jurisdiction or control. Similarly, the undertaking in Article III was broadened to include a ban on the transfer. The main objections to the draft related again to the prohibition of research work, as a number of States considered that this would considerably strengthen the Convention. Others, however, argued that research work was indispensable for the use of biological agents or toxins for prophylactic and other peaceful purposes. No agreement was reached, either on this issue or with regard to a ban on research work concerning weapons, equipment or means of delivery designed to use these agents and toxins for hostile purposes. Some States agreed that, in view of the total destruction of these weapons and the prohibition of their production, such a provision would be redundant. Additional changes were later introduced in the draft, some of them in article I, which further strengthened the undertaking by insertion of the words "never in any circumstances". The new revised draft10/ was tabled on 28 September 1971 also with the co-sponsorship of Canada, Italy, the Netherlands and the United Kingdom and transmitted to the General Assembly for its consideration.

116. On 16 December, by resolution 2826 (XXVI), the Assembly commended the Convention. The relevant articles read as follows.11/

**Article I**

"Each State Party to this Convention undertakes never in any circumstances to develop, produce, stockpile or otherwise acquire or retain:

(1) Microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;

(2) Weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict."

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8/ Ibid., document CCD/328.
Article II

"Each State Party to this Convention undertakes to destroy, or to divert to peaceful purposes, as soon as possible but not later than nine months after the entry into force of the Convention all agents, toxins, weapons, equipment and means of delivery specified in Article I of the Convention, which are in its possession or under its jurisdiction or control. In implementing the provisions of this Article all necessary safety precautions shall be observed to protect populations and the environment."

Article III

"Each State Party to this Convention undertakes not to transfer to any recipient whatsoever, directly or indirectly, and not in any way to assist, encourage, or induce any State, group of States or international organizations to manufacture or otherwise acquire any of the agents, toxins, weapons, equipment or means of delivery specified in Article I of the Convention."

Further measures

117. As soon as it became obvious that a joint ban of chemical and biological weapons was not possible, and that the efforts would concentrate first on biological weapons, the question of further measures for broadening the proposed scope to cover chemical weapons as well received increased attention by a number of States, particularly non-aligned. The identical drafts of 5 August 1971 contained several provisions concerning this question. Thus, the eleventh preambular paragraph stated:

"Convinced that an agreement on the prohibition of bacteriological (biological) and toxin weapons will facilitate progress towards the achievement of agreement on effective measures to prohibit the development, production and stockpiling of chemical weapons, on which negotiations will be continued", Article VIII of the drafts was even more explicit:

"Each State Party to this Convention undertakes to conduct negotiations in good faith on effective measures for prohibiting the development, production and stockpiling of chemical weapons and for their destruction and on appropriate measures concerning the equipment and means of delivery specifically designed for the production or use of chemical weapons for warfare".

118. These provisions were generally welcomed. However, a number of suggestions were made with a view to giving practical effect to the proposed undertaking. Mexico, for example, put forward a specific proposal for the inclusion of an additional article in the draft which would read:12/

"Pending the agreement referred to in Article VIII, the States Parties to this Convention undertake to refrain from any further

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development, production or stockpiling of those chemical agents for weapons purposes which because of their degree of toxicity have the highest lethal effects. The agents in question are listed in the Protocol annexed to this Convention".

A similar proposal was made by Morocco, which stated that it would be highly desirable to reach agreement, immediately after the entry into force of the biological convention, on the cessation of the production of chemical weapons.\textsuperscript{13} Although supported by several delegations, the proposal could not be accepted by other delegations, which considered that such an undertaking, inter alia, should be adequately verified. However, discussions which followed resulted in the improvement of the proposed text of the draft convention. Changes were made in the preambular paragraph and in article VIII strengthening the link between biological and chemical disarmament. The relevant provisions of the Convention in its final form read:

\textbf{Eighth preambular paragraph}

"Recognizing that an agreement on the prohibition of bacteriological (biological) and toxin weapons represents a first possible step towards the achievement of agreement on effective measures also for the prohibition of the development, production and stockpiling of chemical weapons, and determined to continue negotiations to that end",

...

\textbf{Article IX}

"Each State Party to this Convention affirms the recognized objective of effective prohibition of chemical weapons and, to this end, undertakes to continue negotiations in good faith with a view to reaching early agreement on effective measures for the prohibition of their development, production and stockpiling and for their destruction, and on appropriate measures concerning equipment and means of delivery specifically designed for the production or use of chemical agents for weapons purposes".

The negotiations in pursuance of these provisions are continuing in the CCD. A number of proposals have been put forward, including three draft conventions. On 28 March 1972, the Soviet Union introduced a draft convention on the prohibition of the development, production and stockpiling of chemical weapons and on their destruction,\textsuperscript{14} co-sponsored by Bulgaria, Czechoslovakia, Hungary, Mongolia, Poland and Romania. During the 1973 session, Argentina,

\textsuperscript{13} Ibid., document CCD/347.

\textsuperscript{14} Ibid., Supplement for 1972, document DC/235, annex B, CCD/361.
Brazil, Burma, Egypt, Ethiopia, Mexico, Morocco, Nigeria, Sweden and Yugoslavia submitted a working paper containing suggestions for a ban on chemical weapons.\footnote{15} In April 1974, Japan tabled a draft convention on the prohibition of the development, production and stockpiling of chemical weapons and on their destruction.\footnote{16} On 3 July 1974, the Soviet Union and the United States agreed to consider a joint initiative in the CCD with respect to the conclusion, as a first step, of an international convention dealing with the most dangerous, lethal means of chemical warfare.\footnote{17} Consultations are being held by the two powers concerning the joint initiative. On 12 August 1976 the United Kingdom introduced in the CCD a draft convention on the prohibition of the development, production and stockpiling of chemical weapons on their destruction.\footnote{18}

\footnote{15}{Official Records of the General Assembly, Twenty-eighth Session, Supplement No. 31 (A/9141), document CCD/400.}

\footnote{16}{Ibid., Twenty-ninth Session, Supplement No. 27 (A/9627), document CCD/426.}

\footnote{17}{Official Records of the General Assembly, Twenty-ninth Session, Annexes, agenda item 28, document A/9698.}

\footnote{18}{Document CCD/512.}
VII. Convention on the Prohibition of Military or any Other Hostile Use of Environmental Modification Techniques (ENMOD Convention) */

120. At the 1974 session of the CCD, Sweden suggested that the meteorological field required closer attention to see what measures could be taken to prevent the development of methods for meteorological warfare. 1/

121. On 3 July of the same year, the Soviet Union and the United States made a joint statement in which, after recognizing that the use of environmental modification techniques for military purposes could have widespread, long-lasting and severe effects, they advocated the most effective measures possible to overcome the dangers of the use of such techniques. They also decided to hold a meeting of United States and Soviet representatives for the purpose of exploring the problem. 2/ It was on this occasion that, for the first time, the elements for the scope of an eventual ban on environmental warfare were included in an international document.

122. Also in 1974, at the request of the Soviet Union, an item on the prohibition of action to influence the environment for military and other purposes was inscribed in the agenda of the General Assembly. 3/ On 24 September, the Soviet Union introduced in the Assembly a draft resolution, subsequently revised and co-sponsored by 23 other States, to which a draft convention was annexed. Articles I and II of the draft convention read as follows:

Article I

"Each of the Parties to this Convention undertakes not to use meteorological, geophysical or any other scientific or technological means of influencing the environment, including the weather and climate, for military and other purposes incompatible with the maintenance of international security, human well-being and health, and, furthermore, never under any circumstances to resort to such means of influencing the environment and climate or to carry out preparations for their use."

Article II

"1. For the purposes of this Convention, the activities referred to in Article I consist of those active influences on the surface of the land, the sea-bed and the ocean floor, the depths of the earth, the marine environment, the atmosphere or on any other elements of the environment that may cause damage by the following means:

(a) Introduction to the cloud systems (air masses) of chemical reagents for the purpose of causing precipitation (formation of clouds) and other means of bringing about a redistribution of water resources;"

*/ The Convention was opened for signature on 18 May 1977 at Geneva.

1/ CCD/PV. 633.


(b) Modification of the elements of the weather, climate and the hydrological system on land in any part of the surface of the earth;

(c) Direct or indirect action to influence the electrical processes in the atmosphere;

(d) Direct or indirect disturbance of the elements of the energy and water balance of meteorological phenomena (cyclones, anticyclones, cloud front systems);

(e) Direct or indirect modifications of the physical and chemical parameters of the seas and oceans, the seashore, sea-bed and ocean floor that may lead to a change in the hydrological system, water interchange process and ecology of the biological resources of the seas and oceans;

(f) Direct or indirect stimulation of seismic waves by any methods or means that may produce earthquakes and accompanying processes and phenomena, or destructive ocean waves, including tsunami;

(g) Direct or indirect action on the surface of an area of water that may lead to a disturbance of the thermal and gaseous interchange between the hydrosphere and the atmosphere;

(h) The creation of artificial continuous electromagnetic and acoustic fields in the oceans and seas;

(i) Modification of the natural state of the rivers, lakes, swamps and other aqueous elements of the land by any methods or means, leading to reduction in the water-level, drying up, flooding, inundation, destruction of hydrotechnical installations or having other harmful consequences;

(j) Disturbance of the natural state of the lithosphere, including the land surface, by mechanical, physical or other means, causing erosion, a change in the mechanical structure, desiccation or flooding of the soil, or interference with irrigation or land improvement systems;

(k) The burning of vegetation and other actions leading to a disturbance of the ecology of the vegetable and animal kingdom;

(l) Direct or indirect action to influence the ionized or ozone layers in the atmosphere, the introduction of heat and radiant energy absorbing agents in the atmosphere and the contiguous layer, or other action that might lead to disturbances of the thermal and radiation equilibrium of the earth-atmosphere-sun system.

"2. Subsequently, in accordance with the provisions of this Convention, the list of actions enumerated in paragraph 1 of this article may be supplemented or amended depending upon the progress of scientific and technological research.
123. The draft resolution was adopted as resolution 3264 (XXIX), by which the General Assembly considered it necessary to work towards an international convention on environmental warfare; took note of the draft convention submitted by the Soviet Union, as well as other views and suggestions put forward during the discussion; and requested the CCD to proceed as soon as possible towards achieving agreement on the text of a convention.

124. During its 1975 session, at the request of Sweden, the CCD held informal meetings on the subject, and on 21 August 1975 the Soviet Union and the United States submitted identical texts of a draft convention on the prohibition of military or any other hostile use of environmental modification techniques. 4/ Articles I and II, dealing with the question of scope, read as follows:

Article I

"1. Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to another State Party.

"2. Each State Party to this Convention undertakes not to assist, encourage or induce any State, group of States or international organization to engage in activities contrary to the provision of paragraph 1 of this article."

Article II

"As used in Article I, the term "environmental modification techniques" refers to any technique for changing - through the deliberate manipulation of natural processes - the dynamics, composition or structure of the earth, including its biota, lithosphere, hydrosphere, and atmosphere, or of outer space, so as to cause such effects as earthquakes and tsunamis, an upset in the ecological balance of a region, or changes in weather patterns (clouds, precipitation, cyclones of various types and tornadic storms), in the state of the ozone layer or ionosphere, in climate patterns, or in ocean currents."

125. At its thirtieth session, in 1975, the General Assembly considered the report of the CCD on the matter and adopted resolution 3475 (XXX) which noted with satisfaction the submission of the identical draft conventions and that other delegations offered suggestions and preliminary observations regarding the drafts. It requested the CCD to continue negotiations with a view to reaching early agreement, if possible during the CCD's 1976 session, on the text of a convention on the prohibition of military or other hostile uses of environmental modification techniques.

126. At the 1976 session of the CCD, a number of suggestions were made in connexion with the scope of the prohibition as provided for in Articles I and II of the identical drafts, both in plenary statements and in the Ad Hoc Working Group established by the Committee for the purpose of considering any modifications to the identical texts of a draft convention and of facilitating the negotiation of a text of an agreement.

Article I

127. As regards Article I, several comments and proposals for modification were put forward, as discussed below under headings indicating their contents:

1. Suggestions for clarifying or eliminating the phrase "having widespread long-lasting or severe effects."

128. Argentina and Mexico suggested the deletion of the phrase, which they felt would not provide for a comprehensive prohibition. 5/ Yugoslavia also favoured a ban on techniques which caused any damage. 6/ On the other hand, the United Kingdom held that the phrase should be retained, but believed that there should be a definition of the terms. 7/ The Federal Republic of Germany, Italy, Japan and Sweden expressed similar views. 8/ The Netherlands strongly stressed the need for a clear understanding of the terms and concluded that, on balance, a total ban was preferable. 9/ Iran also thought that a total ban would be more effective. 10/ The Soviet Union stated that the choice of those words was due above all to the fact that those were the types of effects which presented the main danger, while the United States held that the low threshold of applicability of the prohibition raised a strong practical inhibition against any hostile use of techniques having, or that would be expected to have, effects anywhere near the threshold criteria. 11/

2. Restricting the ban to "hostile use" without reference to "military use"

129. Canada, Egypt, the Federal Republic of Germany, Sweden and the United Kingdom expressed doubts on the need for the word "military", arguing that it was unnecessary or even confusing. 12/ While agreeing that this term was not essential, the co-sponsors maintained that it emphasized the prohibition of the military use of environmental modification techniques in armed conflicts, as well as their hostile use when no other weapons were being used or when there was no overt conflict. 13/ Bulgaria, India and Mongolia expressed similar views. 14/

3. Replace the words "having ... effects" with "likely to have ... effects", or a similar phrase

130. Japan, the Netherlands and Sweden considered that it would be desirable to amend the phrase along those or similar lines. 15/ The United States explained that the ban was intended to cover only those uses that resulted in the specified

5/ CCD/PV.695 and CCD/PV.724.
6/ CCD/PV.701.
7/ CCD/PV.695.
8/ CCD/PV.697, 701, 699 and 697.
9/ CCD/PV.692.
10/ CCD/PV.697.
11/ CCD/PV.726 and CCD/727.
12/ CCD/PV.699; CCD/PV.701; CCD/PV.697 and 702; CCD/PV.697 and CCD/PV.695.
13/ CCD/PV.691 and CCD/PV.698.
14/ CCD/PV.703; CCD/PV.710; and CCD/PV.702.
15/ CCD/PV.699; CCD/PV.692 and CCD/PV.697.
effects or those which could reasonably have been expected to result in such
effects. 16/ Canada and India stated that the word "having" was more comprehensive
than the suggested changes. 17/

4. Addition of a ban on "threat of use"

131. Egypt, Japan, Pakistan and Sweden, 18/ supported by the Federal Republic
of Germany, Italy and Romania 19/ suggested such a ban. In the opinion of the
co-sponsors, this change was not necessary since Parties would undertake not to use
environmental modification techniques for military or other hostile purpose. 20/
Bulgaria held similar views. 21/

5. Addition of a ban on "preparation for use" or on "research and development"

132. The Netherlands, supported by Argentina, Hungary and Romania, favoured
such a ban. 22/ Canada, India and the United States noted that a ban on research
and development would be either ineffective or impracticable, 23/ while the German
Democratic Republic considered that the prohibition of military use covered the
preparation of armed forces for such use. 24/

6. Application of the ban to all States rather than to States Parties only

133. Egypt, Iran, Japan, Mexico, the Netherlands and Yugoslavia suggested
that the ban on use should apply to all States, parties or not to the convention. 25/
The Soviet Union, supported by Bulgaria, Canada and Mongolia, stated that in that
case States not parties would have no incentive to accede to the convention. 26/
India also supported the wording of the draft. 27/

7. Questions relating to the interpretation of Article 1

134. A number of questions were also discussed in the Committee concerning
the interpretation of the provisions of Article 1, such as the application of the
ban to acts of retaliation and self-defence, the need to avoid duplication with the
draft protocols on humanitarian law in armed conflicts and the meaning of the phrase
"destruction, damage or injury".

16/ CCD/PV.691 and 703
17/ CCD/PV.699 and CCD/PV.710
18/ CCD/PV.701; CCD/PV.699; CCD/PV.717; and CCD/PV.697
19/ CCD/PV.697; CCD/PV.701; and CCD/PV.703
20/ CCD/PV.691 and CCD/PV.698
21/ CCD/PV.694
22/ CCD/PV.692; CCD/PV.695; CCD/PV.693; and CCD/PV.703
23/ CCD/PV.699; CCD/PV.710; and CCD/PV.703
24/ CCD/PV.698
25/ CCD/PV.701; CCD/PV.697; CCD/PV.699; CCD/PV.724; CCD/PV.692;
and CCD/PV.701
26/ CCD/PV.698; CCD/PV.703; CCD/PV.699; and CCD/PV.702.
27/ CCD/PV.710.
Article II

135. As regards Article II, a number of delegations suggested changes or additions to the definition of the term "environmental modification techniques" or to the list of examples included in the draft. Other delegations held that such a list was unnecessary and superfluous. Still others maintained that it was the result of very careful consideration and would serve a useful purpose, while a number of them proposed that, since the list was only illustrative, it should form an annex to the Convention.

136. As a result of the deliberations in the Ad Hoc Working Group, some modifications were introduced in the original draft. The text of Article I was maintained, but an understanding was agreed to, interpreting, for the purposes of the Convention, the terms "widespread", "long-lasting" and "severe". The definition of "environmental modification techniques" in Article II was also retained. However, the list of examples originally included in the Article became part of an understanding, which noted its merely illustrative character and stated that all the phenomena thus listed would be prohibited. The revised draft also included a new Article VIII relating to the convening of review conferences which should, in particular, "examine the effectiveness of the provisions of paragraph 1 of Article I in eliminating the dangers of environmental warfare. Articles I and II of the draft convention and their understandings read as follows:

Article I

"1. Each State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party.

"2. Each State Party to this Convention undertakes not to assist, encourage or induce any State, group of States or international organization to engage in activities contrary to the provisions of paragraph 1 of this article."

Article II

"As used in article I, the term "environmental modification techniques" refers to any technique for changing, through the deliberate manipulation of natural processes - the dynamics, composition or structure of the earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space."

Understanding relating to Article I

"It is the understanding of the Committee that, for the purposes of this Convention, the terms "widespread", "long-lasting" and "severe" shall be interpreted as follows:

(a) widespread": encompassing an area on the scale of several hundred square kilometres;

(b) 'long-lasting': lasting for a period of months, or approximately a season;"
(c) "severe": involving serious or significant disruption or harm to human life, natural and economic resources or other assets.

"It is further understood that the interpretation set forth above is intended exclusively for this Convention and is not intended to prejudice the interpretation of the same or similar terms if used in connexion with any other international agreement."

Understanding relating to Article II

"It is the understanding of the Committee that the following examples are illustrative of phenomena that could be caused by the use of environmental modification techniques as defined in Article II of the Convention: earthquakes; tsunamis; an upset in the ecological balance of a region; changes in weather patterns (clouds, precipitation, cyclones of various types and tornadic storms); changes in climate patterns; changes in ocean currents; changes in the state of the ozone layer; and changes in the state of the ionosphere.

"It is further understood that all the phenomena listed above, when produced by military or any other hostile use of environmental modification techniques, would result, or could reasonably be expected to result, in widespread, long-lasting or severe destruction, damage or injury. Thus, military or any other hostile use of environmental modification techniques as defined in Article II, so as to cause those phenomena as a means of destruction, damage or injury to another State Party, would be prohibited.

"It is recognized, moreover, that the list of examples set out above is not exhaustive. Other phenomena which could result from the use of environmental modification techniques as defined in Article II could also be appropriately included. The absence of such phenomena from the list does not in any way imply that the undertaking contained in Article I would not be applicable to those phenomena, provided the criteria set out in that article were met."

137. Although there was no agreement in the Ad Hoc Working Group on other modifications, Argentina and Mexico, in particular, continued to hold the view that the phrase "having widespread, long-lasting or severe effects" in Article I might legitimize many acts of environmental warfare. 20/

138. Finally, the CCD agreed to transmit to the General Assembly, as an annex to its report, the report of the Ad Hoc Working Group containing the draft convention, as well as comments dissenting views and reservations thereon. 29/

139. At its thirty-first session, the General Assembly adopted by 96 in favour, 8 against and 30 abstentions resolution 31/72 which, inter alia, referred the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques 30/ to all States for their consideration, signature and ratification; and requested the Secretary-General to open it for signature and ratification at the earliest possible date. On 18 May 1977 the Convention was opened for signature at Geneva.

28/ CCD/PV.727.


30/ See Annex to resolution 31/72.