

jurisdiction and control over such object, and over any personnel thereof, while in outer space or on the Moon or other celestial bodies. Ownership of objects launched into outer space, including objects landed or constructed on a celestial body, and of their component parts, is not affected by their presence in outer space or on a celestial body or by their return to Earth. Such objects or component parts found beyond the limits of the State Party to the Treaty on whose registry they are carried shall be returned to that State, which shall, upon request, furnish identifying data prior to their return.

#### Article 12

Any dispute arising from the interpretation or application of this Treaty may be referred by any Contracting Party thereto to the International Court of Justice for decision.

#### Article 13

The provisions of this Treaty are adopted without prejudice to the negotiation of future specific agreements on the peaceful uses of outer space, including the Moon and other celestial bodies.

#### Article 14

This Treaty shall be open for signature by States Members of the United Nations or members of any of the specialized agencies or Parties to the Statute of the International Court of Justice, and by any other State invited by the General Assembly of the United Nations to become a Party. Any such State which does not sign this Treaty may accede to it any time.

#### Article 15

This Treaty shall be subject to ratification or approval by signatory States. Instruments of ratification or approval and instruments of accession shall be deposited with the Secretary-General of the United Nations.

#### Article 16

This Treaty shall enter into force upon the deposit of the second instrument of ratification, approval or

accession. It shall enter into force as to a State ratifying, approving or acceding thereafter upon the deposit of its instrument of ratification, approval or accession.

#### Article 17

A Contracting Party may propose amendments to this Treaty. Amendments shall come into force for each Contracting Party accepting the amendments on acceptance by a majority of the Contracting Parties and thereafter for each remaining Contracting Party on acceptance by it.

#### Article 18

A Contracting Party may give notice of its withdrawal from this Treaty one year after its entry into force by written notification to the Secretary-General of the United Nations. Such withdrawal shall take effect one year from the date of receipt by the Secretary-General of the notification.

#### Article 19

The Secretary-General of the United Nations shall inform all States referred to in article 14 of signatures, deposits of instruments of ratification, approval or accession, the date of entry into force of this Treaty, proposals for amendment, notification of acceptances of amendments, and notices of withdrawal.

#### Article 20

This Treaty shall be registered in accordance with Article 102 of the Charter of the United Nations.

#### Article 21

The original of this Treaty, of which the Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations, who shall send certified copies thereof to the States referred to in article 14.

IN WITNESS WHEREOF, the undersigned, being duly authorized, have signed this Treaty.

DONE at ... this ... day of ... one thousand nine hundred and ...

### DOCUMENT A/6431

#### Report of the Committee on the Peaceful Uses of Outer Space

[Original text: English]  
[22 September 1966]

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#### I. INTRODUCTION

1. The Committee on the Peaceful Uses of Outer Space met at United Nations Headquarters, New York, on 12 April and on 19 September 1966 under the chairmanship of Mr. Kurt Waldheim (Austria). Mr. Gheorghe Diaconescu (Romania) was elected Vice-Chairman at the 44th meeting, on 19 September, in succession to Mr. Mihail Haseganu (Romania). Mr. Geraldo de Carvalho Silos (Brazil) served as Rapporteur. The verbatim records of the Committee's meetings were circulated as documents A/AC.105/PV.43-45.

#### Meetings of sub-committees and the Working Group of the Whole

2. The fourth session of the Scientific and Technical Sub-Committee was convened at the United Nations Office, Geneva, on 18 April under the chairmanship of Mr. D. F. Martyn (Australia). The Sub-Committee held eleven meetings and concluded its work on 27 April 1966. The Sub-Committee's report was circulated as document A/AC.105/31.

3. The fifth session of the Legal Sub-Committee was convened at the United Nations Office, Geneva, on 12 July under the chairmanship of Mr. Manfred Lachs (Poland). The session was suspended on 4 August and was resumed at United Nations Headquarters from 12 to 16 September. The Sub-Committee's report was circulated as document A/AC.105/35.

4. The Working Group of the Whole, established to examine the desirability, objectives and organization of an international conference to be held in 1967 on the exploration and peaceful uses of outer space, met at United Nations Headquarters from 18 to 25 January and from 6 to 9 September. The officers of the Committee served as officers of the Working Group. The Working Group's first and second reports were circulated as documents A/AC.105/30 and A/AC.105/34.

#### Eighth session of the Committee

5. At its 44th meeting, on 19 September 1966, the Committee adopted the following agenda:

1. Election of Vice-Chairman.
2. Statement by the Chairman.
3. Report of the Committee to the General Assembly:
  - (a) Report of the Scientific and Technical Sub-Committee and related matters (A/AC.105/31);
  - (b) Report of the Legal Sub-Committee (A/AC.105/35);
  - (c) Report of the Working Group of the Whole (A/AC.105/34);
  - (d) Reports furnished by the International Telecommunication Union (A/AC.105/L.24) and the World Meteorological Organization (A/AC.105/L.31).

6. In addition to the documents listed in the agenda, the following documents were submitted for the information of the Committee: (a) a report by the Secretary-General on material to ensure popular understanding of the purposes and potentialities of space activities (A/AC.105/C.1/L.12); (b) a note by the Secretariat containing suggestions for programmes of education and training of specialists in the peaceful uses of outer space to assist the developing countries (A/AC.105/C.1/L.14); (c) a review of national and co-operative international space activities (A/AC.105/L.25); (d) a report by the *Ad Hoc* Panel on space education and training established by the Committee

on Space Research (COSPAR) of the International Council of Scientific Unions (A/AC.105/L.27); (e) a report furnished by COSPAR on the world-wide distribution of sounding rocket launching facilities (A/AC.105/L.28); (f) a review of the activities and resources of the United Nations, of its specialized agencies and of other competent international bodies relating to the peaceful uses of outer space (A/AC.105/L.29); (g) the report of the Advisory Panel for the Thumba Equatorial Rocket Launching Station (TERLS) on its first meeting (A/AC.105/L.30); (h) a statement by the Secretary-General on the financial implications of the proposed international conference on the exploration and peaceful uses of outer space (A/AC.105/L.33).

7. The opening statement by the Chairman is reproduced in annex I.

8. The Committee adopted its report to the General Assembly at its 45th meeting, on 19 September 1966.

9. The Committee's recommendations and decisions are set out below.

#### II. RECOMMENDATIONS AND DECISIONS

##### Report of the Scientific and Technical Sub-Committee

10. The Committee endorsed the recommendations set out in paragraphs 15 to 36 of the Sub-Committee's report and reproduced in annex II.

##### Report of the Legal Sub-Committee

11. The Committee took note of the report of the Legal Sub-Committee. The report is reproduced in annex III.

##### Report of the Working Group of the Whole

12. The Committee endorsed the recommendations set out in paragraphs 3, 7, 8, 9 and 10 of the Working Group's second report (A/AC.105/34). The Working Group's recommendations are reproduced in annex IV.

13. The representative of Mexico proposed that the words "examination of the desirability of establishing a permanent centre for information and consultation within the United Nations Secretariat" should be added to item 3 (International co-operation and opportunities for space research and application), in the draft agenda recommended by the Working Group. The Committee agreed to refer the proposal to the General Assembly for further consideration.

14. With regard to the site of the conference, the Committee agreed to recommend that the conference should be held at Vienna in the first part of September 1967, prior to the opening of the twenty-second session of the General Assembly.

15. The Committee agreed that a ceiling of between \$300,000 and \$350,000 should be established for the cost of the conference, the exact amount to be determined after consultations with members and with the Advisory Committee on Administrative and Budgetary Questions. The statement of financial implications by the Secretary-General is reproduced in annex V.

16. With regard to the organization of the conference, the Chairman announced, following consultations with members, that the panel of experts referred to in paragraph 8 of the Working Group's second report would be composed of representatives of the following countries: Australia, Brazil, Bulgaria, Czechoslovakia, France, India, Italy, Japan, Romania, Sweden,

the Union of Soviet Socialist Republics, the United Arab Republic and the United States of America.

17. The Committee agreed to refer the question of participation in the conference to the General Assembly at its twenty-first session.

*Reports prepared by the International Telecommunication Union and the World Meteorological Organization*

18. The Committee noted with appreciation the progress reports prepared by the International Telecommunication Union (ITU) (A/AC.105/L.24) and the World Meteorological Organization (WMO) (A/AC.105/L.31) and requested the two agencies to furnish further reports to the Committee in 1967.

### III. REGISTRATION

19. In conformity with the provisions of paragraphs 1 and 2 of General Assembly resolution 1721 B (XVI), the Committee has continued to receive information from launching States concerning objects launched into orbit. France, the USSR and the United States have furnished information. The information received since the publication of the Committee's last report has been placed in the public registry maintained by the Secretary-General and has been circulated in documents A/AC.105/INF.113-143.

### ANNEX I

#### Opening statement by the Chairman at the 44th meeting of the Committee, on 19 September 1966

Since the seventh session of the Committee on the Peaceful Uses of Outer Space, which was held in October 1965, we have witnessed a number of major events and technological achievements in the exploration of outer space.

The improved technique of launching man-made satellites in orbit around our planet and other celestial bodies and the exceptional degree of control over space craft in outer space have made it possible to unveil some of the mysteries which surround our nearby planets and to achieve the landing of man-made automatic devices on the Moon.

In this connexion I should like to congratulate both the United States and the Soviet Union for the outstanding success which they have achieved in the exploration of outer space and in particular of the Moon.

I should like to recall the historic soft landing on the lunar surface of the automatic station Luna 9 and the remarkable technological feat achieved by Surveyor I, which transmitted a total of over 10,000 photographs from the lunar surface back to Earth. I should further like to mention the automatic stations Luna 10, Luna Orbiter and Luna 11, which became the first man-made satellites to orbit the Moon and which are specifically designed to select suitable landing sites in anticipation of man's greatest adventure when he will leave the boundaries of this planet. I should also like to refer, without trying to give a complete list of all the major events, to the space stations Proton 2 and Proton 3, which have a scientific payload of many tons, and the complex programme of the Gemini Project, which is directly connected with manned flight into space, including both rendezvous techniques and extra-vehicular activities.

In this connexion I should like to extend my sincerest congratulations to the delegation of the United States upon the recent success of the Gemini 11 space mission.

Finally, I wish to mention the technological satellite A-1, which was launched by France on 26 November 1965, by which France has become the third independent space Power.

The whole world, both large and small nations, follow development and progress in the exploration of outer space with increasing interest. While we are legitimately proud of these achievements, every one of us is also full of hope that the great prospects opening up before mankind as a result of

man's entry into outer space will serve the common interest of all nations and will be used for peaceful purposes only.

We must, therefore, endeavour to strengthen this hope through extensive international co-operation, and we must make sure that we adopt in time adequate solutions to the numerous political and legal aspects of the exploration of outer space.

I would therefore urge the members of the Committee, and in particular the major space Powers, that our Committee should reassert and strengthen its role and strive, in a spirit of compromise, to achieve as wide an agreement as possible, in order to enable the Committee to carry out the mandate entrusted to it.

The members of the Committee have before them the report of the Scientific and Technical Sub-Committee (A/AC.105/31), the report of the Legal Sub-Committee (A/AC.105/35), the second report of the Working Group of the Whole (A/AC.105/34), and the reports submitted by the International Telecommunication Union (A/AC.105/L.24) and the World Meteorological Organization (A/AC.105/L.31).

As in previous years, the report of our Scientific and Technical Sub-Committee, which met in April of this year under the chairmanship of Dr. Martyn, contains a series of useful and broad-ranging recommendations on such subjects as the exchange of information, the encouragement of international programmes, international sounding rocket facilities and education and training. I shall not comment on these recommendations in detail, but merely say that they aim at continuing the work mapped out in earlier sessions by the Sub-Committee. The report contains, in addition, some new suggestions which point the way to new fields, as, for example, the recommendation that the Committee should establish a working group to examine the need, feasibility and implementation of a navigation service satellite system and the recommendation to initiate a study on the possibilities of international collaboration in space activities related to meteorology and mass communications, with particular reference to the needs of developing countries.

The Committee will, I am sure, note with particular satisfaction the recommendation that continuing sponsorship should be accorded by the United Nations to the Thumba Equatorial Rocket Launching Station (TERLS), on which a valuable report has been made by the Advisory Panel for TERLS, which was forwarded to the Committee by the Indian National Committee for Space Research (A/AC.105/L.30).

I should mention also the papers presented by the Secretariat and by the COSPAR *Ad Hoc* Panel on the question of education and training in the peaceful uses of outer space.

I am sure that the Committee will also wish to express its appreciation of the reports transmitted to us by the International Telecommunication Union and the World Meteorological Organization on the activities of the two agencies in the space field.

It is encouraging to note the steady progress that is being made by ITU in its studies regarding telecommunications and the various peaceful uses of outer space as well as the advances that are being achieved by the various States members of the agency. The Committee will also study with interest the draft plan for a world weather watch for the period 1967-1971 that is to be submitted to the Fifth World Meteorological Congress for formal adoption in April 1967. As the report of WMO notes, at the Fifth World Meteorological Congress members will have a unique opportunity of demonstrating their intention to follow up General Assembly resolution 1966 (XVIII) and "take far-sighted decisions which will enable the meteorological community to make their maximum contribution to economic development and the well-being of mankind".

I now come to the Legal Sub-Committee. The Legal Sub-Committee held its fifth session in two parts under the chairmanship of Professor Lachs.

During the first part, which took place at Geneva between 12 July and 4 August of this year, a Working Group agreed on nine articles for a proposed treaty concerning the activities of States in the exploration and use of outer space, the Moon and other celestial bodies. These nine articles embody important legal principles such as:

(a) The principle that the use and exploration of outer space and celestial bodies are free for all States, a freedom which shall, however, be exercised for the benefit and in the interest of all mankind;

(b) The principle that the Moon and other celestial bodies shall be used exclusively for peaceful purposes and that the stationing of nuclear weapons in outer space is prohibited;

(c) The principle that outer space, the Moon and other celestial bodies may not be appropriated by any State;

(d) The principle that international law, including the Charter of the United Nations, applies to outer space and celestial bodies;

(e) The principle of assistance to and return of astronauts;

(f) The principle that States are liable for damage caused to other States in the pursuit of space activities;

(g) The principle that States are responsible for space activities carried out by non-governmental entities or by international organizations of which they are a member. As for the responsibility of international organizations themselves, a proposal is still before the Sub-Committee;

(h) The principle that in carrying out space activities States should avoid harmful contamination of the Earth or interference with activities of other States;

(i) The principle that States retain jurisdiction and control of objects launched by them, even while they are in outer space or on celestial bodies.

However, a few, but important, questions could not be settled at that part of the session. They were referred to the second part, which took place last week, here in New York. These problems are:

(a) The problem under what conditions and in what form States carrying out activities on celestial bodies should have access to installations of other parties to the treaty established there;

(b) The problem if, how, and to whom States engaged in space activities shall report on such activities;

(c) The problem if and how States shall accord equal conditions to other parties to the treaty for tracking objects launched into outer space;

(d) The problem of the relationship between the proposed treaty and future agreements concerning the law of outer space.

To our great regret it was not possible to overcome certain difficulties concerning some of the remaining open questions during the resumed fifth session of the Legal Sub-Committee, which was concluded last Friday. I should, however, like to express my earnest hope that in the near future a resumption of the discussion will be possible and will lead to the adoption of the proposed treaty.

I should now like to say a few words in connexion with the report of the Working Group of the Whole which was established to examine the desirability, organization and objectives of an international conference or meeting to be held in 1967 on the exploration and peaceful uses of outer space.

The Working Group of the Whole held its first meeting in January 1966 and adopted a number of recommendations regarding the organization and objectives of an international conference on the peaceful uses of outer space to be held in the latter half of 1967.

The first report of the Working Group, contained in document A/AC.105/30, was endorsed by the main Committee at its 43rd meeting, in April 1966. The report recommended that detailed proposals regarding the organization of the proposed conference should be prepared for consideration and approval by the Committee on the Peaceful Uses of Outer Space, prior to the twenty-first session of the General Assembly. It was agreed that further work had to be done on a number of questions, such as the preparation of estimates of the financial implications related to the conference, and recommendations regarding the time and place of the conference and other matters.

The Working Group held its second session from 6 to 9 September 1966 and was able to agree on a number of recom-

mendations regarding the draft agenda of the conference, the setting up of a panel of experts, and the date of the conference.

Some questions, such as the final decision regarding the place of the conference, the participation in the conference, the composition of the panel of experts and the financial implications of the conference have, however, still to be settled and it is to these questions that we must address ourselves at today's meeting.

I should like to draw the attention of the members of the Committee to document A/AC.105/34, containing the second report of the Working Group of the Whole to the Main Committee, as well as to document A/AC.105/L.33, containing a statement of financial implications by the Secretary-General. The estimates, which range from \$225,850 to \$576,850, depending on the decision to be taken regarding the form and content of the published proceedings, are based on the assumption that the conference will be held at Headquarters or at the United Nations Office at Geneva, for a period of twelve working days, in the first half of September 1967, prior to the twenty-second session of the General Assembly.

This analysis of the reports before us shows that the Committee has to deal with a number of important questions and I should therefore like to express the hope that we will, in the short time available, make every effort to conclude our work as conscientiously and effectively as possible.

### ANNEX II

#### Recommendations approved by the Scientific and Technical Sub-Committee at its fourth session

*(Excerpt from the report of the Sub-Committee on the work of its fourth session)*

#### A. EXCHANGE OF INFORMATION

15. In accordance with the recommendations made by the Committee on the Peaceful Uses of Outer Space at its sixth session,<sup>a</sup> the Secretariat prepared a review of national and co-operative international space programmes based on the reports furnished by Member States in response to General Assembly resolutions 1721 (XVI) and 1802 (XVII) (A/AC.105/C.1/L.10) and a report on the space activities and resources of the United Nations, of the specialized agencies and of other competent bodies (A/AC.105/C.1/L.9). A report was also presented by the Secretary-General on material to ensure popular understanding of the purposes and potentialities of space activities (A/AC.105/C.1/L.12). The Sub-Committee received these with appreciation.

16. The Sub-Committee examined the reports in documents A/AC.105/C.1/L.9 and A/AC.105/C.1/L.10 with interest and requested the Secretariat to bring them up to date, to correct them where necessary and to submit the papers, as revised, for consideration by the Committee on the Peaceful Uses of Outer Space at its next session.

17. With regard to the report on national and co-operative international space programmes (A/AC.105/C.1/L.10), the Sub-Committee recommended that in future the report should be prepared annually by a specific date to be decided by the Secretariat. Countries wishing to prepare their own material should so inform the Secretariat. In the absence of such notice from countries, the Secretariat should itself prepare the national reports from reliable sources and submit its report to the individual country concerned for approval. The Sub-Committee noted that the national report to COSPAR would provide a useful source of information in this connexion.

18. With regard to the review of the space activities and resources of the United Nations, of the specialized agencies and of other competent bodies (A/AC.105/C.1/L.9), the Sub-Committee recommended that the report should be continued and should be expanded to include other bodies interested in space activities, such as the International Telecommunications Satellite Consortium (INTELSAT).

19. The Sub-Committee noted the recommendation by the Secretary-General (A/AC.105/C.1/L.12, para. 10) that the

<sup>a</sup> See *Official Records of the General Assembly, Nineteenth Session, Annexes*, annex No. 10, document A/5785.

report on national and co-operative international space activities should be combined with the review of the space activities of the United Nations and other international bodies in a single volume. The Sub-Committee was informed that funds had been approved by the United Nations Publications Board for the publication of such a volume in 1967.

#### B. ENCOURAGEMENT OF INTERNATIONAL PROGRAMMES

20. The Sub-Committee notes that mutual benefits may be derived by developing countries and by those not yet advanced in space activities in circumstances where they can participate in well-planned space programmes; also, that such participation may result in contributions to the general welfare of mankind.

##### Navigation satellites

21. The Scientific and Technical Sub-Committee, in response to the request of the Committee on the Peaceful Uses of Outer Space contained in paragraph 21 B II of the Committee's report on its sixth session,<sup>a</sup> discussed the possibility of establishing a world civil navigation system. The Sub-Committee considers that the establishment of such a system could be a very useful practical consequence of the exploration of outer space and states that even at present there exist technical means for such a system.

22. However, the Sub-Committee notes the great complexity of this problem which still needs much experimental work and more careful study.

23. The Sub-Committee hopes that countries possessing the capability for the development of the necessary technical means will continue their efforts to find the optimum version of this system from a technical and economic point of view.

24. The Sub-Committee also considers it necessary for the specialized agencies such as the International Civil Aviation Organization (ICAO) and the Inter-Governmental Maritime Consultative Organization (IMCO) to continue their work in order to clarify the needs of such a system.

25. The Sub-Committee recommends that the Committee establish a working group which would be composed of interested members of the Committee and representatives invited from the specialized agencies, such as ICAO, IMCO and ITU. The working group, which should be composed as far as possible of specialists, should be directed to consider in sequence and make recommendations to the Committee regarding the need, feasibility and implementation of a navigation services satellite system, including such aspects of implementation as costs, organization, legal questions, etc.

26. The Sub-Committee noted with appreciation the relevant paper on research and development activity on navigation satellite systems in Japan, circulated at the request of the delegation of Japan (A/AC.105/C.1/L.16).

##### International collaboration in space activities related to meteorology and mass communications

27. The Sub-Committee recognizes the problem of growing population and the problem of providing food for large populations in many parts of the world. Also the Sub-Committee is informed that member nations and specialized agencies are studying the applications of space technology in the fields of meteorology and for the improvement of mass television communications which may ultimately help to alleviate these problems. The Indian Ocean region has been mentioned as one example of an area, among others, in which the problem is especially severe and the opportunity correspondingly great.

28. The Sub-Committee hopes that interested countries and specialized agencies will continue to study, with a sense of urgency, both the scientific and technical feasibility of such applications and the ways in which such applications could best be utilized if available, to meet the needs of the developing countries of the world.

29. The Sub-Committee recommends that the Committee on the Peaceful Uses of Outer Space invite interested Member States and the specialized agencies to report on the results or progress of such studies at its next session.

#### C. INTERNATIONAL SOUNDING ROCKET LAUNCHING FACILITIES

##### 30. "The Sub-Committee,

"Noting the progress of the work of the Thumba Equatorial Rocket Launching Station (TERLS) as described in document A/AC.105/C.1/L.15,

"Noting that TERLS is in the process of creating special facilities such as (a) a laboratory and office space, (b) workshops, (c) a library, (d) classrooms, and (e) living accommodation for scientists, technicians and trainees, and to enlarge the potential of TERLS as an international training centre,

"Noting that an international Seminar on Sounding Rocket Techniques and Experiments was held at TERLS in January 1965, with the financial assistance of UNESCO,

"1. Desires to commend the activities of the host State, the specialized agencies and the Member States associated with the construction and operation of this facility, and to encourage continued efforts in this direction;

"2. Draws the attention of Member States to the availability of this international facility;

"3. Recommends that continuing sponsorship be accorded by the United Nations, as described in General Assembly resolution 2130 (XX), to TERLS as an international facility for the purpose of co-operation in the peaceful uses of outer space.

#### D. EDUCATION AND TRAINING

31. The Sub-Committee, like the Committee on the Peaceful Uses of Outer Space, has in previous reports stressed the importance of education and training in the peaceful uses of outer space as a means of enabling non-space Powers, especially the developing countries and those not yet advanced in space activities, to enjoy the benefits of such activities.

32. The Sub-Committee notes that the General Assembly in its resolution 2130 (XX), unanimously adopted on 21 December 1965, specifically requested the Committee on the Peaceful Uses of Outer Space, in co-operation with the Secretary-General and making full use of the available resources of the Secretariat, and in consultation with the specialized agencies and in co-operation with COSPAR, to prepare and consider during its next session suggestions for programmes of education and training of specialists in the peaceful uses of outer space to assist the developing countries, and to report to the General Assembly at its twenty-first session, to be convened in September 1966.

33. The Sub-Committee makes recommendations under the following headings:

(a) *Popular understanding of the purposes and potentialities of space activities.* The Sub-Committee appreciates the various proposals set out in document A/AC.105/C.1/L.12 and recommends that the material contained in the United Nations documents related to national and international programmes, to the availability of space education and training facilities and fellowships be compiled periodically in a printed directory and made available to the editors of appropriate journals and to national libraries, and also be distributed to a mailing list provided by each Member State. The same mailing list could be used for such other United Nations publications of widespread space interest as the Committee may see fit to suggest in the future. The Sub-Committee recommends that the bibliography circulated as document A/AC.105/C.1/L.12 Add.1 be kept current and made widely available.

(b) *Secondary school space education.* The Sub-Committee recommends that the Secretariat continue to make available to Member States information on material suitable for use in secondary education.

(c) *University level education.* The Sub-Committee recommends that Member States which are in a position to do so increase their efforts to make fellowships and scholarships available in the field of space science and technology available to developing countries and those not yet advanced in space activities, either on the basis of bilateral agreements or through other arrangements.

(d) *Post-university education.* The Sub-Committee recommends:

(i) That Member States in a position to do so increase their efforts to make post-graduate courses on space-related matters available to countries developing space programmes on whatever basis they consider appropriate; and

(ii) That the United Nations, the specialized agencies and COSPAR continue to encourage symposia and meetings of an international character on space and space-related subjects.

(e) *Training in space science and technology.* The Sub-Committee recommends:

(i) That Member States in a position to do so, as well as the United Nations and the specialized agencies, enlarge opportunities for training in practical space activities, particularly for persons in or from developing countries and those countries not yet advanced in space activities;

(ii) That the following guidelines be applied where international support or sponsorship is requested for training of specialists of Member States in the specialized fields of space science and technology:

a. The subject-matter of training should fall within space science and technology;

b. The requests by interested countries should be addressed to the proper specialized agency, if any, so as to avoid duplication of funding and effort and to ensure competent consideration;

c. The training facility should be well qualified to provide such training in the special field of space science or technology, and the prospective trainees should be well qualified to receive such training;

d. The purpose of the training should be its direct application in specific and useful projects or programmes of the trainee's State which have assurance of adequate support and equipment and which are open to all Member States;

e. Institutions within the trainee's State should contribute to a measurable extent to the cost of the training;

f. The training should have a specified maximum duration, after which the trainee should return to his State.

34. Considering that substantial capability in various aspects of scientific sounding rocket operations has been developed at TERLS, a facility sponsored by the United Nations, and that the authorities at TERLS are agreeable to providing opportunities for training there on a pilot basis, the Sub-Committee recommends that the United Nations continue to give consideration to the provision of such support as was outlined in the report of the Committee on the Peaceful Uses of Outer Space on the work of its sixth session and in conformity with the above guidelines.

35. The Sub-Committee noted with appreciation the Special Fund/ITU project for the establishment of a centre for research and training on the use of satellite communications at Ahmedabad in India and requests that further information on this programme be made available at the next session of the Sub-Committee.

36. The Sub-Committee also noted with appreciation the education and training programme of WMO, and specifically the interregional seminars which the organization has already held on the interpretation and use of meteorological satellite data. The Sub-Committee noted that WMO plans to hold further seminars in other regions as more countries come to acquire the capability of receiving and evaluating meteorological satellite data.

#### ANNEX III

##### Report of the Legal Sub-Committee on the work of its fifth session

1. The Legal Sub-Committee held its fifth session under the chairmanship of Mr. Manfred Lachs (Poland). The session was divided into two parts. The first part took place at the

United Nations Office at Geneva from 12 July to 4 August, and the second part, at the United Nations Headquarters from 12 to 16 September 1966. A total of seventeen meetings was held.

2. The Sub-Committee examined the draft treaty on principles governing the activities of States in the exploration and use of outer space, the Moon and other celestial bodies, proposed by the Union of Soviet Socialist Republics, and the draft treaty governing the exploration of the Moon and other celestial bodies, proposed by the United States (see appendix I to this report), as well as all proposals presented by members with respect to particular articles.

3. During the first part of the session, agreement was reached on a series of articles, the texts of which are contained in Working Group papers L.1 to L.9, reproduced in appendix II to the present report. However, no agreement was reached on other draft articles and proposals. The texts of those proposals are contained in the working papers reproduced in appendix III to the present report. The Sub-Committee, having approved an interim report of the Chairman (document A/AC.105/C.2/L.16) at its 71st meeting, on 4 August 1966, decided to suspend its fifth session and to reconvene at a date to be fixed by the Chairman in consultation with members of the Sub-Committee prior to or in the course of the twenty-first session of the General Assembly.

4. As a result of such consultation, the fifth session was resumed at United Nations Headquarters in New York on 12 September 1966. Further proposals were submitted, the texts of which were contained in working papers Nos. 29 to 33, reproduced as appendix IV to the present report. An exchange of views took place on those proposals. No further agreement has been reached.

5. The Sub-Committee decided to defer discussion of a draft agreement on assistance to and return of astronauts and space vehicles, and a draft agreement on liability for damage caused by objects launched into outer space. The fifth session was concluded on 16 September 1966.

#### Appendix I

##### Draft treaties submitted by the United States of America and the Union of Soviet Socialist Republics

##### A. UNITED STATES OF AMERICA: DRAFT TREATY GOVERNING THE EXPLORATION OF THE MOON AND OTHER CELESTIAL BODIES

###### Note<sup>a</sup>

At the request of the United States, the attached text of the United States proposal already distributed as document A/AC.105/32 is submitted to the Legal Sub-Committee.

##### LETTER DATED 16 JUNE 1966 FROM THE REPRESENTATIVE OF THE UNITED STATES OF AMERICA TO THE CHAIRMAN OF THE COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE<sup>b</sup>

On 9 May, I informed you of the statement by President Johnson of 7 May in which he proposed early discussion of a treaty governing the exploration of the moon and other celestial bodies.

The purpose of my letter was to request an early convening of the Outer Space Legal Sub-Committee to prepare a draft treaty for submission to the General Assembly at the next session.

Shortly after that request, we consulted with members of the Outer Space Committee to give them our views in some detail on the twelve points which we believed should be included in a celestial bodies treaty.

One of the first to be consulted was the Soviet Union, on whose Permanent Representative I called on 11 May. At that time I gave him a written outline as follows:

"Outline of points for inclusion in celestial bodies treaty

"1. The Moon and other celestial bodies should be free for exploration by all in accordance with international law.

<sup>a</sup> Document A/AC.105/C.2/L.12, dated 11 July 1966.

<sup>b</sup> Document A/AC.105/32, dated 17 June 1966.



- "2. Celestial bodies should not be subject to any claim of sovereignty.
- "3. There should be freedom of scientific investigation, and all countries should co-operate in scientific activities relating to celestial bodies.
- "4. A State conducting explorations on a celestial body should report on the results of a mission.
- "5. Open access to all areas of celestial bodies should be assured.
- "6. Celestial bodies should be used for peaceful purposes only. No country should be permitted to station weapons of mass destruction on a celestial body. Military fortifications, weapons tests, and military manoeuvres should be forbidden.
- "7. A launching State should be entitled to exercise authority over its facilities on a celestial body and persons participating in its activities there.
- "8. Ownership of objects landed, constructed or used on a celestial body should be retained by the launching State.
- "9. Astronauts of one country should render assistance to other astronauts as may be required by circumstances.
- "10. States should pursue studies and take appropriate steps to avoid harmful contamination.
- "11. Consideration should be given to a provision for the settlement of any disputes that might arise.
- "12. Final clauses—there should be appropriate provisions on signature, ratification, depositary, entry into force, amendment, duration, and registration with the United Nations."

In the course of our consultations with the Committee's membership, we made clear our desire to make early progress on this subject as well as on the other international agreements which the General Assembly asked the Committee to prepare in resolution 2130 (XX).

In response to the United States request, you were good enough, on 18 May, to consult the Committee's membership with regard to an early meeting. I understood that thus far none of those who have replied have opposed an early session; in fact there is, I believe, considerable support for the idea of using the time between now and the General Assembly to prepare a draft treaty which could be presented to the Assembly this fall.

We have been encouraged by the substantial area of apparent agreement between the points we had proposed for inclusion in a treaty, and the letter of the Minister for Foreign Affairs of the USSR of 30 May which was circulated as a United Nations document [A/6341]. My Government then made known its welcome of what appeared to be an affirmative interest in President Johnson's proposal and again expressed the wish that maximum progress be made without further delay in the hope that the Assembly could give its approval to a completed text at its twenty-first session.

In order to take advantage of the favourable response to President Johnson's proposal, I have the honour herewith to present the attached draft "Treaty Governing the Exploration of the Moon and Other Celestial Bodies" and request that it be circulated as a United Nations document.

Further, I have the honour to propose that the Legal Sub-Committee of the Committee on the Peaceful Uses of Outer Space be convened on 12 July so that work on this important subject be gotten under way at the earliest time.

The speed with which men's actual progress in outer space is being recorded requires that we allow no delay in assuring the prompt extension of international law and the United Nations Charter.

(Signed) Arthur J. GOLDBERG  
Permanent Representative of the United States  
of America to the United Nations

*Draft treaty governing the exploration of the Moon and other celestial bodies*

*The Contracting Parties,*

Recalling General Assembly resolution 1962 (XVIII), entitled "Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space", adopted unanimously by the General Assembly on 13 December 1963,

Further recalling General Assembly resolution 1884 (XVIII), concerning weapons of mass destruction, adopted by acclamation on 17 October 1963,

Recognizing that it is in the interest of all mankind that celestial bodies should be used for peaceful purposes only,

Anticipating the substantial contributions to scientific knowledge which will flow from international co-operation in the scientific investigation of celestial bodies,

Convinced that a treaty on the use of celestial bodies will further the Purposes and Principles of the Charter of the United Nations,

Agree that:

*Article 1*

Celestial bodies are free for exploration and use by all States on a basis of equality and in accordance with international law. They are not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by other means.

*Article 2*

There shall be freedom of scientific investigation on celestial bodies.

*Article 3*

States shall facilitate and encourage international co-operation in scientific investigations concerning celestial bodies.

*Article 4*

A State conducting activities on a celestial body shall (a) promptly provide the Secretary-General of the United Nations with a descriptive report of the nature, conduct, and locations of such activities, and (b) make the findings of such activities freely available to the public and the international scientific community.

*Article 5*

States in a position to do so shall, where requested or required by the circumstances, render assistance to nationals of other States engaged in activities on celestial bodies.

*Article 6*

All areas of celestial bodies, including all stations, installations, equipment, and space vehicles on celestial bodies, shall be open at all times to representatives of other States conducting activities on celestial bodies.

*Article 7*

A State may exercise authority over its facilities and persons participating in its activities on a celestial body. Ownership of objects shall not be affected by their being landed, constructed or used on a celestial body.

*Article 8*

In accordance with the sense of General Assembly resolution 1884 (XVIII), adopted by acclamation on 17 October 1963, no State shall station on or near a celestial body any nuclear weapons or other weapons of mass destruction.

*Article 9*

Celestial bodies shall be used for peaceful purposes only. All States undertake to refrain from conducting on celestial bodies any activities such as the establishment of military fortifications, the carrying out of military manoeuvres, or the testing of any type of weapons. The use of military personnel, facilities or equipment for scientific research or for any other peaceful purpose shall not be prohibited.

*Article 10*

States shall pursue studies of and, as appropriate, take steps to avoid harmful contamination of celestial bodies and adverse changes in the environment of the Earth resulting from the return of extraterrestrial matter.

*Article 11*

Any disputes arising from the interpretation or application of this Agreement may be referred by any Contracting Party thereto to the International Court of Justice for decision.

*Article 12*

This Agreement shall be open for signature by States Members of the United Nations or of any of the specialized agencies or Parties to the Statute of the International Court of Justice, and by any other State invited by the General Assembly of the United Nations to become a Party. Any such State which does not sign this Agreement may accede to it at any time.

*Article 13*

This Agreement shall be subject to ratification or approval by signatory States. Instruments of ratification or approval and instruments of accession shall be deposited with the Secretary-General of the United Nations.

*Article 14*

This Agreement shall enter into force upon the deposit of the second instrument of ratification, approval, or accession. It shall enter into force as to a State ratifying, approving, or acceding thereafter upon the deposit of its instrument of ratification, approval, or accession.

*Article 15*

A Contracting Party may propose amendments to this Agreement. Amendments shall come into force for each Contracting Party accepting the amendments on acceptance by a majority of the Contracting Parties and thereafter for each remaining Contracting Party on acceptance by it.

*Article 16*

A Contracting Party may give notice of its withdrawal from this Agreement one year after its entry into force by written notification to the Secretary-General of the United Nations. Such withdrawal shall take effect one year from the date of receipt by the Secretary-General of the notification.

*Article 17*

The Secretary-General of the United Nations shall inform all States referred to in article 12 of signatures, deposits of instruments of ratification, approval or accession, the date of entry into force of this Agreement, proposals for amendment, notification of acceptances of amendments, and notices of withdrawal.

*Article 18*

This Agreement shall be registered in accordance with Article 102 of the Charter of the United Nations.

*Article 19*

The original of this Agreement, of which the Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations who shall send certified copies thereof to the States referred to in article 12.

IN WITNESS WHEREOF, the undersigned, being duly authorized, have signed this Agreement.

Done at... this... day of... one thousand nine hundred and....

**B. UNION OF SOVIET SOCIALIST REPUBLICS: DRAFT TREATY ON PRINCIPLES GOVERNING THE ACTIVITIES OF STATES IN THE EXPLORATION AND USE OF OUTER SPACE, THE MOON AND OTHER CELESTIAL BODIES**

LETTER DATED 11 JULY 1966 FROM THE REPRESENTATIVE OF THE USSR TO THE CHAIRMAN OF THE LEGAL SUB-COMMITTEE<sup>c</sup>

The delegation of the Union of Soviet Socialist Republics to the Legal Sub-Committee of the Committee on the Peaceful Uses of Outer Space draws your attention to the fact that on 16 June 1966 the Soviet Union draft "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, the Moon and Other Celestial Bodies" was, at the request of the Permanent Mission of the Union of Soviet Socialist Republics to the United Nations, issued and circulated under the symbol A/6352 as a document of the twenty-first session of the General Assembly.

I would request you to circulate this letter as an official document of the Legal Sub-Committee of the Committee on the Peaceful Uses of Outer Space at its fifth session, annexing thereto the letter dated 16 June 1966 to the Secretary-General from the Permanent Mission of the Union of Soviet Socialist Republics to the United Nations and the above-mentioned Soviet Union draft treaty, in the form in which they were issued earlier (document A/6352).

(Signed) P. MOROZOV  
Ambassador Extraordinary and Plenipotentiary  
of the Union of Soviet Socialist Republics

Letter dated 16 June 1966 from the representative of the Union of Soviet Socialist Republics to the Secretary-General<sup>d</sup>

On the instruction of the Government of the Union of Soviet Socialist Republics, I have the honour to transmit herewith a draft "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, the Moon and Other Celestial Bodies". The Soviet Government is submitting this draft treaty for consideration at the twenty-first session of the General Assembly under the agenda item proposed for that session by the Soviet Union.

I should be grateful if you would have the aforementioned draft treaty circulated to all delegations as an official United Nations document.

(Signed) P. MOROZOV  
Acting Permanent Representative of  
the Union of Soviet Socialist Republics  
to the United Nations

*Draft Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, the Moon and Other Celestial Bodies*

The Governments..., hereinafter referred to as the Parties to the Treaty,

Inspired by the great prospects opening up before mankind as a result of man's entry into outer space,

Recognizing the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes,

Believing that the exploration and use of outer space should be carried on for the benefit of all peoples irrespective of the degree of their economic or scientific development,

Desiring to contribute to broad international co-operation in the scientific as well as the legal aspects of the exploration and use of outer space for peaceful purposes,

Believing that such co-operation will contribute to the development of mutual understanding and to the strengthening of friendly relations between States and peoples.

Taking account of General Assembly resolution 110 (II) of 3 November 1947, which condemned propaganda designed or likely to provoke or encourage any threat to the peace, breach of the peace or act of aggression, and considering that the aforementioned resolution is applicable to outer space,

Have agreed on the following:

<sup>c</sup> Document A/AC.105/C.2/L.13, dated 21 July 1966.  
<sup>d</sup> Document A/6352, dated 16 June 1966.

## Article I

The exploration and use of outer space shall be carried out for the benefit and in the interests of all countries and shall be the province of all mankind. The Parties to the Treaty undertake to accord equal conditions to States engaged in the exploration of outer space.

Outer space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all regions of celestial bodies.

## Article II

Outer space and celestial bodies shall not be subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.

## Article III

The Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding.

## Article IV

The Parties to the Treaty undertake not to place in orbit around the Earth any objects carrying nuclear weapons or other weapons of mass destruction and not to station such weapons on celestial bodies or otherwise to station them in outer space. The Moon and other celestial bodies shall be used exclusively for peaceful purposes by all Parties to the Treaty. The establishment of military bases and installations, the testing of weapons and the conduct of military manoeuvres on celestial bodies shall be forbidden.

## Article V

A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereon while it is in outer space or on a celestial body. Ownership of objects launched into outer space, including objects delivered to or constructed on a celestial body, and of their component parts, shall not be affected by their presence in outer space or on a celestial body or by their return to earth. Such objects or component parts found beyond the limits of the State Party to the Treaty on whose registry they are carried shall be returned to that State, which shall, upon request, furnish identifying data prior to their return.

## Article VI

States Parties to the Treaty shall bear international responsibility for national activities in outer space or on celestial bodies, whether such activities are carried on by governmental agencies or by non-governmental entities. The activities of non-governmental entities in outer space shall require authorization and continuing supervision by the appropriate State Party to the Treaty. When activities are carried on in outer space by an international organization, responsibility for compliance with this Treaty shall be borne both by the international organization and by the States Parties to the Treaty participating in such organization.

## Article VII

Each State Party to the Treaty which launches or organizes the launching of an object into outer space and on to celestial bodies, and each State from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty or to its natural or judicial persons by such object or its component parts on the Earth, in air space, in outer space or on the celestial body.

## Article VIII

In the exploration and use of outer space, States Parties to the Treaty shall be guided by the principle of co-operation and mutual assistance and shall conduct all their activities in

outer space, including activities on celestial bodies, with due regard for the corresponding interests of other States. States Parties to the Treaty shall conduct research on celestial bodies in such a manner as to avoid harmful contamination. If a State Party to the Treaty has reason to believe that an outer space activity or experiment planned by it or its nationals would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space, including activities on celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A State Party to the Treaty which has reason to believe that an outer space activity or experiment planned by another State Party would cause potentially harmful interference with activities in the peaceful exploration and use of outer space, including activities on celestial bodies, may request consultation concerning the activity or experiment.

## Article IX

States Parties to the Treaty shall regard astronauts as envoys of mankind in outer space and shall render to them all possible assistance in the event of accident, distress, or emergency landing on the territory of another State Party or on the high seas. Where astronauts make such a landing, their safety shall be assured and they shall be enabled promptly to return to the territory of the State Party of registry of their space vehicle.

In carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render all possible assistance to the astronauts of other States Parties.

## Article X

In the event of disputes arising in connexion with the application or interpretation of the Treaty, the States Parties concerned shall immediately consult together with a view to their settlement.

## Article XI

1. This Treaty shall be open to all States for signature. Any State which does not sign this Treaty before its entry into force in accordance with paragraph 3 of this article may accede to it at any time.

2. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Governments of... which are hereby designated the Depositary Governments.

3. This Treaty shall enter into force after its ratification...

4. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.

5. The Depositary Governments shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification and accession to this Treaty, the date of its entry into force, and other notices.

6. This Treaty shall be registered by the Depositary Governments pursuant to Article 102 of the Charter of the United Nations.

## Article XII

This Treaty of which the Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited in the archives of the Depositary Governments. Duly certified copies of this Treaty shall be transmitted by the Depositary Governments to the Governments of the signatory and acceding States.

IN WITNESS WHEREOF the undersigned, duly authorized, have signed this Treaty.

DONE in..., at the city of..., the... day of... one thousand nine hundred and...

## Appendix II

## Articles on which agreement was reached

TEXT OF ARTICLE ACCEPTED BY THE WORKING GROUP AT ITS 1ST MEETING, ON 27 JULY 1966

(Working Group/L.1 and Corr.1)

A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body. Ownership of objects launched into outer space, including objects landed or constructed on a celestial body, and of their component parts, is not affected by their presence in outer space or on a celestial body or by their return to the Earth. Such objects or component parts found beyond the limits of the State Party to the Treaty on whose registry they are carried shall be returned to that State, which shall, upon request, furnish identifying data prior to their return.

TEXT OF ARTICLE ACCEPTED BY THE WORKING GROUP AT ITS 2ND MEETING, ON 28 JULY 1966

(Working Group/L.2)

Each State Party to the Treaty that launches or procures the launching of an object into outer space, including the Moon and other celestial bodies, and each State Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty or to its natural or juridical persons by such object or its component parts on the Earth, in air space, or in outer space, including the Moon and other celestial bodies.

TEXT OF ARTICLE I ACCEPTED BY THE WORKING GROUP AT ITS 3RD MEETING, ON 29 JULY 1966

(Working Group/L.3)

The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries irrespective of their degree of economic or scientific development and shall be the province of all mankind.

Outer space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies.

There shall be freedom of scientific investigation in outer space, including the Moon and other celestial bodies, and States shall facilitate and encourage international co-operation in such investigation.

TEXT OF ARTICLE ACCEPTED BY THE WORKING GROUP AT ITS 3RD MEETING, ON 29 JULY 1966

(Working Group/L.4)

The 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 exclusively for peaceful purposes by all Parties to the Treaty. 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 [and equipment] for scientific research or for any other peaceful purposes shall not be prohibited.

TEXT OF ARTICLE ACCEPTED BY THE WORKING GROUP AT ITS 4TH MEETING, 1 AUGUST 1966

(Working Group/L.5 and Corr.1)

States Parties to the Treaty shall regard astronauts as envoys of mankind in outer space, and shall render to them

\*The words in square brackets have not been agreed upon.

all possible assistance in the event of accident, distress, or emergency landing on the territory of another State Party or on the high seas. When astronauts make such a landing they shall be safely and promptly returned to the State of registry of their space vehicle.

In carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render all possible assistance to the astronauts of other States Parties.

States Parties to the Treaty shall immediately inform the other Parties to the Treaty or the Secretary-General of the United Nations of any phenomena they discover in outer space, including the Moon and other celestial bodies, which could constitute a danger to the life or health of astronauts.

TEXT OF ARTICLE ACCEPTED BY THE WORKING GROUP AT ITS 4TH MEETING, 1 AUGUST 1966

(Working Group/L.6)

States Parties to the Treaty shall bear international responsibility for national activities in outer space, including the Moon and other celestial bodies, whether such activities are carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the present Treaty. The activities of non-governmental entities in outer space, including the Moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty. When activities are carried on in outer space, including the Moon and other celestial bodies, by an international organization, responsibility for compliance with this Treaty shall be borne both by the international organization and by the States Parties to the Treaty participating in such organization.

TEXT OF ARTICLE ACCEPTED BY THE WORKING GROUP AT ITS 6TH MEETING, ON 2 AUGUST 1966

(Working Group/L.7)

Outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.

TEXT OF ARTICLE ACCEPTED BY THE WORKING GROUP AT ITS 6TH MEETING, ON 2 AUGUST 1966

(Working Group/L.8)

The Parties to the Treaty shall carry on activities in the exploration and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding.

TEXT OF ARTICLE ACCEPTED BY THE WORKING GROUP AT ITS 6TH MEETING, ON 2 AUGUST 1966

(Working Group/L.9)

In the exploration and use of outer space, including the Moon and other celestial bodies, States Parties to the Treaty shall be guided by the principle of co-operation and mutual assistance and shall conduct all their activities in outer space, including the Moon and other celestial bodies, with due regard to the corresponding interests of all other States Parties to the Treaty. States Parties to the Treaty shall pursue studies of outer space, including the Moon and other celestial bodies, and conduct exploration of them so as to avoid their harmful contamination and also adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter and, where necessary, shall adopt appropriate measures for this purpose. If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the Moon and other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space, including the Moon and other celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment. A

State Party to the Treaty which has reason to believe that an activity or experiment planned by another State Party in outer space, including the Moon and other celestial bodies, would cause potentially harmful interference with activities in the peaceful exploration and use of outer space, including the Moon and other celestial bodies, may request consultation concerning the activity or experiment.

### Appendix III

#### Draft articles and proposals, submitted to the Sub-Committee at the first part of the fifth session, requiring further discussion

UNITED STATES: REVISION OF ARTICLE 6 OF THE UNITED STATES DRAFT TREATY

(Working paper No. 3, 21 July 1966)

All stations, installations, equipment, and space vehicles on the Moon and other celestial bodies shall be open at all times to representatives of other States Parties to this Treaty conducting activities on celestial bodies.

USSR: DRAFT ARTICLE

(Working paper No. 4, 21 July 1966)

A State conducting activities on celestial bodies will, on a voluntary basis, inform the Secretary-General of the United Nations and also the public and the international scientific community of the nature, conduct and locations of such activities.

UNITED STATES: REVISION OF ARTICLES 8 AND 9 OF THE UNITED STATES DRAFT TREATY

(Working paper No. 6/Rev.1, 1 August 1966)

The 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 exclusively for peaceful purposes. The establishment of military bases and fortifications, the testing of any type of weapons, and the conduct of military manoeuvres shall be forbidden. The present Treaty does not prohibit the use of any types of personnel or equipment for scientific research or any other peaceful purpose.

UNITED ARAB REPUBLIC: DRAFT ARTICLE

(Working paper No. 7/Corr.1, 27 July 1966)

States conducting activities in outer space, and on celestial bodies, will on a voluntary basis, inform the Secretary-General of the United Nations and also the public and the international scientific community of the nature, conduct and locations of such activities through the United Nations facilities.

All information shall be promptly submitted, preferably in advance or at the carrying out of these activities or immediately after.

The United Nations should be prepared to disseminate this information immediately and effectively after receiving the said information which has to be ample and in detail for the benefit of the general public and the international scientific community.

UNITED ARAB REPUBLIC: PROPOSAL

(Working paper No. 8, 22 July 1966)

Replace the first paragraph of article I of the USSR draft treaty by the following:

"The Parties to this Treaty recognize outer space as the province of mankind.

"To this end, the exploration and the use of outer space shall be carried out for the benefit, betterment and in the interest of all nations, irrespective of the degree of their economic and scientific development. The Parties to the Treaty

undertake to accord equal conditions to States engaged in the exploration of outer space.

"States engaged in the exploration of outer space undertake to accord facilities and to provide possibilities to the non-space Powers, to enable them to participate in and to draw benefit from the exploration and the use of outer space for the aim of deriving practical benefits related to their economic and social development."

UNITED KINGDOM: ADDITIONAL ARTICLE ON INTERNATIONAL ORGANIZATIONS

(Working paper No. 17, 25 July 1966)

1. If an international organization which conducts activities in outer space including the Moon and celestial bodies transmits to [the depository authority] a declaration that it accepts and undertakes to comply with the provisions of this Treaty, all the provisions except articles... [here insert a reference to the articles concerning signature, ratification and accession by States], shall apply to the organization as they apply to a State which is a Party to this Treaty.

2. The States Parties to this Treaty undertake to use their best endeavours to ensure that any international organization which conducts such activities and of which they are constituent members is authorized to make and will make the declaration referred to in paragraph 1 of this article.

3. The States Parties to this Treaty shall take such steps as are open to them to ensure that any international organization which conducts such activities and of which they are constituent members acts, subject to reciprocity, in accordance with the principles set out in this Treaty until such time as a declaration is made pursuant to paragraph 1 of this article.

USSR: REVISION OF ARTICLE IV OF THE USSR DRAFT TREATY

(Working paper No. 9/Corr.1, 26 July 1966)

The 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 and not to station such weapons on celestial bodies or otherwise to station them in outer space. The Moon and other celestial bodies shall be used exclusively for peaceful purposes by all Parties to the Treaty. 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.

UNITED ARAB REPUBLIC: PROPOSED NEW ARTICLE

(Working paper No. 19, 26 July 1966)

The Parties to the Treaty, recognizing the enormous potentialities of space applications for communications purposes and more specifically for sound and television broadcasting, undertake to make use of such applications only in accordance with the resolutions of the General Assembly which condemn using the media of information for hostile propaganda and urge States to utilize them for promoting friendly relations among nations, based upon the purposes and principles of the Charter. In particular, they shall undertake to regulate, at the world-wide level, direct broadcasting by artificial satellites, as regards both its technical and programme contents aspects. They undertake to refrain from using communication satellites for direct broadcasting until such regulations are set by the competent international organizations.

INDIA: AMENDMENTS TO ARTICLE VII OF THE USSR DRAFT

(Working paper No. 21, 28 July 1966)

1. Substitute the word "absolutely" for the word "internationally".

2. Add at the end of the article the following sentence: "The principle embodied in this article is subject to detailed provisions dealing with the various aspects of this principle."

to be included in a separate agreement on liability in case of damage."

INDIA: AMENDMENT TO ARTICLE IX OF THE USSR DRAFT

(Working paper No. 22, 28 July 1966)

Add at the end of the article the following:

"This article is subject to the provisions of a separate agreement to be concluded dealing with assistance to and return of astronauts and space vehicles."

USSR: PROPOSALS

(Working paper No. 23/Corr.1, 29 July 1966)

1. The following text is proposed for article I:

"The exploration and use of outer space, including the Moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries and shall be the province of all mankind.

"Outer space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies.

"There shall be freedom of scientific investigation in outer space, including the Moon and other celestial bodies, and States shall facilitate and encourage international co-operation in such investigation.

"All stations, installations, equipment and space vessels on celestial bodies shall be open to representatives of other States Parties to the Treaty engaged in activities on celestial bodies, on a basis of reciprocity and subject to agreement between the Parties with regard to the time of visits to such objects."

2. The following text is proposed for inclusion in the draft treaty:

"States Parties to the Treaty will accord other States Parties to the Treaty conducting activities relating to the exploration and use of outer space equal conditions for observing the flight of space objects launched by those States."

AUSTRALIA: PROPOSED NEW ARTICLE

(Working paper No. 25, 1 August 1966)

The provisions of this Treaty are adopted without prejudice to the negotiation of future specific agreements on the peaceful uses of outer space, including the Moon and other celestial bodies.

ITALY: PROPOSAL

(Working paper No. 26, 3 August 1966)

All States engaged in activities in outer space, on the Moon and other celestial bodies shall grant to representatives of all Parties to the Treaty free immediate access to their stations, equipment and space vessels, on the understanding that the time of the visit should not imperil the life of the personnel and the functioning of the installations involved.

ITALY: PROPOSAL

(Working paper No. 27, 3 August 1966)

The States Parties which conduct space activities through international organizations undertake that these activities will fully comply with the provisions of the Treaty.

A declaration to this effect may be transmitted by such an organization to [the depository authority].

JAPAN: AMENDMENT TO THE REVISED TEXT OF ARTICLE 6 OF THE UNITED STATES DRAFT TREATY (WORKING PAPER No. 3)

(Working paper No. 28, 4 August 1966)

All stations, installations, equipment, and space vehicles of any State Party to the Treaty on celestial bodies shall be open

at all times to representatives of any other State Party to the Treaty conducting activities on celestial bodies. Such representatives shall take maximum precautions not to interfere with the normal operation of activities therein.

### Appendix IV

#### Proposals submitted to the Sub-Committee at its resumed fifth session

USSR: REVISED TEXT OF THE ARTICLE CONTAINED IN PARAGRAPH 2 OF WORKING PAPER No. 23/CORR.1 OF 29 JULY 1966

(Working paper No. 29, 13 September 1966)

States Parties to the Treaty will accord other States Parties to the Treaty conducting activities relating to the exploration and use of outer space equal conditions for observing the flight of space objects launched by those States.

If the rendering of such assistance involves any expense for the State Party to the Treaty rendering the assistance, such expense shall be reimbursed by the State Party concerned by agreement between the two sides.

UNITED STATES: REVISION OF ARTICLE 6 OF THE UNITED STATES DRAFT TREATY

(Working paper No. 30, 12 September 1966)

All stations, installations, equipment and space vehicles on the Moon and other celestial bodies shall be open to representatives of other States Parties to this Treaty on a basis of reciprocity. Such representatives shall give reasonable advance notice of a projected visit in order that appropriate consultations may be held and that maximum precautions may be taken to assure safety and to avoid interference with normal operations in the facility to be visited.

UNITED STATES: REVISION OF ARTICLE 4 OF THE UNITED STATES DRAFT TREATY

(Working paper No. 31, 13 September 1966)

The States Parties to the Treaty take note of the desirability of the fullest exchange of information concerning the nature, conduct and locations of activities on celestial bodies and, to the extent feasible and practicable, will promptly submit reports to the other Parties to the Treaty or the Secretary-General of the United Nations and to the international scientific community.

USSR: PROPOSED NEW ARTICLE FOR INCLUSION IN THE DRAFT TREATY

(Working paper No. 32, 13 September 1966)

This Treaty shall not be construed as affecting the right of States Parties thereto to conclude any international agreements relating to the activities of States in the peaceful exploration and use of outer space, provided that such agreements do not conflict with the provisions of this Treaty.

UNITED ARAB REPUBLIC: AMENDMENT TO THE REVISED TEXT OF ARTICLE 4 OF THE UNITED STATES DRAFT TREATY (WORKING PAPER No. 31)

(Working paper No. 33, 14 September 1966)

The States Parties to the Treaty take note of the desirability of the fullest exchange of information concerning the nature, conduct and locations of activities on celestial bodies and, to the extent feasible and practicable, will promptly submit reports to the other Parties to the Treaty, the Secretary-General of the United Nations and to the international scientific community.

The United Nations should be prepared to disseminate this information immediately and effectively.



## ANNEX IV

## Recommendations of the Working Group of the Whole on the proposed international conference on the exploration and peaceful uses of outer space

(Excerpts from the second report of the Working Group of the Whole (A/AC.105/34))

3. At the conclusion of its first series of meetings, on 25 January 1966, the Working Group approved the following recommendations:

"I. The Working Group of the Whole, having examined the desirability, organization and objectives of the international conference or meeting to be held in 1967 on the peaceful uses of outer space, considers that an international conference of about two weeks' duration in the latter half of 1967 would be desirable.

"II. Accordingly, the Working Group recommends to the Committee on the Peaceful Uses of Outer Space the holding, under United Nations auspices, of an international conference in 1967 which would have the following objectives:

"(a) An examination of the practical benefits to be derived from space research and exploration on the basis of technical and scientific achievements and the extent to which non-space Powers, especially the developing countries, may enjoy these benefits, particularly in terms of education and development;

"(b) An examination of the opportunities available to non-space Powers for international co-operation in space activities, taking into account the extent to which the United Nations may play a role.

"III. It is suggested that these objectives could be successfully achieved through the preparation and delivery by qualified persons of a number of papers devoted *inter alia* to the following topics:

"(a) A general appraisal of the contributions which have been made and can be made in future by scientific and technical research in outer space and by international co-operation in providing practical benefits, especially for developing countries, in the fields of biology, medicine, communications, meteorology and navigation and in other fields;

"(b) The implications of space exploration for education, with special attention to the possibilities of establishing programmes for the education and training of specialists to assist the developing countries in the peaceful uses of outer space;

"(c) The various other implications of expanding space exploration and research;

"(d) The opportunities for participation in space exploration and research.

Papers on these topics would best serve the objectives of the conference if they were prepared in a manner which would make them meaningful to both scientists and non-scientists concerned with the welfare of their peoples in many fields. These papers should take into account possible contributions by the United Nations to promote international co-operation.

"IV. It is also recommended that detailed proposals regarding the organization of the proposed conference be prepared for consideration and approval by the Committee on the Peaceful Uses of Outer Space prior to the twenty-first session of the General Assembly. The Working Group, noting the need for further work on a number of questions, such as (a) the preparation of estimates of the financial implications related to the conference, and (b) recommendations regarding the time and place of the conference and other matters, and taking into account the need to avoid duplication of activities, entrusts to the officers of the Working Group the convening of the Working Group periodically, as the need may arise, in the interval between now and the session of the Committee on the Peaceful Uses of Outer Space at which this question is discussed. This activity is to be carried out by the Working Group in co-operation with the Secretary-General, making full use of the resources and facilities of the United Nations Secretariat

in formulating draft proposals on the administrative, financial and technical aspects connected with the preparation of the conference.

"V. It is further recommended that interested specialized agencies, as well as COSPAR, should be invited to participate as observers: and that other questions relating to participation and the venue of the proposed conference be considered by the Committee on the Peaceful Uses of Outer Space in the light of the objectives of the proposed conference and of the detailed proposals which will be submitted for the Committee's consideration prior to the twenty-first session of the General Assembly."

7. *Draft agenda.* The Working Group agreed to recommend to the Committee on the Peaceful Uses of Outer Space the following draft agenda for the proposed space conference:

*Introductory session:*

Review of the results of space research during the ten years of the space age. Basic scientific results in the physical exploration of the upper atmosphere and outer space, manned space flight, lunar and planetary research, with particular emphasis on their practical meaning.

*Thematic sessions:*

## 1. Communications:

Scientific, technical and economic aspects of radio and telephone communications and television using space satellites. Historical review. Possibilities and advantages of using space communications, including mass communications, for development, education and cultural purposes, taking into account the interest of the developing countries.

## 2. Meteorology:

Meteorological satellites and sounding rockets. Historical review. Development of experimental and operational systems and services including weather forecasting and weather research. Current and future research. Economic and social advantages of global and regional systems, taking into account the special geographical situation of developing countries.

## 3. Navigation:

Use of satellites for navigation and related services. Scientific and technical problems in development of space navigation systems. Economic evaluation. Studies of possible types of navigation systems.

## 4. Other space techniques of practical benefit:

Data-collecting systems. Geodetic applications. Earth resources surveys.

## 5. Biology and medicine:

Medical and biological problems in the study of outer space and the application of their solutions on earth. Use of the attainments of space biology and medicine in the interests of public health, industry and agriculture.

## 6. Non-space applications of space technology:

Spin-off to industrial technology of know-how acquired in space research activities. Current progress and prospects.

## 7. Education and training:

Use of the results of space research and applications in general and specialized education. Programmes and opportunities for education and training. Role of international organizations in this field.

## 8. International co-operation and opportunities for participation in space research and application:

Programmes, results and opportunities. The role of international organizations concerned with problems of outer space.

## 9. Economic, legal and social problems of exploration and use of outer space relevant to international co-operation and practical benefits.

## ANNEX V

## Financial implications of the proposed international conference on the exploration and peaceful uses of outer space

## Note by the Secretary-General

1. The Working Group of the Whole of the Committee on the Peaceful Uses of Outer Space has proposed that an international conference on the exploration and peaceful uses of outer space be held in the first two weeks of September 1967. The venue of the conference is to be decided by the Committee at its eighth session, in September 1966.

2. The following estimates of the costs related to the conference have been prepared so that the Committee may be advised of the approximate financial implications involved.

3. The estimates for the conference are based on the assumption that it will be held at Headquarters or at the United Nations Office, Geneva,<sup>a</sup> for a period of twelve working days in the first half of September 1967, prior to the twenty-second session of the General Assembly. In preparing the estimates, it has been assumed that:

(a) The travel and subsistence costs of participants will be borne by the Governments or organizations concerned;

(b) So far as possible, meetings will be held consecutively; provision will however be made for possible evening lectures and for group discussions;

(c) Simultaneous interpretation will be provided into English, French, Russian and Spanish;

(d) No verbatim or summary records will be circulated; the proceedings will be recorded on magnetic tape and summaries of the discussions will be prepared, if required, for use in the compilation of the final proceedings of the conference;

(e) In-session documentation will be limited to a short daily conference programme, a list of participants, a conference handbook and a list of conference papers;

(f) A total of not more than 150 papers, not exceeding twenty pages each, with illustrations, will be presented to the conference;

(g) Papers will be presented in one of the languages of the conference (English, French, Russian or Spanish) and distributed in that language;

(h) Participants will be requested to submit abstracts not exceeding 500 words (2 pages) in length in all of the four conference languages. The abstracts will be distributed in the languages in which they are submitted.

4. The estimates, which range from \$225,850 to \$576,850 depending on the decision to be taken regarding the form and content of the published proceedings, are as follows:

	\$	\$
A. Preparations for the conference .....		95,500
1. Up to 4 consultants for three months each will be required to assist in the preparation of the conference		
Fees, travel and subsistence .....	28,800	
2. 1 administrative assistant (G-5) and 2 secretaries (G-3) for nine months to assist the regular staff of the Outer Space Affairs Group and the consultants		
Salaries .....	17,700	
3. Typing of abstracts and reproduction of papers and abstracts:		
(a) Typing of 150 abstracts of 2 pages each in four languages .....	3,000	
(b) Reproduction of abstracts: total no more than 1,200 .....	12,000	
(c) Reproduction of 150 papers of 20 pages each (with illustrations) ...	34,000	

<sup>a</sup> Should the conference be held at Geneva, an additional provision of \$6,400 would be required to cover the costs of travel and subsistence of 8 substantive staff members from Headquarters who would attend the conference.

8. *Panel of experts.* With regard to the organization of the conference, the Working Group recommended:

(a) That the Chairman of the Committee on the Peaceful Uses of Outer Space, consulting with members of the Committee, select a panel of experts reflecting the composition of the main Committee to discharge certain necessary tasks in connexion with the preparation and conduct of the conference;

(b) That the terms of reference of the panel of experts should encompass the following functions: the establishment of deadlines for, and suitable lengths of, abstracts and papers to be submitted through States; the receipt, selection, and scheduling of papers for the conference, in accordance with the agreed agenda; and the nomination of a technical chairman and other technical officers as may be necessary for each individual session;

(c) That the panel of experts should start its work as soon as possible after the approval by the General Assembly of the appointment of the panel, and should be guided by the following additional considerations:

The conference is to extend over twelve working days, as far as possible in consecutive sessions, to accommodate as many papers as may be presented effectively on this basis, leaving suitable periods for questions and answers and group discussions.

Papers are to be selected on the basis of merit and relevance to the topics and main theme of the conference, giving due regard to the interests of developing nations and those reporting on space activities.

Provision should also be made for possible evening lectures by outstanding participants.

The panel shall function in co-operation with the Secretariat in consultation with, and under the guidance of, the Chairman of the Committee on the Peaceful Uses of Outer Space.

9. With further regard to the organizational aspects of the conference, the Working Group agreed to recommend:

(a) That the conference should not be empowered to make recommendations to Governments or to take decisions regarding policy;

(b) That every reasonable effort should be made to minimize the costs of the conference to the United Nations, which should not exceed an amount to be determined by the Committee on the Peaceful Uses of Outer Space on the basis of estimates to be furnished by the Secretariat;

(c) That to contribute to this objective, States shall submit papers in one of the official languages of the conference, and abstracts in the languages of the conference, and that abstracts and papers selected for presentation shall be prepared for distribution in this form.

10. *Date and place.* The Working Group also discussed the date and place of the proposed conference. With regard to date, it was agreed to recommend that the conference should be held in the first part of September 1967 prior to the opening of the twenty-second session of the General Assembly. With regard to place, a number of members of the Working Group expressed the view that the conference should be held in Europe. Others, however, were of the opinion that the conference should be held at United Nations Headquarters or, if elsewhere, in accordance with the provisions of General Assembly resolution 2116 (XX). The Working Group noted with appreciation the generous offers of the Governments of France and Austria to invite the conference to meet in Paris or Vienna. It was agreed that no recommendation should be made on this point and that the matter should be referred to the Committee on the Peaceful Uses of Outer Space for decision. It was further agreed that the Secretariat should be requested to furnish revised estimates showing the comparative costs to the United Nations for the various sites under consideration.

