

REPORT OF THE COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE

GENERAL ASSEMBLY

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NOTE

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ANNEX

Opening statement by the Chairman at the 144th meeting of the Committee on 9 June 1975 $\,$

I. INTRODUCTION

1. The Committee on the Peaceful Uses of Outer Space held its eighteenth session at United Nations Headquarters from 9 to 20 June 1975 under the chairmanship of Mr. Peter Jankowitsch (Austria). Mr. Ion Datcu (Romania) served as Vice-Chairman and Mr. Luiz Paulo Lindenberg Sette (Brazil) as Rapporteur. The verbatim records of the Committee's meetings are contained in documents A/AC.105/PV.144-156.

Meetings of subsidiary bodies

- 2. The Legal Sub-Committee held its fourteenth session at the United Nations Headquarters from 10 February-7 March 1975 under the chairmanship of Mr. Eugeniusz Wyzner (Poland). The summary records of the Sub-Committee's meetings are given in documents A/AC.105/C.2/SR.226-245. The report of the Sub-Committee was issued under the symbol A/AC.105/147.
- 3. The Scientific and Technical Sub-Committee held its twelfth session at United Nations Headquarters from 21 April to 2 May 1975 under the chairmanship of Mr. J. H. Carver (Australia). The summary records of the Sub-Committee's sessions are contained in documents A/AC.105/C.1/SR.136-152. The report of the Sub-Committee was issued under the symbol A/AC.105/150.

Eighteenth session of the Committee

- 4. The Committee on the Peaceful Uses of Outer Space, at its opening meeting, on 9 June 1975, adopted the following agenda:
 - 1. Statement by the Chairman.
 - 2. General debate.
 - 3. Consideration of:
 - (a) Report of the Legal Sub-Committee (A/AC.105/147);
 - (b) Report of the Scientific and Technical Sub-Committee (A/AC.105/150).
 - 4. Other matters.
 - 5. Report of the Committee to the General Assembly.
- 5. Having been informed that its Rapporteur, Mr. Luiz Felipe de Seixas-Corrêa had been assigned to a new post, the Committee at its 144th meeting elected Mr. Luiz Paulo Lindenberg Sette as its new Rapporteur.
- 6. Representatives of the following Member States attended the session:
 - Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chad, Chile, Czechoslovakia, Egypt, France, German Deomcratic Republic, Germany

(Federal Republic of), Hungary, India, Indonesia, Iran, Italy, Japan, Kenya, Lebanon, Mexico, Mongolia, Nigeria, Pakistan, Poland, Romania, Sierra Leone, Sudan, Sweden, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, United States of America and Venezuela.

- 7. In addition to the reports of its subsidiary bodies, the Committee had before it the following documents:
 - A/AC.105/142/ Question of convening a United Nations conference on space Add.2-3 applications
 - A/AC.105/151 Presentation of information by the Inter-Governmental
 Maritime Consultative Organization on the establishment
 of a maritime satellite system
 - A/AC.105/L.83 Venue of the meetings of the Legal Sub-Committee
 - A/AC.105/L.84 Consideration of the report of the Scientific and Technical Sub-Committee; question of convening a United Nations conference on space; proposal submitted by Austria and India.
 - A/AC.105/L.86 Paragraphs suggested for inclusion in the Committee's report under agenda item 4 (a): working paper submitted by Australia.
- 8. A representative of the United Nations Development Programme (UNDP) and representatives of the following specialized agencies attended the session: International Labour Organisation (ILO), Food and Agriculture Organization of the United Nations (FAO), United Nations Educational, Scientific and Cultural Organization (UNESCO), Inter-Governmental Maritime Consultative Organization (IMCO). The representatives of the Committee on Space Research (COSPAR) of the International Council of Scientific Unions and the European Space Agency (ESA) also attended the session.
- 9. A list of the representatives of the Member States and specialized agencies attending the session is contained in document A/AC.105/SVIII/INF.1.
- 10. At the opening of the session, at the 144th meeting, the Chairman of the Committee made a statement reviewing the work of the Committee's subsidiary bodies and outlining the work of the Committee. The text of the Chairman's statement is annexed.
- ll. At the same meeting, the Chairman also made a statement conveying the condolences of the Committee on the deaths of Academician A. A. Blagonravov, M. Jean-Félix Charvet and Dr. Franco Fiorio, after which the Committee observed a minute of silence in tribute to their memory.
- 12. During the general debate, the Committee heard statements on the successful preparations that were underway for the United States/USSR joint Apollo-Soyuz flight to be launched on 15 July 1975. In extending its good wishes to the Governments of the United States and the Soviet Union for a successful launch of the Apollo-Soyuz flight, the Committee expressed the hope that the

friendship and co-operation which marked this flight would extend to future international co-operative efforts in the peaceful exploration of outer space.

- 13. The Committee held its general debate on the items before it at the 144th to 148th meetings, from 9 to 12 June 1975, in the course of which statements were made by the representatives of Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Czechoslovakia, Egypt, France, the German Democratic Republic, Germany (Federal Republic of), India, Iran, Italy, Japan, Kenya, Mexico, Mongolia, Pakistan, Poland, Romania, Sweden, Union of Soviet Socialist Republics, United Kingdom of Great Britain and Northern Ireland, United States of America and Venezuela. Those statements are contained in the verbatim records of the 144th to 148th meetings of the Committee (A/AC.105/PV.144-148).
- 14. The representative of COSPAR as well as the representatives of ESA and the European Broadcasting Union (EBU) also made statements, which appear respectively in the records of the 145th, 148th and 150th meetings (A/AC.105/PV.145), A/AC.105/PV.148 and A/AC.105/PV.150).
- 15. The Committee had before it a letter dated 22 May 1975 from EBU requesting observer status with the Committee. The Committee decided to grant a representative of EBU the possibility to address the Legal Sub-Committee and the main Committee whenever the question of direct interest to this organization, namely, direct broadcasting by satellites, was discussed.
- 16. After considering the various items before it, the Committee, at its 156th meeting, on 20 June 1975, adopted its report to the General Assembly containing the recommendations and decisions set out in the paragraphs below.

II. RECOMMENDATIONS AND DECISIONS

A. Report of the Legal Sub-Committee

- 17. The Committee took note of the report of the Legal Sub-Committee on the work of its fourteenth session (A/AC.105/147), covering the results of its deliberations of the four items assigned to it by General Assembly resolution 3234 (XXIX).
- 18. The Committee noted that the Legal Sub-Committee had pursued its work on the draft treaty relating to the moon, in particular through the re-establishment of its Working Group I, as referred to in paragraphs 9 to 23 of the Sub-Committee's report, giving priority to the question of natural resources of the moon, regarded by many delegations as the problem whose solution would facilitate an agreement on the two other remaining issues on the scope of the treaty and the information to be furnished on missions to the moon. The Committee noted that as a result of the debate which took place in the Working Group, the texts concerning natural resources were redrafted into articles X and X bis, although a number of words or sentences still appeared in square brackets and certain provisions were drafted in two versions, both of which were placed in square brackets. The Committee commended the two draft articles to Member States for thorough examination as a possible basis for reaching a compromise solution of the problem of natural resources of the moon.
- 19. The Committee agreed that the Legal Sub-Committee at its fifteenth session should continue to consider, as a matter of high priority, the draft treaty relating to the moon.
- 20. The Committee noted that the Legal Sub-Committee had pursued its work on the question of elaboration of principles governing the use by States of artificial earth satellites for direct television broadcasting, in particular through the re-establishment of its Working Group II, with a view to concluding an international agreement or agreements in accordance with General Assembly resolutions 2916 (XXVII) of 9 November 1972 and 3234 (XXIX) of 12 November 1974, was able to make further progress by drafting texts of principles on several new provisions in addition to continuing its work on the texts of five principles drafted at its 1974 session. The Committee expressed its satisfaction with the complete set of principles drafted by the Working Group and reproduced in annex II of the Legal Sub-Committee's report, including formulations on which consensus had been reached, in addition to texts of principles which include words or sentences in square brackets, or alternative formulations, on matters where consensus could not be reached at the present stage of its work.
- 21. The Committee agreed that the Legal Sub-Committee at its fifteenth session should continue to consider, as a matter of high priority, the elaboration of principles governing the use by States of artificial earth satellites for direct television broadcasting with a view to concluding an international agreement or agreements, in accordance with General Assembly resolutions 2916 (XXVII) and 3234 (XXIX).

- 22. The Committee noted that the Legal Sub-Committee was able to begin detailed consideration this year of the item relating to legal implications of earth resources survey by remote sensing satellites as requested by General Assembly resolution 3234 (XXIX) of 12 November 1974. The Committee noted with satisfaction that the Working Group III established by the Legal Sub-Committee to consider the questions relating to this item was able to ascertain certain common elements to be found in the three draft international instruments submitted to it for consideration as well as the views expressed by many Member States, among which were:
- (a) That remote sensing activities by means of space technology should be conducted for the benefit and in the interest of all mankind; this new technology would be of particular significance to developing countries in their plans and programmes for national development;
- (b) That remote sensing activities by means of space technology should be conducted in accordance with international law, including the United Nations Charter and the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies;
- (c) That the maximum benefits to all countries could be obtained by international co-operation at all levels, particularly on a regional basis;
- (d) That States undertaking programmes for remote sensing activities by means of space technology should encourage international participation;
- (e) That in remote sensing activities by means of space technology measures should be taken to promote efforts for the protection of the natural environment of the earth.

The Committee also noted that, in addition to the areas of agreement referred to above, there were several other main questions which were raised and considered by the Working Group.

- 23. The Committee agreed that the Legal Sub-Committee at its fifteenth session should be requested to carry out, as a matter of high priority, the following:
- (a) To continue its detailed legal consideration of remote sensing from space of the earth (i.e. of its natural resources and its natural environment), taking into account the various views of States expressed on the subject, including proposals for draft international instruments, and taking into account all relevant discussions, views and conclusions concerning organizational, economic and technical aspects of remote sensing in the Scientific and Technical Sub-Committee including those contained in the report of its twelfth session (A/AC.105/150, paras. 15-29), with a view to identifying further common elements among the views of States;
- (b) To proceed to the drafting of principles in regard to those particular areas of the subject where common elements in the views of States are identified.
- 24. The Committee, while noting that there remained areas where consensus had not yet been reached on the three items referred to in paragraphs 18 to 23 above, was

encouraged by the progress made and expressed the hope that more progress could be achieved in the next session of the Legal Sub-Committee.

- 25. The Committee also noted that matters relating to the definition and/or delimitation of outer space and outer space activities had also been discussed by the Legal Sub-Committee at one of its meetings and that there had been a useful and interesting exchange of views. It also noted that during the discussion the importance of this subject had been stressed and hope had been expressed that at its future sessions the Sub-Committee would be able to consider the item in greater detail.
- 26. The Committee agreed that the Legal Sub-Committee at its fifteenth session should continue its work on matters relating to the definition and/or delimitation of outer space and outer space activities.
- 27. During the present session, the Italian delegation submitted a proposal on the precise delimitation of outer space, to be divided into two zones (atmospheric and outer space), and to fix the "vertical frontier" at about 90 kilometres from the surface of the earth (A/AC.105/PV.155). The Committee took note of the above with interest.
- 28. In the course of the present session, the delegation of Argentina put forth ideas and suggestions relating to the legal aspects of the formation and operation of international co-operative ventures for space applications. These were noted with interest by the Committee.
- 29. The Committee having discussed the items relating to (a) the draft treaty relating to the moon (see paras. 18 and 19 above); (b) the elaboration of principles governing the use by States of artificial earth satellites for direct television broadcasting (see paras. 20 and 21 above); (c) legal implications of remote sensing of the earth from space (see paras. 22 and 23 above); (d) matters relating to the definition and/or delimitation of outer space and outer space activities, and having noted the opinion expressed by the Legal Sub-Committee in paragraph 15 of its report that at its next session it should continue to consider with the same high priority the issues covered by items (a), (b) and (c) above, called upon the Legal Sub-Committee to continue its work on this basis at its next session. The Committee also requested the Legal Sub-Committee to continue its work on item (d) above.

B. Report of the Scientific and Technical Sub-Committee

30. The Committee took note of the report of the Scientific and Technical Sub-Committee on the work of its twelfth session (A/AC.105/150). In considering the various recommendations of the Sub-Committee contained in the report, the Committee expressed its views as set out in the following paragraphs.

1. Remote sensing of the earth from space

31. The Committee noted with satisfaction that the Scientific and Technical Sub-Committee, in its examination of the question of remote sensing of the earth from space, had considered in detail both the current pre-operational/experimental phase as well as a possible future global international operational remote sensing

system or systems. The Committee further noted the views of the Sub-Committee on these matters as set out in paragraphs 27 and 28 of its report.

- 32. The Committee confirmed the view of the Scientific and Technical Sub-Committee that further studies of organizational and financial matters should progress together with consideration of the legal aspects of remote sensing, and with the view to facilitate the continued important work of the Scientific and Technical Sub-Committee in the field of remote sensing. Taking into consideration the tasks of the Legal Sub-Committee as set forth in paragraph 23 of this report, and without prejudice to the fulfilment of those tasks, the Committee endorsed the recommendation of the Sub-Committee that the Secretariat should be requested to prepare for the consideration of the Sub-Committee at its thirteenth session the following studies:
- (a) An analytical report on actual and predicted costs and benefits involved in the practical application of remote sensing. A report of this nature would be based on material mentioned in document A/AC.105/139 and Add.1 and any further information available.
- (b) A feasibility study, using resources at its disposal, on a possible co-ordinating function for the United Nations regarding future operational remote sensing activities. Such a function could possibly be combined with any future operational global (international) centre for data storage, analysis and dissemination under the auspices of the United Nations. Such a study would have to be conducted in close contact with those specialized agencies which have already involved themselves in international/global remote sensing programmes, taking into account the considerations mentioned in paragraph 27, subparagraph (xii), of document A/AC.105/150.
- (c) An information paper on existing or planned national or regional ground stations, including those for direct reception of remote sensing data from NASA's LANDSAT programme and centres for data-processing, storage and dissemination. Such a paper, which would have to be compiled in close contact with the Governments and agencies concerned, might include information on technical characteristics, management and ownership, staffing, costs, national and international (regional) user contacts and policies, priority applications, benefits, volume of data handled or envisaged, etc.
- (d) A preliminary study on the organizational and financial requirements of a future operational space segment for global coverage to be internationally operated, owned and financed with explicit reference to the role of the United Nations. This study would include both a brief outline of possible technical configurations and a presentation of organizational and financial alternatives for an international co-operative venture. In the first instance, special emphasis should be given to a definition and an evaluation of certain assumptions regarding user requirements and priorities and regarding technical constraints on the system.
- 33. The Committee also endorsed the recommendation of the Sub-Committee that the Secretary-General be requested to undertake the following practical steps:
- (a) In co-operation with the appropriate specialized agencies, to explore the feasibility of utilizing existing facilities and expertise to establish on an

experimental basis an international centre which could train and assist persons from developing countries to make the most effective use of remote sensing information. If the study demonstrated that such an experiment could be implemented without additional financial implications, the Sub-Committee was of the view that it should be carried out and a full report on the results should be submitted to the Sub-Committee at its next session.

- (b) To undertake an appropriate users survey, utilizing the services of UNDP, the regional economic commissions and other United Nations bodies as appropriate for obtaining a clearer understanding of the real needs of the users and their stage of preparedness in this area of activity.
- 34. The Committee, noting that the question of definitions of aspects relevant to remote sensing already was before the Legal Sub-Committee, requested the Scientific and Technical Sub-Committee to consider possible scientific and technical criteria relevant to the definition, for purposes of remote sensing, of the terms "natural resources of the Earth" and "data on the natural resources of the Earth acquired by means of remote sensing" and to transmit its findings in this regard to the Legal Sub-Committee at its next session.

2. United Nations programme on space applications

- 35. The Committee noted the report of the Sub-Committee relating to the status of the United Nations programme on space applications, as set out in chapter II of that report (A/AC.105/150), and noted with satisfaction that further progress had been made in the implementation of the United Nations programme on space applications. In this connexion, the Committee expressed appreciation to the expert on space applications on the excellent work he had performed.
- 36. The Committee endorsed the United Nations programme on space applications for 1976 as proposed to the Scientific and Technical Sub-Committee by the expert on space applications. Several representatives expressed the view that the United Nations programme should be expanded as regards both its content and its scope. The Committee took the view that any expansion of the United Nations space applications programme should be based on a careful and substantive assessment of the need for such expansion. The Committee took note of a proposal that the Sub-Committee request the United Nations expert on space applications, in formulating his annual proposals for inclusion in the programme, to seek, at least six months before the submission of the programme, the views of Member States regarding the advisability of adopting each of the measures included by him in the programme, and that the Committee considered that this would be of valuable assistance in increasing the effectiveness of the programme.
- 37. The Committee noted that, in reviewing the future United Nations programme on space applications, the Sub-Committee had before it the report on the needs of developing countries for assistance in the practical applications of space technology (A/AC.105/143 and Add.1-3). In this connexion, the Committee agreed with the view of the Sub-Committee that, while the number of replies from Member States contained in the report was relatively small, they identified the needs of those developing countries which had replied to the questionnaire, particularly the importance of education and training, and endorsed the suggestions of the Sub-Committee that the Secretary-General again draw the attention of Member States

to the questionnaire of 19 August 1974 in order to obtain a wider range of replies for the consideration of the Sub-Committee at its next session.

- 38. The Committee expressed its appreciation to the Governments of Japan, Egypt, Brazil and Canada for hosting United Nations-sponsored panels/seminars/workshops in 1974 and 1975 and to the Governments of Mexico, Kenya, Indonesia, Iran, the Federal Republic of Germany, the United Kingdom, India and Pakistan for agreeing to host United Nations-sponsored panels/seminars/workshops or technical visits in 1975 and 1976.
- 39. The Committee further expressed its appreciation of the assistance provided by the specialized agencies in co-sponsoring or participating in the various regional seminars and workshops held in 1974 and 1975 and those envisaged for 1975 and 1976, as set out in paragraphs 32 to 40 of the Sub-Committee's report.
- 40. The Committee also expressed its appreciation to the International Astronautical Federation (IAF) for agreeing to host a joint United Nations/IAF training workshop on remote sensing applications in the early autumn of 1976 in the United States.
- 41. The Committee renewed its recommendation to Member States engaged in space applications programmes to invite the holding of such panels, either on a regional or on a wider basis, with a view to the widest possible spread of information and sharing of experience in this new area for development, especially that of the developing countries.
- 42. The Committee expressed its appreciation for the offers of fellowships for training in the area of practical applications of space technology made by the Governments of Brazil, Italy, Japan, the United Kingdom and the United States, as noted in paragraph 47 of the Sub-Committee's report. The Committee also expressed its appreciation for the offer of fellowships made at the present session by the Government of Belgium. The Committee commended the fellowships to the attention of Member States, particularly the developing countries.
- 43. The Committee noted with interest the suggestion made by the Chairman, supported by the delegation of Argentina, that, in view of the increasing importance of solar energy as a potential future source of energy, the Committee might begin to look at its role in developing modes of international co-operation necessary to bring the benefits of this new source of energy to all nations through space technology, taking into account work already being carried out in the United Nations, the specialized agencies and other organizations.

3. Co-ordination within the United Nations system

44. The Committee discussed the need for ensuring effective co-ordination of the activities of the United Nations and the specialized agencies in the area of space applications and heard a statement in this connexion from the representative of the Office of Inter-Agency Affairs. The Committee, having commented favourably on the need for ensuring effective interagency co-ordination which would assist in increasing the effectiveness of the progress in the area of space applications, agreed with the views of the Scientific and Technical Sub-Committee as set forth in paragraph 51 of its report. The Committee noted in this connexion the efforts that were being made in this direction in the context of the Administrative

Committee on Co-ordination (ACC), in particular towards the establishment of a standing body of ACC to deal with matters relating to space applications, and recommended that the Secretary-General present a report on the results of these efforts to the thirteenth session of the Scientific and Technical Sub-Committee. Some delegations also made specific proposals as to how the effectiveness of interagency meetings could be enhanced in order that a useful programme in this field could be developed.

45. The Committee commented favourably on the need for ensuring better co-ordination between its two Sub-Committees which would assist in increasing the effectiveness of the progress in the areas being under consideration by these Sub-Committees. In this connexion, the Committee felt that its Scientific and Technical Sub-Committee could assist in the work of the Legal Sub-Committee by reviewing at an appropriate time its examination of criteria connected with the definition and/or delimitation of outer space, taking account of the contents of documents A/AC.105/39 of 6 September 1967 and A/AC.105/C.2/7 of 7 May 1970, as well as considering scientific and technical criteria for defining the notion of "natural resources of the Moon and other celestial bodies" and possible ways, means and time-limits for their exploitation.

4. Exchange of information

- 46. The Committee noted with appreciation the reports submitted by Member States on their national and co-operative space programmes during the calendar year 1974 (A/AC.105/146 and Add.1-4). It further agreed with the Scientific and Technical Sub-Committee that the reports reflected a most encouraging trend towards expanded international co-operation bilaterally as well as multilaterally in the peaceful uses of outer space, as noted in paragraph 59 of its report.
- 47. The Committee also noted that the Scientific and Technical Sub-Committee had welcomed the arrangements being made by the Secretariat to publish the revised edition of the review of 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.105/100 and Add.1-3), and expressed the hope that the information provided would also reflect assistance extended to developing countries in the area of practical applications of space technology. The Committee noted the view expressed that the format of the review could be improved by providing information under subject areas such as technical assistance, including education and training.
- 48. The Committee recommended that the Secretary-General, making full use of the resources at his disposal and in co-operation with the specialized agencies concerned, submit a report to the Committee at its nineteenth session on ways and means by which the United Nations system might implement a full-scale programme of public information in the peaceful uses of outer space, particularly on those aspects of space applications which have special reference to the problems being faced by developing countries. In preparing such a report, attention should be given to the development of a programme with modest financial implications, bearing in mind the specific audience to which it should be addressed.
- 49. The Committee expressed its appreciation for receipt of the progress reports submitted by IMCO on the International Conference on the Establishment of an International Maritime Satellite System, held in London from 23 April to 9 May 1975,

and expressed the hope that the Committee would be kept informed of further developments that might be relevant to its work.

5. International sounding rocket launching facilities

50. The Committee shared the satisfaction expressed by the Sub-Committee in paragraph 74 of its report on the work being carried out at the Thumba Equatorial Rocket Launching Station of the Vikram Sarabhai Space Centre in India and the CELPA Mar del Plata Rocket Launching Station in Argentina relative to the use of sounding rocket facilities for international co-operation and training in the peaceful scientific exploration of outer space. The Committee accordingly recommended that the General Assembly continue to grant sponsorship to these two ranges.

6. Possible United Nations conference on space

- 51. The Committee noted the views expressed by Member States regarding the idea of a conference dedicated to space matters and the possibility that space applications be included in the United Nations Conference on Science and Technology proposed for the late 1970s, as well as the Sub-Committee's recommendation that further efforts be made to define the purpose, objectives and scope of the possible options. In the light of these developments, the Committee recommended that the Scientific and Technical Sub-Committee devote a number of meetings during its thirteenth session, including the possiblity of convening an informal working group during that session, to consider the desirability of holding an international conference on space matters, and to report on this subject to the Committee at its nineteenth session, taking into account the various views and suggestions made and options referred to in the replies received from Member States to the questionnaire sent out by the Secretary-General on 13 August 1974 and in the course of statements made in the Scientific and Technical Sub-Committee, in the Committee on the Peaceful Uses of Outer Space and in the General Assembly.
- 52. The Committee noted with interest the information contained in document A/AC.105/142/Add.2 on a possible United Nations Conference on Science and Technology which is discussed in the context of the Economic and Social Council. It was agreed that, in view of the proposed main objectives of that Conference (para. 4) of the above document), attention should be paid to matters relating to space applications for peaceful purposes at any conference with these objectives. The Committee commended this view for the consideration of the Preparatory Committee for the Science and Technology Conference. The possible role of the Committee on the Peaceful Uses of Outer Space in preparing for such a conference should be considered at its nineteenth session.

7. Future work of the Sub-Committee

53. The Committee took note of the views of the Scientific and Technical Sub-Committee regarding its future role and work, as expressed in paragraph 55 in the Sub-Committee's report, and endorsed the recommended priorities for the work programme as contained therein.

III. SCHEDULE OF WORK OF THE COMMITTEE AND ITS SUBSIDIARY BODIES

Schedule of meetings for 1976

54. The Committee, having deliberated on the matter, agreed on the following schedule of meetings for 1976:

	<u>Time</u>	Location
Scientific and Technical Sub-Committee	22 March-9 April	New York
Legal Sub-Committee	3-28 May	Geneva
Committee on the Peaceful Uses of Outer Space	28 June-9 July	New York

Related matters

- 55. The Committee, recalling its recommendation in paragraph 62 of the report on its last session, and noting the views expressed in that connexion by the Legal Sub-Committee and the Scientific and Technical Sub-Committee in paragraphs 16 and 57 of their reports respectively, expressed its preference for scheduling future sessions of the Committee and its two sub-committees within the same time period as that allocated for 1976.
- Sub-Committee, the Committee had before it a letter dated 10 June 1975 from the Acting Chairman of the Committee on Conferences addressed to the Chairman of the Committee on the Peaceful Uses of Outer Space, commending for the consideration of the Committee on the Peaceful Uses of Outer Space the recommendation made by the Committee on Conferences to the General Assembly that, starting in 1977, the meetings of the Legal Sub-Committee of the Committee on the Peaceful Uses of Outer Space be held in New York. A number of delegations expressed the view that they could not agree with the above recommendation. The Committee on the Peaceful Uses of Outer Space was of the view that the General Assembly should take fully into account the Committee's opinion that the former practice agreed to by it at its 107th meeting on 15 December 1971 (A/AC.105/PV.107, p. 32) of holding the meetings of the Legal Sub-Committee in rotation between Geneva and New York should be maintained.
- 57. The delegation of Canada, with a view to enhancing the effectiveness of the work of the Committee and its subsidiary bodies, suggested, inter alia, that the time allocated for the sessions of these bodies should be reduced and that the time allocated to the general debate of those bodies should be limited. The Committee took note of the observations made in support of as well as against this suggestion.

ANNEX

Opening statement by the Chairman at the 144th meeting of the Committee on 9 June 1975

Before proceeding with the statement of the Chairman, which traditionally takes place at the beginning of our work, I should like to welcome here Mr. Luboš Perek, who has assumed the duties of Chief of the Outer Space Affairs Division in the United Nations Secretariat. He succeeds Mr. Abdel-Ghani, who left the Division and has since joined the services of his Government and whom we welcome here today in another capacity. On behalf of the Committee, I therefore welcome Mr. Perek. We look forward to co-operating with him in our work, as we did with his predecessor.

The past year which is under review in our work was one of many significant developments relating to the exploration of outer space. A great number of remarkable scientific feats were and are being conducted in outer space, particularly by the major space Powers. Mention should be made here of the continued success of the United States LANDSAT I programme and the progress of the United States ATS-6 satellite, which has now been moved over India with experimental educational satellite programmes to begin there shortly. These are programmes which relate directly to our work. We hope that these experiments will be most successful so that operational programmes with far-reaching impact for economic and social development can be launched in a short while.

On behalf of the Committee, I wish to congratulate India for having successfully orbited an experimental satellite - ARYABHATA - thereby joining the outer space club. This effort is particularly significant as the satellite and its experiments have been fully developed by scientists from a developing country. It is thus a truly outstanding achievement, and I should like to ask the representative of India to convey our sense of admiration to his Government.

In Europe, an event of great importance took place on 30 May 1975 when the European Space Agency (ESA) officially came into being. The signing of the Convention of ESA on that day in Paris followed an agreement of principle for the creation of the Agency some two years ago. The Agency, which up to now has consisted of 10 members, is the successor of ELDO and ESRO and will, as one of the most important of its projects, take part in the development of the Spacelab programme.

Finally, it was with great satisfaction that we noted the success of the preparations for the joint Apollo-Soyuz flight in the coming month of July. The Apollo-Soyuz programme, which originated during the visit to Moscow of President Nixon in May 1972, has offered a splendid opportunity to peaceful international co-operation in outer space and is thus of a significance which widely transcends the actual event. It is our hope here that the path traced by the Apollo-Soyuz flight will remain open and that the example of friendship and co-operation set by the American and Soviet astronauts will be widely emulated. And for the spaceflight on 15 July, the good wishes of this Committee go to cosmonauts Aleksei Leonov and Valeriy Lubasov of the Soviet Union and to astronauts Thomas Stafford, Vance Brand and Donald Slayton of the United States of America.

Those are just a few of the outstanding space events of the past year, and it is only because of the limitations imposed by time and the agenda that more of them cannot be mentioned here. However, I am sure that the Committee would like to express a tribute of gratitude and admiration not only to all space nations but, in particular, to all space scientists, space workers and astronauts, who in the past year gave new proof of their exceptional devotion to the idea of space exploration.

As representatives are all aware, during this year the subsidiary bodies of this Committee have accomplished a great deal of work to be reviewed during this session of the Committee. The reports of these bodies now before us embody the extent of the work carried out by them. Their successes were due in great part to the most able leadership of their chairmen: Mr. Carver, of Australia, who again chaired the Scientific and Technical Sub-Committee; and Ambassador Wyzner, of Poland, who chaired the Legal Sub-Committee, to both of whom I wish to convey the appreciation of this Committee.

In briefly reviewing the work of those two Sub-Committees, I shall begin with the Legal Sub-Committee, which, in accordance with the provisions of General Assembly resolution 3234 (XXIX), gave priority at its last session to three principal areas of work: first, the draft treaty relating to the moon; secondly, the elaboration of principles governing direct broadcast satellites; and thirdly, implications of remote sensing of the earth by satellites. With regard to those subjects, the Sub-Committee established a Working Group on the moon treaty, chaired by Professor Gyorgy Harazti of Hungary; a Working Group on Direct Broadcast Satellites, chaired by Mr. Vellodi of India; and a Working Group on Remote Sensing of the Earth by Satellites, chaired by Mr. Abdel-Ghani of Egypt.

While the reports of each of the Working Groups were accepted by the Sub-Committee virtually without change, discussions within the Working Groups reflected the difficult issues confronting the Sub-Committee in regard to these topics and the extent to which reconciliation of conflicting viewpoints was considered possible.

The debate concerned the draft moon treaty, which began in 1972 and resulted in agreement in 1973 on the text of 21 articles and the preamble but which, as members know, had not shown much progress since then, continued to focus, at the last session, on the question of the appropriate legal régime governing the exploitation of the natural resources of the moon. Several new proposals were made and were discussed in Working Group I of the Sub-Committee.

As a result of the debates in the Working Group and the Sub-Committee, the texts concerning natural resources were redrafted into articles X and X <u>bis</u>. In the draft, however, a number of words or sentences still appeared in square brackets, owing to the lack of a consensus. For the same reason, certain provisions were formulated in two versions, and, in that case, both texts were placed in square brackets. The texts of articles X and X <u>bis</u> are reproduced as annex I to the report of the Legal Sub-Committee.

No final agreement was reached on the main outstanding issues relating to the legal status of the natural resources of the moon and the scope of the treaty, and therefore the Sub-Committee considered that it should continue its work at its next session again with the same high priority. As this is a matter that was considered in detail in formal and informal meetings at the last session of this Committee, we might perhaps consider holding consultations with a view to narrowing

the gap between the various views held by members on these two main outstanding issues. As in the past, I shall hold myself available for any action, formal or informal, the Committee might wish to take in this matter.

The principal task assigned to the Legal Sub-Committee in regard to the item on direct broadcast satellites was the formulation of principles governing such broadcasts, with a view to concluding an agreement or agreements on that subject. The Sub-Committee's task in dealing with this item at its session in 1974, as well as this year, was made easier by the interdisciplinary discussions carried out previously by the Working Group on Direct Broadcast Satellites, which had been meeting since 1969 to discuss the technical, political, legal, social and economic implications of this new technology.

At its 1974 session the Legal Sub-Committee, drawing on the report of the Working Group in document A/AC.105/127, discussed five of the 14 principles identified by the Working Group on which the formulation of principles were required, and reached a general consensus in regard to five of those principles - namely, applicability of international law; rights and benefits of States; international co-operation; State responsibility; and possible settlement of disputes.

The Legal Sub-Committee, through its Working Group II, at its session this year discussed both the five principles dealt with earlier and the other remaining principles not hitherto discussed. It was able to make considerable progress in this area, succeeding in reducing many of the bracketed phrases in the first five principles formulated in 1974 and also in formulating a number of other principles on which a great deal of consensus could be reached. Thus, it reached complete agreement on State responsibility and peaceful settlement of disputes and formulated alternative principles in regard to other principles - such as the ones on purposes and objectives, consent and participation, and duty and right to consult, without bracketed phrases, as well as in regard to some others with virtually no brackets, such as the ones on the principles relating to international co-operation and spill-over. The discussions also helped members to move toward a general consensus: that the concept of prior consent and the concept of freedom of information, which are the key issues relating to these questions, were not necessarily incompatible. The text of the principles worked out by the Sub-Committee through its Working Group, some of which include words or sentences in square brackets or alternative formulations on matters where a consensus could not be reached, are reproduced as annex II to the report of the Sub-Committee.

The Sub-Committee has thus made considerable progress and, with the co-operation of all members concerned, I hope we can assist in the process of trying to resolve some more of the outstanding items at this session of the Committee.

The case of the final priority item on the Legal Sub-Committee's agenda was different from that of the two preceding subjects, where the Sub-Committee was called upon to complete a draft treaty or formulate principles with a view to concluding an agreement. On that subject - that is, remote sensing - the Sub-Committee, which was considering the item for the first time, was called upon merely to consider the legal implications of the matter in the light of various proposals and views emanating from member States. Thus, the task assigned to the Legal Sub-Committee in this area was difficult in terms both of procedure and of substance. However, with the help of its Working Group, it was able to agree on identifying certain common elements in the proposals before it, including, for

instance, the principles that, first, remote sensing should be conducted for the benefit of mankind and, secondly, all States have the right to conduct remote sensing under international law.

Further progress in the Sub-Committee would seem to require more substantive discussions in regard to a number of important issues related to this matter, and I hope we shall be able to clarify some of them at the present session of this Committee.

Paragraph 15 of the report of the Legal Sub-Committee expresses the opinion that at its next session the Sub-Committee should continue to consider with the same high priority the three issues I have discussed earlier in this statement: the moon treaty, direct broadcast satellites, and remote sensing of the earth by satellites.

The Sub-Committee discussed also at one of its meetings the question of the definition and/or delimitation of outer space and outer space activities, and there was a useful and interesting exchange of views. During the discussion the importance of the subject was stressed and the hope was expressed that at its future sessions the Sub-Committee would be able to consider the item in greater detail.

Finally with respect to the work of the Legal Sub-Committee, it had an interesting and detailed discussion also with regard to the date and venue of its future sessions. In paragraph 16 of its report, the Sub-Committee, responding to the recommendation made by this Committee last year, has now proposed that its future sessions be scheduled for the month of May each year.

Also in response to a request made by this Committee last year, the Sub-Committee considered the question of the venue of its sessions. It had before it a note prepared by the Office of Financial Services on financial implications; that note is reproduced as annex IV to the Legal Sub-Committee's report. A number of arguments were advanced in the Sub-Committee both in favour of and against holding all future sessions of the Sub-Committee in Geneva. The Sub-Committee regretted, in the circumstances, that it was unable to make an agreed recommendation on the question to this Committee, and it is now up to us to consider the question further and take a decision on it.

The Scientific and Technical Sub-Committee, considering the final report of the Working Group on Remote Sensing of the Earth by Satellites, concluded that the work in this area, initiated by the Working Group, should be continued, and it recommended that the Secretary-General prepare certain studies. In accordance with that recommendation, the Secretary-General submitted several comprehensive studies on the question. In deliberations on the organizational aspects of international co-operation in the field of remote sensing, those studies proved to be most helpful in an area of great interest to many delegations. During those discussions the Sub-Committee had before it also several proposals submitted by members, and it took note of the work done by the Legal Sub-Committee in this area and discussed the current pre-operational/experimental phase as well as possible future global international operational remote sensing systems.

The Sub-Committee noted that facilities for data storage and dissemination have been established by member States as well as by the Food and Agriculture Organization (FAO) and that several States have established national repositories with the help of data obtained from the United States LANDSAT programme. It felt that it would be extremely useful to have reports from centres which have established or are about to establish national facilities on their experience with such centres.

The Sub-Committee further noted the importance of providing adequate training facilities in all aspects of remote sensing, particularly to developing countries. The Sub-Committee also felt that in order to consider the establishment of an appropriate organizational framework for a possible global operational system it would be essential to have a clear understanding of the real needs of the users and also more detailed information on the cost and benefits of remote sensing to member States. Taking all these factors into consideration, and believing that further study of organizational and financial matters should progress together with the consideration of the legal aspects of remote sensing, the Sub-Committee has in paragraph 29 of its report recommended to this Committee that the United Nations Secretariat be requested to prepare for the consideration of the next session of the Sub-Committee several studies with the aim of clarifying the issues mentioned earlier.

It also agreed that the Secretary-General should be requested to take practical steps, in co-operation with the appropriate specialized agencies, to explore the feasibility of utilizing existing facilities and expertise to establish on an experimental basis an international centre which could train and assist persons from developing countries to make the most effective use of remote sensing information. If the study demonstrated that such an experiment could be implemented without additional financial implications, it should be carried out and reported on to the Sub-Committee at its next session.

In regard to the United Nations space applications programme, the Committee will be pleased to know that, under the guidance of the Sub-Committee and within its limited financial resources, the programme continues to make worth-while contributions in bringing to the attention of developing countries the benefits of space exploration and making them meaningful to these countries by the educational and training programmes conducted under this heading.

Among them note should be taken of the United Nations panel meeting on Satellite Broadcasting Systems for Education, held in Japan; the joint United Nations-FAO Regional Seminar on Remote Sensing of the Earth Resources and Environment, held in Egypt; the United Nations Interregional Seminar on the Applications of Geodetic and Remote Sensing Data from Satellites and Cartography, held in Brazil; and the United Nations Interregional Technical Seminar on Remote Sensing, held in Canada last month. These panel meetings, seminars or workshops have taken place since we met last year. Several others are planned for the immediate future - for instance, a joint United Nations-UNESCO Regional Seminar on Satellite Broadcasting Systems for Education, to be held in Mexico in September 1975; a United Nations-World Meteorological Organization (WMO) Seminar on Satellite Meteorology, to be held in Kenya in November 1975; and finally, a United Nations-FAO Regional Seminar for Remote Sensing Applications in November 1975, to be held in Indonesia.

Several more panel meetings and seminars are scheduled for 1976, including two seminars on remote sensing to be held in co-operation with UNESCO in Iran and the United Kingdom respectively; a seminar on remote sensing in the Federal Republic of Germany; and possibly another on the same subject in Pakistan.

Also in 1976, a training workshop in remote sensing jointly sponsored by the United Nations and the International Astronomical Federation (IAF) will be held in the United States, and a technical visit by participants from developing countries to India in the course of the Satellite Instructional Television Experiment (SITE) is also planned so that they can get first-hand information regarding the various aspects of this experiment.

A number of fellowships offered by member States in various disciplines relating to space applications are also being administered by the United Nations. The United Nations Expert on Space Applications and regional consultants have visited several developing countries in order to promote awareness of the practical applications of space technology, and several more such visits are planned for the future.

A number of these projects have been undertaken in co-operation with the specialized agencies, which have continued to conduct their own programmes in this field - for example, ITU in the field of space telecommunications and FAO in the area of remote sensing. UNESCO carried out programmes in the area of space communications and remote sensing.

Of particular interest to the United Nations this year is the effort of the Inter-Governmental Maritime Consultative Organization (IMCO) in London regarding the establishment of a maritime satellite system, for which it has convened a diplomatic conference. The discussions relating to the establishment of the INMARSAT system, as it will be known, will have a significant influence on the establishment of international collaborative efforts in other matters related to space, such as remote sensing, and should therefore be of particular interest to this Committee. Also of interest is the meteorological research and operations programme of the WMO to improve international service and the action taken in response to a resolution of the General Assembly at its twenty-eighth session on the WMO Tropical Cyclone Project to find ways and means of mitigating the harmful effects of tropical storms by using space technology.

COSPAR and IAF have continued to extend considerable support to the work of the Scientific and Technical Sub-Committee. In view of their role in outer space activities, the Sub-Committee at its last session requested them to consider the possibility of preparing an annual report which would cover such items as the state of the art of scientific and technological developments in the exploration and practical use of outer space, a forecast of future scientific and technological training and developments and, finally, an assessment of the areas where national space organizations could undertake such activities within an international framework.

Reviewing the United Nations Programme on Space Applications, which has now been in existence for several years, the Sub-Committee had before it a report on the needs of developing countries for assistance in the practical application of space technology. The Sub-Committee expressed the view that while the number of replies from member States was still relatively small, they reflected to a certain degree the needs of developing countries and particularly the importance of education and training. The Sub-Committee suggested that the Secretary-General again draw the attention of member States to the questionnaire in order to obtain a wider range of replies for consideration by the Sub-Committee at its next session. The Committee might wish to give guidance to the Sub-Committee regarding the evaluation of the impact of this programme with the respective objectives given it in 1969 so that a complete review might be carried out at the next session of the Sub-Committee.

In concluding my remarks on the space applications programme, I wish to take the opportunity to express on behalf of the Committee sincere appreciation to the Expert, Mr. Murthy. He has done splendid work on which he is to be highly commended.

The Sub-Committee on scientific and technical matters also discussed the possibility of holding a second United Nations conference on the peaceful uses of outer space. A report on this question prepared by the Secretary-General was before

the Sub-Committee. The Sub-Committee agreed with the view expressed by the Secretary-General that it would be difficult to make an assessment regarding the convening of a conference on the basis of the relatively small number of replies received so far. The Sub-Committee recommended, therefore, that Member Sates which have not yet done so should submit their views as soon as possible. It also noted support from some Member States for the holding of such a conference, as well as other views expressed at the meeting of the Sub-Committee. In view of the possibility that space applications might be included in the United Nations Conference on Science and Technology, the Sub-Committee asked the Secretary-General to provide to it at its next session all available information relating to this matter so that the purpose, objectives and scope of available options could be further clarified. This is also a matter to which this Committee might wish to give some attention at this session.

The Sub-Committee also gave consideration to the need for ensuring the effective co-ordination of the activities of the United Nations and the specialized agencies in the area of space applications. In this connexion the Sub-Committee recalled the request it had made to the Secretary-General at its last session for a report on co-ordination among the specialized agencies and the United Nations in space applications programmes. The Secretary-General will be submitting a report on this matter to the Committee at this session for our consideration.

As I have had occasion to say in the past at this juncture, I feel that the main Committee has a very special function in relation to its sub-bodies. While it will generally, for lack of time, not be possible to discuss the various items in great detail, we should nevertheless be prepared to review the work done by the Sub-Committees and we should try to put various questions in a somewhat wider perspective and also attempt to solve outstanding issues or at least to narrow existing differences of opinion, so as to facilitate the work of our Sub-Committee.

We are fortunate indeed that we can rely on work well done and on excellent reports which have been submitted by our two Sub-Committees.

Acknowledging this fact, however, should not mean that we have to rubber-stamp these reports and pass them on to the General Assembly without first having carefully considered the main issues involved. I think this is particularly important and appropriate where problems are discussed whose nature requires that they be looked at from different angles. Furthermore, and perhaps even more important, it should be one of the primary objectives of this Committee to shape the activities of the United Nations in outer space matters for the years to come. This will require that the Committee be prepared to give guidelines and to issue specific directions, where appropriate, to its Sub-Committees in relation to priorities to be set in the time ahead.

Only then will we have fulfilled the obligations which are incumbent upon us as the focal point in the United Nations for all space-related matters.

This Committee, in the past two decades, has made important contributions in a new sphere of human activity, the peaceful conquest of outer space. We are aware today of the immense benefits this endeavour has brought to mankind as a whole, benefits deriving from the development of many new branches of technology, which are summarized under the concept of space application; but also benefits deriving from the increase in international co-operation which the extension of outer space activities has brought about.

While this Committee is still constructively engaged in many fields of present space activity, trying to make them parts of a future international network of space co-operation, new vistas are opening before our eyes.

We are becoming aware that outer space is not filled with inanimate objects, dead even geologically for millions of years, but with bodies of tremendous importance for the planet earth: indeed, some of the most important future sources of energy may be found in outer space - perhaps solar energy is an example. Let me quote from a recent paper by Professor William E. Heronemus of the School of Engineering at the University of Massachusetts, which contains a most pertinent evaluation of some uses of solar energy for the international system:

"The energy plans of the world today are based on consumption of petroleum, coal and uranium. The distribution of those fuels around the world is far from equitable, no matter how equity is defined. Trading for those fuels and other actions, short of and including military action to assure their availability, has a significant impact on major subsystems of the global system. As time goes on and three or four economic giants become even more dependent upon fuels remote from their shores, the likelihood of serious clashes increases. The entire gamut of international ploys, including blackmail, is likely to be experienced. Men, accustomed to warmth and light, can become angry when forced to endure the cold and the dark. The petroleum and coal situation is serious enough, but one must contemplate some of the real consequences of any significant international use of the nuclear fission processes. Each reactor plant and the fuel associated therewith to varying extent becomes a source of poison or bomb material which in the wrong hands could threaten the very foundations of international stability.

"The earlier promises of nuclear energy to all nations now appear to have been some kind of a nightmare. Still, current plans for energy for the future are pegged to combustion and fission, and fusion if it can be reduced to practice. One might think that an appropriate policy of a world government or system attempting to secure world stability for the future would be a ban, a total ban, on the proliferation of devices capable of generating high-level wastes or bomb materials. The geopolitical significance of energy practices based upon combustion, fission or fusion appears to be capable of dominating all else in the future. On the other hand, a world system organized towards the practical and reasonably paced conversion to solar energy practices appears to offer a geopolitical situation within which all could trade and grow, paying maximum attention to things more in keeping with the dignity and aspirations of man. Solar energy, in its ability to drive a large number of processes, is indeed quite equitably distributed amongst all."

The distinguished Professor continues:

"If the wealthy nations learn how to make solar energy processes more economic than combustion, fission or fusion, then those who can hardly afford combustion - and who have never had the least chance of affording fission or fusion - might have a new chance to expand their energy resources. With luck, the United States will find her own way via solar energy, and there should be no reason why all nations cannot share her research and development results. There is enough solar energy for all, it is well distributed and it cannot be used to bring down rival nations.

"It is quite clear that any developing nation who first sees the need for increased energy, then decides to accumulate the capital required for solar energy plant, should seriously consider the next step of building much of it itself. This could never be the case with nuclear power; it could scarcely ever be the case with modern combustion plants. It should be the case with solar energy. There can be a system of technology and management skill transfer used here which permits the more affluent to help the less affluent to help themselves. A whole new dimension could be given to the concept of development aid if practised in the solar energy context."

As other bodies in the United Nations system have done before us, we might therefore now ourselves begin to look at our own potential future role in developing the kind of international co-operation necessary to bring the benefits of new sources of energy from outer space to all nations.

I trust we shall be able to co-operate together during this session of the Committee and find the ways and means to further efforts for international co-operation in the area of peaceful uses of outer space.