# REPORT OF THE COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE

# **GENERAL ASSEMBLY**

OFFICIAL RECORDS: FORTY-FIRST SESSION SUPPLEMENT No. 20 (A/41/20)



340.

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**UNITED NATIONS** 

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# NOTE

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

[26 June 1986]

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#### I. INTRODUCTION

1. The Committee on the Peaceful Uses of Outer Space held its twenty-ninth session at United Nations Headquarters from 2 to 13 June 1986. The officers of the Committee were the following:

Chairman: Mr. Peter Jankowitsch (Austria)

Vice-Chairman: Mr. Teodor Marinescu (Romania)

Rapporteur: Mr. Henrique Rodriques Valle (Brazil)

The summary records of the Committee's meetings are contained in documents A/AC.105/SR.280-293.

# Meetings of subsidiary bodies

- 2. The Scientific and Technical Sub-Committee held its twenty-third session at United Nations Headquarters from 10 to 21 February 1986 under the chairmanship of Mr. J. H. Carver (Australia). The report of the Sub-Committee was issued as document A/AC.105/369 and Corr.1.
- 3. The Legal Sub-Committee held its twenty-fifth session at the United Nations Office at Geneva from 24 March to 11 April 1986 under the chairmanship of Mr. Ludek Handl (Czechoslovakia). The report of the Sub-Committee was issued as document A/AC.105/370 and Corr.1. The summary records of the Sub-Committee's meetings are contained in documents A/AC.105/C.2/SR.436-450.
- 4. At its opening meeting, the Committee adopted the following agenda:
  - 1. Adoption of the agenda.
  - 2. Statement by the Chairman.
  - 3. General exchange of views.
  - 4. Ways and means of maintaining outer space for peaceful purposes.
  - 5. Report of the Scientific and Technical Sub-Committee on the work of its twenty-third session (A/AC.105/369 and Corr.1).
  - 6. Report of the Legal Sub-Committee on the work of its twenty-fifth session (A/AC.105/370 and Corr.1).
  - Implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space.
  - 8. Other matters.
  - 9. Report of the Committee to the General Assembly.

# Membership and attendance

- 5. In accordance with General Assembly resolutions 1721 E (XVI) of
  20 December 1961, 3182 (XXVIII) of 18 December 1973, 32/196 B of 20 December 1977
  and 35/16 of 3 November 1980, the Committee on the Peaceful Uses of Outer Space was
  composed of the following Member States: Albania, Argentina, Australia, Austria,
  Belgium, Benin, Brazil, Bulgaria, Burkina Faso, Cameroon, Canada, Chad, Chile,
  China, Colombia, Czechoslovakia, Ecuador, Egypt, France, German Democratic
  Republic, Germany, Federal Republic of, Hungary, India, Indonesia, Iran (Islamic
  Republic of), Iraq, Italy, Japan, Kenya, Lebanon, Mexico, Mongolia, Morocco,
  Netherlands, Niger, Nigeria, Pakistan, Philippines, Poland, Portugal, Romania,
  Sierra Leone, Sudan, Sweden, Syrian Arab Republic, Turkey, Union of Soviet
  Socialist Republics, United Kingdom of Great Britain and Northern Ireland, United
  States of America, Uruguay, Venezuela, Viet Nam and Yugoslavia.
- 6. At its 280th and 287th meetings, the Committee decided to invite, at their request, the representatives of Cuba and of the Holy See, respectively, to attend the twenty-ninth session of the Committee and address it, as appropriate, on the understanding that this would be without prejudice to further requests of this nature and that it would not involve any decision of the Committee concerning status.
- 7. At its 281st meeting, the Committee decided to grant, at its request, permanent observer status to the International Maritime Satellite Organization (INMARSAT).
- 8. Representatives of the United Nations Development Programme (UNDP), the International Telecommunication Union (ITU) and the International Atomic Energy Agency (IAEA) attended the session.
- 9. Representatives of the European Space Agency (ESA), the Committee on Space Research (COSPAR) of the International Council of Scientific Unions (ICSU), the International Astronautical Federation (IAF), the International Telecommunications Satellite Organization (INTELSAT) and INMARSAT also attended the session.
- 10. A list of representatives attending the session is contained in document A/AC.105/XXIX/INF.1.

#### Proceedings

- 11. At the opening of the session, at the 280th 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. He reviewed the scientific and technological advances achieved in the field of the exploration of outer space and called for improved environment for future co-operative efforts of the international space community and broader possibilities for further joint progress. The text of the Chairman's statement is annexed to the present report (annex I).
- 12. At its 280th to 283rd meetings, from 2 to 4 June 1986, the Committee held a general exchange of views, in the course of which statements were made by the representatives of Argentina, Austria, Brazil, Bulgaria, Canada, Chile, China, Colombia, Czechoslovakia, Ecuador, Egypt, France, the German Democratic Republic, the Federal Republic of Germany, Hungary, India, Indonesia, Japan, Mexico, Mongolia, the Netherlands, Pakistan, Poland, Romania, Sweden, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, the United States of America, Venezuela and Yugoslavia (see A/AC.105/SR.230-283).

- 13. The representatives of ESA, COSPAR, IAF, INMARSAT and INTELSAT, as well as the United Nations Expert on Space Applications, also made statements (see A/AC.105/SR.281, A/AC.105/SR.283 and A/AC.105/SR.285).
- 14. During the session, special presentations were made by the following individuals: (a) Mr. Gerard Brachet, President of SPOT IMAGE, sponsored by the French National Centre for Space Studies (CNES), on the early results of the SPOT remote sensing satellite; (b) Mr. Frank J. Nola, aerospace engineer from the George C. Marshall Space Flight Center, sponsored by the United States National Aeronautics and Space Administration (NASA), on what was described as an important spin-off from space research, the "Power factor controller"; and (c) Dr. Rudeger Reinhard of ESA, organized by IAF, on the results gathered from the international fleet of spacecraft that studied Halley's Comet.
- 15. After considering the various items before it, the Committee, at its 293rd meeting on 13 June 1986, adopted its report to the General Assembly containing the recommendations and decisions set out in the paragraphs below.

#### II. RECOMMENDATIONS AND DECISIONS

# A. Ways and means of maintaining outer space for peaceful purposes (agenda item 4)

- 16. In accordance with paragraph 15 of General Assembly resolution 40/162 of 16 December 1985, the Committee continued its conside ation, as a matter of priority, of ways and means of maintaining outer space for peaceful purpor as.
- 17. The Committee recognized the need to maintain outer space for peaceful purposes and agreed that it could make important contributions to that end. However, there was no specific agreement regarding the role that it should play in that regard.
- Som? delegations expressed the view that the Committee should complement the work being done in bilateral and multilateral forums towards arms control in outer space. They were of the view that the Committee and its two Sub-Committees should be requested to consider specific ways and means of maintaining outer space for peaceful purposes as, in their view, the Committee and its two Sub-Committees had competence in that area. In that connection, they submitted a working paper (A/AC.105/L.161) suggesting ways in which the Committee could work for the banning of weapons in outer space, for the promotion of international co-operation in the peaceful exploration of space and for the strengthening of the international legal and institutional basis for such exploration. In particular, they felt that it was important to ask the General Assembly to request the Committee to study the replies of States in response to General Assembly resolution 40/87 of 12 December 1985 as they related to the development of international co-operation in the peaceful uses of outer space and to draw up appropriate recommendations. The Committee, in their view, should give special consideration to the question of the machinery for international co-operation in the prevention of an arms race in outer space and its exploration for peaceful purposes, including the proposal for the establishment of a world space organization. These delegations drew the attention of the Committee to the proposals for a stage-by-stage programme of joint practical actions in the peaceful exploration of outer space, as contained in the message dated 10 June 1986, by N. I. Ryzhkov, Chairman of the Council of Ministers of the USSR, to the Secretary-General of the United Nations.
- 19. Other delegations expressed the view that disarmament questions did not fall within the com rence of the Committee. They pointed out that the question of the prevention of an arms race in outer space was properly a matter for the First Committee of the General Assembly and for the Conference on Disarmament. They were of the view that the Committee should not be distracted from the task of promoting international co-operation in the peaceful uses of outer space by being drawn into the areas belonging to the mandate of other forums. They pointed out that the working paper contained in document A/AC.105/L.161 could not serve as a basis for discussion as its contents were not appropriate for the Committee's deliberations. Moreover, they were of the view that General Assembly resolution 40/87 was a First Committee resolution, dealing with disarmament questions, and that therefore compliance with that resolution was a matter belonging to the First Committee and not to the Committee on the Peaceful Uses of Outer Space. Those delegations reiterated the view that the best way for the Committee to contribute to maintaining outer space for peaceful purposes was to promote international co-operation further by revitalizing its work and that of its sub-committees, and

they recalled the proposals contained in document A/AC.105/L.154, which had been submitted to the Committee at its twenty-eighth session. In this context, the view was expressed that there should be an exchange of views on the experiences that Governments or national institutes had gained with the various instruments of international co-operation in outer space.

- 20. Still other delegations expressed the view that the peaceful uses of outer space were closely related to the prevention of growing militarization and an arms race in outer space. They expressed serious concern over the intensification of the militarization of outer space and regretted that no progress had been made in the bilateral and multilateral negotiations held at Geneva. They were of the view that, although the Committee on the Peaceful Uses of Outer Space was not the main forum for dealing with arms control in outer space and it should focus its attention on scientific, technical and legal matters concerning the peaceful uses of outer space, it could play a supportive role for prevention of an arms race in space by exchanging views and making proposals on this important issue. It could urge the two major space Powers, in an appropriate manner, to conduct serious negotiations in the bilateral talks for achieving progress and could recommend that the United Nations appeal to the Conference on Disarmament to take effective measures to halt the development of an arms race in outer space. In their view, this could not weaken, but rather would strengthen the role of the Committee in its task of promoting international co-operation in the peaceful uses of outer space. Some of those delegations recalled the Delhi Declaration, adopted on 28 January 1985 (A/40/114-S/16921, annex), highlighting the urgency and need to avoid an arms race in outer space.
- The Committee took note of a statement of the delegation of Austria reflecting the mutual understanding that the General Assembly's decision, contained in paragraph 15 of its resolution 40/162, to request the Committee on the Peaceful Uses of Outer Space to consider, as a matter of priority, the item entitled "Ways and means of maintaining outer space for peaceful purposes", and to report thereon, showed the concern felt by the international community and the need to promote international co-operation in the peaceful uses of outer space. The Committee, through its work in the scientific, technical and legal fields, had an important role to play in assuring that outer space was maintained for peaceful purposes. It was the firm belief of the Member States of the Committee that developments that would strengthen the role of the Committee in maintaining outer space for peaceful purposes should continue. The Committee had responsibilities relating to the strengthening of the international basis for the peaceful exploration and uses of outer space. This could cover, among other matters, further development of international space law, including, as appropriate, the preparation of international agreements governing various practical peaceful applications of the achievements of space science and technology. Strengthening international co-operation in the peaceful exploration and uses of outer space also implied the need for the sammittee itself to improve, whenever necessary, the methods and forms of its work.

B. Report of the Scientific and Technical Sub-Committee on the work of its twenty-third session

Implementation of the recommendations of the second United Nations Conference on the Exploration and Peaceful Uses of Outer Space (agenda items 5 and 7)

- 22. The Committee conducted a joint consideration of the items entitled "Report of the Scientific and Technical Sub-Committee" and "Implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space".
- 23. The Committee took note with appreciation of the report of the Scientific and Technical Sub-Committee on the work of its twenty-third session (A/AC.105/369 and Corr.1) covering the results of its deliberations of the items assigned to it by the General Assembly in its resolution 40/162. The Committee further noted with satisfaction that, in accordance with Assembly resolution 40/162, the Sub-Committee had given priority consideration to the item "Implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space".
- 24. The Committee, while expressing its appreciation to all Governments that had made or expressed their intertion to make contributions towards carrying out the implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space, noted that the Sub-Committee took note of the disappointment expressed by the developing countries at the lack of financial resources to implement these recommendations.
  - 1. Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space
- (a) United Nations Programme on Space Applications
- 25. At the outset of the Committee's deliberations of this item, the Expert on Space Applications made a statement briefing the Committee on the various activities carried out or planned under the Programme on Space Applications. The Expert urged Member States to continue to give strong support to the Programme on Space Applications, especially because the funds allocated under the regular budget for the Programme had been severely cut. In this regard, some delegations expressed their dissatisfaction with these cuts and asked for steps to be taken to insure the financial soundness of the Programme on Space Applications.
- 26. The Committee took note of the United Nations Programme on Space Applications, as set out in the report of the Sub-Committee. The Committee was pleased to note that further progress had continued to be made in the implementation of that Programme planned for 1986. In that regard, the Committee expressed its appreciation to the Expert on Space Applications for the effective manner in which he had implemented the United Nations Programme within the limited funds at his disposal.

## (i) Long-range fellowships for in-depth training

27. The Committee expressed its appreciation to the Governments of Austria and the USSR as well as to ESA for offering fellowships through the United Nations in 1985-1986 and for renewing their offers of fellowships for 1986-1987. The Committee also expressed its appreciation to the Government of the German Democratic Republic for offering fellowships for 1986-1987 and to the Government of Brazil for its tentative offer of further fellowships.

# (ii) Technical advisory services

28. Regarding technical advisory services, the Committee noted that at the request of the Government of Iraq, a technical advisory mission was currently being planned to assist Morol Oniversity in reviewing a training curriculum for a master's degree programme in remote sensing technology. The Committee further noted that the Programme on Space Applications was also collaborating with and was offering technical advisory service to the United Nations Centre for Science and Technology for Development in its preparation of its ATAS Bulletin on Satellite Remote Sensing Technology for Development.

# (iii) United Nations workshops/training courses/seminars/meetings of experts

- 29. Regarding the United Nations workshops/training courses/seminars/meetings of experts, the Committee endorsed the activities proposed for 1987 as outlined by the Expert in his report (see A/AC.105/364, para 39 (c)) and recommended these activities for approval by the General Assembly. In so doing, the Committee welcomed the invitations from the Governments of the German Democratic Republic, Italy, Nigeria and the USSR, as well as from the Food and Agriculture Organization of the United Nations (FAO), to host and/or co-sponsor the workshops/training courses/seminars/meetings of the experts concerned.
- Regarding the United Nations workshops/training courses/seminars/meetings of 30. experts for 1986, the Committee also expressed its appreciation to the Governments of Italy and France as well as to FAO for co-sponsoring the eleventh United Mations/FAO International Training Course, which focused on remote sensing applications to agricultural statistics; to the Government of Spain for offering to host and co-sponsor the first United Nations/ESA Training Course on Drought Assessment and Vegetation Monitoring Using Meteorological Sciallites; to the Government of Sri Lanka for offering to host and co-sponsor the United Nations Regional Meeting of Experts on Space Technology Applications; to the Government of Mexico for offering to host and co-sponsor the United Nations Meeting of Experts on Space Science and Technology and Applications within the Framework of Educational Systems; and to the Government of Ecuador as well as to FAO, the World Meteorological Organization (WMO) and ESA for co-sponsoring the third United Nations/WMO/FAO/ESA International Training Course on Remo e Sensing Applications to Operational Agro-meteorology and Hydrology and to the Centro de Levantamientos Integrados de Recursos Naturales por Sensores Remotos (CLIRSEN) in Quito for The Committee noted with appreciation the financial and/or hosting this course. other assistance provided and being offered by the Governments of Ecuador, France, Italy, Mexico, Spain and Sri Lanka as well by FAO, WMO, ESA and CLIRSEN in connection with these workshops/training courses/seminars/meetings of experts. Committee also noted with appreciation the financial contribution of \$12,000 made by the Government of Pakistan in support of the Programme.

# (iv) Promotion of greater co-operation in space science and technology

31. Regarding the promotion of greater co-operation in space science and technology, the Committee noted with satisfaction that the United Nations had co-sponsored, with ESA and the Pan-African Telecommunication Union (PATU), two symposia on space telecommunication in Africa (Lomé, Togo, March 1985 and Harare, Zimbabwe, October 1985) and provided financial support for the participation of two persons in each symposium. The Committee noted that the United Nations would sponsor a limited number of participants from the developing countries to take part in the workshop on remote sensing of interest to developing countries during the 1986 COSPAR plenary meeting at Toulouse, France. The Committee further noted with appreciation that the Government of Colombia and the Economic Commission for Latin America and the Caribbean (ECLAC) are co-sponsoring the United Nations Meeting of Experts on Space Science and Technology and its Applications to be held in Cartagena, Colombia in June 1986.

# (b) International space information service

32. With regard to the international space information service, the Committee noted with satisfaction that the publication entitled Education, Training, Research, and Fellowship Opportunities in Space Science and Technology and its Applications: A Directory had been published as document A/AC.105/366.

The Committee noted that the Directory will be updated periodically (approximately every three years) as appropriate.

# (c) Studies

- 33. The Committee noted that the General Assembly, in its resolution 40/162, had endorsed the recommendation of the Committee that the Scientific and Technical Sub-Committee, when continuing its consideration of the implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space, including the implementation of the recommendations contained in the studies that had so far been conducted, should also consider the advisability of carrying out further studies, within existing resources, capable of ving rise to concrete projects of international space comperation. In doing so, the Sub-Committee was to bear in mind in particular the needs of the developing countries.
- 34. In this connection, the Committee noted that, of the complete list of the studies recommended by the Conference and presented during the Scientific and Technical Sub-Committee's consideration of studies at its twentieth session (see A/AC.105/318, annex II), five studies had so far been conducted (A/AC.105/339/Rev.1, A/AC.105/340/Rev.1, A/AC.105/341/Rev.1, A/AC.105/344 and A/AC.105/349). The Committee requested the Secretariat to seek the views of Member States on how far the five studies that had already been carried out have benefited them in putting into practice the findings of these studies. Such information could enable the Committee to evaluate further the usefulness and desirability of conducting future studies.
- (d) Co-ordination of space activities within the United Nations system and inter-agency co-operation
- 35. With regard to co-ordination of outer space activities within the United Nations system and inter-agency co-operation, the Committee noted the request of the General Assembly, contained in resolution 40/162, to all organs, organizations

and bodies of the United Nations system to co-operate in the implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space.

- 36. The Committee further noted with appreciation that the Sub-Committee had continued to stress the necessity of ensuring continuous and effective consultations and co-ordination in the field of outer space activities among organizations within the United Nations system. In this connection, the Committee noted with satisfaction that the seventh Inter-Agency Meeting on Outer Space Activities had been held in 1985 (ACC/1985/PG/14) and the eighth Inter-Agency Meeting on Outer Space Activities would be held in October 1986 at the headquarters of the United Nations Industrial Development Organization (UNIDO) at Vienna, which would discuss, inter alia, the implementation of recommendations of the Conference. The Committee welcomed the fact that the United Nations publication entitled Space Activities of the United Nations and International Organizations had been issued at the initiative of the Inter-Agency Meeting on Outer Space Activities as a revised and expanded edition (A/AC.105/358). 1/
- 37. The Committee noted with appreciation the participation in all stages of its work and that of its Sub-Committee by representatives of United Nations bodies, the specialized agencies and other international organizations. The Committee found the reports submitted by these bodies helpful in enabling it and its submidiary bodies to fulfil their role as a focal point for international co-operation, especially with respect to the practical applications of space science and technology in developing countries.
- 38. The Committee endorsed the view of the Sub-Committee that the United Nations should continue to seek the support of UNDP and other international funding institutions and that the Secretariat should take note of, and operate within, the UNDP funding procedures.

#### (e) Regional and interregional mechanisms of co-operation

39. Regarding regional and interregional mechanisms of co-operation, the Committee noted with satisfaction that, in pursuance of General Assembly resolution 40/162, the Secretariat had continued to seek to strengthen regional mechanisms of co-operation by carrying out various activities in the implementation of the recommendations of the Conference, in particular those under the Programme on Space Applications, as in the case of the United Nations Regional Meeting of Experts on Space Technology Applications, to be held at Colombo, Sri Lanka (see para. 30), and the United Nations Meeting of Experts on Space Science and Technology and its Applications to be held at Cartagena, Colombia (see para. 31).

# (f) Future work

40. Regarding the future implementation of the recommendations of the Conference, the Committee endorsed the recommendation of the Scientific and Technical Sub-Committee to establish a Working Group of the Whole, beginning with its twenty-fourth session, to evaluate the implementation of the recommendations of the Conference, with a view to improving the execution of activities relating to international co-operation, particularly those included within the United Nations Programme on Space Applications and to propose concrete steps to increase such co-operation as well as to make it more efficient.

# 2. Remote sensing of the Earth by satellites

- 41. The Committee noted that, in accordance with General Assembly resolution 40/162, the Scientific and Technical Sub-Committee had continued its priority consideration of questions relating to remote sensing of the Earth by satellites.
- 42. The Committee also noted that, in the course of the debate in the Sub-Committee, delegations had reaffirmed their basic positions relating to remote sensing, which had been reflected in the reports of the previous sessions of the Sub-Committee.
- 43. The Committee agreed that the Sub-Committee should continue consideration of the item on a priority basis at its next session and that sufficient time should be allocated for its consideration.

# 3. Use of nuclear power sources in outer space

- 44. The Committee noted that, in accordance with General Assembly resolution 40/162, the Sub-Committee had continued its priority consideration of questions relating to the use of nuclear power sources in outer space.
- 45. The Committee noted that, based on section II A, "Nuclear power sources", of the 1981 report of the Working Group on the Use of Nuclear Power Sources in Outer Space on the work of its third session (A/AC.105/287, annex II), the Sub-Committee had discussed the need for internationally acceptable scientific and twhnical criteria for design and safe use of nuclear power sources in outer space. In that connection, the Committee endorsed the agreement reached within the Sub-Committee that, in the development and implementation of new space systems, attention should be given to further enhancing the safe"y margin of space objects with nuclear power sources on board.
- 46. The Committee endorsed the recommendation of the Sub-Committee that with respect to section C, "Notification", the information on malfunctioning objects with nuclear power sources on board with a risk of re-entry of radioactive materials to the Earth's atmosphere, provided in accordance with the format of notification adopted by the Working Group at its third session in 1981, should start as soon as the malfunctioning has become known and should be updated by the launching State and transmitted with increasing frequency as the anticipated time of re-entry into the dense layers of the Earth's atmosphere is approaching, so that the international community would be informed of the situation and would have sufficient time to plan for any national response activities deemed necessary. This information should also be transmitted to the Secretary-General of the United Nations with the same frequency.
- 47. The Committee further endorsed the agreement in the Sub-Committee that there was a need for guidance to States as regards preplanning of area monitoring and countermeasures for protection of the population and the environment in case of radioactive contamination of their territory from nuclear power sources carried by a space object.
- 48. Some delegations expressed the view that important work remained to be carried out, taking into account the proper role of the Scientific and Technical Sub-Committee, namely, providing technical elements useful to the Legal Sub-Committee, particularly regarding method, form and frequency of notification, criteria for safe and reliable use of nuclear power sources and emergency

procedures in case of unplanned re-entry of nuclear power sources. Accordingly, those delegations felt that a working group on nuclear power sources in outer space, if reconvened at the 1987 session of the Sub-Committee, would constitute the best forum to proceed expeditiously with the remaining work. Other delegations were not convinced of the necessity of reconvening the Working Group and felt that the necessary work could be carried out directly by the Sub-Committee.

Some delegations recommended that efforts should be continued to reach agreement on the reconvening of the Working Group.

49. The Committee endorsed the recommendation of the Sub-Committee that the item should be kept as a priority item on its agenda for the next session and that sufficient time should be allocated for its consideration.

# 4. Space transportation systems

- 50. The Committee noted that, in accordance with General Assembly resolution 40/162, the Sub-Committee had continued the consideration of the item relating to space transportation systems and their implications for future activities in space.
- '1. The Committee took note of the progress being achieved in the various programmes in operation or planned by Ch. 4, France, India, Japan, the USSR, the United Kingdom, the United States and ESA.
- 52. The Committee endorsed the decision of the Sub-Committee that it continue consideration of the item at its next session.

# Examination of the physical nature and technical attributes of the geostationary orbit

- 53. The Committee noted that, in accordance with General Assembly resolution 40/162, the Sub-Committee had continued examination of the physical nature and technical attributes of the geostationary orbit.
- 54. The Committee took note of the letter from the Secretary-General of the International Telecommunication Union addressed to the Secretary-General of the United Nations (A/AC.105/360) informing him that the World Administrative Radio Conference on the use of the geostationary satellite orbit and the planning of the space services utilizing it, at its first session, from 6 August to 13 September 1985, declared itself not competent to deal with the subject of some specific principles concerning the demands made by the equatorial countries to have sovereignty/jurisdiction over the corresponding segments of the geostationary orbit superjacent to their territories as well as the preservation of such segments by those countries for the opportune and appropriate utilization of the orbit by all
- 55. The Committee noted that delegations had reiterated and elaborated on the views expressed at earlier sessions and reflected in earlier reports of the Committee and its two sub-committees, most notably in the following documents: A/AC.105/267, para. 69; A/AC.105/271, para. 41; A/35/20, para. 43; A/36/20 para. 46; and most recently in A/AC.105/369, paras. 87 and 86.

States, particularly the developing countries.

56. The Committee endorsed the recommendation of the Sub-Committee that it continue consideration of the item at its next session.

# C. Report of the Legal Sub-Committee on the work of its twenty-fifth session (agenda item 6)

57. The Committee took note with appreciation of the report of the Legal Sub-Committee on the work of its twenty-fifth session (A/AC.105/370 and Corr.1), which provided the results of its deliberations on the items assigned to it by the General Assembly in its resolution 40/162.

# Legal implications of remote sensing of the Earth from space, with the aim of finalizing the draft set of principles

- 58. The Committee noted that, during its consideration of the legal implications of remote sensing of the Earth by satellites, the Sub-Committee had re-established its Working Group on remote sensing under the chairmanship of Mr. Franz Cede (Austria).
- 59. The Committee noted with satisfaction that the Working Group had successfully completed, by consensus, the draft principles, relating to remote sensing of the Earth from space, as set out in the report of the Legal Sub-Committee (A/AC.105/370 and Corr.1, para. 29, and annex I).
- 60. Some delegations expressed the view that, while the agreed principles on remote sensing were an acceptable compromise, they were accepting them on the understanding that the Committee would continue to work on that question in order that the concerns of developing countries would be more adequately met.
- 61. The Committee endorsed the draft principles relating to remote sensing of the Earth from space which are set out in annex II of the present report and recommended their adoption by the General Assembly at its forty-first session.

# The elaboration of draft principles relevant to the use of nuclear power sources in outer space

- 62. The Committee noted that, in giving detailed consideration to this item, the Sub-Committee, during its twenty-fifth sension, had re-established its Working Group on the item, under the chairmanship of Mr. Franz Cede (Austria).
- 63. The Committee noted the work carried out by the Working Group, as reflected in the report of the Legal Sub-Committee (A/AC.105/370 and Corr.1, paras. 30-36 and annex II).
- 64. The Committee endorsed the texts of two draft principles, relating to the theme of notification and that of assistance to States, as reflected in the report of the Legal Sub-Committee (A/AC.105/370 and Corr.1, annex II).
- 65. Some delegations felt that the Legal Sub-Committee should give priority to the elaboration of further principles concerning the use of nuclear power sources. Other delegations did not feel that this quention should be given priority. However, some delegations recommended that efforts should be continued to find agreement on the question of priority of this item. In particular, it was suggested that efforts should also be made to define safety criteria to prevent

accidents. Some delegations noted that it was important to have norms for international liability in that area and that such liability should include direct, indirect and delayed damage. Some delegations further noted that the Scientific and Technical Sub-Committee had contributed to the work of the Legal Sub-Committee on the question of nuclear power sources and that such co-operation should be continued in the future.

- 66. The Committee recommended that the Legal Sub-Committee should continue consideration of the item at its next session with a view to reaching consensus on other principles.
  - 3. Matters relating to the definition and delimitation of cuter space and to the character and utilization of the geostationary orbit, including consideration of ways and means to ensure the rational and equitable use of the geostationary orbit without prejudice to the role of the International Telecommunication Union
- 67. The Committee noted that, in accordance with General Assembly resolution 40/162, the Legal Sub-Committee had continued to consider this item through its Working Group under the chairmanship of Mr. Vicente Montemayor (Mexico).
- 68. The Committee noted that a variety of views had been expressed on the question and reflected in paragraphs 37 to 44 and annex III of the report of the Legal Sub-Committee (A/AC.105/370 and Corr.1). Those views were elaborated on and reiterated during the current session of the Committee. In this connection, some delegations indicated that it was necessary to have a conventionally defined boundary between air and outer space. Other delegations expressed the view that the need for such a definition or delimitation had not yet been established. Still other delegations expressed the view that the definition or delimitation of outer space would help in the solution of problems in the legal régime of the geostationary orbit.
- 69. Some delegations proposed that the Legal Sub-Committee should elaborate draft principles governing the activities of States in the utilization of the geostationary orbit. Other delegations considered that the elaboration of draft principles on this subject was not necessary.
- 70. The Committee recommended that the Legal Sub-Committee should continue consideration of the item at its next session.

# D. Other matters (agenda item 8)

71. The Committee noted with appreciation the participation in its work and of its Sub-Committees by representatives of United Nations bodies and specialized agencies, and found the reports they had submitted helpful in enabling the Committee and its subsidiary bodies to fulfil their role as a focal point of international co-operation in the peaceful uses of outer space. The Committee also noted with appreciation the participation in its work and that of its sub-committees by the representatives of ESA, COSPAR, IAF, INTELSAT and INMARSAT. The Committee requested that concerned organizations should continue to keep it informed of their activities relating to the peaceful uses of outer space.

- 72. During the course of the current session, the Chairman informed the Committee that he had received a letter from the Secretary-General, dated 24 January 1986, (CS/86/POC-2) on the financial emergency of the United Nations, requesting that conference-servicing costs of all committees be kept to a minimum. In this connection, the Chairman also informed the Committee that the General Assembly had decided to provide the Committee with summary records in place of verbatim records for its meetings.
- 73. The Committee joined both the Scientific and Technical Sub-Committee (A/AC.105/369, para. 102) and the Legal Sub-Committee (A/AC.105/370 and Corr. 1, para. 13) in declaring its support for the objectives of the International Year of Peace as set out in General Assembly resolutions 40/3 and 40/10 of 24 October and 11 November 1985, respectively.

# E. Future work

- 74. The Committee noted the views expressed by the Scientific and Technical Sub-Committee, as contained in paragraphs 99 to 101 of its report (A/AC.105/369), and endorsed the recommendations contained in these paragraphs concerning the agenda of the twenty-fourth session of the Sub-Committee.
- 75. Regarding the agenda of the Legal Sub-Committee, the Committee recommended that the Legal Sub-Committee, at its twenty-sixth session, should:
- (a) Continue the elaboration of draft principles relevant to the use of nuclear-power sources in outer space through its Working Group;
- (b) Continue, through its Working Group, its consideration of matters relating to the definition and delimitation of outer space and to the character and utilization of the geostationary orbit, including consideration of ways and means to engure the rational and equitable use of the geostationary orbit without prejudice to the role of the International Telecommunication Union;
- (c) Consider the choice of a new item for the agenda of the Legal Sub-Committee, including the proposals made by the Group of 77 and others, with a view to making a recommendation to the Committee on the Peaceful Uses of Outer Space in order to reach consensus during its thirtieth session.
- 76. The Committee agreed that the Legal Sub-Committee could take on new tasks.
- 77. In this connection, some delegations, suggested in a working paper (A/AC.105/L.161) that the legal aspects of the non-use of force in outer space and from space against the Earth, and that the Committee could also deal with the international legal aspects of ensuring the immunity of artificial Earth satellites and prepare definitions of some general concepts to be incorporated in agreements on preventing an arms race in space, concepts such as "outer space", "space object", "object in space" and others. The Committee, in their view could also prepare international agreements governing various practical peaceful applications and international space flights and missions. They also suggested that the Committee could, by itself or through its Scientific and Technical Sub-Committee, undertake a world-wide study of the specific requirements of States in utilizing space technology, taking into account the prospects for the development of that technology up to the end of this century and beyond. Furthermore, they suggested that the Committee could formulate suggestions as to structure, functions and legal status of the world space organization and act as the preparatory committee for an international conference which should be convened for the purpose of establishing such an organization.

- 78. Some delegations expressed the view that since there was no immediate coalescence of views regarding new agenda items, the next session of the Legal Sub-Committee should carefully consider proposals for a new agenda item in keeping with the Committee's mandate and on which consensus might be possible. They suggested that a working group might be established for this purpose. Regarding the future work of the Committee, the view was expressed that the Committee should consider what possible steps, capable of achieving consensus, could make its work as useful as possible. In this connection, it was suggested that the Committee should begin its work on a new agenda item relating to spin-offs from outer space programmes.
- 79. The view was also expressed that a positive attitude should be taken toward adding a new item to the agenda of the Legal Sub-Committee, taking into account the financial crisis of the United Nations and the need to enhance efficiency. The new item should be decided by consensus through consultation and should be practicable, constructive and beneficial to international co-operation in the peaceful uses of outer space, with particular attention to the needs of the developing countries.
- 80. Some delegations considered that improvements could be made in the procedure for registration of space objects in support of the provisions of the Convention on REgistration of Objects Launched into Outer Space of 1975 (see General Assembly resolution 3235 (XXIX) annex). These improvements would be aimed at increasing the degree of information and confidence with respect to outer space activities in the interest of all States. A proposal was made for the inclusion of this item on the agenda of the Legal Sub-Committee for the purpose of elaborating recommendations to be adopted by the General Assembly.
- 81. A proposal was made that the Legal Sub-Committee at its next session could study procedures for enhanced international co-operation in case of an emergency involving manned space flight. Such procedures would be in addition to article V of the reaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (General Assembly resolution 2222 (XXI)); they could include co-operation in facilitating communications, in providing and preparing emergency landing sites, in assisting in the rescue and return of a space object and its crew and in emergency pre-planning efforts. The Legal Sub-Committee might later elaborate principles on this subject.
- 82. Some other delegations suggested in a working paper (A/AC.105/L.163) that, bearing in mind the gravity of the continuing financial crisis and recalling the letter to the Chairman of the Committee from the Secretary-General requesting that limits should be set and, where established, strictly maintained on the number and duration of meetings, the length of a future session of the Legal Sub-Committee should be reduced to bring it more in line with the Scientific and Technical Sub-Committee as well as the Main Committee itself. In their view, such a recommendation would not detract from the importance of the Sub-Committee, nor would it be inconsistent with consideration of its future agenda, including also new items, but would display a sense of responsible self-management by the Committee.
- 83. Some delegations expressed the view that concern is good management and savings, which the Committee should adopt, as should all other United Nations bodies, should not prevent it from continuing its work under satisfactory conditions. These delegations expressed the hope that before the Committee takes a decision on a possible reduction of the length of the session of the Legal Sub-Committee, the Secretariat should provide it with estimates of the savings which could be thus effected and, as appropriate, suggest other means for making savings of a similar magnitude.

- 84. Other delegations, while expressing their deep concern over the present financial crisis that the United Nations is experiencing, felt that this temporary situation should not be the only criterion for deciding on the length of future sessions of the Legal Sub-Committee.
- Some delegations expressed the view that significant tasks lay before the Committee and its sub-committees. They, therefore, felt that there was a need to come up with fresh proposals, particularly with regard to the work of the Legal Sub-Committee. In this connection, it was proposed, on behalf of the Group of 77, that a new item be inscribed in the Legal Sub-Committee's agenda, which could be entitled "Access by States to benefits of the exploration and uses of outer space". They pointed out that, in proposing the new agenda item, they were guided by a desire to meet the concrete needs and expectations of all countries, particularly those of developing countries and that they were responding to the philosophy of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space, which had highlighted the interrelationship between scientific, legal and technical problems. These delegations felt that the length of future sessions of the Legal Sub-Committee should not be reduced, since the Sub-Committee had demonstrated its effectiveness and also in view of the envisaged addition of r = s genda item. The Committee took note with great interest and appleciation of the proposal of the Group of 77 and felt that the Legal Sub-Committee should consider this proposal as well as other proposals when discussing its future work.

# F. Schedule of work of he Committee and its subsidiary bodies

86. The Committee indicated the following tentative timetable for 1987:

	Time	Location
Scientific and Technical Sub-Committee	17-27 February	New York
Legal Sub-Committee	16 March-3 April	New York
Committie on the Peaceful Uses of Outer Space	1-12 June	New York

#### G. Tribute to the Chairman

87. On the occasion of the appointment of the Chairman of the Committee, Ambassadoe Peter Jankowitsch, to the position of Minister for Foreign Affairs of Austria, the members of the Committee expressed their sincere congratulations and extended their good wisnes to him in his very important tasks. They expressed their deep gratitude for his dedicated service to and leadership of the Committee over a long period of time, during which his devotion to the tasks of the Committee had been a decisive factor in its important achievements in the promotion of international co-operation in the peaceful uses of outer space.

# Notes

1/ United Nations publication, Sales No. E.86.I.2.

#### ANNEX T

# Opening Statement by the Chairman of the Committee

- 1. I welcome you all most cordially to the twenty-ninth session of the Committee on the Peaceful Uses of Outer Space. At the same time, I wish to extend our special welcome to the representatives of the International Telecommunications Satellite Organization (INTELSAT) and the International Organization of Space Communications (INTERSPOTNIK), who have joined the Committee as permanent observers beginning with this session. We look forward to a long and fruitful co-operation with these distinguished organizations.
- 2. It is my pleasure to review at the outset of the present session some of the technological advances that have been made, as well as the results of the 1986 sessions of our two sub-committees, and share with the distinguished delegates some thoughts as to what contributions this Committee can make during the coming two weeks as the focal point of international co-operation in the peaceful uses of outer space within the United Nations framework.
- 3. Since the Committee met last, there have been many new accomplishments in the field of outer space. Particularly noteworthy may be the continued growth of international satellite-related organizations and programmes such as COSPAS/SARSAT. which continues its famed international rescue operation as a joint programme among four member States represented in this Committee, namely, Canada, France, the Union of Soviet Socialist Republics and the United States of America. INTELSAT has greatly increased its total capacity to promote international telephone and television services linking by launching three INTELSAT V-A sateilites last year. INMARUAT has recently expanded its mandate to provide satellite services to air navigation which would include data links for the transmission of airline operational, performance monitoring, meteorological and other information. service is also planned for in-flight telephone calls. We hope that the current tests and demonstrations phase of aeronautical satellite communications services and equipment, which INMARSAT, is conducting with the Intern lional Civil Aviation Organization, will have a great success.
- 4. Member States of this Committee have continued to maintain a high level of space activities. In this regard, the Soviet Union and the United States have continued their space activities in many disciplines. The Soviet Union's activities included the launching of a Meteor 3 meteorological satellite and the continued use of the Soyuz and Progress spacecraft serving the space station Salyut 7. This past Pebruary, the Soviet Union launched the first module for the MIR (PEACE) permanent space station system marking the beginning of a transition from research and experiments to large-scale production activities in outer space. The Soviet Union also announced the creation of Glavkosmos, a new civilian space agency to further promote space activities.
- 5. In October 1985, the United States, continuing its Space Shuttle Programme, launched the largest crew ever: eight international astronauts, including two from the Federal Republic of Germany and one from the Netherlands, in addition to five American astronauts. This flight carried the European-built SPACELAB on board, whose scientific operations were planned and directed by the Federal Republic of Germany. This was followed by a flight carrying the first Mexican astronaut into space. Among satellites deployed were the Australian Aussat, the United States Satcom Ku 2 and the Mexican Morelos.

- 6. The magnificent pictures the Uranus sent to the Earth by the Voyager 2 spacecraft at the beginning of 1986 are still very fresh in our memory. Following that spectacular encounter, on the occasion of the visit by the Halley's Comet, several international efforts, some joint and some parallel international efforts, took place between 6 and 14 March 1986, based on the agreement among Japan, the Soviet Union, the United States and ESA to exchange data, on a near real time basis, on the environment of Halley's Comet. Involved in this agreement were the Soviet Union's Vegas 1 and 2, Japan's MS-T5 and Planet A and the European Giotto spacecraft.
- 7. On 1 February 1986, China successfully launched a telecommunications and broadcasting satellite into geosynchronous orbit, using its Long March 3 launch vehicle. On 11 February, Japan launched its second operational direct broadcast satellite, BS-2b to replace BS-2a, a sister TV-satellite launched in January 1984. Another important development is the continuation of the Ariane launcher family by the European Space Agency. ESA's Ariane made a successful sixteenth flight and deployed the French Spot-1 Earth observation satellite and the Swedish Viking scientific satellite. The United Kingdom of Great Britain and Northern Ireland has recently announced the formation of the British National Space Centre (BNSC), which, I understand, is currently in the process of establishing the space policy of the United Kingdom, covering international as well as national space activities.
- 8. While these are brilliant achievements and significant advances of space technology in many important fields, the first months of 1986 were also times of human tragedy and of serious set-backs in the exploration and peaceful uses of outer space.
- 9. This is a reference, first and foremost, to the immense tragedy that occurred on 28 January 1986, which not only struck seven young astronauts five young men and two young women on space shuttle "Challenger", but with them and through them the whole of the international space community in the East and West, North and South.
- 10. May I therefore now with the full Committee assembled express once again our deep sense of sympathy and our sincere condolences to the Government and people of the United States.
- 11. There is no doubt that serious reversals such as these, especially ones that claim human life, and also to a similar degree set-backs such as the loss, a few lays ago, of an Ariane launcher on a mission i.a. for INTELSAT, raise serious questions about the future of many space programmes. These are questions not only about the speed and rhythm of technological progress, but especially in an intellectual environment that has become more and more sceptical about technical progress itself about the final aims and destinies of modern technology itself.
- 12. Yet, while it is certainly true that some of the events in the early months of 1986 may have shaken our confidence in the capacity of technology to solve any and all problems and slowed down programmes and perhaps inspired greater modesty as far as claims to perfection are concerned, the vast benefits that mankind has reaped over past decades from space science and technology, and even more, the tremendous possibilities that still lie ahead, can only lead to one overriding conclusion; the doors to outer space have been thrown wide open and a tremendous job remains to be done. We have created instruments that work, as well as a sense of mission that is quite unique as far as similar endeavours are concerned.

- 13. We should therefore rededicate ourselves not only to the peaceful conquest of outer space through human beings and through their minds, through ever new and ever richer technological accomplishments, but also through an increased measure of international co-operation. If we proceed in this spirit, hardly any sacrifice will have been made in vain.
- 14. This Committee is uniquely suited to improve the environment for future co-operative efforts of the international space community and to broaden possibilities for further joint progress. Let me express the hope that in this regard we shall never be found wanting when it comes to intensifying efforts to achieve tangible, concrete results in the promotion of international co-operation for the peaceful uses of outer space.
- 15. It is encouraging to note in this context that, over the past year, new signs for the building of networks of co-operation across national boundaries, stressing the global nature of space activities, have again begun to appear. These co-operative relations encompass many aspects of space activities, including joint research, procurement of hardware, provision of services, including launching services, leasing of satellites, just to name a few, which were beyond our imagination only a few decades ago.
- 16. International co-operation in outer space has many dimensions: it has proven, time and again, that it can become one of the most effective instruments in lessening tension between powerful nations and that it has a unique "confidence building" quality that few other methods of co-operation produce.
- 17. Today, international co-operation has another no less crucial focus: it has become an instrument to promote economic and social development of the third world. This dimension is perhaps most evident in the field of telecommunications for third world countries, a subject to which many international organizations, not least the International Telecommunication Union, have given much attention over the past years and which was also the focal point of the "Independent Commission for Worldwide Telecommunications Development".
- 18. The needs to be addressed in this context become evident when one remembers for a moment one of the findings of this Commission quite topical, incidentally, these days that today there are more telephones in the city of Tokyo than in all of Africa and that half of the world's population lives in countries with less than one telephone for every 100 persons.
- 19. With these thoughts in mind, let us now turn to the immediate tasks before us. As in the past year, one of the primary issues before us at this session is "war, s and means of maintaining outer space for peaceful purposes", which the General Assembly, at its fortieth session, instructed us to consider as a matter of priority and to report thereon to its forty-first session.
- 20. As the distinguished delegates will recall, this (mmittee during the last session "recognized the need to maintain outer space for peaceful purposer and agreed that it could make important contributions to that end", and some concrete proposals were tabled. However, there was no specific agreement with regard to the role this Committee should play in that regard, reflecting the almost diametrically opposing views which still exist among Member States. It is none the less true that the deliberation on this item in the Committee went somewhat beyond a rather general debate to discuss whether the Committee should take up this agenda item or not. Let us hope that, during the current session, the Committee can find and possibly expand some common ground regarding this admittedly difficult question.

- 21. While recognizing that this item certainly carries a potential for dissension for the Committee and its work as well as a potential for uniting behind a common purpose, I continue to believe that our best contribution towards "maintaining outer space for peaceful purposes" resides in a faithful accomplishment of our original mandate and in the convincing demonstration to the world of the real purposes and the real benefits of the presence of human beings and human technology in outer space; it also resides in the constant proof to what extent a purposely peaceful outer space environment allowing full development of space sciences and technologies can be useful to all the nations of this world.
- 22. Before going into detail about the work of the two sub-committees, I should like to express, on behalf of the Committee, our deep appreciation to Professor John Carver of Australia, Chairman of the Scientific and Technical Sub-Committee, and to Ambassador Ludek Handl of Czechoslovakia, Chairman of the Legal Sub-Committee. Indeed, the Committee is much indebted to these distinguished Chairmen for the smooth and productive functioning of its two subsidiary podies which serve as the basis for a successful session of the Committee.
- 23. The Scientific and Technical Sub-Committee's report on its twenty-third session is before us in document A/AC.105/369 and Corr.1. The Sub-Committee considered the following items on a priority basis: (a) the United Nations Programme on Space Applications and the co-ordination of space activities with the United Nations system; (b) implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space; (c) questions relating to remote sensing of the Earth by satellites; and (d) the use of nuclear power sources in outer space. It also considered (e) questions relating to space transportation systems and their implications for future activities in space, and (f) the examination of the physical nature and technical attributes of the geostationary orbit.
- 24. The Sub-Committee, as in the past year, conducted a joint consideration of the United Nations Space Applications Programme and the implementation of the recommendations of the Second United Nations Conference on the Exploration and Peaceful Uses of Outer Space, since the expansion and reorientation of the Space Applications Programme is an integral part of the implementation of the recommend hions of the Conference. In considering these agenda items, the Sub-Comm ties was well aware of the position of the General Assembly, which, at its fortieth session, once again emphasized the urgency and importance of fully implementing the recommendations of the Conference and identified four recommendations which should be considered within the context of the overall consideration of the implementation of the recommendations of the Conference. In view of the above, the Sub-Committee recommended the establishment of a working group of the whole to evaluate, beginning with its next session, the implementation of the recommendation of the Conference, with a view to improving the execution of activities relating to international co-operation, particularly those included within the United Nations Programme on Space Applications, and to propose concrete steps to increase such co-operation as well as to make it more efficient. The Sub-Committee reviewed the wide range of activities reported on by the Expert on Space Applications and commended his work during the past year; it also approved or took note of the activities proposed for 1986 and 1987. However, the Sub-Committee reiterated its concern at the existence of a gap between the resources needed for the new or expanded activities recommended by the Conference and the resources available for their implementation. In view of this resource gap, the Committee might wish to consider this important question further.

- 25. With regard to studies, the General Assembly endorsed the recommendation of this Committee that the Sub-Committee should consider the advisability of carrying out further studies, within existing resources, capable of giving rise to concrete projects of international space co-operation. However, there was no recommendation for further studies. Perhaps the Committee wishes to address this important question during the current session.
- 26. This is also an opportunity for the Committee to consider what further actions it might wish to take to implement fully the recommendations of the Conference, in view of the position of the General Assembly which I referred to a moment ago.
- 27. For the first time, the Sub-Committee selected one topic as the main theme of its session, namely, "Remote sensing for developing countries", and at the same time as the Sub-Committee continued its consideration of its agenda item, an International Astronautical Federation (IAF)/Committee on Space Research (COSPAR) symposium was being held on that theme. Reflecting the somewhat heightened interest in this subject, the Sub-Committee expressed its elaborated views relating to assistance to the developing countries, the availability of remote sensing data and analysed data and the access to data from operational meteorological satellites.
- 28. This year the consideration of the use of nuclear power sources in outer space was conducted directly by the Sub-Committee and, through informal negotiations during the session, some additional points were agreed upon and recorded in the Sub-Committee's report. These agreements are encouraging signs as the Sub-Committee continues to tackle this difficult but highly important subject.
- 29. The questions relating to space transportation systems and the examination of the physical nature and technical attributes of the geostationary orbit were also considered by the Sub-Committee. Little progress, however, was made on these questions.
- 30. This was the first year for the Sub-Committee to attempt to enhance the scientific aspect of its work based on its recommendations which were endorsed by this Committee last year. Scientific presentations were made by the USSR and the United States delegations on developments relating to life sciences, including space medicine. In addition to the already mentioned symposium on "Remote sensing for developing countries", another presentation was made jointly by COSPAR and IAF on "Progress in the geosph re-biosphere programme". These presentations provided the members with a valuable opportunity to receive first-hand information on the scientific and technical aspects of questions that are or may come before the Committee and its sub-committees. In recognition of the importance of these and other scientific topics, the Sub-Committee made a major recommendation this year, proposing to include four new agenda items in its agenda for its next session. The Sub-Committee also proposed a theme for its next session: communications for development". Two of these new items are recommended to be considered, with the valuable assistance of COSPAR and IAF, in the form of reports, presentation or a symposium. There is no doubt that these recommendations will be considered favourably by the Committee.
- 31. Let me now turn to the work of the Legal Sub-Committee which is reflected in document A/AC.105/370 and Corr.1.
- 32. I am most pleased to note that, after a decade of admirable work, a Working Group of the Legal Sub-Committee, under the chairmanship of Ambassador Cede of Austria, has succeeded, during the Sub-Committee's twenty-fifth anniversary session, in achieving consensus on an entire set of principles relating to remote

- sensing of the Earth from space. The agreed set of principles is presented in annex I of the report of the Legal Sub-Committee and waits for the endorsement by this Committee. Thus, we have before us a major opportunity to present to the General Assembly, at its forty-first session, the fruits of quiet and patient negotiations in the form of a set of principles achieved by consensus on one of the most important areas of outer space activities.
- 33. The Legal Sub-Committee also re-established its Working Group on the Use of Nuclear Power Sources in Outer Space, chaired by Ambassador Cede, in order to continue its consideration under a sightly modified mandate of the elaboration of draft principles relevant to the use of nuclear power sources in outer space. In this area again, the Sub-Committee reports a major progress, it has succeeded in reaching a consensus on the texts of two draft principles relating to the theme of notification and the theme of assistance to States, which appear in annex II of the Sub-Committee's report. I am sure that the Committee can endorse these texts and further encourage the Sub-Committee to pursue the matter with equal success.
- 34. The re-established working group of the Legal Sub-Committee on the definition and delimitation of outer space and the geostationary orbit, under the chairmanship of Ambassador Montemayor, made little progress. However, it is hoped that the spirit of compromise and the determination to produce concrete results which obviously characterized the Sub-Committee's work with respect to the other two of its agenda items will have a positive influence in the near future on registering substant we progress on these difficult questions as well.
- 35. This has been a brief customary overview of the work of our two sub-committees. While it is somewhat disappointing to see little substantive progress in some areas, the overall result of the work of the two sub-committees is clearly positive and indeed impressive. This no doubt resulted from the spirit of co-operation and willingness which the members of the sub-committees demonstrated by their action in order to find common solutions through our established decision-making process by consensus. It may be too early to conclude categorically that the Committee and its two sub-committees have succeeded in ridding themselves of the difficulties which emerged a few years ago; but by working together in the same spirit to consolidate our gains and make further progress, we shall be able to build our case to declare confidently that the crisis is behind us.
- 36. Let us continue to proceed in the spirit of constructive co-operation, fully mindful of the important opportunity for the Committee to achieve major progress so that the Committee can answer the many urgent challenges of our time.
- 37. Before I conclude my statement, I should like to refer to two other matters.
- 38. I have received a letter from the Under-Secretary-General for Political and Security Council Affairs, transmitting General Assembly resolutions 40/3 and 40/10 regarding the International Year of Peace, adopted during the fortieth session of the Assembly. The responses of the Scientific and Technical: b-Committee and the Legal Sub-Committee on this matter appear in paragraph 102 and paragraph 13 of their respective reports.
- 39. I should also like to refer to a letter I have received from the Secretary-General regarding the financial emergency of the United Nations, which requests the conference-servicing costs of all committees be kept to a minimum. In this connection, I should like to note that, since the receipt of this letter, the resumed fortieth session of the General Assembly, which just concluded, adopted

certain measures that will affect the Committee's work. In particular, the Committee will have to work in the future without verbatim reports which it has maintained traditionally. But the Assembly has agreed that the Committee could maintain, instead, summary records of our proceedings.

- 40. Let me say in conclusion that one of the main tasks of this Committee, a strong focal point for one of the most crucial areas of international co-operation today, remains the patient search for areas of common action, a search that requires not only agreements on new items of work, new ideas for organizing our work in a climate of stringent financial conditions and new approaches to some of the familiar problems of our agenda, but also a constant display of our political will to maintain this Committee as one of the most successful and productive institutions the General Assembly has created.
- 41. The Committee members are certainly aware that our success is therefore not unrelated to the success of the United Nations as a whole and that we hold in our hand an unique opportunity to display the qualities and potential of modern multilateral diplomacy.
- 42. Judging from the past record of the Committee and the collective wisdom it has never failed to display, judging from the many years of successful experience that many of you have acquired in this very particular environment to which we return today and to which we all wish to give new life over the next two weeks, I believe that a modest but firm expression of optimism . certainly not out of order.
- 43. I thank you all for your attention.

#### ANNEX 11

# Draft Principles Relating to Remote Sensing of the Earth from Space

# Principle I

For the purposes of these principles with respect to remote rensing activities:

- (a) The term "remote sensing" means the sensing of the Earth's surface from space by making use of the properties of electromagnetic waves emitted, reflected or dif\_catted by the sensed objects, for the purpose of improving natural resources management, land use and the protection of the environment;
- (b) The term "primary data" means those raw data that are acquired by remote sensors borne by a space object and that are transmitted or delivered to the ground from space by telemetry in the form of electromagnetic signals, by photographic film, magnetic tape or any other means:
- (c) The term "processed data" means the products resulting from the processing of the primary data, needed in order to make such data usable;
- (d) The term "analysed information" means the information resulting from the interpretation of processed data, inputs of data and knowledge from other sources;
- (e) The term "remote sensing activities" means the operation of remote sensing space systems, primary data collection and storage stations, and activities in processing, interpreting and disseminating the processed data.

#### Principle II

Remote sensing activities shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic, social or scientific and technological development, and taking into particular consideration the needs of the developing countries.

# Principle III

Remote sensing activities shall be conducted in accordance with international law, including the Charter of the United Nations, the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, and the relevant instruments of the International Telecommunication Union.

## Principle IV

Remote sensing activities shall be conducted in accordance with the principles contained in article I of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, which, in particular provides that the exploration and use of outer space shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and stipulates the principle of freedom of exploration and use of outer space on a

basis of equality. These activities shall be conducted on the basis of respect for the principle of full and permanent sovereignty of all States and peoples over their own wealth and natural resources, with due regard to the rights and interests, in accordance with international law, of other States and entities under their jurisdiction. Such activities shall not be conducted in a manner detrimental to the legitimate rights and interests of the sensed State.

# Principle V

States carrying out remote sensing activities shall promote international co-operation in these activities. To this end, they shall make available to other States opportunities for participation therein. Such participation shall be based in each case on equitable and mutually acceptable terms.

# Principle VI

In order to maximize the availability of benefits from remote sensing activities, States are encouraged through agreements or other arrangements to provide for the establishment and operation of data collecting and storage stations and processing and interpretation facilities, in particular within the framework of regional agreements or arrangements wherever feasible.

# Principle VII

States participating in remote sensing activities shall make available technical assistance to other interested States on mutually agreed terms.

# Principle VIII

The United Nations and the relevant agencies within the United Nations system shall promote international co-operation, including technical assistance and co-ordination in the area of remote sensing.

# Principle IX

In accordance with article IV of the Convention on Registration of Objects Launched into Outer Space and article XI of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Rodies, a State carrying out a programme of remote sensing shall inform the Secretary-General of the United Nations. It shall, moreover, make available any other relevant information to the greatest extent feasible and practicable to any other State, particularly any developing country that is affected by the programme, at its request.

# Principle X

Remote sensing shall promote the protection of the Earth's natural environment.

To this end, States participating in remote sensing activities that have identified information in their possession that is capable of averting any phenomenon harmful to the Earth's natural environment shall disclose such information to States concerned.

# Principle XI

Remote sensing shall promote the protection of mankind from natural disasters.

To this end, States participating in remote sensing activities that have identified processed data and analysed information in their possession that may be useful to States affected by natural disasters, or likely to be affected by impending natural disasters, shall transmit such data and information to States concerned as promptly as possible.

# Principle XII

As soon as the primary data and the processed data concerning the territory under its jurisdiction are produced, the sensed State shall have access to them on a non-discriminatory basis and on reasonable cost terms. The sensed State shall also have access to the available analysed information concerning the territory under its jurisdiction in the possession of any State participating in remote sensing activities on the same basis and terms, taking particularly into account the needs and interests of the developing countries.

# Principle XIII

To promote and intensify international co-operation, especially with regard to the needs of developing countries, a State carrying out remote sensing of the Earth from outer space shall, upon request, enter into consultations with a State whose territory is sensed in order to make available opportunities for participation and enhance the mutual benefits to be derived therefrom.

# Principle XIV

In compliance with article VI of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, States operating remote sensing satellites shall bear international responsibility for their activities and assure that such activities are conducted in accordance with these principles and the norms of international law, irrespective of whether such activities are carried out by governmental or non-governmental entities or through international organizations to which such States are parties. This principle is without prejudice to the applicability of the norms of international law on State responsibility for remote sensing activities.

# Principle XV

Any dispute resulting from the application of these principles shall be resolved through the established procedures for the peaceful settlement of disputes.

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