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**Committee on the Peaceful Uses of Outer Space** Scientific and Technical Subcommittee Thirty-sixth session Vienna, 22-26 February 1999

# Report of the Scientific and Technical Subcommittee on the work of its thirty-sixth session

# I. Introduction

1. The Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space held its thirty-sixth session at the United Nations Office at Vienna from 22 to 26 February 1999 under the chairmanship of Dietrich Rex (Germany).

2. Representatives of the following Member States attended the session: Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Cuba, Czech Republic, Ecuador, Egypt, France, Germany, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Italy, Japan, Kenya, Lebanon, Mexico, Morocco, Netherlands, Nigeria, Philippines, Poland, Portugal, Republic of Korea, Romania, Russian Federation, South Africa, Spain, Sudan, Sweden, Syrian Arab Republic, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, Venezuela and Viet Nam.

3. Representatives of the following specialized agencies and other organizations in the United Nations system attended the session: United Nations Educational, Scientific and Cultural Organization (UNESCO), International Telecommunication Union (ITU) and World Meteorological Organization (WMO). 4. The session was also attended by representatives of the European Space Agency (ESA), International Organization of Space Communications (INTERSPUTNIK), International Telecommunications Satellite Organization (INTELSAT), Committee on Space Research (COSPAR), European Association for the International Space Year (EURISY), International Academy of Astronautics (IAA), International Astronautical Federation (IAF), International Astronomical Union (IAU) and International Society for Photogrammetry and Remote Sensing (ISPRS).

5. A list of the representatives of Member States, specialized agencies and other international organizations attending the session is contained in document A/AC.105/C.1/INF.28.

6. On 22 February 1999, the Subcommittee adopted the following agenda:<sup>1</sup>

- 1. Adoption of the agenda.
- 2. Statement by the Chairman.
- 3. Preparations for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) by the Advisory Committee for UNISPACE III.
- 4. Space debris.

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- 5. United Nations Programme on Space Applications and the coordination of space activities within the United Nations system.
- 6. Other matters:
  - (a) Schedule of work for the Scientific and Technical Subcommittee at its thirtyseventh session, in 2000;
  - (b) Other reports.
- 7. Report to the Committee on the Peaceful Uses of Outer Space.

#### A. Meetings and documentation

7. The Subcommittee held 10 meetings.

8. A list of the documents that were before the Subcommittee is provided in annex I to the present report.

9. Following the adoption of the agenda, the Chairman made a statement outlining the work of the Subcommittee at its current session. He also reviewed the activities of Member States in space exploration, including important advances that had been achieved as a result of international cooperation during the past year.

10. At the 515th, 516th and 517th meetings, the Chairman informed the Subcommittee that requests had been received from the permanent representatives of Azerbaijan, Bolivia, Costa Rica, Finland, Peru, Slovakia and Tunisia, together with the permanent observer for the League of Arab States, to attend the session. Following past practice, those delegations were invited to attend the current session of the Subcommittee and to address it as appropriate, without prejudice to further requests of that nature; that action did not involve any decision of the Subcommittee extended to those delegations.

11. At the 515th meeting, the Director of the Office for Outer Space Affairs of the Secretariat made a statement reviewing the work programme of the Office. At the 518th meeting, the Expert on Space Applications made a statement outlining the activities carried out and planned under the United Nations Programme on Space Applications.

## **B.** Technical presentations

12. In response to General Assembly resolution 53/45, F. Alby (France), P. Moskwa of the Inter-Agency Space Debris Coordination Committee (IADC) and W. Flury of ESA made technical presentations on the complex issue of space debris and the solutions currently being adopted at the national and international levels.

# C. Recommendations of the Scientific and Technical Subcommittee

13. After considering the various items before it, the Subcommittee, at its 524th meeting, on 26 February 1999, adopted its report to the Committee on the Peaceful Uses of Outer Space, containing its views and recommendations as set out in the paragraphs below.

# II. Preparations for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) by the Advisory Committee for UNISPACE III

14. The Advisory Committee noted that the General Assembly, in its resolution 52/56 of 10 December 1997, paragraph 23, had agreed that the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) should be convened at the United Nations Office at Vienna from 19 to 30 July 1999 as a special session of the Committee on the Peaceful Uses of Outer Space, open to all States Members of the United Nations.

15. The Advisory Committee also noted that the General Assembly, in its resolution 53/45, paragraph 22, had endorsed the recommendations of the Preparatory Committee at its 1998 session, contained in the report of the Committee on the Peaceful Uses of Outer Space on its forty-first session,<sup>2</sup> and had requested the Preparatory and Advisory Committees and the executive secretariat to

carry out their tasks in accordance with those recommendations.

16. The Advisory Committee further noted that the General Assembly, in its resolution 53/45, paragraph 18, had agreed that the Advisory Committee should reconvene the Working Group of the Whole at its 1999 session to assist the Advisory Committee in finalizing its preparatory work for UNISPACE III. Accordingly, the Advisory Committee requested the Working Group to give full consideration to the tasks entrusted to the Advisory Committee by the Assembly and to report thereon to the Advisory Committee.

17. At the 524th meeting of the Subcommittee, on 26 February 1999, the Advisory Committee adopted the report of the Working Group of the Whole, contained in annex II to the present report, and noted that the report of the Working Group provided the basis for the Preparatory Committee to finalize its preparations for UNISPACE III.

18. The Advisory Committee recommended that the Working Group of the Whole should be reconvened by the Scientific and Technical Subcommittee at its thirty-seventh session, in 2000, to assist the Subcommittee in considering its future work in the light of the recommendations of UNISPACE III.

# **III.** Space debris

## A. General matters

19. In accordance with General Assembly resolution 53/45, the Subcommittee continued its consideration, on a priority basis, of the agenda item on space debris.

20. The Subcommittee agreed that consideration of space debris was important and that international cooperation was needed to expand appropriate and affordable strategies to minimize the potential impact of space debris on future space missions.

21. The Subcommittee agreed that Member States should pay more attention to the problem of collisions of space objects, including those with nuclear power sources on board, with space debris and other aspects of space debris. It noted that the General Assembly, in its resolution 53/45, had called for the continuation of national research on that question, for the development of improved technology for the monitoring of space debris and for the compilation and dissemination of data on space debris. The Subcommittee recalled the request of the Assembly that information on those issues should be submitted to the Subcommittee, and it took note of the replies from Member States (A/AC.105/708 and Add.1 and 2) submitted to it in accordance with that request. The Subcommittee agreed that national research on space debris should continue and that Member States and international organizations should make available to all interested parties the results of that research, including information on practices adopted that had proved effective in minimizing the creation of space debris.

22. The Subcommittee heard scientific and technical presentations on the subject of space debris by representatives of France, IADC and ESA, as mentioned in paragraph 12 of the present report.

23. The Subcommittee took note of the conference room paper on space debris submitted by the Russian Federation, entitled "The forecast of technogenous contamination of the near-Earth space (NES) with various measures of its mitigation" (A/AC.105/C.1/1999/CRP.4).

24. The Subcommittee noted that cooperation had continued through IADC, with the participation of Japan, the National Aeronautics and Space Administration (NASA) of the United States, ESA, the Russian Space Agency, the China National Space Administration, the British National Space Centre, the Centre national d'études spatiales (CNES) of France, the Indian Space Research Organization and the German Aerospace Center (DLR), to enable its members to exchange information on space debris activities, facilitate opportunities for cooperation in space debris research, review the progress of ongoing activities and identify debris mitigation options. The Subcommittee also noted that the Italian Space Agency (ASI) had been admitted into IADC in 1998.

25. The Subcommittee noted with satisfaction that, following its invitation, a representative of IADC had made a technical presentation on its work with regard to the space debris issue, as mentioned in paragraph 12 of the present report. The Subcommittee agreed that IADC should be invited to make a technical presentation on its work at the thirty-seventh session of the Subcommittee.

26. The Subcommittee recalled that, in order to further its consideration of the agenda item on space debris, it had adopted at its thirty-second session a multi-year plan for the consideration of space debris. The Subcommittee also recalled that at each session it should review the current operational debris mitigation practices and consider future mitigation methods with regard to cost-efficiency (A/AC.105/637 and Corr.1, para. 92).

27. The Subcommittee agreed that adoption of the technical report at its current session was an important achievement. The Subcommittee noted that, owing to the complexity of the space debris issue, its discussion of that issue should continue in order to ensure further progress in developing an understanding of the issue. The Subcommittee agreed that IADC, as the international expert organization on space debris, should continue to brief the Subcommittee should assess the effectiveness of existing mitigation practices and the extent to which they were being implemented and that efforts to model and characterize the debris environment should continue.

### **B.** Technical report on space debris

28. Concerned about the influence of space debris on the space environment and on the operation of spacecraft, the Subcommittee had included an item on space debris on the agenda for its thirty-first session, in 1994. It had been agreed that it was important to have a firm scientific and technical basis for future action on the complex attributes of space debris.

29. The Subcommittee had agreed to focus on understanding research related to space debris, including debris measurement techniques; mathematical modelling of the debris environment; characterizing the space debris environment; and measures to mitigate the risks of space debris, including spacecraft design measures to protect against space debris. Accordingly, a multi-year work plan had been adopted in 1995 for specific topics to be covered during the period 1996-1998. It had also been agreed that the work plan should be implemented with flexibility, so that all relevant issues on space debris could be addressed.

30. The Subcommittee had agreed, at its thirty-third session, to prepare a technical report on space debris that would be structured according to the specific topics addressed by the work plan during the period 1996-1998. The report would be carried forward and updated each year, leading to an accumulation of advice and guidance, in order to establish a common understanding that could serve as the basis for further deliberations of the Committee on that important matter (A/AC.105/637 and Corr.1, para. 96).

31. The Subcommittee noted that, at its thirty-third session, in accordance with the multi-year plan, it had focused its attention on measurements of space debris, understanding of data and effects of that environment on

space systems, as reflected in its technical report for 1996 (A/AC.105/637 and Corr.1, paras. 94-138). At its thirty-fourth session, the Subcommittee had focused its attention on the modelling of the space debris environment and risk assessment, as reflected in its technical report for 1997 (A/AC.105/672, paras. 102-104). At its thirty-fifth session, the Subcommittee had focused its attention on space debris mitigation measures, as reflected in its technical report for 1998 (A/AC.105/697 and Corr.1, paras. 97-99).

32. The Subcommittee had agreed, at its thirty-fifth session, that the draft technical report of the Subcommittee on space debris, which would include the part on mitigation measures drafted during that session, should be adopted at its thirty-sixth session, in 1999, after final editing during the inter-sessional period and consideration by relevant organizations, such as IADC and IAA (A/AC.105/697 and Corr.1, para. 95).

33. The Subcommittee noted with satisfaction the draft of the complete technical report on space debris (A/AC.105/707), which also contained the technical changes and amendments that had been proposed by Canada, France, Germany and the United Kingdom and by IADC during the inter-sessional period. The Subcommittee also noted that an introduction and an annex containing a list of documents relevant to the subject of space debris had been prepared by the Secretariat.

34. The Subcommittee took note of the comments prepared during the session by the drafting group on the draft technical report on space debris, contained in conference room paper A/AC.105/C.1/1999/CRP.3.

35. The Subcommittee adopted the draft technical report on space debris (A/AC.105/707), together with the changes proposed by the drafting group. The Subcommittee noted that the technical report on space debris would be submitted to the Committee on the Peaceful Uses of Outer Space at its forty-second session. The Subcommittee agreed to have the technical report widely distributed, including by making it available to UNISPACE III, the Legal Subcommittee at its thirty-ninth session, in 2000, international organizations such as COSPAR, IAA, IAF and IADC and other scientific meetings such as the annual IAF Congress.

36. The Subcommittee also agreed that the technical report on space debris should be reviewed as appropriate and should be updated as new technological developments occurred and as the technical understanding of the space debris environment improved. 37. The Scientific and Technical Subcommittee expressed its appreciation to the Chairman, Dietrich Rex (Germany), whose invaluable expertise in space debris matters had greatly facilitated the work of the Subcommittee on the technical report.

## C. General views

38. The view was expressed that there was a need to develop a common database for space debris that could serve as a clearing house of information for the international community for research and further advancement of knowledge in that field.

39. Some delegations expressed the view that issues relating to the cost implications of space debris mitigation measures needed further analysis and warranted the full attention of the Scientific and Technical Subcommittee in the future.

40. Some delegations expressed the view that there should be follow-up activity by the Legal Subcommittee on the technical report on space debris. Those delegations were of the view that the Committee on the Peaceful Uses of Outer Space should consider submitting the technical report to the Legal Subcommittee so that it could decide what implications the report might have regarding its work programme. Other delegations expressed the view that it was still premature for the Legal Subcommittee to discuss the issue of space debris, and that the discussion of the issue by the Legal Subcommittee should be postponed at least until the technical report had been thoroughly analysed by Member States and relevant space-related organizations and industry.

41. Some delegations expressed the view that, in the light of the completion by the Scientific and Technical Subcommittee of the multi-year work plan and the technical report on space debris, the Committee on the Peaceful Uses of Outer Space might wish to have the Legal Subcommittee consider presenting its views on the applicability of the existing outer space treaties in relation to space debris.

42. The Scientific and Technical Subcommittee recommended that the item entitled "Space debris" be retained as a priority item on the agenda for its thirty-seventh session.

# IV. United Nations Programme on Space Applications and the coordination of space activities within the United Nations system

43. In accordance with General Assembly resolution 53/45, paragraph 13 (c), the Subcommittee continued its consideration of the item on a priority basis.

# A. United Nations Programme on Space Applications

44. The Subcommittee had before it the report of the United Nations Expert on Space Applications (A/AC.105/715). The report was supplemented by a statement from the Expert. The Subcommittee noted that the United Nations Programme on Space Applications for 1998 had been carried out satisfactorily and commended the work accomplished by the Expert in that regard; in particular, the Subcommittee expressed its appreciation for the organization of the regional preparatory conferences for UNISPACE III.

45. The Subcommittee noted with appreciation that, since its previous session, additional contributions for 1998 and 1999 had been offered by various Member States and organizations and that they had been acknowledged in the report of the Expert (A/AC.105/715, paras. 41-42).

46. The Subcommittee continued to express its concern over the still limited financial resources available for carrying out the United Nations Programme on Space Applications and appealed to Member States to support the Programme through voluntary contributions. The Subcommittee felt that the limited resources of the United Nations should be focused on the activities with the highest priority and noted that the United Nations Programme on Space Applications was the priority activity of the Office for Outer Space Affairs.

#### 1. Period 1998-1999

United Nations conferences, training courses, workshops and symposia

47. With regard to the activities of the Programme carried out in 1998 and early in 1999, the Subcommittee expressed its appreciation to the following:

(a) The Government of India, as well as ESA, for co-sponsoring the Workshop on Emerging Trends in Satellite Meteorology, hosted by the Centre for Space Science and Technology in Asia and the Pacific and the Indian Space Research Organization and held in Ahmedabad from 9 to 12 March 1998;

(b) ISPRS, as well as Spectrum Astro, Inc., Lockheed Martin Corporation and the Federal Laboratory Consortium, for co-sponsoring the Second United Nations International Conference on Spin-off Benefits of Space Technology, hosted by ISPRS and held in Tampa, Florida, United States, from 30 March to 3 April 1998;

(c) The Government of Malaysia, as well as ESA, for co-sponsoring the Regional Preparatory Conference for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space for Asia and the Pacific, hosted by the Space Sciences Division of the Ministry of Science, Technology and the Environment and held in Kuala Lumpur from 18 to 22 May 1998;

(d) The Government of Sweden, represented by the Swedish International Development Agency, for co-sponsoring the Eighth United Nations International Training Course on Remote Sensing Education for Educators, hosted by Stockholm University and the Swedish Space Corporation and held in Stockholm and Kiruna, Sweden, from 4 May to 12 June 1998;

(e) The Government of Austria, as well as the province of Styria, the city of Graz and ESA, for co-sponsoring the United Nations/European Space Agency Symposium on Economic Benefits of Using Space Technology Applications in Developing Countries, held in Graz, Austria, from 7 to 10 September 1998;

(f) The Government of Spain, as well as ESA, for co-sponsoring the United Nations Workshop on Space Technology for Emergency Aid/Search and Rescue Satellite-Aided Tracking System for Ships in Distress, hosted by the National Institute for Aerospace Technology (INTA) of Spain and held in Maspalomas, Gran Canaria, Spain, on 24 and 25 September 1998; (g) The Government of Australia, IAF and CNES of France for co-sponsoring the United Nations/ International Astronautical Federation Workshop on Expanding the User Community of Space Technology in Developing Countries, hosted by the Cooperative Research Centre for Satellite Systems and held in Melbourne, Australia, from 24 to 27 September 1998;

(h) The Government of Chile, as well as ESA, for co-sponsoring the Regional Preparatory Conference for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space for Latin America and the Caribbean, hosted by the Ministry of Foreign Affairs, the University of Concepción and Intendencia de la Región del Biobio and held in Concepción, Chile, from 12 to 16 October 1998;

(i) The Government of Sweden for co-sponsoring the Workshop on the Evaluation of the United Nations/ Sweden International Training Course Series on Remote Sensing Education for Educators, hosted by the Swedish International Development Agency and Stockholm University and held in Gaborone from 18 to 21 October 1998;

(j) The Government of Morocco, as well as ESA, for co-sponsoring the Regional Preparatory Conference for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space for Africa and the Middle East, hosted by the Royal Centre for Remote Sensing of Morocco and held in Rabat from 26 to 30 October 1998;

(k) The Government of Romania, as well as ESA, for co-sponsoring the Regional Preparatory Conference for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space for Eastern Europe, hosted by the Romanian Space Agency and held in Bucharest from 25 to 29 January 1999.

48. The Subcommittee took note of the status of United Nations workshops, training courses, symposia and conferences planned for 1999, including the following, which were described in the report of the Expert on Space Applications (A/AC.105/715, annex IV):

(a) United Nations/European Space Agency Workshop on Basic Space Science, to be held in Mafraq, Jordan, from 13 to 17 March 1999;

(b) American Institute of Aeronautics and Astronautics Workshop on International Space Cooperation:

Solving Global Problems, to be held in Bermuda from 11 to 15 April 1999;

(c) Regional workshop on the role of the African Regional Centre for Space Science and Technology—in French language in national and regional development, to be held in Rabat in the second or third quarter of 1999;

(d) Regional workshop on the role of the African Regional Centre for Space Science and Technology Education—in English language in national and regional development, to be held in Ile-Ife, Nigeria, in the second or third quarter of 1999;

(e) Ninth United Nations/Sweden International Training Course on Remote Sensing Education for Educators, to be held in Stockholm and Kiruna, Sweden, from 3 May to 11 June 1999;

(f) United Nations/China/European Space Agency Conference on Space Applications in Promoting Sustainable Agriculture, to be held in Beijing from 14 to 17 September 1999;

(g) Second United Nations Workshop on Space Technology for Emergency Aid/Search and Rescue Satellite-Aided Tracking System for Ships in Distress, to be held in Maspalomas, Gran Canaria, Spain, in September 1999;

(h) United Nations/International Astronautical Federation Workshop on Space: An Integral Part of Sustainable Development, being co-sponsored by ESA and the European Commission and organized in cooperation with the Government of the Netherlands and the International Institute for Aerospace Survey and Earth Sciences (ITC), to be held in Amsterdam and Enschede, Netherlands, from 30 September to 3 October 1999;

(i) Post-UNISPACE III briefing at the Second Asia-Pacific Ministerial Conference on Space Applications for Sustainable Development, to be held in New Delhi from 2 to 8 December 1999.

#### Long-term fellowships for in-depth training

49. The Subcommittee expressed appreciation to ESA for having offered five training fellowships in various areas relating to space activities for the period 1998-1999. The status of the fellowships for the period 1998-1999 and the countries whose candidates had received fellowships were indicated in the report of the Expert on Space Applications (A/AC.105/715, annex II).

50. The Subcommittee noted with satisfaction that China had offered to the United Nations Programme on Space Applications two long-term fellowships for the period 1998-1999.

51. The Subcommittee noted that it was important to increase the opportunities for in-depth education in all areas of space science, technology and applications projects through long-term fellowships and urged Member States to make such opportunities available at their relevant institutions.

#### Technical advisory services

52. The Subcommittee took note of the technical advisory services being provided under the United Nations Programme on Space Applications in support of projects on regional space applications, as indicated in the report of the Expert on Space Applications (A/AC.105/715, paras. 20-35):

(a) Assistance in the growth and operation of the Asia-Pacific Satellite Communications Council;

(b) Collaboration with several African countries on the implementation of the project on cooperative information network linking scientists, educators, professionals and decision makers in Africa (COPINE), pursuant to one of the recommendations of the United Nations Regional Conference on Space Technology for Sustainable Development in Africa, held in Dakar from 25 to 29 October 1993, regarding the establishment, as a matter of urgency, of an efficient communications network among African and European professionals and scientists at the national, continental and intercontinental levels;

(c) Collaboration with ESA and the Department of Economic and Social Affairs of the Secretariat on follow-up activities related to the recommendations of the training courses on applications of the remote sensing satellite data to natural resources, renewable energy and the environment held in Frascati, Italy, in 1993, 1994, 1995 and 1997;

(d) Collaboration with ESA on follow-up activities relating to the series of workshops on basic space science;

(e) Follow-up to the United Nations international training course series in Sweden on remote sensing education for educators;

(f) Contribution to the Committee on Earth Observation Satellites (CEOS) proposal on the Integrated Global Observing Strategy.

#### Promotion of greater cooperation in space science and technology

53. The Subcommittee noted that the United Nations was collaborating with international professional bodies within the space community to promote the exchange of

experiences on space activities. The United Nations Programme on Space Applications had co-sponsored the United Nations/International Astronautical Federation Workshop on Expanding the User Community of Space Technology in Developing Countries, held in Melbourne in September 1998, in conjunction with the forty-ninth Congress of the International Astronautical Federation. Participants from developing countries at the Workshop also attended the Congress.

54. The Subcommittee noted that the United Nations Programme on Space Applications had co-sponsored the participation of scientists from developing countries in the thirty-second Scientific Assembly of the Committee on Space Research, held in Nagoya, Japan, from 12 to 19 July 1998.

55. The Subcommittee noted that the United Nations Programme on Space Applications would co-sponsor the participation of scientists from developing countries in the United Nations/International Astronautical Federation Workshop on Space: An Integral Part of Sustainable Development, to be held in Amsterdam and Enschede from 30 September to 3 October 1999, in conjunction with the fiftieth Congress of the International Astronautical Federation, and that participants at the Workshop would also attend the Congress, which would be held from 4 to 8 October 1999.

#### 2. Year 2000

United Nations conferences, training courses, workshops and symposia

56. The Subcommittee recommended the approval, after appropriate consultations, of the following programme of workshops, training courses, symposia and conferences planned for 2000:

(a) Tenth United Nations/Sweden International Training Course on Remote Sensing Education for Educators;

(b) United Nations/European Space Agency/ Committee on Space Research Workshop on Data Analysis Techniques, to be held in India;

(c) United Nations/Austria Symposium on space technology and development, to be held in Graz, Austria;

(d) United Nations/International Astronautical Federation Workshop on space technology for the benefit of developing countries, to be held in Rio de Janeiro.

57. The Subcommittee noted that other activities would be organized under the auspices of the United Nations Programme on Space Applications on the basis of recommendations of UNISPACE III.

## **B.** International space information service

58. The Subcommittee noted with satisfaction that the Office for Outer Space Affairs had continued to develop a World Wide Web home page (http://www.un.or.at/OOSA/ index.html), including both information within the United Nations system and access to external databases.

59. The Subcommittee noted with satisfaction the publication of the document entitled *Seminars of the United Nations Programme on Space Applications: Selected Papers on Remote Sensing, Space Science and Information Technology* (A/AC.105/711).

## C. Reports

60. The Subcommittee took note with appreciation of the reports submitted to it by Member States and international organizations in response to the recommendations of the Working Group of the Whole in its report on the work of its eleventh session.

# D. Coordination of space activities within the United Nations system and inter-agency cooperation

61. The Subcommittee noted that the General Assembly, in its resolution 53/45, paragraph 24, had encouraged all Member States, organizations within the United Nations system and other international organizations with space activities to contribute actively to achieving the objectives of UNISPACE III.

62. The Subcommittee continued to stress the necessity of ensuring continuous and effective consultations and

coordination in the field of outer space activities among organizations within the United Nations system and the avoidance of duplicative activities. The Subcommittee also noted that the United Nations Programme on Space Applications should enhance coordination efforts with regional space events such as the Regional Space Applications Programme for Sustainable Development in Asia and the Pacific of the Economic and Social Commission for Asia and the Pacific (ESCAP).

63. The Subcommittee noted with satisfaction that the Inter-Agency Meeting on Outer Space Activities had held its nineteenth session at the United Nations Office at Vienna on 2 and 3 June 1998 and that the report on its deliberations (A/AC.105/701) and the report of the Secretary-General entitled "Coordination of outer space activities within the United Nations system: programme of work for 1998 and 1999 and future years" (A/AC.105/700) were before the Subcommittee.

64. The Subcommittee noted that the sessions of the Inter-Agency Meeting on Outer Space Activities would continue to be convened at the United Nations Office at Vienna and to be hosted by the Office for Outer Space Affairs prior to the sessions of the Scientific and Technical Subcommittee each year, without prejudice to any invitation by an interested agency to host a session at its headquarters. The Subcommittee noted that the twentieth session of the Inter-Agency Meeting on Outer Space Activities, scheduled to be held at the United Nations Office at Vienna from 2 to 4 February 2000, would address, among other things, coordination of activities related to the plan of action of UNISPACE III.

#### E. Regional and interregional cooperation

65. The Subcommittee noted with appreciation the continuing efforts undertaken by the United Nations Programme on Space Applications, in accordance with General Assembly resolution 45/72 of 11 December 1990, in leading an international effort to establish regional centres for space science and technology education in existing national or regional educational institutions in developing countries. The Subcommittee also noted that, once established, each centre could expand and become part of a network that could cover specific programme elements in established institutions related to space science and technology in each region.

66. The Subcommittee recalled that the General Assembly, in its resolution 50/27 of 6 December 1995, had endorsed the recommendation of the Committee that the centres be established on the basis of affiliation to the United Nations as early as possible and that such affiliation would provide the centres with the necessary recognition and would strengthen the possibilities of attracting donors and of establishing academic relationships with national and international space-related institutions.

67. The Subcommittee recalled that the General Assembly, in its resolution 53/45, had noted with satisfaction that, in accordance with paragraph 30 of its resolution 50/27, the Centre for Space Science and Technology Education in Asia and the Pacific had continued its education programme in 1998 and that significant progress had been achieved in establishing regional centres for space science and technology education in the other regions.

68. The Subcommittee noted with satisfaction that the Centre for Space Science and Technology Education in Asia and the Pacific would conduct its seventh nine-month course at the Space Applications Centre at Ahmedabad, India, from 1 July 1999 to 31 March 2000. The theme of the course would be satellite communications.

69. The Subcommittee recommended that the Member States concerned in Asia and the Pacific should undertake further consultations, with the assistance of the Office for Outer Space Affairs, with a view to making the Centre for Space Technology Education in Asia and the Pacific grow into a network of nodes.

The Subcommittee noted with satisfaction that the 70. African Regional Centre for Space Science and Technology-in French language had been inaugurated on 24 October 1998 in Morocco and that its first programme event would be a seminar lasting 2-3 days that would be attended by senior administrative and scientific representatives of each of the participating countries. The Subcommittee also noted with satisfaction that the African Regional Centre for Space Science and Technology Education-in English language had been inaugurated on 24 November 1998 in Nigeria and that a document on the proposed activities of the Centre, which had been developed for implementation in March 1999, as well as other matters relating to the Centre, would be reviewed at the resumed session of the Governing Board of the Centre in 1999.

71. The Subcommittee noted with satisfaction that the regional centre for space science and technology education in Latin America and the Caribbean, to be located in Brazil and Mexico, was expected to be inaugurated in 1999 and

that, in preparation for the opening of the campus of the centre in Brazil, the National Institute for Space Research (INPE) of Brazil had carried out a number of activities for the benefit of States in the region, as presented in the report of the Expert on Space Applications (A/AC.105/715, para. 12).

72. The Subcommittee noted that missions had been sent to Jordan and the Syrian Arab Republic from 24 June to 1 July 1998 to evaluate the establishment of a regional centre for space science and technology education in western Asia and that the reports of those missions were being finalized, in consultation with the Governments of the two countries, with a view to selecting a host country for the Centre.

73. The Subcommittee noted that a mission had been sent to Bulgaria, Greece, Hungary, Poland, Romania and Turkey from 24 November to 7 December 1998, with the objective of undertaking a technical study and providing a report that could be used in determining an agreed framework for the operation of a network of space science and technology education and research institutions for central eastern and south-eastern European countries. The Subcommittee also noted that the steering committee for the network had held a meeting during the current session to discuss further procedures for the operation of the network.

74. The Subcommittee noted that the satellite-based COPINE project would offer an excellent opportunity for the exchange of information needed to promote progress in health care, agriculture, education, science and technology, and the management and survey of natural resources and the environment in Africa. The Subcommittee noted that such cooperation would provide long-term benefits to the participating African countries and would contribute to economic growth in the region. The Subcommittee also noted that the Provisional Governing Board of COPINE, at its meeting held in London on 27 April 1998, had made conclusions and recommendations concerning the future of the project (A/AC.105/715, para. 21). It was noted that the Office for Outer Space Affairs was continuing consultations on the implementation of the project with a number of interested countries.

75. The Subcommittee noted with satisfaction that the regional preparatory conferences for UNISPACE III, mentioned in paragraph 47 above, had served to promote regional and interregional cooperation.

76. The Subcommittee emphasized the importance of regional and international cooperation in making the benefits of space technology available to all countries by such cooperative activities as sharing payloads, disseminating

information on spin-off benefits, ensuring compatibility of space systems and providing access to launch capabilities at reasonable cost.

# V. Other matters

# A. Review of the future work of the Scientific and Technical Subcommittee

77. In adopting the agenda for its thirty-sixth session, the Subcommittee recalled that consideration of several agenda items had been suspended for one year in accordance with General Assembly resolution 53/45, paragraph 14, and that consideration of those items was to be resumed at its thirty-seventh session. The Subcommittee also recalled that it should identify at its thirty-sixth session the theme fixed for special attention of the Subcommittee at its thirty-seventh session.

78. The Subcommittee noted that, in accordance with General Assembly resolution 53/45, the agenda for its thirty-seventh session should include the following priority items:

(a) United Nations Programme on Space Applications and the coordination of space activities within the United Nations system;

(b) Matters relating to the remote sensing of Earth by satellite, including applications for developing countries;

(c) Use of nuclear power sources in outer space;

(d) Space debris.

79. The Subcommittee noted that, in accordance with General Assembly resolution 53/45, the agenda for its thirty-seventh session should also include the following items:

(a) Questions relating to space transportation systems and their implications for future activities in outer space;

(b) Examination of the physical nature and technical attributes of the geostationary orbit and of its utilization and applications, including in the field of space communications, as well as other questions relating to space communications developments, taking particular account of the needs and interests of developing countries;

(c) Matters relating to life sciences, including space medicine;

(d) Progress in national and international space activities related to the Earth's environment, in particular progress in the International Geosphere-Biosphere (Global Change) Programme;

(e) Matters relating to planetary exploration;

(f) Matters relating to astronomy;

(g) Consideration of the theme fixed for special attention at the thirty-seventh session of the Scientific and Technical Subcommittee.

80. The Subcommittee agreed that it should review the structure of its agenda taking into account the recommendations of UNISPACE III and that that task could be accomplished under its agenda item entitled "Other matters".

81. The Subcommittee agreed that at its thirty-seventh session, in 2000, the theme fixed for special attention should be "Space commercialization: an era of new opportunities". The Subcommittee recalled that, at its thirty-fifth session, it had recommended that COSPAR and IAF, in liaison with Member States, should be invited to arrange a symposium with as wide a participation as possible, to be held during the first week of the thirty-seventh session of the Subcommittee, in order to complement its discussions on the special theme (A/AC.105/697 and Corr.1, para. 155).

82. The Subcommittee recalled that the Committee on the Peaceful Uses of Outer Space, at its forty-first session, had agreed that the Scientific and Technical Subcommittee and the Legal Subcommittee would invite special presentations on new launch systems and ventures at their sessions in 2000 with a view to attaining a better understanding of those launch activities.<sup>3</sup>

83. In accordance with the four-year work plan for developing a framework on safety assurance processes and standards for nuclear power sources in outer space, the Subcommittee requested the Secretariat to invite Member States and international organizations to submit to the Subcommittee at its thirty-seventh session, in 2000, information on the identification of terrestrial processes

and technical standards that might be relevant to nuclear power sources, including factors that distinguished nuclear power sources in outer space from terrestrial nuclear applications.<sup>4</sup>

84. Some delegations expressed the view that the Subcommittee needed to have a modified agenda to include extensive discussions on possible new items.

85. Some delegations proposed new items for the agenda of the Subcommittee at its thirty-seventh session in 2000,

and at its thirty-eighth session, in 2001. Those delegations were of the view that the new agenda items, contained in a working paper submitted by Germany on behalf of Austria, Canada, China, Czech Republic, France, Greece, Hungary, Italy, Japan, Morocco, Romania, Russian Federation, Spain, Sweden, Turkey, United Kingdom of Great Britain and Northern Ireland and United States of America (A/AC.105/C.1/L.227), would limit the amount of information not related to agenda items that was reported at the sessions of the Subcommittee, focus the work of the Subcommittee on its agenda items and facilitate the consideration by the Subcommittee of the results and recommendations of UNISPACE III. The delegations of those countries were of the view that the draft provisional agenda items proposed in the working paper should be recommended by the Committee at its next session, in July 1999, for approval by the General Assembly at its fiftyfourth session.

86. The view was expressed that an item entitled "Matters relating to the remote sensing of Earth by satellite, including applications for developing countries and monitoring of Earth's environment", should be a substantive item of the agenda of the Scientific and Technical Subcommittee.

87. The Subcommittee agreed that the proposal contained in document A/AC.105/C.1/L.227 could constitute the basis for consensus at the 1999 session of the Committee on the Peaceful Uses of Outer Space while, in addition, taking into account the views expressed by other delegations.

88. The view was expressed that, for a meaningful discussion of the geostationary orbit, it was necessary to know what objects were in the geostationary orbit and which of them were in service and that, on that basis, the Subcommittee would be able to determine whether or not the item on the geostationary orbit should continue to be on its agenda.

89. Some delegations expressed the view that the item on the geostationary orbit should remain on the agenda of the Subcommittee.

90. The Subcommittee recommended that its thirtyseventh session be held from 7 to 18 February 2000.

# **B.** Future election of the Rapporteur of the Committee

91. The Subcommittee noted with satisfaction that the African Group had nominated Mohammed Aït Belaïd

(Morocco) to fill the vacant post of Rapporteur of the Committee on the Peaceful Uses of Outer Space and that the election of the Rapporteur would take place at the session of the Committee that would be held in July 1999.

# C. Other reports

92. The Subcommittee welcomed the annual reports of ESA (A/AC.105/716), INTELSAT (A/AC.105/717) and NASA (A/AC.105/718). The Subcommittee requested those organizations to continue to report on their work.

93. The Subcommittee expressed its appreciation to COSPAR for its report on the progress in space research and to IAF for its report on space technology and applications, the two reports being compiled by the Office for Outer Space Affairs and issued jointly under the title *Highlights in Space: Progress in Space Science, Technology and Applications, International Cooperation and Space Law,* 1998 (A/AC.105/710).

94. The Subcommittee noted with appreciation the participation in its current session of representatives of United Nations bodies and specialized agencies and permanent observers. The Subcommittee noted that their statements and reports had been helpful in enabling it to fulfil its role as focal point for international cooperation in space.

Notes

<sup>1</sup> In paragraph 14 of its resolution 53/45 of 3 December 1998, the General Assembly endorsed the recommendation of the Committee of Peaceful Uses of Outer Space that, in view of the abbreviated schedule of work of the Scientific and Technical Subcommittee at its thirty-sixth session and the preparatory work to be conducted for UNISPACE III, the Subcommittee should suspend, as an exception, its consideration of the following items for one year, to be resumed at its thirty-seventh session, in the year 2000:

(a) General exchange of views;

(b) Matters relating to the remote sensing of the Earth by satellites, including, *inter alia*, applications for developing countries;

(c) Use of nuclear power sources in outer space;

(d) Questions relating to space transportation systems and their implications for future activities in space;

(e) Examination of the physical nature and technical attributes of the geostationary orbit and of its utilization and applications, including, *inter alia*, in the field of space communications, as well as other questions relating to space communications developments, taking particular account of the needs and interests of developing countries;

(f) Matters relating to life sciences, including space medicine;

(g) Progress in national and international space activities related to the Earth's environment, in particular progress in the International Geosphere-Biosphere (Global Change) Programme;

(h) Matters relating to planetary exploration;

(i) Matters relating to astronomy;

 $(j) \qquad \mbox{The theme fixed for the special attention of the Subcommittee} \label{eq:special}$ 

<sup>2</sup> Official Records of the General Assembly, Fifty-third Session, Supplement No. 20 (A/53/20), paras. 23-44.

<sup>3</sup> Ibid., para. 153.

<sup>4</sup> Ibid. para. 91.

# Annex I

# Documents before the Scientific and Technical Subcommittee at its thirty-sixth session

# Item 1. Adoption of the agenda

A/AC.105/C.1/L.225 Provisional agenda, with annotations, for the thirty-sixth session

# Item 3. Preparations for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) by the Advisory Committee for UNISPACE III

A/CONF.184/2	Provisional rules of procedure of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space
A/CONF.184/PC/1	Draft report of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space
A/CONF.184/PC/2	Report on the Regional Preparatory Conference for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space for Asia and the Pacific (Kuala Lumpur, 18-22 May 1998)
A/CONF.184/PC/3	Report on the Regional Preparatory Conference for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space for Latin America and the Caribbean (Concepción, Chile, 12-16 October 1998)
A/CONF.184/PC/4	Report on the Regional Preparatory Conference for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space for Africa and the Middle East (Rabat, 26-30 October 1998)
A/CONF.184/PC/5	Report on the Regional Preparatory Conference for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space for Eastern Europe (Bucharest, 25-29 January 1999)
A/CONF.184/PC/L.4	Organizational matters relating to the holding of UNISPACE III
A/CONF.184/PC/L.5 and Add.1	Recommendations of the regional preparatory conferences for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space

# Item 4. Space debris

A/AC.105/707	Draft technical report on space debris of the Scientific and Technical Subcommittee
A/AC.105/708 and Add.1 and 2	National research on space debris, safety of nuclear-powered satellites and problems of collisions of nuclear-powered sources with space debris

# Item 5. United Nations Programme on Space Applications and the coordination of space activities within the United Nations system

A/AC.105/715	Report of the Expert on Space Applications
A/AC.105/704	Report on the Eighth United Nations International Training Course on Remote Sensing Education for Educators (Stockholm and Kiruna, Sweden, 4 May-12 June 1998)
A/AC.105/706	Report on the Second United Nations International Workshop on Spin-off Benefits of Space Technology: Challenges and Opportunities (Tampa, Florida, United States of America, 30 March-3 April 1998)
A/AC.105/709	Report on the Workshop on the Evaluation of the United Nations/Swedish International Development Agency International Training Course Series on Remote Sensing Education for Educators (Gaborone, 18-21 October 1998)
A/AC.105/711	Seminars of the United Nations Programme on Space Applications: Selected Papers on Remote Sensing, Space Science and Information Technology
A/AC.105/712	Report on the United Nations/European Space Agency Symposium on Economic Benefits of Using Space Technology Applications in Developing Countries (Graz, Austria, 7-10 September 1998)
A/AC.105/713	Report on the United Nations Workshop on Space Technology for Emergency Aid/Search and Rescue Satellite-Aided Tracking System for Ships in Distress (Maspalomas, Gran Canaria, Spain, 24 and 25 September 1998)
A/AC.105/714	Report on the United Nations/International Astronautical Federation Workshop on Expanding the User Community of Space Technology Applications in Developing Countries (Melbourne, Australia, 24- 27 September 1998)

# Item 6. Other matters

A/AC.105/710	Highlights in Space, 1998: Progress in Space Science, Technology and Applications, International Cooperation and Space Law
A/AC.105/716	Report of the European Space Agency
A/AC.105/717	Report of the International Telecommunications Satellite Organization
A/AC.105/718	Report of the National Aeronautics and Space Administration
A/AC.105/C.1/L.227	Proposal on revising the agenda of the Scientific and Technical Subcommittee following the convening of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space: working paper submitted by Germany on behalf of Austria, Canada, China, Czech Republic, France, Greece, Hungary, Italy, Japan, Morocco, Romania, Russian Federation, Spain, Sweden, Turkey, United Kingdom of Great Britain and Northern Ireland and United States of America
A/AC.105/C.1/1999/CRP.5	Revision to the medium-term plan for the period 1998-2001

# Item 7. Report to the Committee on the Peaceful Uses of Outer Space

A/AC.105/C.1/L.226	Draft report of the Scientific and Technical Subcommittee on the
and Add.1-3	work of its thirty-sixth session

# Working Group of the Whole

# Annex II

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

1. In accordance with General Assembly resolution 53/45, paragraph 18, the Working Group of the Whole was reconvened at the thirty-sixth session of the Scientific and Technical Subcommittee to assist the Advisory Committee in finalizing its preparatory work for the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III). The Working Group held nine meetings from 22 to 26 February 1999. At its ninth meeting, on 26 February 1999, it adopted the present report.

2. It was recalled that, at its previous sessions, the Working Group had carried out its work under the chairmanship of Muhammad Nasim Shah (Pakistan). It was decided that, in his absence, the Working Group would carry out its work under the chairmanship of Ulrike Butschek (Austria). It was agreed that the Acting Chairperson would be assisted by Latha Reddy (India) in coordinating the work related to the organizational matters relating to UNISPACE III.

3. The Working Group noted that the General Assembly, in its resolution 52/56, had agreed that UNISPACE III should be convened at the United Nations Office at Vienna from 19 to 30 July 1999 as a special session of the Committee on the Peaceful Uses of Outer Space, open to all States Members of the United Nations. The Working Group also noted that the Assembly, in its resolution 53/45, had endorsed the recommendations of the Preparatory Committee at its 1998 session<sup>a</sup> and had requested the Preparatory and Advisory Committees and the executive secretariat to carry out their tasks in accordance with those recommendations.

## A. Preparation of the draft report

4. The Working Group recalled that the executive secretariat would circulate to the Member States, at the end of September 1998, the draft report and the revised version of the draft Vienna Declaration on Space and Human Development, along with the draft executive summary, to be revised on the basis of comments received from Member States. The Working Group also recalled that the executive secretariat would provide a compilation of the

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recommendations from the regional preparatory conferences for UNISPACE III and other comments to be received from Member States for consideration by the Advisory Committee, at its 1999 session, for inclusion in the draft report, the draft executive summary and the draft of the Vienna Declaration.<sup>b</sup>

5. The Working Group had before it a note by the Secretariat (A/CONF.184/PC/1) containing the revised text of the full draft report, which had been prepared on the basis of detailed comments made by the Preparatory Committee at its 1998 session. The Working Group noted that the document contained the text of the draft Declaration as revised by the Preparatory Committee and the text of the draft executive summary as revised by the executive secretariat on the basis of comments made by the Preparatory Committee. The Working Group also had before it documents containing the recommendations of the regional preparatory conferences for UNISPACE III for Asia and the Pacific and for Africa and the Middle East (A/CONF.184/PC/L.5) and for Latin America and the Caribbean and for Eastern Europe (A/CONF.184/PC/ L.5/Add.1).

6. The Working Group noted that draft revised texts of the Vienna Declaration had been submitted by the United Kingdom of Great Britain and Northern Ireland, on behalf of States members of the European Space Agency, including Canada (A/CONF.184/PC/CRP.14) and by the Czech Republic (A/CONF.184/PC/CRP.17). The Working Group had before it a document containing a composite text prepared by the executive secretariat that included the proposals made by Member States for the draft of the Vienna Declaration (A/CONF.184/PC/CRP.18).

7. The Working Group considered, section by section, the revised draft annexed to a note by the Secretariat (A/CONF.184/PC/1), as well as an additional text on strengthening the activities of the United Nations Programme on Space Applications (A/CONF.184/PC/ CRP.20), together with a correction introduced by the Director of the Office for Outer Space Affairs, and provided detailed comments to finalize the text. On the basis of comments made in the Working Group on the composite text prepared by the executive secretariat, the Working Group prepared a revised draft of the Vienna Declaration (A/CONF.184/PC/CRP.18/Rev.1), to which all the recommendations of the preparatory regional conferences for UNISPACE III would be annexed.

8. The Working Group agreed that, on the basis of the above-mentioned comments, the executive secretariat should revise the draft of the Vienna Declaration and finish preparing the draft report well ahead of the 1999 session of the Preparatory Committee, for distribution to all Member States, so that the draft report could be forwarded to UNISPACE III.

#### **B.** Organization

9. The Working Group recalled the agreement of the Preparatory Committee at its 1998 session that the Advisory Committee, at its 1999 session, should reach agreement on the distribution of the remaining offices for UNISPACE III and the allocation of agenda items of UNISPACE III between Committee I and Committee II. The Working Group also recalled that the Preparatory Committee had requested the executive secretariat to submit proposals to assist the Advisory Committee in considering those matters.<sup>c</sup>

10. The Working Group had before it a report prepared by the Secretariat on organizational matters relating to the holding of UNISPACE III (A/CONF.184/PC/L.4) and documents prepared by the Secretariat containing additional and updated information for that report (A/CONF.184/PC/CRP.12 and Add.1).

11. On the basis of its deliberations, the Working Group agreed on a number of issues concerning the organization of UNISPACE III, which are presented below.

#### 1. Distribution of offices of the General Committee and establishment of a drafting group

12. The Working Group recalled the agreement of the Working Group of the Whole of the Committee on the Peaceful Uses of Outer Space at its 1998 session on the provisional rules of procedure for UNISPACE III,<sup>d</sup> in particular rule 6, paragraph 2, concerning the establishment of a drafting group for UNISPACE III, and rule 7, paragraph 2, concerning the offices of the General Committee and their equitable geographical distribution.

13. The Working Group noted the candidates nominated by the regional groups to become officers of the General Committee of UNISPACE III and agreed on the following

composition and distribution of offices for the Conference: for the Plenary, U. R. Rao (India) as President, Raimundo González (Chile) as Vice-President, and Mohammed Aït Belaïd (Morocco) as Rapporteur-General; for Committee I, Dietrich Rex (Germany) as Chairman, Yuri Koptev (Russian Federation) as Vice-Chairman and R. A. Boroffice (Nigeria) as Vice-Chairman and Rapporteur; for Committee II, Shunji Murai (Japan) as Chairman, Vladimir Kopal (Czech Republic) as Vice-Chairman and Luiz Gylvan Meira Filho (Brazil) as Vice-Chairman and Rapporteur; and for the Technical Forum, Peter Jankowitsch (Austria) as Chairman.

14. The Working Group also agreed that the Drafting Group, to be chaired by the Rapporteur-General of the Plenary and consisting of two representatives from each of the five regional groups, together with any additional representatives of the Member States invited by the Rapporteur-General to assist in the preparation of the full draft report of UNISPACE III, would include the following individuals: Dawlat Hassen (Egypt) and Mongezi Tshongweni (South Africa), for Africa; Sridhara Murthy (India) and a representative (to be identified) from Malaysia, for Asia and the Pacific; Dumitru Dorin Prunariu (Romania) and Arif Mehdiyev (Azerbaijan), for Eastern Europe; two representatives (to be identified) from countries in Latin America and the Caribbean; and Gabriella Venturini (Italy) and Lynn F. H. Cline (United States of America), for Western Europe and other States.

#### 2. Allocation of agenda items and schedule of work of the Plenary, Committee I and Committee II

15. The Working Group considered a proposal made by the executive secretariat on the allocation of agenda items among the main bodies of UNISPACE III, based on the restructured draft provisional agenda (A/CONF.184/ PC/L.4, paras. 23-27). The Working Group agreed on the allocation of the items as follows, on the understanding that the sub-item entitled "Ways and means to promote international cooperation" would be added to item 11, entitled "Economic and societal benefits":

Plenary:	items 1-6, 13-15
Committee I:	items 7, 9, 10 and 12
Committee II:	items 8 and 11

16. The Working Group also agreed on the indicative schedule of work of the Plenary, Committee I and Committee II as proposed by the executive secretariat (A/CONF.184/PC/L.4, paras. 28-29 and annex VII).

# **3.** Arrangements for the activities of the Technical Forum

17. The Working Group agreed on the arrangements made by the executive secretariat for the activities of the Technical Forum, concerning, among others, their schedule and conference services to be provided (A/CONF.184/PC/L.4, paras. 32-37 and 42-50, and A/CONF.184/PC/CRP.12 and Add.1).

# 4. Additional international organizations to be invited

18. The Working Group recalled that the Preparatory Committee at its 1998 session approved the list of international organizations to be invited to UNISPACE III on the understanding that, if agreement was reached, other international organizations could be added to the list at the 1999 session of the Advisory Committee. The Working Group noted that the Pugwash Conferences on Science and World Affairs and the European Space Science Committee of the European Science Foundation had expressed their interest in participating in UNISPACE III and agreed that those organizations should be invited.

# 5. Participation of national organizations and the statements to be made by space-related international organizations without observer status with the General Assembly or the Committee on the Peaceful Uses of Outer Space

19. The Working Group noted that the provisional rules of procedure did not explicitly cover the questions of the participation of national non-governmental organizations and the statements to be made in the Plenary, Committee I or Committee II by space-related international organizations not having permanent observer status with the General Assembly or the Committee on the Peaceful Uses of Outer Space. Considering that both national organizations and space-related industries would be invited through their Governments, the Working Group recommended that the relevant provisions of rule 16 of the provisional rules of procedure, governing the participation of space-related industries, should be applied to the participation of national organizations. The Working

Group also recommended that, under rule 15 of the provisional rules of procedure, it should be understood that international organizations that were identified and called upon, under item 7 of the provisional agenda, to present reports should be permitted to make statements on their reports.

## 6. Voluntary contributions

20. The Working Group noted that, in his statement, the Director of the Office for Outer Space Affairs of the Secretariat had invited Member States, space agencies and relevant national and international organizations to consider supporting the preparations for UNISPACE III through voluntary contributions. The Working Group noted with appreciation that the Government of Austria, the province of Styria and the city of Graz had provided substantial financial assistance by renting space in the Austria Center Vienna, seconding a junior professional staff member, co-sponsoring the activities of the Technical Forum and the Space Generation Forum and organizing social activities for participants of UNISPACE III. The Working Group also noted with appreciation the contributions of the Centre national d'études spaciales of France, in providing financial support for the publication of the preliminary programme, of the Government of Japan, in seconding an expert, and of the European Space Agency, in co-sponsoring the regional preparatory conferences for UNISPACE III and providing financial support for the reproduction of the UNISPACE III poster. The Working Group noted with satisfaction that other Member States were also considering making voluntary contributions to ensure the success of the preparations for and the convening of UNISPACE III. The Working Group invited others to do the same.

21. The Working Group noted that the question of the participation of the least developed countries had been raised in the Fourth Committee of the General Assembly at its fifty-third session. The Working Group noted with satisfaction that, in response to a request by the Working Group on the agenda item on international cooperation in the peaceful uses of outer space, the executive secretariat was seeking voluntary contributions to support the participation of the least developed countries. The Working Group invited interested Member States and international organizations to consider making voluntary contributions to assist the executive secretariat in that endeavour.

## 7. Future work

22. The Working Group recommended that the executive secretariat should be requested to prepare a report, for submission to the General Assembly at its fifty-fourth session, on the organizational matters relating to UNISPACE III, which should provide guidelines for other bodies in the United Nations and organizations within the United Nations system for organizing a conference that would address global issues while keeping its cost within existing resources.

#### Notes

- <sup>a</sup> Official Records of the General Assembly, Fifty-third Session, Supplement No. 20 (A/53/20), paras. 23-44.
- <sup>b</sup> Ibid., para. 35.
- <sup>c</sup> Ibid., para. 40.
- <sup>d</sup> Ibid., annex.