



**United Nations**

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

**General Assembly**  
**Official Records**  
**Sixty-first session**  
**Supplement No. 20 (A/61/20)**



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



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*Note*

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## Chapter I

### Introduction

1. The Committee on the Peaceful Uses of Outer Space held its forty-ninth session in Vienna from 7 to 16 June 2006. The officers of the Committee were as follows:

<i>Chairman:</i>	Gérard Brachet (France)
<i>First Vice-Chairman:</i>	Előd Both (Hungary)
<i>Second Vice-Chairman/Rapporteur:</i>	Paul R. Tiendrébéogo (Burkina Faso)

The unedited verbatim transcripts of the meetings of the Committee are contained in documents COPUOS/T.550-565.

#### A. Meetings of subsidiary bodies

2. The Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space had held its forty-third session in Vienna from 20 February to 3 March 2006, under the chairmanship of B. N. Suresh (India). The report of the Subcommittee was before the Committee (A/AC.105/869).

3. The Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space had held its forty-fifth session in Vienna from 3 to 13 April 2006, under the chairmanship of Raimundo González Aninat (Chile). The report of the Subcommittee was before the Committee (A/AC.105/871). The unedited verbatim transcripts of the meetings of the Subcommittee are contained in documents COPUOS/Legal/T.731-747.

#### B. Adoption of the agenda

4. At its opening meeting, the Committee adopted the following agenda:
1. Opening of the session.
  2. Adoption of the agenda.
  3. Election of officers.
  4. Statement by the Chairman.
  5. General exchange of views.
  6. Ways and means of maintaining outer space for peaceful purposes.
  7. Implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III).
  8. Report of the Scientific and Technical Subcommittee on its forty-third session.
  9. Report of the Legal Subcommittee on its forty-fifth session.

10. Spin-off benefits of space technology: review of current status.
11. Space and society.
12. Space and water.
13. Recommendations of the World Summit on the Information Society.
14. Other matters.
15. Report of the Committee to the General Assembly.

### **C. Election of officers**

5. At the 550th meeting, on 7 June, Gérard Brachet (France) was elected Chairman of the Committee, Elöd Both (Hungary) was elected its First Vice-Chairman and Paul R. Tiendrébéogo (Burkina Faso) was elected its Second Vice-Chairman/Rapporteur, each for a two-year term of office.

6. Also at the 550th meeting, the Committee endorsed the election of B. N. Suresh (India) as Chairman of the forty-third session of the Scientific and Technical Subcommittee, Mazlan Othman (Malaysia) as Chairman of the forty-fourth session of the Scientific and Technical Subcommittee and Raimundo González Aninat (Chile) as Chairman of the Legal Subcommittee for a two-year term of office.

### **D. Membership**

7. In accordance with General Assembly resolutions 1472 A (XIV) of 12 December 1959, 1721 E (XVI) of 20 December 1961, 3182 (XXVIII) of 18 December 1973, 32/196 B of 20 December 1977, 35/16 of 3 November 1980, 49/33 of 9 December 1994, 56/51 of 10 December 2001, 57/116 of 11 December 2002 and 59/116 of 10 December 2004 and decision 45/315 of 11 December 1990, the Committee on the Peaceful Uses of Outer Space was composed of the following 67 States: Albania, Algeria, Argentina, Australia, Austria, Belgium, Benin, Brazil, Bulgaria, Burkina Faso, Cameroon, Canada, Chad, Chile, China, Colombia, Cuba, Czech Republic, Ecuador, Egypt, France, Germany, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Italy, Japan, Kazakhstan, Kenya, Lebanon, Libyan Arab Jamahiriya, Malaysia, Mexico, Mongolia, Morocco, the Netherlands, Nicaragua, Niger, Nigeria, Pakistan, Peru, Philippines, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Saudi Arabia, Senegal, Sierra Leone, Slovakia, South Africa, Spain, Sudan, Sweden, Syrian Arab Republic, Thailand, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, Venezuela (Bolivarian Republic of) and Viet Nam.

### **E. Attendance**

8. Representatives of the following 58 States members of the Committee attended the session: Algeria, Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Burkina Faso, Canada, Chile, China, Colombia, Cuba, Czech Republic, Ecuador,



Egypt, France, Germany, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Italy, Japan, Kazakhstan, Libyan Arab Jamahiriya, Malaysia, Mexico, Mongolia, Morocco, Netherlands, Nicaragua, Nigeria, Pakistan, Peru, Philippines, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Saudi Arabia, Slovakia, South Africa, Spain, Sudan, Sweden, Syrian Arab Republic, Thailand, Turkey, Ukraine, United Kingdom, United States, Uruguay, Venezuela (Bolivarian Republic of) and Viet Nam.

9. At its 550th, 551st and 552nd meetings, the Committee decided to invite, at their request, representatives of Angola, Azerbaijan, Belarus, Bolivia, the Dominican Republic, the Holy See, Israel, Switzerland and Tunisia to attend its forty-ninth session and to address it, as appropriate, on the understanding that it would be without prejudice to further requests of that nature and that it would not involve any decision of the Committee concerning status.

10. Representatives of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Atomic Energy Agency (IAEA) attended the session.

11. The session was also attended by representatives of the Committee on Earth Observation Satellites (CEOS), the European Space Agency (ESA), the European Space Policy Institute (ESPI), the International Astronautical Federation (IAF), the International Mobile Satellite Organization (IMSO), the International Society for Photogrammetry and Remote Sensing (ISPRS), the International Space University (ISU), the Space Generation Advisory Council (SGAC) and the Spaceweek International Association (SIA).

12. The invited representative of the secretariat of the Group on Earth Observations (GEO) also attended the session.

13. A list of representatives of States members of the Committee, States not members of the Committee, United Nations entities and other organizations attending the session is contained in document A/AC.105/XLIX/INF/1.

## **F. General statements**

14. Statements were made by representatives of the following States members of the Committee during the general exchange of views: Argentina, Austria, Brazil, Burkina Faso, Canada, Chile, China, Colombia, Cuba, Czech Republic, Ecuador, France, Germany, Hungary, India, Indonesia, Italy, Japan, Libyan Arab Jamahiriya, Malaysia, Nigeria, Pakistan, Poland, Portugal, Republic of Korea, Romania, Russian Federation, South Africa, Thailand, Ukraine, United States and Venezuela (Bolivarian Republic of). The representative of Switzerland also made a statement. Statements were also made by the representatives of ESPI and ISPRS.

15. The Committee welcomed the election of Gérard Brachet (France) as its Chairman, Elöd Both (Hungary) as its First Vice-Chairman and Paul R. Tiendrébéogo (Burkina Faso) as its Second Vice-Chairman/Rapporteur.

16. The Committee expressed its appreciation to its outgoing Chairman, Adigun Ade Abiodun (Nigeria), to its outgoing First Vice-Chairman,

Ciro Arévalo Yepes (Colombia), and to its outgoing Second Vice-Chairman/Rapporteur, Parviz Tarikhi (Islamic Republic of Iran), for their leadership during their terms of office.

17. The Committee expressed its condolences to the Government of Indonesia for the loss of human life and property resulting from the recent earthquake in that country.

18. The Committee congratulated the Russian Federation on the forty-fifth anniversary of the first manned flight into outer space made by cosmonaut Yuri Gagarin on 12 April 1961.

19. The Committee also congratulated the United States on the twenty-fifth anniversary of the first flight of the Space Shuttle on 12 April 1981.

20. The Committee congratulated Brazil on the space flight of its first astronaut on 30 March 2006.

21. At the 550th meeting, on 7 June, the Chairman made a statement outlining the work of the Committee at its current session. The Chairman noted that the Committee had aligned many of its activities with the global development goals set by the Millennium Summit of the United Nations, held at Headquarters from 6 to 8 September 2000, articulated by the World Summit on Sustainable Development, held in Johannesburg, South Africa, from 26 August to 4 September 2002, and reaffirmed by the 2005 World Summit, held at Headquarters from 14 to 16 September 2005. The Chairman also noted that the celebration of the fiftieth session of the Committee, in 2007, would be an excellent opportunity to pay tribute to the accomplishments made in the first 50 years since the dawn of the space age and to reflect on possible future developments for the next 50 years.

22. At the 550th meeting, the Director of the Office for Outer Space Affairs of the Secretariat made a statement in which he reviewed the work carried out by the Office during the previous year. The Committee expressed its appreciation to the Director and his staff for the services provided and work conducted by the Office in the previous year.

23. At the 550th meeting, the representative of the United States showed the Committee a video on the twenty-fifth anniversary of the Space Shuttle programme.

24. The Committee heard a presentation under the general exchange of views on “The Sentinel Asia project for establishing a disaster management support system in the Asia-Pacific region”, by K. Kaku (Japan).

## **G. Adoption of the report of the Committee**

25. After considering the various items before it, the Committee, at its 565th meeting, on 16 June, adopted its report to the General Assembly containing the recommendations and decisions set out below.

## Chapter II

### Recommendations and decisions

#### A. Ways and means of maintaining outer space for peaceful purposes

26. In accordance with paragraph 39 of General Assembly resolution 60/99 of 8 December 2005, the Committee continued its consideration, as a matter of priority, of ways and means of maintaining outer space for peaceful purposes.

27. The representatives of India and the United States made statements during the discussion on this item. During the general exchange of views, statements were also made on this item by representatives of other member States.

28. The Committee noted with satisfaction the agreement of the General Assembly that, during its consideration of the matter, the Committee could consider ways to promote regional and interregional cooperation based on experiences stemming from the Space Conference of the Americas and the role that space technology could play in the implementation of recommendations of the World Summit on Sustainable Development.

29. With regard to the implementation of the recommendations of the World Summit on Sustainable Development, the Committee noted that, based on the input provided by member States of the Committee and entities of the United Nations system, the Office for Outer Space Affairs had continued to update the list of space-related initiatives and programmes that corresponded to recommendations contained in the Plan of Implementation of the World Summit on Sustainable Development.<sup>1</sup> The Committee agreed that the Office should continue to update the list, which is available on the website of the Office ([www.uncosa.unvienna.org/wssd/index.html](http://www.uncosa.unvienna.org/wssd/index.html)).

30. The Committee noted with satisfaction that the Government of Ecuador would be hosting the Fifth Space Conference of the Americas in Quito from 25 to 28 July 2006 and that the Government of Chile, with the support of the Government of Colombia, UNESCO and the Office for Outer Space Affairs, had organized a preparatory meeting for the Conference during the International Air and Space Fair held in Santiago on 28 and 29 March 2006.

31. Some delegations were of the view that the benefits of space technology and its applications should contribute to an orderly growth of space activities favourable to sustained economic growth and sustainable development in all countries, particularly in developing ones.

32. The view was expressed that the consideration of all issues affecting the peaceful uses of outer space, including the use of applications of space technology for the sustainable growth and development of all States, would require the consideration by the Committee of the possibility of establishing a practical mechanism for coordinating and harmonizing its work with other related bodies, such as the General Assembly and the Conference on Disarmament.

33. The view was expressed that, in order to maintain the peaceful, responsible and international character of the space field, the Committee should promote greater transparency in the space activities being undertaken by various States.

34. The view was expressed that the Committee should play a key role in disseminating and promoting the peaceful uses of outer space through the contributions that it was making and should continue to make towards consolidating and perfecting the ethical principles and legal instruments that could guarantee the non-discriminatory use of outer space exclusively for peaceful purposes.
35. The view was expressed that the Committee had been created exclusively to promote international cooperation in the peaceful uses of outer space and that disarmament aspects of outer space were more appropriately dealt with in other forums, such as the General Assembly and the Conference on Disarmament.
36. The view was expressed that calls for the placement of weapons in outer space would inevitably lead to suspicion and tension among States and the destruction of a climate of trust and cooperation and that, therefore, the discussion on maintaining outer space for peaceful purposes should continue to be held by the Committee.
37. The view was expressed that the introduction of weapons into outer space would undermine the concept of the peaceful uses of outer space, as well as the basis for, and the very logic of disarmament and non-proliferation efforts.
38. The view was expressed that the establishment of effective mechanisms, including legal mechanisms, could serve as an important obstacle to the militarization of outer space.
39. The view was expressed that reviewing ways and means of maintaining outer space for peaceful purposes could be done by exploring ways to promote regional and interregional cooperation based on the experience of the Space Conference of the Americas, as well as by considering the role that space technology could play in the implementation of actions recommended in the Plan of Implementation of the World Summit on Sustainable Development.
40. The view was expressed that space activities could contribute to the broad concept of security by maintaining the peaceful aspect of space technology development and fostering peaceful uses of outer space.
41. The view was expressed that, in order to further the objective of promoting the peaceful uses of outer space, the limited resources of outer space, such as geostationary orbital positions, should be shared equitably among countries.
42. The Committee recommended that, at its fiftieth session, in 2007, it should continue its consideration, on a priority basis, of the item on ways and means of maintaining outer space for peaceful purposes.

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## **B. Implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space**

43. In accordance with General Assembly resolution 60/99, the Committee considered the item on the implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III).

44. The representatives of Argentina, Brazil, Chile, China, France, Germany, India, Italy, Japan, Nigeria, the United Kingdom and the United States made statements under the item. During the general exchange of views, statements relating to this item were also made by representatives of other member States. The observers for IAF and SIA also made statements. The invited representative of the secretariat of GEO also made a statement.

45. The Committee had before it, for its consideration, the following:

(a) Contribution of the Committee on the Peaceful Uses of Outer Space to the work of the Commission on Sustainable Development for the thematic cluster 2006-2007: space for sustainable development (A/AC.105/872);

(b) Strengthening the link between the Committee and the Commission on Sustainable Development (A/AC.105/2006/CRP.11).

46. The Committee noted that, in accordance with General Assembly resolution 60/99, the Scientific and Technical Subcommittee at its forty-third session had convened the Working Group of the Whole to consider the implementation of the recommendations of UNISPACE III. The Chairman of the Working Group of the Whole was Muhammad Nasim Shah (Pakistan).

47. The Committee endorsed the recommendations of the Scientific and Technical Subcommittee and its Working Group of the Whole with regard to the implementation of the recommendations of UNISPACE III.

48. The Committee heard under this item a presentation entitled "World Space Week in Bangladesh", by F. R. Sarker (SIA).

49. The Committee emphasized the importance of implementing the Plan of Action contained in its report to the General Assembly on the implementation of the recommendations of UNISPACE III (A/59/174, sect. VI.B), which had been endorsed by the Assembly in its resolution 59/2 of 20 October 2004.

50. The Committee noted that, in accordance with General Assembly resolution 59/2, the Committee should continue to consider, in its future sessions, the implementation of the recommendations of UNISPACE III until the Committee considered that concrete results had been achieved.

51. The Committee agreed that the recommendations of UNISPACE III were being effectively implemented through the use of multi-year workplans, the establishment of actions teams and reports from ad hoc and other groups on their activities. The Committee agreed that that flexible approach enabled it to address a wide range of important and related issues.

52. The Committee noted with appreciation that Member States were implementing the recommendations of UNISPACE III by, among other things, actively supporting and participating in the work related to the 10-Year Implementation Plan of GEO, the efforts of the Integrated Global Observing Strategy (IGOS) and CEOS. The Committee also noted that some Member States were contributing to the implementation of the recommendations of UNISPACE III by continuing to contribute to the work of the action teams established by the Committee to implement those recommendations.

53. The Committee agreed that the establishment of the action teams had created, under the voluntary leadership of Governments, a unique and useful mechanism that allowed for governmental and non-governmental entities to participate in the follow-up to UNISPACE III while preserving the pivotal role of Member States.

54. The Committee noted with satisfaction that, during its forty-ninth session, the Action Team on an Environmental Monitoring Strategy had met. The Committee welcomed the report on the progress being made by the Action Team on Near-Earth Objects.

55. The Committee noted with appreciation that Member States were also contributing to the implementation of the recommendations of UNISPACE III through a number of national and regional activities and efforts.

56. The Committee noted with appreciation that the International Committee on GNSS (ICG) had been established on a voluntary basis as an informal body to promote cooperation, as appropriate, on matters of mutual interest related to civil satellite-based positioning, navigation, timing and value-added services, as well as the compatibility and interoperability of global navigation satellite systems (GNSS) systems, while increasing their use to support sustainable development, particularly in developing countries. The Committee also noted that since the establishment of ICG, 19 States and intergovernmental and non-governmental organizations had confirmed their participation in ICG as members or observers. The Committee further noted that, at its meeting held on 6 June 2006, the terms of reference for ICG had been finalized by the ad hoc working group established for that purpose.

57. The Committee noted with appreciation that, in accordance with its strategy to further implement the recommendations of UNISPACE III, the Office for Outer Space Affairs had been serving as the focal point for matters relating to the establishment of the ad hoc working group and would provide support for the organization of the first meeting of ICG, to be held in Vienna from 30 October to 3 November 2006.

58. The Committee noted with appreciation the progress made with regard to the study on the possibility of creating an international entity to provide for coordination and the means of realistically optimizing the effectiveness of space-based services for use in disaster management. The views of member States and the decisions of the Committee with regard to the possibility of creating such an international entity are reflected in paragraphs 150-165 of the present report.

59. The Committee welcomed with satisfaction the link established between its work relating to the implementation of the recommendations of UNISPACE III and the work being carried out by the Commission on Sustainable Development.

60. The Committee noted with appreciation that the Scientific and Technical Subcommittee had finalized the contribution of the Committee to the work of the Commission on Sustainable Development for the thematic cluster 2006-2007, on the basis of the inputs received from member States, and that the contribution, contained in document A/AC.105/872, had been made available to the Commission at its fourteenth session, held in New York from 1 to 12 May 2006.

61. The Committee expressed its appreciation to the Division for Sustainable Development of the Department of Economic and Social Affairs of the Secretariat for facilitating the submission of the contribution of the Committee to the Commission on Sustainable Development. The Committee agreed that the Office for Outer Space Affairs should continue working closely with the Commission secretariat with a view to further strengthening the connection and interaction between the two bodies.

62. The Committee agreed that the Director of the Division for Sustainable Development should be invited to participate in the sessions of the Committee to inform it of how it could best contribute to the work of the Commission on Sustainable Development and that the Director of the Office for Outer Space Affairs should attend the sessions of the Commission with a view to raising awareness and promoting the benefits of space science and technology, in particular in the areas being addressed by the Commission.

63. The Committee agreed to continue contributing to the policy year of each of the two-year cycles of the multi-year programme of work of the Commission on Sustainable Development. The Committee noted that the following issues would be the focus of the work of the Commission in the period 2008-2009: agriculture, rural development, land, drought, desertification and Africa.

64. The Committee agreed that member States should be requested to provide inputs for the development of a concise document that would emphasize the benefits of the use of, and tools offered by, space science and technology and its applications for meeting the challenges being faced, in particular, by developing countries with regard to the issues to be addressed by the Commission on Sustainable Development in the period 2008-2009. The Committee agreed that the Working Group of the Whole of the Scientific and Technical Subcommittee should, during the forty-fourth session of the Subcommittee, conduct the first review of the draft concise document to be prepared on the basis of the input received from member States.

65. The Committee agreed to finalize, at its fiftieth session, its contribution to the thematic cluster for the cycle 2008-2009 of the Commission on Sustainable Development.

66. The view was expressed that the follow-up to the recommendations of UNISPACE III should take into consideration local and regional capabilities and needs and that the productive work of the action teams should be followed by the definition and implementation of action plans describing specific goals, means and tasks.

67. The view was expressed that implementation of the recommendations of UNISPACE III would enable developing countries to address challenges of development, particularly those challenges relating to the promotion of agriculture,

the management of water resources, the eradication of illiteracy, the provision of better education and the improvement of public health services.

68. The view was expressed that developing countries could pool their resources to initiate programmes on space applications that had proved successful in other developing countries.

69. The view was expressed that efforts to involve private industry in contributing to the implementation of the recommendations of UNISPACE III should be pursued once clear project proposals were developed that could attract private industry to participate actively in the initiatives of the Committee.

70. The Committee noted that the Global Earth Observation System of Systems (GEOSS) had been created by GEO with a view to using Earth observation applications for addressing matters relating to disaster response and mitigation, health, energy and water management, weather forecasting, climate change, agriculture, biodiversity and ecosystems. The Committee also noted that GEO, through GEOSS, would coordinate the collection of Earth observation data to ensure access to the data and their distribution to all potential users, including developing countries. The Committee further noted that the workplan for implementation of that initiative in the period 2007-2008 was in the process of being finalized.

71. The Committee took note with appreciation of the reports by Member States and by the Spaceweek International Association on the promotion and organization of public outreach activities in celebration of World Space Week.

72. The Committee noted with appreciation that a report on the international celebration of World Space Week in 2005, prepared by the Spaceweek International Association in cooperation with the Office for Outer Space Affairs, had been made available in a special publication (ST/SPACE/29).

### **C. Report of the Scientific and Technical Subcommittee on its forty-third session**

73. The Committee took note with appreciation of the report of the Scientific and Technical Subcommittee on its forty-third session (A/AC.105/869), which contained the results of its deliberations on the items assigned to it by the General Assembly in its resolution 60/99.

74. The Committee expressed its appreciation to the outgoing Chairman of the Scientific and Technical Subcommittee, Dumitru-Dorin Prunariu (Romania), for his able leadership and contributions. The Committee also expressed its appreciation to B. N. Suresh (India) for his able leadership during the forty-third session of the Subcommittee.

75. At the 554th meeting of the Committee, on 9 June, the Chairman of the Scientific and Technical Subcommittee made a statement on the work of the Subcommittee at its forty-third session.

76. The representatives of Algeria, Austria, Brazil, Burkina Faso, Canada, Chile, China, Colombia, the Czech Republic, France, Germany, Greece, India, Indonesia, Iran (Islamic Republic of), Italy, Japan, Malaysia, the Netherlands, Nigeria, Poland, the Republic of Korea, Thailand, Ukraine, the United Kingdom, the United States



and Venezuela (Bolivarian Republic of) made statements under this item. During the general exchange of views, statements relating to this item were also made by representatives of other member States.

77. The Committee heard the following presentations under this agenda item:

(a) “Use of remote sensing satellite technology in disaster management”, by Arshad Siraj (Pakistan);

(b) “Mars-Express: very close to an exciting world”, by Ralf Jaumann (Germany);

(c) “IAA Study on space traffic management”, by Kai-Uwe Schrogl (International Academy of Astronautics).

78. The Committee welcomed the special presentations made before the Subcommittee on various topics and noted that such presentations provided complementary technical content for the deliberations of the Subcommittee, timely and useful information on new programmes and developments in the space community and illustrative examples of space technology.

79. The Committee noted with appreciation the ongoing inter-agency cooperation within the United Nations system. The Committee took note of the United Nations efforts in the coordinated use of space applications to achieve the goals and objectives of the World Summit on Sustainable Development, the United Nations Millennium Declaration (General Assembly resolution 55/2), the World Summit on the Information Society, the United Nations Framework Convention on Climate Change<sup>2</sup> and the Kyoto Protocol.<sup>3</sup> The Committee further noted the inter-agency coordination among United Nations entities in the implementation of the 10-Year Implementation Plan of GEOSS.

## **1. United Nations Programme on Space Applications**

### **(a) Activities of the United Nations Programme on Space Applications**

80. At the commencement of the deliberations on this item, the Expert on Space Applications briefed the Committee on the overall strategy for the implementation of the United Nations Programme on Space Applications. The strategy would concentrate on priority thematic areas, with several topics focusing on capacity-building and sustainable development for developing countries, and would address various issues related to the United Nations global agendas for development.

81. The Committee noted the priority thematic areas of the Programme, as referred to in the report of the Expert on Space Applications (A/AC.105/861, para. 5).

82. The Committee took note of the activities of the Programme carried out in 2005, as set out in the report of the Scientific and Technical Subcommittee (A/AC.105/869, paras. 40-43) and in the report of the Expert on Space Applications (A/AC.105/861, para. 52 and annex I). The Committee expressed its appreciation to the Office for Outer Space Affairs for the manner in which the activities of the Programme had been implemented within the limited funds available. The Committee also expressed its appreciation to the Governments and intergovernmental and non-governmental organizations that had sponsored those activities. The Committee noted with satisfaction that further progress was being

made in the implementation of the activities of the Programme for 2006, as set out in the report of the Subcommittee (A/AC.105/869, para. 44).

83. The Committee noted with satisfaction that the Programme was helping developing countries and countries with economies in transition to participate in and benefit from the space activities being carried out in implementing various recommendations of UNISPACE III.

84. The Committee once again expressed its concern that the financial resources available to the Programme remained limited and appealed to the donor community to support the Programme through voluntary contributions. The Committee held the view that the limited resources available to the United Nations should be focused on activities of the highest priority; it noted that the United Nations Programme on Space Applications was the priority activity of the Office for Outer Space Affairs.

(i) *United Nations Programme on Space Applications conferences, training courses and workshops*

85. The Committee expressed its appreciation to the Governments of Nepal and the Syrian Arab Republic and to ESA and the International Centre for Integrated Mountain Development for co-sponsoring and hosting activities of the United Nations Programme on Space Applications held between January and May 2006 (A/AC.105/869, para. 44 (a) and (b)).

86. The Committee endorsed the workshops, training courses, symposiums and expert meetings planned for the remaining part of 2006, and expressed its appreciation to Austria, China, India, South Africa, Spain, Ukraine, the United States and Zambia, as well as to ESA, IAA and IAF, for co-sponsoring, hosting and supporting those activities (A/AC.105/869, para. 44 (c)-(j)).

87. The Committee endorsed the programme of workshops, training courses, symposiums and conferences planned to be held in 2007 for the benefit of developing countries, as follows:

- (a) Two workshops on the use of space technology for disaster management;
- (b) Three workshops or symposiums on the application of space technology to environmental monitoring and natural resources management, to address various issues related to the United Nations global agendas for development;
- (c) One training course on satellite technology for tele-health;
- (d) One United Nations/IAF workshop;
- (e) One workshop on space law;
- (f) One workshop on the International Heliophysical Year and basic space science;
- (g) One workshop on small-satellite applications for health studies, co-organized by the Russian Federation and the Office for Outer Space Affairs, in celebration of the fiftieth anniversary of the historic launch of the world's first artificial satellite, Sputnik 1;
- (h) Training courses to be organized at the regional centres for space science and technology education, affiliated to the United Nations.

88. The Committee noted with appreciation that, since its forty-eighth session, additional resources for 2006 had been offered by various Member States and organizations.

89. The Committee noted with appreciation that the host countries of the regional centres for space science and technology education were providing significant financial and in-kind support to the centres.

(ii) *Long-term fellowships for in-depth training*

90. The Committee expressed its appreciation to the Government of Italy, which, through the Politecnico di Torino and the Istituto Superiore Mario Boella and with the collaboration of the Istituto Elettrotecnico Nazionale Galileo Ferraris, had provided four 12-month fellowships for postgraduate studies in GNSS and related applications.

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

(iii) *Technical advisory services*

92. The Committee noted with appreciation the technical advisory services provided under the United Nations Programme on Space Applications in support of activities and projects promoting regional cooperation in space applications, as referred to in the report of the Expert on Space Applications (A/AC.105/861, paras. 32-40).

**(b) International Space Information Service**

93. The Committee noted with satisfaction that the publications entitled *Seminars of the United Nations Programme on Space Applications*<sup>4</sup> and *Highlights in Space 2005*<sup>5</sup> had been issued.

94. The Committee noted with satisfaction that the Secretariat had continued to enhance the International Space Information Service and the newly improved and enhanced website of the Office for Outer Space Affairs ([www.unoosa.org](http://www.unoosa.org)). The Committee also noted with satisfaction that the Secretariat was maintaining a website on the coordination of outer space activities within the United Nations system ([www.uncosa.unvienna.org](http://www.uncosa.unvienna.org)).

**(c) Regional and interregional cooperation**

95. The Committee recalled that the General Assembly, in its resolution 50/27 of 6 December 1995, had endorsed the recommendation of the Committee that the regional centres on space science and technology education 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.

96. The Committee noted with satisfaction that the United Nations Programme on Space Applications continued to emphasize cooperation with Member States at the

regional and global levels aimed at supporting the centres. The Committee noted that all the regional centres had entered into an affiliation agreement with the Office for Outer Space Affairs.

97. The Committee also noted that the General Assembly, in its resolution 60/99, had agreed that the regional centres should continue to report to the Committee on their activities on an annual basis.

98. The Committee noted that the highlights of the activities of the regional centres supported under the Programme in 2005 and planned activities for 2006 and 2007 were included in the report of the Expert on Space Applications (A/AC.105/861, annex III).

99. In accordance with General Assembly resolution 60/99, representatives of the regional centres, located in Brazil and Mexico, in India, in Morocco and in Nigeria, made presentations to the Committee on the achievements of the regional centres in holding nine-month postgraduate courses for their respective regions in the disciplines of space science and technology education (see also documents A/AC.105/2006/CRP.7-10).

100. The Committee noted that the Government of India had continuously provided strong support to the Regional Centre for Space Science and Technology Education in Asia and the Pacific over the past decade, including making the appropriate facilities and expertise available to it through the Indian Space Research Organisation (ISRO) and the Department of Space, and noted with satisfaction that the Centre had celebrated its tenth anniversary in 2005. The Committee noted that, to date, the Centre had conducted 23 nine-month postgraduate courses: 10 on remote sensing and the geographic information system (GIS), five on satellite communications and four each on satellite meteorology and global climate and on space and atmospheric science. The Centre had also conducted 16 short-term courses and workshops in the previous 10 years. The Committee noted that, completing a decade of educational activities, the Centre was planning to achieve the status of an international centre of excellence in training, education and research.

101. The Committee noted that the campuses in Brazil and Mexico of the Regional Centre for Space Science and Technology Education for Latin America and the Caribbean had started organizing nine-month postgraduate courses in 2003. The Centre was strongly supported by the Governments of Brazil and Mexico. The campus in Brazil had benefited from the facilities made available to it by the National Institute for Space Research (INPE) of Brazil. Similar high-quality facilities had been made available on the campus in Mexico, which was supported by the National Institute of Astrophysics, Optics and Electronics. The Brazil campus had already conducted four nine-month postgraduate courses on remote sensing and GIS. The Centre had further conducted six short-term courses and workshops since its inauguration. In 2005, the meeting of the Governing Board of the Centre had reinforced the terms of the agreement for the establishment of the Centre concerning the joining of other States from Latin America and the Caribbean.

102. The Committee noted that the African Regional Centre for Space Science and Technology—in French Language had been organizing nine-month postgraduate courses since its inauguration in 1998. Based in Rabat, the Centre was actively supported by the Government of Morocco and important national institutions such as the Royal Centre for Remote Sensing, the Mohammadia Engineering School, the

Hassan II Institute of Agronomy and Veterinary Medicine, the National Institute of Telecommunications and the National Directorate of Meteorology. The Committee noted that the Centre had already carried out eight nine-month postgraduate courses in remote sensing and GIS, satellite communications and satellite meteorology and global climate. Since its inauguration, the Centre had organized 13 short-term workshops and conferences. Among those activities, the Centre had hosted two short-term workshops in 2005, co-sponsored by the United States, ESA, the Islamic Educational, Scientific and Cultural Organization (ISESCO) and the Office for Outer Space Affairs, on Landsat data distribution for sustainable development in Africa and on spatial information and sustainable development.

103. The Committee recalled that the African Regional Centre for Space Science and Technology Education—in English Language had been inaugurated in Nigeria in 1998. The Centre operated under the auspices of the National Space Research and Development Agency of Nigeria and was located at Obafemi Awolowo University in Ile-Ife, Nigeria. The Committee noted that the Centre's facilities were provided by departments of the University. The Centre had already organized eight nine-month postgraduate courses, on remote sensing and GIS, satellite meteorology and global climate, satellite communications and space and atmospheric science. The Centre had also conducted seven short-term activities. The Director of the Centre was pursuing political support from Governments of member States in Africa to strengthen the operation of the Centre for the benefit of the region.

104. The Committee noted that, in July 2006, the Government of China, in cooperation with the Secretariat of the Asia-Pacific Multilateral Cooperation in Space Technology and Applications (AP-MCSTA), would hold its first nine-month postgraduate course, on space technology applications, based on the four educational curricula developed by the United Nations. The course would be organized and conducted by the Beijing University of Aeronautics and Astronautics. The Government of China and the AP-MCSTA secretariat would jointly provide full and partial scholarships to some participants from developing countries in the region of Asia and the Pacific.

105. The Committee noted with satisfaction that, as noted by the General Assembly in its resolution 60/99, the Government of Ecuador would host the Fifth Space Conference of the Americas in Quito from 25 to 28 July 2006 and that, on 28 and 29 March 2006, the Government of Chile had organized a preparatory meeting for the Conference, with the support of the Government of Colombia, UNESCO and the Office for Outer Space Affairs.

106. The Committee noted that the preparatory meeting for the Fifth Space Conference of the Americas had issued a declaration that identified the space applications for human security and sustainable development that would be analysed during the Conference. Those applications include tele-education, telemedicine, prevention and mitigation of natural disasters, preservation of the environment and the protection of cultural heritage.

107. The Committee noted with satisfaction that, as noted in General Assembly resolution 60/99, the Government of Nigeria, in collaboration with the Governments of Algeria and South Africa, had hosted the first African Leadership Conference on Space Science and Technology for Sustainable Development in November 2005. The Committee also noted that the Conference would be held on a biennial basis

and that the Government of South Africa had offered to host the Conference in 2007 and that the Government of Algeria had offered to host the Conference in 2009.

108. The Committee noted with satisfaction that the Convention on the establishment of the Asia-Pacific Space Cooperation Organization had been opened for signature in Beijing on 28 October 2005 and that, as at 1 June 2006, the Convention had been signed by nine States. The Committee also noted that, once the Convention had been ratified by five States, it would enter into force, thereby establishing the Organization, with its headquarters in Beijing.

109. The Committee noted with satisfaction that the United Nations Programme on Space Applications had initiated work in developing countries on several pilot projects of national or regional significance. Those projects included:

(a) Co-sponsoring a project entitled “Mapping Tsunami-Affected Coastal Aquaculture Areas in Northern Sumatra Using High Resolution Satellite Imagery” with the Korea Aerospace Research Institute of the Republic of Korea. The project was proposed by the Centre for Remote Imaging, Sensing and Processing of Singapore;

(b) Co-sponsoring, with India and the United States, a project on telemedicine applications in Afghanistan;

(c) Launching a project, entitled “Himalayas from Space”, with ESA and the International Centre for Integrated Mountain Development (ICIMOD) to implement a new module on space technology case studies for the Eduspace programme of ESA;

(d) Distributing Landsat data donated by the United States to African institutions for education, training and project development;

(e) Jointly conducting with Colombia, and with the support of ITU, the development of a geostationary orbit occupancy analysis tool;

(f) Assisting in the establishment of a task force on health using space technologies for Latin America and the Caribbean;

(g) Assisting in the initiation and development of four projects related to tele-health training, avian influenza early warning methodology development, assessment of communication system network configurations and a needs assessment on implementing national tele-health programmes in Asian countries;

(h) Launching two projects for the benefit of countries in Western Asia and North Africa, entitled “Development of an early warning strategy using space technologies” and “Data access and sharing: to establish base maps for focused types of natural disaster”. The projects would be carried out by voluntary national teams under the concept of low costs and the non-transfer of funds among the parties involved in the projects;

(i) Continuing, in the field of basic space science, cooperation with Japan in aiding astronomy in developing countries through the Japanese official development assistance cooperative programme; and continuing, for the International Heliophysical Year, the initiation of low-cost, ground-based, worldwide instrument deployment opportunities;

(j) Continuing to build upon the potential application and involvement of the Office for Outer Space Affairs in the Charter on Cooperation to Achieve the Coordinated Use of Space Facilities in the Event of Natural or Technological Disasters;

(k) Defining training-related activities that involve young professionals and students in space technology applications, in cooperation with SGAC.

110. The Committee further noted that the Programme welcomed co-sponsors for future projects that benefited developing countries.

**(d) International Satellite System for Search and Rescue**

111. The Committee recalled that, at its forty-fourth session, it had agreed that a report on the activities of the International Satellite System for Search and Rescue (COSPAS-SARSAT) should be considered annually by the Committee as part of its consideration of the United Nations Programme on Space Applications and that member States should report on their activities regarding COSPAS-SARSAT.<sup>6</sup>

112. The Committee noted with satisfaction that COSPAS-SARSAT, a cooperative venture initiated in the late 1970s and involving Canada, France, the Russian Federation and the United States, was using space technology to assist aviators and mariners in distress around the globe. Since 1982, COSPAS-SARSAT had introduced analog and digital emergency beacons worldwide and had expanded its space segment to include ad hoc payloads on geostationary and low-Earth orbit satellites that currently provided alert signals.

113. The Committee noted with satisfaction that COSPAS-SARSAT currently had 37 member States, which offered six polar-orbiting and five geostationary satellites that provided worldwide coverage for the search and rescue beacons. In 2005, COSPAS-SARSAT had helped save more than 1,400 lives in more than 450 different events. Since 1982, COSPAS-SARSAT had helped to save about 18,500 lives.

114. The Committee noted that the member States of COSPAS-SARSAT were exploring the use of satellites in medium-Earth orbit to improve international satellite-aided search and rescue operations.

**2. Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth's environment**

115. The Committee noted that, in accordance with General Assembly resolution 60/99, the Scientific and Technical Subcommittee had continued its consideration of matters relating to remote sensing of the Earth by satellite. The Committee took note of the discussion of the Subcommittee under that agenda item, as reflected in the report of the Subcommittee (A/AC.105/869, paras. 82-91).

116. The Committee stressed the importance of remote sensing technology for sustainable development and emphasized, in that connection, the importance of providing non-discriminatory access to state-of-the-art remote sensing data and to derived information at a reasonable cost and in a timely manner.

117. The Committee noted that technological progress and applications in the area of Earth observation satellites were significant for developing countries because of their potential to promote sustainable development.

118. The Committee underlined the importance of building capacity in the adoption and use of remote sensing technology, in particular to meet the needs of developing countries.

119. The Committee also highlighted the importance of international cooperation among member States in the use of remote sensing satellites, in particular by sharing experience and technologies.

120. The view was expressed that the theme for the 2007 COSPAR/IAF Symposium, "The use of the equatorial orbit for space application: challenges and opportunities", was significant in relation to the application of the equatorial orbit for remote sensing purposes.

### **3. Space debris**

121. The Committee noted that, in accordance with General Assembly resolution 60/99, the Scientific and Technical Subcommittee had continued its consideration of the agenda item on space debris, in accordance with the workplan adopted at its thirty-eighth session (A/AC.105/761, para. 130) and amended at its forty-second session (A/AC.105/848, annex II, para. 6). The Committee took note of the discussion of the Subcommittee on space debris, as reflected in the report of the Subcommittee (A/AC.105/869, paras. 92-114).

122. The Committee noted with satisfaction that the Subcommittee, at its forty-third session, in accordance with General Assembly resolution 60/99, had reconvened the Working Group on Space Debris under the chairmanship of Claudio Portelli (Italy) to consider issues arising from its workplan and that the Subcommittee had endorsed the recommendations of the Working Group as contained in its report (A/AC.105/869, para. 101 and annex II).

123. The Committee noted with appreciation that, at that session and one year ahead of schedule, the Working Group on Space Debris had successfully developed the draft space debris mitigation guidelines of the Scientific and Technical Subcommittee and that consensus had been reached on the text of that document (A/AC.105/C.1/L.284), based on and consistent with the technical content of the Inter-Agency Space Debris Coordination Committee (IADC) Space Debris Mitigation Guidelines. The Committee also noted that the IADC Guidelines had been referenced as a document of a technical nature, while the space debris mitigation guidelines of the Subcommittee would contain general recommendations and would not be more technically stringent than the IADC Guidelines.

124. The Committee also noted that the agreed draft space debris mitigation guidelines of the Subcommittee were being circulated at the national level to secure consent for approval of the guidelines by the Subcommittee at its forty-fourth session, in 2007, and that the guidelines, should they be adopted, would remain voluntary, implemented through national mechanisms and not legally binding under international law.

125. The Committee noted that some States had already implemented space debris mitigation measures on a voluntary basis, through national mechanisms and



consistent with the IADC Guidelines, with the aim of promoting space debris mitigation measures.

126. The view was expressed that, after circulation at the national level, the draft document should be modified according to the comments received by member States.

127. The view was expressed that, should the space debris mitigation guidelines of the Subcommittee be adopted at its forty-fourth session, in 2007, their submission to the General Assembly in a separate draft Assembly resolution would be more appropriate than as an addendum to the report of the Committee and would more appropriately highlight the importance of their acceptance and the effectiveness of the Committee in addressing major issues that could affect access to outer space in the long term.

128. The Committee recalled that the General Assembly, in its resolution 59/116 of 10 December 2004, had agreed with the Subcommittee that international cooperation was needed to develop more appropriate and affordable strategies to minimize the potential impact of space debris on future space missions. The Committee also recalled that the Subcommittee, at its forty-second session, had agreed that Member States, in particular space-faring countries, should pay more attention to the problem of the collision of space objects, including those with nuclear power sources on board, with space debris and to other aspects of space debris, as well as its re-entry into the atmosphere (A/AC.105/848, para. 90).

129. Some delegations were of the view that the future use of outer space depended on keeping space debris to manageable levels and that space debris in outer space was a prime threat to the unimpeded operation of functional satellites and therefore to the continued access of the global community to the benefits of outer space. Some delegations expressed the view that the issue of space debris was closely related to the emerging problem of space traffic management and that, in that regard, the introduction to the Committee of the International Academy of Astronautics Cosmic Study on Space Traffic Management was timely and informative.

130. Some delegations expressed the view that, while the voluntary guidelines being formulated by the Subcommittee, if adopted, would represent a significant advance, they would not cover all debris-producing situations and would accordingly need to be kept under consideration. The view was also expressed that it was probable that the population of space debris would continue to grow, thus increasing collision risk as time went on. Efforts should continue to be made to devise the technical ability to begin removing existing space debris from their orbits in order to halt the decline in the space environment. Those delegations also expressed the view that the proliferation of space debris was undermining the future of space programmes and the respective benefits deriving from space activities, as well as the safety of crews on space missions.

#### **4. Use of nuclear power sources in outer space**

131. The Committee noted that, in accordance with General Assembly resolution 60/99, the Scientific and Technical Subcommittee had continued its consideration of the item relating to the use of nuclear power sources in outer space. The Committee took note of the discussion of the Subcommittee on the use of

nuclear power sources in outer space, as reflected in the report of the Subcommittee (A/AC.105/869, paras. 115-129).

132. The Committee noted with satisfaction that, at its forty-third session, the Subcommittee had reconvened its Working Group on the Use of Nuclear Power Sources in Outer Space under the chairmanship of Sam A. Harbison (United Kingdom). The Committee also noted with satisfaction that the Working Group had made significant progress and had carried out successful and detailed work in identifying and developing potential implementation options for establishing an international technically based framework of goals and recommendations for the safety of planned and currently foreseeable space nuclear power source applications.

133. The Committee noted with satisfaction the successful conclusion of the work of the Joint Technical Workshop on the Objectives, Scope and General Attributes of a Potential Technical Safety Framework for Nuclear Power Sources in Outer Space, which had been organized by the Subcommittee and IAEA in Vienna from 20 to 22 February 2006, pursuant to General Assembly resolution 60/99.

134. The Committee noted with appreciation the reply of the Secretariat of IAEA to the letter sent by the secretariat of the Committee concerning questions identified at the Workshop (A/AC.105/L.264).

135. The Committee noted the observations and conclusions of the Workshop, contained in the preliminary draft report of the Workshop (A/AC.105/869, annex III, appendix).

136. The view was expressed that the observation of the Workshop reflected in paragraph 4 (a) of the preliminary draft report of the Workshop (A/AC.105/869, annex III, appendix) should encourage the international community to develop a technically based framework for the use of nuclear power source applications in outer space and to implement and apply it rigorously.

137. The view was expressed that the possible impact on human life and the environment posed by missions carrying nuclear power sources on board deserved serious consideration.

138. Some delegations were of the view that the early elaboration and adoption by the Committee of a comprehensive and internationally accepted safety framework for the use of nuclear power sources in outer space required more commitment by the Subcommittee.

139. At the 561st meeting of the Committee, on 14 June, the Acting Chairperson of the Working Group on the Use of Nuclear Power Sources in Outer Space of the Subcommittee, Alice Caponiti, reported on the results of the intersessional meetings of the Working Group.

140. The Committee noted that the Working Group had held an extensive discussion of the replies received from the Secretariat of IAEA, that it had agreed that the preliminary draft report of the workshop, in its current form, could constitute a solid basis for the final draft report of the Workshop, to be presented to the Subcommittee at its next meeting in 2007, and that it had started to draw up a draft report based on the final outline of the objectives, scope and attributes of an international technically based framework of goals and recommendations, taking into account the final draft report of the Workshop, as well as the results of the

consultations with IAEA on factors that could facilitate joint development of a framework.

141. The Committee noted the request of the Working Group to be represented at the next session of the IAEA Commission on Safety Standards, to be held from 20 to 22 November 2006. In that connection, the Committee requested the secretariat to submit to the Secretariat of IAEA a letter conveying the wish of the Working Group to be represented at the session of the Commission and to inform it of ongoing activities in the development of a potential technical safety framework for nuclear power sources in outer space.

#### **5. Space-system-based telemedicine**

142. The Committee noted that, in accordance with General Assembly resolution 60/99, the Scientific and Technical Subcommittee had concluded its consideration of the item on space-system-based telemedicine under the three-year workplan adopted by the Subcommittee at its fortieth session. The Committee took note of the discussion of the Subcommittee under that agenda item, as reflected in the report of the Subcommittee (A/AC.105/869, paras. 130-141).

143. The Committee noted the progress made by the Scientific and Technical Subcommittee in addressing the multi-year workplan. The Committee also noted that consideration of the item on space-system-based telemedicine by the Subcommittee raised awareness concerning the applications of space technology for telemedicine in developing countries. In that context, the Committee took note of a number of activities at the regional and national levels for building capacity in telemedicine. It noted that consideration of the item had provided an opportunity for member States and observers to exchange information on the status of various space-system-based applications for telemedicine and on projects that made such applications operational.

#### **6. Near-Earth objects**

144. The Committee noted that, in accordance with General Assembly resolution 60/99, the Scientific and Technical Subcommittee had considered an item on near-Earth objects under the three-year workplan adopted by the Subcommittee at its forty-first session and amended at its forty-second session. The Committee took note of the discussion of the Subcommittee under that agenda item, as reflected in the report of the Subcommittee (A/AC.105/869, paras. 142-152).

145. The Committee noted with satisfaction that a working draft of a report summarizing the work carried out to date by the Action Team on Near-Earth Objects and indicating what further activity could help to complete the work of the Action Team would be presented to the Scientific and Technical Subcommittee at its forty-fourth session.

#### **7. Space-system-based disaster management support**

146. The Committee noted that, in accordance with General Assembly resolution 60/99, the Scientific and Technical Subcommittee had considered the agenda item on space-system-based disaster management support in accordance with the three-year workplan adopted at its forty-first session (A/AC.105/823, annex II, para. 15) and amended at its forty-second session (A/AC.105/848, annex I, para. 21).

The Committee took note of the discussions of the Subcommittee under that agenda item, as contained in the report of the Scientific and Technical Subcommittee (A/AC.105/869, paras. 154-176).

147. The Committee noted that Sentinel Asia was a new disaster management initiative that aimed to share disaster information in Asia and the Pacific. The Committee further noted that the first meeting of Sentinel Asia had been held in Hanoi in February 2006 and that the second meeting would be held in Bangkok, in cooperation with the Economic and Social Commission for Asia and the Pacific as well as space, science and technology related agencies.

148. The Committee noted that the Disaster Monitoring Constellation, a partnership among Algeria, China, Nigeria, Turkey and the United Kingdom, had signed an agreement on 15 November 2005 to join the International Charter "Space and Major Disasters". The Committee further noted that the satellites that were part of the Constellation were providing effective services to users globally, including in the aftermath of earthquakes in India, Iran (Islamic Republic of) and Pakistan, as well as for the floods caused by Hurricane Katrina in the United States.

149. The Committee noted with satisfaction that a National Tsunami Warning System had been set up in Malaysia and that a national disaster early-warning centre had also been set up in Thailand.

150. The Committee noted that, in accordance with its agreement at its forty-eighth session,<sup>7</sup> the Subcommittee at its forty-third session had had before it, for its review and for recommendation to the Committee, the study of the ad hoc expert group on the possibility of creating an international entity to provide for coordination and the means of realistically optimizing the effectiveness of space-based services for use in disaster management (A/AC.105/C.1/L.285).

151. The representative of Romania, on behalf of the ad hoc expert group, presented to the Committee the final report of the group (A/AC.105/2006/CRP.13). The ad hoc expert group held a meeting on 8 and 9 June 2006, in accordance with the agreement of the Scientific and Technical Subcommittee (A/AC.105/869, para. 163), to finalize its report to the Committee, including a proposed implementation plan based on the secured commitments of support to be provided by member States to the proposed entity, and to propose a final name for the entity.

152. The Committee commended the ad hoc expert group for the excellent study it had presented to the Scientific and Technical Subcommittee (A/AC.105/C.1/L.285) and the final report that it had prepared for the Committee's consideration and agreed that its final report, as contained in A/AC.105/2006/CRP.13, should be prepared as an addendum to the study. The Committee also expressed its appreciation to the following member States that had made commitments or had indicated that they were considering making commitments of support: Algeria, Argentina, Austria, China, Germany, India, Italy, Morocco, Nigeria, Romania, Russian Federation and Turkey as well as to Switzerland.

153. The Committee noted that the entity being proposed would contribute to ensuring that all countries and all relevant international and regional organizations had access to and used all types of space-based information to support the full disaster management cycle by being a gateway to space information for disaster management support, a bridge that would connect the disaster management and

space communities and a facilitator of capacity-building and institutional strengthening.

154. The Committee agreed that the entity should be implemented as a programme of the Office for Outer Space Affairs under the Director of the Office, as an open network of providers of support. The activities would be planned and carried out in a coordinated manner, initially building upon the commitments made by Austria, China and Germany.

155. Furthermore, the Committee agreed that the Director of the Office for Outer Space Affairs would be responsible for administrative matters associated with United Nations procedures and overall supervision of the proposed programme. The proposed programme would have an office in Beijing and an office in Bonn, Germany. The activities described above and in annex 1 of document A/AC.105/2006/CRP.13 would be carried out within the proposed implementation framework presented in annex 2 of document A/AC.105/2006/CRP.13 by the staff that would be assigned to the Beijing office, the Bonn office and to the Office for Outer Space Affairs in Vienna.

156. The Committee agreed that the proposed programme should keep the number of staff to a minimum, draw its staff from Member States and ensure that United Nations rules and regulations regarding geographical representation of United Nations staff members be applied, taking into account the experiences of disaster-stricken developing countries in managing natural disasters and post-crisis efforts.

157. The Committee agreed that the programme being proposed should be named the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (SPIDER).

158. The Committee noted that in relation to the indication of support made by the Government of Switzerland, due consideration would be given to the possibility of having a liaison office in Geneva that would contribute to disseminating and integrating the work of the programme within the humanitarian response community.

159. The Committee agreed that the proposed programme should work closely with end-users, particularly in developing countries, through the consolidation of a network of regional support offices, taking advantage of the number of commitments made for carrying out its work, and bringing together, in a coordinated manner, the important experience and capabilities being offered, and to be offered, by member States. This would also ensure that regional and national centres of expertise had a strong role in the implementation of the programme's activities in their respective region.

160. The proposed programme would report to and receive guidance from the Committee on the Peaceful Uses of Outer Space through the Office for Outer Space Affairs.

161. Concerning programme implications for the Office for Outer Space Affairs, the Committee noted that the additional activities to be carried out by the Office included administrative matters related to the proposed programme, overall coordination of the work carried out by the Beijing and Bonn offices, and taking the lead in implementing specific activities as presented in annex 2 of document A/AC.105/2006/CRP.13. The Committee also noted that resources to be made

available to it would enable the Office for Outer Space Affairs to carry out the additional activities while ensuring that those responsibilities would not have a negative impact on the current programme activities of the Office.

162. The Committee noted that the ad hoc expert group had indicated that the proposed programme would require an annual operating budget of approximately \$1.3 million, to cover personnel, facilities (operation and maintenance) and operational costs (A/AC.105/C.1/L.285, para. 84) and that approximately two thirds of those resources were being made available by member States that had confirmed financial and in-kind support for the implementation of the proposed programme, with the remaining one third to be provided by the United Nations. Regarding that complement of support to be provided by the United Nations, the Committee agreed that such resources should be pursued through a rearrangement of priorities within the framework of the United Nations reform process and, if necessary, the rearrangement of priorities of the Office for Outer Space Affairs and should not result in an increase of the total regular budget of the United Nations.

163. The Committee requested the Office for Outer Space Affairs to develop a detailed workplan for 2007 and the biennium 2008-2009 to be considered during the forty-fourth session of the Scientific and Technical Subcommittee, taking into consideration the commitments received and in consultation with the representatives of countries that had provided or would be providing commitments, as well as with the representatives of other countries that had indicated their interest in contributing to the development of the workplan.

164. The Committee also requested the Office for Outer Space Affairs to continue to secure further support for the proposed programme, both in-kind and cash contributions, and requested that consultations with other relevant initiatives, such as GEOS, UNOSAT, GMES, the International Charter "Space and Major Disasters" and other relevant initiatives, should be carried out on a continuous basis, to ensure both the increase of support to the proposed programme and the coordination of the work of the proposed programme with all other relevant initiatives.

165. The Committee agreed that the partners implementing the proposed programme should endeavour to initiate activities in January 2007 or as soon as it was practicable in order to enable the proposed programme to begin providing support for disaster management at the earliest possible time.

**8. 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 developments in space communications, taking particular account of the needs and interests of developing countries**

166. In accordance with General Assembly resolution 60/99, the Scientific and Technical Subcommittee considered the agenda item on the geostationary orbit and space communications as a single issue/item for discussion. The Committee took note of the discussion of the Subcommittee under that agenda item, as reflected in the report of the Subcommittee (A/AC.105/869, paras. 189-196).

167. Some delegations reiterated the view that the geostationary orbit was a scarce natural resource, which ran the risk of becoming saturated. Those delegations

considered that the exploitation of the geostationary orbit should be rationalized and made available to all countries, in particular to developing countries, thus giving them the opportunity to have access to the geostationary orbit under equitable conditions. The needs and interests of developing countries, the geographical position of certain countries and the process followed by the International Telecommunication Union (ITU) should also be taken into account.

168. The view was expressed that the agenda item should be retained in the agenda of the Committee for further consideration.

#### **9. International Heliophysical Year 2007**

169. The Committee noted that, in accordance with General Assembly resolution 60/99, the Scientific and Technical Subcommittee had considered an agenda item on the International Heliophysical Year 2007, under the three-year workplan adopted at the forty-second session of the Subcommittee (A/AC.105/848, annex I). The Committee took note of the discussion of the Subcommittee under that agenda item, as reflected in the report of the Subcommittee (A/AC.105/869, paras. 177-188).

170. The Committee noted that the International Heliophysical Year 2007 would be an international endeavour, with States from every region of the world planning to host instrument arrays, provide scientific investigators or offer supporting space missions. The Committee also noted that the Year would serve to focus worldwide attention on the importance of international cooperation in research activities in the field of solar-terrestrial physics.

171. The Committee noted with satisfaction that, as part of the celebrations of the International Heliophysical Year, the International School for Young Astronomers would be hosted by Malaysia, in cooperation with the International Astronomical Union (IAU), from 6 to 27 March 2007.

172. The Committee noted that the Enhanced Polar Outflow Probe (ePOP), the THEMIS mission of five satellites and the Canadian GeoSpace Monitoring project would operate during the International Heliophysical Year and would generate valuable data that could be shared with the global scientific community.

173. The Committee also noted that, in celebration of the International Heliophysical Year, various activities would be conducted under the coordination of the National Institute of Aeronautics and Space of Indonesia. Those activities included research on solar physics and the relationship between the Earth and the Sun, public outreach programmes and projects involving geomagnetic observations.

#### **10. Draft provisional agenda for the forty-fourth session of the Scientific and Technical Subcommittee**

174. The Committee noted that, in accordance with General Assembly resolution 60/99, the Scientific and Technical Subcommittee had considered proposals for a draft provisional agenda for its forty-fourth session. The Subcommittee had endorsed the recommendations of its Working Group of the Whole concerning the draft provisional agenda for the forty-fourth session of the Subcommittee (A/AC.105/869, paras. 197-199 and annex I).

175. The Committee recalled its recommendation, made at its forty-seventh session,<sup>8</sup> to continue the practice of alternating each year the organization of the symposium by COSPAR and IAF and the symposium to strengthen partnership with industry. The Committee endorsed the agreement of the Subcommittee that in 2007 the symposium to be organized by COSPAR and IAF would be held and that the industry symposium would be suspended (A/AC.105/869, annex I, para. 24).

176. The Committee endorsed the recommendation that the theme of the symposium should be "Use of the equatorial orbit for space applications: challenges and opportunities". The Committee also endorsed the agreement of the Subcommittee that the symposium should be held during the first week of the forty-fourth session of the Subcommittee (A/AC.105/869, annex I, para. 25).

177. On the basis of the deliberations of the Scientific and Technical Subcommittee at its forty-third session, the Committee agreed on the following draft provisional agenda for the forty-fourth session of the Subcommittee:

1. General exchange of views and introduction to reports submitted on national activities.
2. United Nations Programme on Space Applications.
3. Implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III).
4. Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth's environment.
5. Items to be considered under workplans:

(a) Space debris;

(Work for 2007 as reflected in the multi-year workplan in the report of the Scientific and Technical Subcommittee on its forty-second session (A/AC.105/848, annex II, para. 6))

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

(Work for 2007 as reflected in the multi-year workplan in the report of the Scientific and Technical Subcommittee on its forty-second session (A/AC.105/848, annex III, para. 8))

(c) Near-Earth objects;

(Work for 2007 as reflected in the multi-year workplan in the report of the Scientific and Technical Subcommittee on its forty-second session (A/AC.105/848, annex I, para. 20))

(d) Space-system-based disaster management support;

(Work for 2007 as reflected in the multi-year workplan the report of the Scientific and Technical Subcommittee on its forty-first session (A/AC.105/823, annex II, para. 15))

(e) International Heliophysical Year 2007.



(Work for 2007 as reflected in the multi-year workplan in the report of the Scientific and Technical Subcommittee on its forty-second session (A/AC.105/848, annex I, para. 22))

6. Single issue/item for discussion: Examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including, inter alia, in the field of space communications, as well as other questions relating to developments in space communications, taking particular account of the needs and interests of developing countries.
7. Draft provisional agenda for the forty-fifth session of the Scientific and Technical Subcommittee, including identification of subjects to be dealt with as single issues/items for discussion or under multi-year workplans.
8. Report to the Committee on the Peaceful Uses of Outer Space.

178. The Committee endorsed the recommendation that the Subcommittee should reconvene the Working Group of the Whole and the Working Group on the Use of Nuclear Power Sources in Outer Space and should establish a working group on near-Earth objects to consider, in accordance with the workplan adopted, that item for one year (A/AC.105/869, annex I, paras. 22 and 23).

#### **D. Report of the Legal Subcommittee on its forty-fifth session**

179. The Committee took note with appreciation of the report of the Legal Subcommittee on its forty-fifth session (A/AC.105/871), which contained the results of its deliberations on the items assigned to it by the General Assembly in its resolution 60/99.

180. The Committee expressed its appreciation to the outgoing Chairman of the Legal Subcommittee, Sergio Marchisio (Italy), for his able leadership and contribution. The Committee also expressed its appreciation to Raimundo González Aninat (Chile) for his able leadership during the forty-fifth session of the Subcommittee.

181. At the 554th meeting, on 9 June 2006, the Chairman of the Legal Subcommittee made a statement on the work of the Subcommittee at its forty-fifth session.

182. The representatives of China, the Czech Republic, India, Iran (Islamic Republic of), Italy, Japan, Nigeria, the Republic of Korea, Thailand and the United States made statements under the item. During the general exchange of views, statements relating to this item were also made by representatives of other member States.

##### **1. Status and application of the five United Nations treaties on outer space**

183. The Committee noted that, in accordance with General Assembly resolution 60/99, the Legal Subcommittee had considered, as a regular item of its agenda, the status and application of the five United Nations treaties on outer space. The Committee took note of the discussion of the Subcommittee under that agenda item, as reflected in the report of the Subcommittee (A/AC.105/871, paras. 32-54).

184. The Committee noted that the Subcommittee had reconvened its Working Group on the Status and Application of the Five United Nations Treaties on Outer Space, under the chairmanship of Vassilios Cassapoglou (Greece), and that the mandate of the Working Group included the status of the United Nations treaties on outer space, review of their implementation and obstacles to their universal acceptance, as well as the promotion of space law, especially through the United Nations Programme on Space Applications (A/AC.105/763 and Corr.1, para. 118) and any new, similar issues that might be raised in discussions in the Working Group, provided that those issues fell within its existing mandate (A/AC.105/787, paras. 138 and 140).

185. The Committee noted that the Subcommittee had endorsed the recommendation of the Working Group that member States provide information on any action that might have been taken at the national level as a result of receiving the letter from the Secretary-General encouraging participation in the outer space treaties (A/AC.105/871, para. 52). The Committee also endorsed the recommendation.

186. The Committee noted with satisfaction that the Working Group had agreed on the text of a document on the advantages of adhering to the Convention on International Liability for Damage Caused by Space Objects. The Committee endorsed the recommendation of the Working Group that the Office for Outer Space Affairs send that document to all States that had not yet become parties to the Convention (A/AC.105/871, annex I, para. 8, and appendix).

187. The Committee also noted with satisfaction that the Working Group had agreed on a programme of work for the forty-sixth session of the Legal Subcommittee in 2007 (A/AC.105/871, annex I).

188. The Committee approved the endorsement by the Subcommittee of the report of the Working Group (A/AC.105/871, para. 51 and annex I) and of the recommendation by the Working Group to extend the mandate of the Working Group for one additional year, to 2007. The Committee noted that the Subcommittee had agreed that, at its forty-sixth session, it would review the need to extend the mandate of the Working Group beyond that period.

189. The Committee welcomed the information provided by some delegations on the current status of the five United Nations treaties on outer space in their respective States and on the further action that those States intended to take in order to accede to or ratify those treaties. The Committee noted with satisfaction the reports on the progress made by member States in developing their national space law.

190. The Committee expressed its appreciation to the Office for Outer Space Affairs for the informational material provided on national space legislation and international treaties, as well as for the informative website concerning the work of the Committee and its subcommittees.

191. The Committee agreed that member States should regularly provide the Office for Outer Space Affairs with information on their national space legislation and policy in order for the Office to maintain an up-to-date database on that subject.

192. Some delegations expressed the view that the United Nations treaties on outer space had established a comprehensive legal framework that encouraged the

exploration of outer space and supported increasingly complex activities in outer space by both government and private entities, with benefits to both spacefaring and non-spacefaring nations. Those delegations advocated further adherence to the outer space treaties.

193. Other delegations expressed the view that, owing to developments in space activities, such as the commercialization of space and the involvement of the private sector, there was a need to consider a new, comprehensive convention on outer space law to further strengthen the international legal regime covering outer space activities. Those delegations were of the view that a single, comprehensive convention could regulate all aspects of outer space activities.

194. The view was expressed that the lack of awareness of the benefits deriving from adherence to the United Nations treaties on outer space needed to be addressed by the Legal Subcommittee in order to broaden the participation of Member States.

195. Some delegations expressed the view that the working paper submitted by a number of States entitled “Questionnaire on possible options for future development of international space law”, to be discussed by the Working Group during the forty-sixth session of the Legal Subcommittee, was of particular interest and could assist the Subcommittee in reaching constructive conclusions about the future orientation of its work.

196. The view was expressed that in the context of a universal, comprehensive convention on space law, for which the current international legal regime would serve as a guide, regard should be given to the relevant practice of States in space activities and to the regime and principles in the United Nations Convention on the Law of the Sea<sup>9</sup> that might be usefully applied, *mutatis mutandis*, to outer space, as well as to the lessons learned from drafting that Convention.

197. The view was expressed that the advantages of adherence to the Convention on International Liability for Damage Caused by Space Objects, listed in the appendix to the report of the Working Group (A/AC.105/871, annex I, appendix), were only illustrative and not exhaustive and that it was up to each State to decide on the advantages of its becoming a party to a treaty.

198. The Committee noted with appreciation that a workshop on space law hosted by the Government of Nigeria, through its National Space Research and Development Agency, had been held in Abuja from 21 to 24 November 2005. The Committee welcomed the announcement that the Government of Ukraine would host the next workshop on space law, to be held in Kyiv from 6 to 9 November 2006.

## **2. Information on the activities of international organizations relating to space law**

199. The Committee noted that, in accordance with General Assembly resolution 60/99, the Legal Subcommittee had considered information on the activities of international organizations relating to space law as a regular item of its agenda. The Committee took note of the discussion of the Subcommittee under that item, as reflected in the report of the Subcommittee (A/AC.105/871, paras. 55-76).

200. The Committee noted with appreciation the positive results of the Space Law Conference on the theme “Bringing space benefits to the South-East Asian region”, organized jointly by the International Institute of Space Law (IISL) of IAF, ISRO and the Astronautical Society of India in Bangalore, India, from 26 to 29 June 2005.

**3. Matters relating to: (a) the definition and delimitation of outer space; and (b) 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**

201. The Committee noted that, in accordance with General Assembly resolution 60/99, the Legal Subcommittee had continued to consider, as a regular item of its agenda, matters relating to: (a) the definition and delimitation of outer space; and (b) 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 ITU. The Committee took note of the discussion of the Subcommittee under that item, as reflected in the report of the Subcommittee (A/AC.105/871, paras. 77-96).

202. The Committee noted the progress made by the Working Group on the Definition and Delimitation of Outer Space, which had been reconvened during the forty-fifth session of the Legal Subcommittee, under the chairmanship of José Monserrat Filho (Brazil). In accordance with the agreement reached by the Legal Subcommittee at its thirty-ninth session, endorsed by the Committee at its forty-third session and subsequently endorsed by the General Assembly in its resolution 60/99, the Working Group was reconvened to consider only matters relating to the definition and delimitation of outer space.

203. Some delegations expressed the view that it was important to further consider this item and the outlined programme of the future work of the Working Group, as contained in the report of the Working Group (A/AC.105/871, annex II).

204. Some delegations expressed the view that the lack of definition or delimitation of outer space brought about legal uncertainty concerning the applicability of space law and air law.

205. The view was expressed that, despite the difficulties in reaching consensus on the question of the definition and delimitation of outer space, member States should continue consultations on the item with a view to maintaining peace and security in outer space and promoting the peaceful use of outer space.

206. The view was expressed that the question of definition and delimitation of outer space was linked to the issue of the geostationary orbit. That delegation also expressed the view that the geostationary orbit was an integral part of outer space and its use should be governed by the provisions of the United Nations treaties on outer space.

207. The Committee noted that the Working Group had expressed its appreciation to the Scientific and Technical Subcommittee for its reply regarding the possibility of preparing a report on the technical characteristics of aerospace objects in the light of the current level of technological advancement. The Committee also noted that the Working Group had agreed to clarify its invitation in the future, taking into account the results of the work on the development of criteria for analysing the replies to the questionnaire on aerospace objects (A/AC.105/871, annex II, para. 11).

208. Some delegations expressed the view that the geostationary orbit was a limited natural resource with sui generis characteristics that risked saturation and that equitable access to it should therefore be guaranteed for all States, taking into

account in particular the needs of developing countries and the geographical position of certain countries.

209. Some delegations expressed the view that in consideration of its special nature and properties, the geostationary orbit should be governed by a special legal regime that would allow equitable access to it, taking into account the specific needs and interests of developing countries and countries in certain geographical positions.

210. Some delegations expressed the view that, as the issue of definition and delimitation of outer space and the character and utilization of the geostationary orbit were of crucial importance, this item should be retained in the agenda of the Subcommittee.

#### **4. Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space**

211. The Committee noted that, in accordance with General Assembly resolution 60/99, the Legal Subcommittee had continued its consideration of the review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space (Assembly resolution 47/68) as a single issue/item for discussion.

212. The Committee noted that an exchange of views had taken place in the Legal Subcommittee on the review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, as reflected in the report of the Subcommittee (A/AC.105/871, paras. 97-104), in which reference was made to the work currently being undertaken by the Scientific and Technical Subcommittee under the item entitled "Use of nuclear power sources in outer space".

#### **5. Examination and review of the developments concerning the draft protocol on matters specific to space assets to the Convention on International Interests in Mobile Equipment**

213. The Committee noted that, in accordance with General Assembly resolution 60/99, the Legal Subcommittee had considered a single issue/item for discussion entitled "Examination and review of the developments concerning the draft protocol on matters specific to space assets to the Convention on International Interests in Mobile Equipment". The Committee took note of the discussion of the Subcommittee under that item, as reflected in the report of the Subcommittee (A/AC.105/871, paras. 105-127).

214. The Committee noted that the third session of the International Institute for the Unification of Private Law (Unidroit) committee of governmental experts for the consideration of the preliminary draft protocol was tentatively scheduled to be held in Rome from 11 to 15 December 2006 and that member States of the Committee would be invited to attend.

215. The view was expressed that as the draft space assets protocol would promote financing for space assets by establishing international security interests in them and would have a positive effect on commercial activities, it would be an interesting subject for discussion.

216. Some delegations expressed the view that the agreement by the Legal Subcommittee to continue examination of this agenda item at its forty-sixth session,

in 2007, was welcome. Those delegations attached great significance to the following: that the Convention on International Interests in Mobile Equipment and the Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Aircraft Equipment (Aircraft Protocol) had entered into force; that the International Registry on aircraft objects had begun operation; and that the Council of the International Civil Aviation Organization (ICAO) had assumed the role of Supervisory Authority under the Aircraft Protocol and published the Regulations and Procedures for the International Registry. The view was expressed that those developments were convincing evidence that an appropriate organization in the United Nations system could assume the important role of supervisory authority for international registries envisaged by the Convention and its relevant protocols. The view was also expressed that those developments clarified the practical functioning of the system established by the protocols to the Convention.

217. The view was expressed that the wording of this agenda item was wide enough to allow a meaningful discussion on all aspects relating to the draft space assets protocol.

218. The view was expressed that the deliberations and recommendations arising from the Government/Industry Forum, recently convened under the auspices of Unidroit in London, would serve to facilitate discussions at the next meeting of governmental experts.

219. The view was expressed that a thorough analysis needed to be undertaken of the compatibility between the private law and the public international law implications of the future protocol, paying careful attention to the possible contradictions and conflicts that might arise in practice. That delegation expressed the view that the international responsibility of States needed to be clearly defined when non-governmental entities of those States were engaged in commercial activities in space. That delegation further expressed the view that, with regard to the relationship between the future protocol and the legal regime on outer space, the principles of public international law contained in the outer space treaties should prevail.

## **6. Practice of States and international organizations in registering space objects**

220. The Committee noted that, in accordance with General Assembly resolution 60/99, the Legal Subcommittee had considered the practice of States and international organizations in registering space objects in accordance with the workplan adopted by the Committee at its forty-sixth session. The Committee took note of the discussion of the Subcommittee under that agenda item, as reflected in the report of the Subcommittee (A/AC.105/871, paras. 128-145).

221. The Committee noted that the Subcommittee had reconvened its Working Group on the Practice of States and International Organizations in Registering Space Objects, under the chairmanship of Kai-Uwe Schrogl (Germany).

222. The Committee noted with appreciation the compilation of elements provided in the note by the Secretariat (A/AC.105/C.2/L.262) on the benefits of becoming a party to the Convention on Registration of Objects Launched into Outer Space (General Assembly resolution 3235 (XXIX), annex).

223. The Committee agreed that it was important to urge greater adherence to the Registration Convention, which would lead to more States registering space objects, and also to encourage international organizations to declare their acceptance of the rights and obligations under the Convention.

224. The Committee agreed that the set of elements in paragraph 8 of the report of the Working Group (A/AC.105/871, annex III) could constitute the basis for consensus on specific recommendations and conclusions to be included in the report to be prepared by the Subcommittee at its forty-sixth session, in 2007.

225. The Committee endorsed the recommendations of the Working Group as contained in paragraphs 1-10 of its report (A/AC.105/871, annex III) and endorsed by the Legal Subcommittee (A/AC.105/871, para. 144). In doing so, the Committee agreed that the Subcommittee at its forty-sixth session, in 2007, should reconvene the Working Group in order to assist the Subcommittee in preparing the report to be submitted to the Committee in accordance with the workplan under the item entitled "Practice of States and international organizations in registering space objects". The Committee also agreed that, to facilitate the work of that report, the Chairman of the Working Group could conduct informal consultations open to all interested member States of the Committee before the forty-sixth session of the Subcommittee, by electronic means or in any other appropriate manner.

#### **7. Draft provisional agenda for the forty-sixth session of the Legal Subcommittee**

226. The Committee noted that, in accordance with General Assembly resolution 60/99, the Legal Subcommittee had considered an item entitled "Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its forty-sixth session".

227. The Committee noted that an exchange of views had taken place in the Legal Subcommittee on proposals by member States for new items to be included in the agenda of the Subcommittee and that agreement had been reached on a proposal, to be submitted to the Committee, for the draft provisional agenda for the forty-sixth session of the Subcommittee, in 2007, as reflected in the report of the Subcommittee (A/AC.105/871, paras. 146-155).

228. Some delegations expressed the view that the Legal Subcommittee should actively seek to reach consensus on the inclusion of new items in its agenda, particularly under workplans that provided a practical mechanism for achieving results within designated time frames, with a view to supporting the continuous development of international space law.

229. On the basis of the deliberations of the Legal Subcommittee at its forty-fifth session, the Committee agreed on the following draft provisional agenda for the forty-sixth session of the Subcommittee, in 2007:

##### *Regular items*

1. General exchange of views.
2. Status and application of the five United Nations treaties on outer space.
3. Information on the activities of international intergovernmental and non-governmental organizations relating to space law.

4. Matters relating to:
  - (a) The definition and delimitation of outer space;
  - (b) 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.

*Single issues/items for discussion*

5. Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space.
6. Examination and review of the developments concerning the draft protocol on matters specific to space assets to the Convention on International Interests in Mobile Equipment.

*Items considered under workplans*

7. Practice of States and international organizations in registering space objects.  
2007: Report to the Committee on the Peaceful Uses of Outer Space.

*New items*

8. Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its forty-seventh session.

230. The Committee endorsed the decision of the Subcommittee to reconvene at its forty-sixth session the working groups on the status and application of the five United Nations treaties on outer space, on matters relating to the definition and delimitation of outer space and on the practice of States and international organizations in registering space objects (A/AC.105/871, para. 152).

231. The Committee agreed that the Subcommittee, at its forty-sixth session, should review the need to extend the mandate of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space beyond that session of the Subcommittee (A/AC.105/871, para. 153).

## **E. Spin-off benefits of space technology: review of current status**

232. In accordance with paragraph 48 of General Assembly resolution 60/99, the Committee resumed its consideration of the item entitled “Spin-off benefits of space technology: review of current status”.

233. The representatives of Canada, Japan and the United States made statements under this item.

234. The Committee heard a presentation entitled “JAXA’s activities for spin-off”, by Hitoshi Yoshino (Japan).



235. The publication *Spinoff 2005*, submitted by the National Aeronautics and Space Administration (NASA) of the United States, was made available to the Committee.

236. The Committee agreed that spin-offs of space technology should be promoted because they advanced economies through the production of new innovative technologies, thereby contributing to improving the quality of life of human populations.

237. In the field of energy, the Committee noted that the same solar technology that was used on the Helios and Pathfinder solar-powered aircraft was being used in homes across the world. The solar panel spin-off technology had no moving parts, creating pollution-free electricity with no noise and virtually no maintenance.

238. In the field of environmental conservation, the Committee noted that harmful chemical compounds, capable of contaminating soil and groundwater, were being removed from various environmental surroundings using a technology developed to decontaminate areas surrounding launch pads.

239. In the field of resource management, the Committee noted that remote sensing information was being used to develop innovative geospatial products. Such products included a crop prescription service for farmers; a disaster management web-based tool that officials could access when they needed to make decisions in emergency and disaster situations; and a service for young or inexperienced farmers that provided, free of charge, an educational, geospatial-based, precision agriculture application.

240. In the area of insulation, the Committee noted that thermal insulation material used for the H-IIA launch vehicle would be applied as a spray-type heat insulator for buildings.

241. In the area of transportation, the Committee noted that the technology of the blast wave simulation software used during the lift-off of launch vehicles would be applied to the design of front carriages for high-speed trains.

242. The Committee noted that telecommunications by satellite and global navigation services were being used, among other things, for management, mitigation and relief operations during and after a disaster, for search and rescue, for high-definition television and for recreational activities such as fishing and hiking through the use of satellite navigational services.

243. The Committee recommended that it continue its consideration of the item at its fiftieth session, in 2007.

## **F. Space and society**

244. In accordance with paragraph 49 of General Assembly resolution 60/99, the Committee continued to consider, under the agenda item entitled "Space and society", the special theme for the focus of discussions for the period 2004-2006, "Space and education", in accordance with the workplan adopted by the Committee at its forty-sixth session,<sup>10</sup> in 2003.

245. The Committee recalled that in accordance with the workplan, it would conclude the workplan at its current session and undertake the following: (a) develop specific, concrete action plans for incorporating outer space into education, enhancing education in space, expanding space tools for education and ensuring that space-based services contribute to the achievement of the Millennium Development Goal on access to education; and (b) prepare a brief document on the role of space in education, as well as the link between space and education, for transmission to the General Conference of UNESCO.

246. The representatives of Austria, Brazil, Canada, Chile, Colombia, Hungary, India, Japan, Malaysia, Nigeria, the Republic of Korea, Thailand and the United States made statements under this item.

247. The Committee heard the following presentations:

(a) “Report on the status of operation of the Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP)”, by V. K. Dadhwal (CSSTEAP);

(b) “Report on the status of operation of the African Regional Centre for Space Science and Technology Education—in English Language (ARCSSTE-E)”, by O. Jegede (ARCSSTE-E);

(c) “Report on the status of operation of the African Regional Centre for Space Science and Technology—in French Language (CRASTE-LF)”, by A. Touzani (CRASTE-LF);

(d) “Report on the status of operation of the Regional Centre for Space Science and Technology Education for Latin America and the Caribbean (CRECTEALC)”, by José Marques da Costa (CRECTEALC);

(e) “Activities of the JAXA Space Education Centre: achievements and perspectives for international cooperation”, by Takemi Chiku (Japan);

(f) “Space education and training activities in Italy”, by Germana Galoforo (Italy);

(g) “Space and society”, by P. Martinez (South Africa);

(h) “Effective utilization of EDUSAT for education in India”, by B. N. Suresh (India);

(i) “University hands-on space education: the Japanese case”, by Tetsuo Yasaka (Japan);

(j) “Update on the ‘Space Education Programme of UNESCO’”, by Yolanda Berenguer (UNESCO).

248. The Committee noted that the Space Education Programme of UNESCO was aimed at enhancing space subjects and disciplines in schools and universities, in particular in developing countries, and raising awareness among the general public of the benefits of space technology for social, economic and cultural development. The Committee noted that UNESCO was the lead United Nations agency for the United Nations Decade of Education for Sustainable Development (2005-2014).

249. The Committee noted that there were a number of national educational initiatives and activities aimed at using content, materials and applications unique to

space activities for training students and teachers and for educating the general public on matters relating to outer space, including: the initiatives and activities of the Malaysian Angkasawan Program and the space awareness program; the NASA Educator Astronaut Program, Explorer Schools Program and Explorer Institutes initiative, as well as the education programmes implemented by the National Oceanic and Atmospheric Administration (NOAA); the Summer School Alpbach co-organized by the Austrian Aeronautics and Space Agency of the Austrian Research Promotion Agency (FFG), ESA and the national space agencies of all ESA member States, the BRITE Austria project and the Austrian Space Forum; the Space Awareness and Learning Program of the Government of Canada and the Canadian Space Agency; the Hungarian Space Research Group of Eotvos University and HUNAGI (a Hungarian spatial data interest community of 112 institutions and organizations in the field of geo-information); the Brazilian Space Agency (AEB) school programme; the ISRO Village Resource Centres; the JAXA Space Education Center; the Institute of Space Knowledge-based Development of Thailand under the auspices of the Geo-Informatics and Space Technology Development Agency (GISTDA); and the Korea Aerospace Research Institute (KARI). The Committee also noted the ESA Student Space Exploration and Technology Initiative (SSETI).

250. The Committee noted the educational opportunities being provided by some national universities, including hands-on training opportunities for university and graduate students in space science and engineering. In that regard, the Committee also noted the establishment of the University Space Engineering Consortium (UNISEC) to support such hands-on activities; the membership of the Consortium currently consisted of 20 universities and 30 voluntary groups.

251. The Committee noted that a number of national tele-education initiatives were providing educators and students at all levels, including those in remote areas, with high-quality education consisting of the latest teaching resources, vocational and teacher training and adult education.

252. The Committee noted the activities at the regional level for capacity-building through education and training in space science and technology application for sustainable development, including the achievements of the African Regional Centre for Space Science and Technology Education—in English Language (ARCSSTE-E), the Asia-Pacific Regional Space Agency Forum (APRSAF) and the pro tempore secretariat of the Fourth Space Conference of the Americas.

253. The Committee noted with satisfaction that, at the global level, a large number of educational and outreach activities and programmes for children, young people and the general public were being established by space agencies and international organizations to promote awareness of the benefits of space science and technology and to encourage children to consider careers in the fields of mathematics and science.

254. The Committee noted the role that the International Space Station was playing in education and in reaching out to international education communities.

255. The Committee noted that World Space Week, observed each year from 4 to 10 October, pursuant to General Assembly resolution 54/68 of 6 December 1999, contributed to the development of education and raised awareness about outer space, in particular among young people and the general public. The Committee noted that

more than 50 countries had participated in World Space Week in 2005 and that the theme of the activities for 2005 had been “Discovery and imagination”.

256. The Committee was of the view that sharing scientific and technical knowledge and achievements in the field of space activities would have a positive impact on future generations.

257. The view was expressed that illiteracy and a lack of adequate education continued to constitute major problems for developing countries and that the United Nations Programme on Space Applications should place more emphasis on supporting education and training for capacity-building in developing countries.

258. The view was expressed that States should be encouraged to improve the dissemination of space-related educational materials in order to increase general awareness of the importance of the use of space technology for attaining sustainable development. That delegation noted that education had been one of the priority areas identified by the Fourth Space Conference of the Americas, held in Cartagena de Indias, Colombia, in 2002.

259. The view was expressed that the Committee could identify entities that were already contributing to the implementation of the activities contained in the Plan of Action contained in the report of the Committee (A/59/174, paras. 300-309), which had been endorsed by the General Assembly in its resolution 60/99, and could examine how their efforts could be further supported and better coordinated.

260. The Committee agreed that, in view of the importance of space and education, it would continue to consider this special theme at its fiftieth session, in 2007, and that it would undertake the actions called for in paragraph 245 at that time.

## **G. Space and water**

261. In accordance with paragraph 50 of General Assembly resolution 60/99, the Committee continued to consider the agenda item entitled “Space and water”.

262. The representatives of Argentina, Austria, Canada, France, India, Japan, Nigeria and the United States made statements under the item.

263. The Committee heard the following technical presentations under the item:

(a) “Use of space-based systems for water resource management in India”, by K. Radhakrishnan (India);

(b) “Japan’s programme on space and water applications”, by Tamotsu Igarashi (Japan).

264. The Committee welcomed consideration of this item and agreed that it was timely in view of numerous discoveries and the prospect of future developments in the area of the use of space technology for water resource management. The Committee agreed that the current challenge in using space applications for water management was ensuring that new, valuable scientific data were made readily available and converted into practical information, usable by decision makers and policymakers.

265. The Committee noted that, following the United Nations Conference on Environment and Development, held in Rio de Janeiro from 3 to 14 June 1992, Member States had agreed that renewable resources, including water, should not be used faster than they were being renewed. In that context, the Committee noted that States had a greater responsibility in managing the environment and, in particular, its renewable resources.

266. The Committee noted that acute water shortages and floods were of major concern in developing countries, causing loss of human life and food shortages. At the same time, the Committee noted that access to fresh drinking water had always been a basic need for humankind and that it still constituted a daily challenge. The Committee also noted that water-related challenges could lead to social, economic and political tensions and that no consideration of economic, social or environmental development was possible without considering the issue of water. The Committee further noted that desertification, a water management issue, threatened one third of the Earth's surface and could affect more than a billion people around the world.

267. The Committee noted that space applications could significantly contribute to cost-effective water resource management as well as to the prediction and mitigation of water-related emergencies. The Committee also noted that it was difficult to fully understand the water cycle only through in-situ observation networks, which were non-existent in some countries and deteriorating in others and extremely costly to augment. In that context, the Committee noted that satellites offered an alternative way to observe the Earth and that they were essential for gathering information on remote places. The Committee noted that such observations could provide necessary information for water basin management and for the interlinking of rivers.

268. The Committee noted that space-based observations of oceans provided information for seasonal climate forecasting and, in relation to the El Niño and La Niña phenomena, hydrological extremes such as floods, droughts or a high number of intense thunderstorms. The Committee also noted that satellite data for water management needs could help to determine precipitation activity, snow cover, soil moisture, changes in underground water storage, flood inundation areas, surface temperature, wind speed and vegetation type and health and could even provide estimates of evaporation. The Committee noted the use of Earth observation data in producing maps for groundwater prospects and recharge sites, marine and lake resources, irrigation water management and studies of glaciers, surface-water bodies and the recharge of aquifers.

269. The Committee noted that data from a number of operational satellites were currently available for water resource management. The Committee also noted plans to begin operating new programmes to collect and disseminate data about the Earth's oceans, atmosphere, land, climate and space environment, providing high-quality, sustained environmental measurements for monitoring the global water cycle and related weather phenomena.

270. The Committee noted a number of national and international projects related to water resource management that were, among other things, aimed at mapping wastelands, monitoring surface water bodies, groundwater prospects, watershed and water quality, forecasting snow melt runoff and glacial inventory, estimating crop

production, assessing potential fishery zones, developing aquaculture in coastal areas, studying flood plain areas and assessing the impact of global warming on water resources.

271. The Committee recalled the presentation on the development of a pilot project that would apply space applications to the restoration of Lake Chad and the management of water resources in the Lake Chad basin. The Committee noted the progress in developing that project, in particular, the ongoing consultations between the experts of the countries sharing that water basin and the Lake Chad Basin Commission. The Committee also noted that the shrinking of Lake Chad represented a scientific challenge related to understanding the effects of drought in the Sahel area of Africa and the impact of climate change. The Committee further noted that various academic institutions were making use of space-based data in their research on water resources of Lake Chad.

272. The Committee noted with satisfaction the work that had been carried out by the United Nations/Austria/European Space Agency series of symposiums on the use of space applications for sustainable development, held in Graz, Austria, in 2003, 2004 and 2005, which had focused on the use of space applications for various aspects of water resource management. The Committee noted that, among other things, the symposiums had developed elements for inclusion in pilot project proposals for the use of space technology for water resource management and had set up a voluntary group of experts who had agreed to help developing countries to develop such pilot project proposals. The Committee also noted that the symposiums had assisted the Lake Chad Basin Commission in initiating a pilot project aimed at restoring Lake Chad.

273. The Committee noted the ongoing activities within the ESA Terrestrial Initiative of Global Environmental Research (TIGER). In that context, the Committee noted that projects in the Zambezi delta and the middle Limpopo basin in Southern Africa were aimed at demonstrating how remote sensing and geographical information system (GIS) applications worked for integrated river basin management. The Committee noted that a similar project for the Sous-Massa basin in Morocco was aimed at developing a decision aid system for water resource management based on GIS, satellite and other data. The Committee also noted the launch of the Nile River Awareness Kit, produced by the Canadian Space Agency at the request of the Nile Transboundary Environmental Action Project of the Nile Basin Initiative to, among other things, raise the awareness of decision makers.

274. The Committee noted the applications of space technology for monitoring water levels in pasture lands in Mali during dry seasons, as well as for monitoring water levels in the Guarani aquifer in Latin America. The Committee also noted that the Sentinel Asia project had been developed to disseminate and share space-based disaster management information, including on water-related emergencies, in Asia.

275. The Committee noted the positive experience of the Preparation for the Use of Meteosat Second Generation in Africa (PUMA) project of the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), aimed at providing weather forecasting information to countries in Africa.

276. The Committee noted that consideration of the item on space and water promoted capacity-building in the use of space applications for water resource management. The Committee noted a number of research and capacity-building

activities in that area that were being carried out by various national and international entities. In that regard, the Committee also noted that the 16th United Nations/International Astronautical Federation workshop, to be held in Valencia, Spain, on 29 and 30 September 2006, would address the use of space technologies for water management.

277. The Committee noted with appreciation that the Crown Prince of Saudi Arabia had announced five awards for creative scientific innovations in the area of water resource management. The Committee further noted the invitation of the Government of Saudi Arabia to Member States to propose innovative projects in the area of water resource management for the purposes of the above-mentioned awards.

278. The Committee agreed to continue the consideration of the item at its fiftieth session, in 2007.

## **H. Recommendations of the World Summit on the Information Society**

279. In accordance with paragraph 51 of General Assembly resolution 60/99, the Committee considered a new agenda item entitled "Recommendations of the World Summit on the Information Society".

280. The Committee noted that ITU had been unable to attend the current session of the Committee. The Committee also noted that the recommendations of the World Summit on Information Society were being implemented by the various stakeholders that would assist in the follow-up to the Summit.

281. The Committee agreed that the twenty-seventh session of the Inter-Agency Meeting on Outer Space Activities, to be held in Vienna from 17 to 19 January 2007, should be invited to provide information on any activities being carried out, or planned, to implement the recommendations of the Plan of Action of the World Summit on Information Society for consideration by the Scientific and Technical Subcommittee at its forty-fourth session.

## **I. Other matters**

282. The representatives of Algeria, Austria, Brazil, Canada, Chile, Colombia, the Czech Republic, India, Indonesia, Iran (Islamic Republic of), the Netherlands, Nigeria, Peru, the Russian Federation, South Africa, Spain, the United States and Venezuela (Bolivarian Republic of) made statements under this item. During the general exchange of views, statements relating to this item were also made by representatives of other member States.

### **1. Proposed strategic framework for the programme on the peaceful uses of outer space for the period 2008-2009**

283. The Committee had before it for its consideration the proposed strategic framework for the programme on the peaceful use of outer space for the period 2008-2009 (A/61/6 (Prog.5)). The Committee agreed on the proposed strategic framework.

284. The Committee noted that the proposed strategic framework identified the priority areas for supporting the further implementation of the recommendations of UNISPACE III, as contained in the Plan of Action of the Committee (see A/59/174, sect. VI.B), endorsed by the General Assembly in its resolution 59/2 of 20 October 2004.

## **2. Composition of the bureaux of the Committee and its subsidiary bodies for the period 2008-2009**

285. In accordance with the agreement of the Committee at its forty-sixth session,<sup>11</sup> endorsed by the General Assembly in its resolution 58/89 of 9 December 2003 and pursuant to the measures relating to the working methods of the Committee and its subsidiary bodies as endorsed by the Assembly in its resolution 52/56 of 10 December 1997, the Committee considered the composition of the bureaux of the Committee and its subsidiary bodies for the period 2008-2009.

286. The Committee noted the candidature of *Ciro Arévalo Yepes* (Colombia) and *Filipe Duarte Santos* (Portugal) for the offices of Chairman and Second Vice-Chairman/Rapporteur of the Committee on the Peaceful Uses of Outer Space for the period 2008-2009.

287. The Committee noted the candidature of *Aboubekr Seddik Kedjar* (Algeria) for the office of Chairman of the Scientific and Technical Subcommittee for the period 2008-2009.

288. The Committee noted the candidature of *Vladimír Kopal* (Czech Republic) for the office of Chairman of the Legal Subcommittee for the period 2008-2009.

289. The Committee noted that the Group of Asian States would nominate its candidate for First Vice-Chairman of the Committee on the Peaceful Uses of Outer Space for the period 2008-2009 in the near future.

## **3. Future role and activities of the Committee**

290. The Committee recalled that, at its forty-eighth session, the Chairman of the Scientific and Technical Subcommittee for the period 2001-2003, *Karl Doetsch* (Canada), had made a special presentation entitled "Observations on activity of the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space". The Committee further recalled that, at the same session and on the basis of that presentation, the Chairman of the Committee for the period 2004-2005, *Adigun Ade Abiodun* (Nigeria), had prepared a non-paper entitled "Planning for future roles and activities of the Committee", for consideration by the Committee.

291. The Committee noted with appreciation that, in accordance with its request, a working paper had been prepared by the Secretariat entitled "Future role and activities of the Committee on the Peaceful Uses of Outer Space" (A/AC.105/L.265), which summarized the presentation, the informal paper and the discussion in the Committee on this matter at its forty-eighth session, and provided substantive elements for consideration by the Committee.

292. The view was expressed that it was important to safeguard the position of the Committee as an important forum for the international community. In that regard, it would be particularly important that space goals be linked to international development goals, and that the work of the Committee be harmonized with the



work of other United Nations forums, including the Inter-Agency Meeting on Outer Space Activities and the Commission on Sustainable Development.

293. The view was expressed that the strong increase in the number of private entities operating in space, as well as the development of new industries involved in space activities, suggested that thought should be given to ensuring that outer space remained accessible to all countries for peaceful purposes. That delegation was of the view that the increased use of outer space and the arrival of new actors, of which a growing number represented private commercial interests, had the potential to generate greater demand for orbital slots and competition, with the potential for friction between competing space actors. It would therefore be important to identify and anticipate where activities might benefit from additional guidelines to ensure the safety and common understanding of how space was used for peaceful purposes. Such work would aim to keep the space environment safe and sustainable for civil space assets, especially in an era of expanded satellite traffic.

294. Some delegations expressed the view that it was important for the Committee to study carefully the most appropriate methodology for advancing long-term planning of the future role and activities of the Committee. In that regard, it was essential to review the major trends in broader space activities and in global agendas for sustainable development and bridging the digital divide.

295. The view was expressed that the working paper prepared by the Secretariat should remain on the agenda of the Committee at its fiftieth session, in 2007, and that the Committee could benefit from involving the Scientific and Technical Subcommittee and Legal Subcommittee in its further deliberations.

296. The Committee agreed that it should bear in mind the work done and the achievements made by the Committee and its mandate as part of consideration of the long-term planning of the future role and activities of the Committee. There were several major achievements made by the Committee that needed to be taken into account in any discussion on its future role and activities, as reflected in the report of UNISPACE III, the report of the Committee on the review of the implementation of the recommendations of UNISPACE III (A/59/174) and the list of issues for the use of space technology in the reports submitted by the Secretary-General as follow-up to major United Nations conferences and summits (A/AC.105/2006/CRP.16).

297. The Committee agreed to continue considering the issue of the “future role and activities of the Committee” at its fiftieth session. The Committee further agreed that the Chairman of the Committee could conduct intersessional, open-ended informal consultations with a view to presenting to the Committee a list of elements that could be taken into consideration at its next session. Such elements should be based on the need to look into areas where the Committee and its Subcommittees had made progress and other areas where the Committee might need to focus more attention in the future, taking into account paragraph 296 and the evolution of space technology and the increased number of participants in space activities.

#### 4. New item on the agenda of the Committee

298. The Committee had before it a proposal from the delegation of Brazil to include a new item on the agenda of the Committee, under a multi-year workplan, for the period 2007-2009 (A/AC.105/2006/CRP.15).

299. Some representatives expressed the view that it was of paramount importance for developing countries to develop their own national infrastructure for space-derived geospatial data. Access to reliable space-derived geospatial information would facilitate and promote greater transparency and accountability in Government business and the enhancement of information communication and sustainable development. Those delegations were also of the view that the inclusion of such an item on the agenda of the Committee would be a valuable contribution to the Committee's efforts towards enhancing international cooperation for sustainable development.

300. Other delegations expressed the view that such an agenda item could lead to duplication of efforts and possibly dilute actions undertaken by international and regional institutions, such as the Global Spatial Data Infrastructure Association (GSDI), the Permanent Committee on Spatial Data Infrastructure for the Americas and the Committee on Development Information (CODI). Those delegations believed that it was important to avoid any interference in existing and well-functioning international cooperation efforts.

301. The Committee agreed to include a new item on the agenda of the Committee at its fiftieth session, entitled "International cooperation in promoting the use of space-derived geospatial data for sustainable development", under the multi-year workplan presented below and with the understanding that the workplan could be revised as necessary for 2008 and 2009 at the Committee's fiftieth and fifty-first sessions.

302. The Committee further agreed that in 2007 it would identify and assess the interfaces among existing international forums where countries undertake discussions regarding the implementation of space-derived geospatial data infrastructures, in order to avoid duplication of international cooperative efforts. On the basis of this assessment, the Committee would then take a decision on the next steps on the workplan, including more closely defining the scope of the agenda item on space-derived geospatial information.

##### *Workplan*

##### **2007**

- Presentations by member States and observers, regional and international organizations and informal coordination groups on their respective activities related to space-derived geospatial information for sustainable development. These could include the United Nations regional centres for space science and technology education, GEO, CEOS, UNESCO, FAO, among others.

##### **2008**

- Expert presentations on experiences in the establishment of appropriate national infrastructure for space-derived geospatial data collection, processing

and application, including human resource training, technical infrastructure and financial requirements, and institutional arrangements.

## 2009

- Evaluation of the activities undertaken within the United Nations system that are directly related to the use of space-derived geospatial information for sustainable development and consideration of ways to highlight the links existing among those activities and the means to give them stronger international recognition.
- Drafting of a report containing recommendations on ways and means to foster international cooperation with a view to building up national infrastructure to use space-derived geospatial data.

303. The Committee agreed that any recommendations or conclusions resulting from the workplan would be in accordance with the Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of all States, Taking into Particular Account the Needs of Developing Countries (General Assembly resolution 51/122, annex).

## 5. Observer status

304. The Committee noted that the Centre for Human Rights and Peace Advocacy, a non-governmental organization, had applied for permanent observer status with the Committee and that the related correspondence and the constitution of the organization had been made available during the current session of the Committee (A/AC.105/2006/CRP.14).

305. The Committee recalled its decision, at its thirty-third session, in 1990, that non-governmental organizations requesting observer status with the Committee should have consultative status with the Economic and Social Council and should, as part of their programmes, be concerned with matters falling within the competence of the Committee. The Committee also recalled that such organizations should be recognized international non-profit organizations, have an established headquarters, an executive officer and a constitution or statutes, a copy of which should be before the Committee at the time that a request for observer status was considered.

306. While the Committee noted the interest of the Centre for Human Rights and Peace Advocacy in the work of the Committee, it decided not to recommend the granting of permanent observer status to the Centre in view of the fact that it was not clearly established that the Centre's activities were sufficiently concerned with matters falling within the competence of the Committee. The Secretariat was requested to inform the Centre of the Committee's decision.

## 6. Report of the Secretary-General

307. The Committee noted that, in paragraph 32 of General Assembly resolution 60/99, the Assembly had requested the Secretary-General to submit it at its sixty-first session, through the Committee, a report on the inclusion of the issue of the use of space technology in the reports submitted by the Secretary-General to the major United Nations conferences and summits for economic, social and cultural

development and related fields, and inclusion of that issue in the outcomes and commitments of those conferences and summits.

308. The Committee had before it a conference room paper containing a list of reports issued by the Secretary-General and outcome documents of major global conferences and summits, prepared and adopted from 2002 to 2006, which contained references to the uses of space technology (A/AC.105/2006/CRP.16).

309. The Committee agreed that the information contained in that document should be transmitted to the Office of the Secretary-General for submission to the Assembly at its sixth-first session.

## **7. Symposium**

310. As agreed during the forty-eighth session of the Committee, a symposium entitled "Space and forests" was held on 12 June 2006 to demonstrate the opportunities offered for monitoring and managing forests through space technologies and international cooperation in the peaceful uses of outer space. The moderator for the symposium was L. Beckel (Austria).

311. The following presentations were made during the symposium: "Global assessment and monitoring of forests" by A. Branthomme (FAO); "Global TREES Project: monitoring global forest cover change through collaboration and partnership" by A. Belward (European Commission); "Applications of remote sensing data in forestry" by E. Csató (Hungary); "Space technology for monitoring and managing forests in Nigeria" by A. Salami (Nigeria); and "Forest area monitoring in Thailand with the use of satellite imagery" by J. Wichawutipong (Thailand).

312. The Committee noted with appreciation that the symposium had offered great insights and expertise on various applications of space technology for monitoring and managing forests, which were not covered during the consideration of other items on the agenda of the Committee.

313. On 12 June 2006, presentations entitled "Space-based systems for forest resources management: Indian experience" by D. Radhakrishnan (India) and "Space-based information to support forest management in Indonesia" by M. Kartasasmita (Indonesia) were made in the context of the Symposium.

314. The Committee agreed that a symposium on space and water should be held during the fiftieth session of the Committee.

## **8. Panel on space activities**

315. The Committee agreed that a panel on space exploration activities, including the participation of the private sector, should be held during the fiftieth session of the Committee.

## **9. Fiftieth anniversary of the space age**

316. The Committee noted with appreciation that Member States and intergovernmental and non-governmental organizations would be organizing and holding a number of national, regional and international events to commemorate the launch into outer space of the first human-made Earth satellite, Sputnik I, on

4 October 1957. In that context, the Russian Federation informed the Committee on the planning of events during 2007.

## J. Schedule of work of the Committee and its subsidiary bodies

317. The Committee agreed on the following tentative timetable for its session and those of its subcommittees in 2007:

	<i>Date</i>	<i>Location</i>
Scientific and Technical Subcommittee	12-23 February 2007	Vienna
Legal Subcommittee	26 March-5 April 2007	Vienna
Committee on the Peaceful Uses of Outer Space	6-15 June 2007	Vienna

### Notes

<sup>1</sup> See *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

<sup>2</sup> United Nations, *Treaty Series*, vol. 1771, No. 30822.

<sup>3</sup> FCCC/CP/1997/7/Add.1, decision 1/CP.3, annex.

<sup>4</sup> United Nations publication, Sales No. E.06.I.5.

<sup>5</sup> United Nations publication, Sales No. E.06.I.6.

<sup>6</sup> *Official Records of the General Assembly, Fifty-sixth Session, Supplement No. 20* and corrigendum (A/56/20 and Corr.1), para. 220.

<sup>7</sup> *Ibid.*, *Sixtieth Session, Supplement No. 20* and corrigendum (A/60/20 and Corr.1), paras. 57-58.

<sup>8</sup> *Ibid.*, *Fifty-ninth Session, Supplement No. 20* and corrigenda (A/59/20 and Corr.1 and 2), para. 137.

<sup>9</sup> United Nations, *Treaty Series*, vol. 1833, No. 31363.

<sup>10</sup> *Official Records of the General Assembly, Fifty-eighth Session, Supplement No. 20* (A/58/20), para. 239.

<sup>11</sup> *Ibid.*, annex II, paras. 4-9.

