



General Assembly

Distr.: Limited
15 June 2006

Original: English

**Committee on the Peaceful
Uses of Outer Space**
Forty-ninth session
Vienna, 7-16 June 2006

Draft report

Chapter II

Addendum

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

1. 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.
2. 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.
3. 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.
4. The representatives of Austria, Algeria, Brazil, Burkina Faso, Canada, Chile, China, Colombia, the Czech Republic, France, Greece, India, Indonesia, Iran (Islamic Republic of), Italy, Japan, Malaysia, the Netherlands, Nigeria, the Republic of Korea, Thailand, Ukraine, the United Kingdom, the United States, Venezuela (Bolivarian Republic of) and [...] made statements under this item. During the general exchange of views, statements relating to the item were also made by the representatives of the following member States: [...].
5. The Committee heard the following presentations under this agenda item:

V.06-54877 (E)



(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).

6. 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.

7. 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 Change¹ and the Kyoto Protocol.² The Committee further noted the inter-agency coordination among United Nations entities in the implementation of the 10-Year Implementation Plan of the Global Earth Observation System of Systems (GEOSS).

1. United Nations Programme on Space Applications

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

8. 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.

9. 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).

10. 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).

¹ United Nations, *Treaty Series*, vol. 1771, No. 30822.

² FCCC/CP/1997/7/Add.1, decision 1/CP.3, annex.

11. 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.

12. 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*

13. 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)).

14. 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)).

15. 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.

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

17. 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*

18. 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 global navigation satellite systems (GNSS) and related applications.

19. 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*

20. 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

21. The Committee noted with satisfaction that the publications entitled *Seminars of the United Nations Programme on Space Applications*³ and *Highlights in Space 2005*⁴ had been issued.

22. 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). 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).

(c) Regional and interregional cooperation

23. 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

³ United Nations publication, Sales No. E.06.I.5.

⁴ United Nations publication, Sales No. E.06.I.6.

possibilities of attracting donors and of establishing academic relationships with national and international space-related institutions.

24. 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.

25. 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.

26. 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).

27. 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.

28. 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.

29. 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.

30. 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.

31. 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.

32. 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.

33. 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.

34. The Committee noted that the preparatory meeting for the Fifth Space Conference of the Americas 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.

35. 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.

36. 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.

37. 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 Disasters”. 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.

38. 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

39. 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.⁵

40. 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.

41. 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.

42. 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

43. 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

⁵ *Official Records of the General Assembly, Fifty-sixth Session, Supplement No. 20 and corrigendum (A/56/20 and Corr.1), para. 220.*

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).

44. 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.

45. 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.

46. 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.

47. 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.

48. 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

49. 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).

50. 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).

51. 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.

52. 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.

53. 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.

54. 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.

55. 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.

56. 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).

57. 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.

58. 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

59. 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).

60. 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.

61. 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.

62. 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).

63. 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).

64. 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 elaborate a technically based framework for the use of nuclear power source applications in outer space and to implement and apply it rigorously.

65. 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.

66. 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.

67. 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.

68. 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 elaborate 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.

69. 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

70. 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).

71. 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

72. 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).

73. 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

[Text to be submitted under a separate document symbol (A/AC.105/L.266/Add.4).]

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

74. 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).

75. 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.

76. 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

77. 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).

78. 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.

79. 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.

80. 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.

81. 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

82. 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).

83. The Committee recalled its recommendation, made at its forty-seventh session,⁶ 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).

84. 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).

85. 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.

⁶ Ibid., *Fifty-ninth Session, Supplement No. 20* and corrigenda (A/59/20 and Corr.1 and 2), para. 137.

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.

86. 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).