United Nations A/AC.105.C.1/L.286

General Assembly

Distr.: Limited
24 February 2006

Original: English

Committee on the Peaceful Uses of Outer Space
Scientific and Technical Subcommittee
Forty-third session
Vienna, 20 February-3 March 2006

Draft report

I. Introduction

1. The Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space held its forty-third session at the United Nations Office at Vienna from 20 February to 3 March 2006 under the chairmanship of B. N. Suresh (India).

2. The Subcommittee held […] meetings.

A. Attendance

3. Representatives of the following member States of the Committee attended the session: Algeria, Argentina, Austria, Belgium, Brazil, Bulgaria, Burkina Faso, Canada, Chile, China, Cuba, Czech Republic, Ecuador, France, Germany, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Italy, Japan, Kazakhstan, Malaysia, Mexico, Morocco, Netherlands, 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 of Great Britain and Northern Ireland, United States of America, Uruguay, Venezuela (Bolivarian Republic of) and Viet Nam.

4. At the 638th and 643rd meetings, on 20 and 22 February, the Chairman informed the Subcommittee that requests had been received from Angola, Azerbaijan, Belarus, Bolivia, the Dominican Republic, Switzerland, Tunisia, Yemen and Zimbabwe to attend the session as observers. Following past practice, those States were invited to send delegations to attend the current session of the Subcommittee and address it as appropriate, without prejudice to further requests of

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that nature; that action did not involve any decision of the Subcommittee concerning status but was a courtesy that the Subcommittee extended to those delegations.

5. The following United Nations entities were represented at the session by observers: the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Institute for Training and Research (UNITAR), the World Health Organization (WHO), the World Meteorological Organization (WMO) and the International Atomic Energy Agency (IAEA).

6. The following international organizations were also represented by observers: the Association of Space Explorers (ASE), the European Space Agency (ESA), EURISY, the European Space Policy Institute (ESPI), the International Astronautical Federation (IAF), the International Astronomical Union (IAU), the International Institute for Applied Systems Analysis (IIASA), the International Law Association (ILA), 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).

7. A list of the representatives of States, United Nations entities and other international organizations attending the session is contained in A/AC.105/C.1/INF/35.

B. Adoption of the agenda

8. At its 638th meeting, on 20 February 2006, the Subcommittee adopted the following agenda:

1. Adoption of the agenda.
2. Election of the Chair.
3. Statement by the Chair.
4. General exchange of views and introduction to reports submitted on national activities.
5. United Nations Programme on Space Applications.
6. Implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III).
7. Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth's environment.
8. Space debris.
9. Use of nuclear power sources in outer space.
10. Space-system-based telemedicine.
11. Near-Earth objects.
12. Space-system-based disaster management support.
13. International Heliophysical Year 2007.

14. Examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including 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.

15. Draft provisional agenda for the forty-fourth session of the Scientific and Technical Subcommittee.

16. Report to the Committee on the Peaceful Uses of Outer Space.

C. Election of the Chairman

9. At its 638th meeting, the Subcommittee elected B. N. Suresh (India) Chairman of its forty-third session and Mazlan Othman (Malaysia) Chairman of its forty-fourth session, pursuant to General Assembly resolution 60/99 of 8 December 2005.

D. General statements

10. The Subcommittee welcomed the election of Mr. Suresh as its Chairman for a one-year term, starting in 2006, and Ms. Othman for the following one-year term, starting in 2007. The Subcommittee expressed its appreciation to the outgoing Chairman, Dumitru-Dorin Prunariu (Romania), for his leadership and contributions in furthering the achievements of the Subcommittee during his two-year term.

11. The view was expressed that, while that arrangement would enable the Subcommittee to carry out its work as scheduled, that solution should not set a precedent for future elections.

12. Condolences were conveyed to Pakistan and the Philippines, as well as to other countries, for the loss of lives as a result of disasters. It was noted that there was greater urgency in the work of the Subcommittee to expand space-based applications for disaster prevention and recovery.

13. Condolences were also conveyed to Italy and other ESA member States for the passing away of Antonio Rodota, who had been Director General of ESA from 1997 to 2003.

14. China was congratulated for the successful launch of its second manned mission and the United States was congratulated for the successful return to flight of the Space Shuttle.

15. Statements were made by representatives of the following member States during the general exchange of views: Argentina, Austria, Brazil, Canada, China, Colombia, Cuba, Czech Republic, Ecuador, France, Germany, Hungary, India, Indonesia, Iran (Islamic Republic of), Italy, Japan, Malaysia, Nigeria, Pakistan, Poland, Republic of Korea, Romania, Russian Federation, South Africa, Syrian Arab Republic, Thailand, United Kingdom, United States, Venezuela (Bolivarian Republic of) and Viet Nam. General statements were made by the observers for UNESCO, ESA, IAF and ISPRS.

16. The Subcommittee heard the following technical presentation under this item: "Perspectives of the Russian programme of fundamental space research for 2006-2015", by a representative of the Russian Federation.

17. At the 638th meeting, the Chairman made a statement outlining the work of the Subcommittee at its current session and reviewing the global space activities of the previous year, including important advances that had been made as a result of international cooperation.

18. Also at the 638th meeting, the Director of the Office for Outer Space Affairs of the Secretariat made a statement reviewing the work programme of the Office.

E. National reports

19. The Subcommittee took note with appreciation of the reports submitted by Member States (A/AC.105/857 and Add.1, and A/AC.105/C.1/2006/CRP.3) for its consideration under agenda item 4, "General exchange of views and introduction of reports submitted on national activities". The Subcommittee recommended that the Secretariat continue to invite Member States to submit annual reports on their space activities.

F. Symposium

20. Pursuant to General Assembly resolution 60/99, an industry symposium on the theme "Synthetic aperture radar missions and their applications" was held on 20 February 2006. It was moderated by Lothar Beckel of Geospace.

21. The presentations to the symposium included the following: "Synthetic aperture radar (SAR) data for sustainable development", by G. Staples, MacDonald Dettwiler Geospatial Services; "ERS/ENVISAT ASAR data products and services", by A. Celentano, Eurimage; "Use of ERS altimeter data within the REFERENCE3D production project", by C. Cortes and L. Tripon, Spot Image; "Applications of SAR for sustainable social and economic development in India", by M.Y.S. Prasad, Antrix Corporation; "Operational satellite-based oil spill and ship detection services: a case study from Northern Europe", by A. Jensen, Kongsberg Satellite Services AS; "TerraSAR-Xproducts, services and applications", by J. Herrmann, Infoterra; "COSMO-SkyMed: products and user services", by E. Lopinto, Italian Space Agency (ASI); "Use of SAR data in maritime applications", by G. Riccobono, Telespazio; "The TerraSAR-X mission: a German public-private-partnership undertaking", by R. Werninghaus, German Aerospace Center (DLR); and "ALOS/PALSAR: overview and expected results", by T. Tadono, Japan Aerospace Exploration Agency (JAXA).

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

22. The Subcommittee noted with satisfaction that the Inter-Agency Meeting on Outer Space Activities had held its twenty-sixth session in Paris from 18 to 20 January 2006. The Subcommittee had before it the report of the Inter-Agency

Meeting on its twenty-sixth session (A/AC.105/859) and the report of the Secretary-General on the coordination of space-related activities within the United Nations system: directions and anticipated results for the period 2006-2007 (A/AC.105/858). The Subcommittee noted that the twenty-seventh session of the Inter-Agency Meeting would be held in Vienna from 17 to 19 January 2007.

23. The Subcommittee noted that the Inter-Agency Meeting at its twenty-sixth session had considered two new agenda items: "Participation of United Nations entities in the process of the Group on Earth Observations"; and "Lessons learned from applications of space technology in support of disaster relief efforts". In that regard, the Subcommittee also noted that the Inter-Agency Meeting would invite United Nations agencies dealing with humanitarian issues to report at its twenty-seventh session on the lessons learned from the application of space-based data for disaster relief efforts (A/AC.105/859, para. 70).

24. The Subcommittee noted that the Inter-Agency Meeting had updated the list of space-related initiatives of the member States of the Committee on the Peaceful Uses of Outer Space and the entities of the United Nations system that had responded to specific recommendations contained in the Plan of Implementation of the World Summit on Sustainable Development (see A/AC.105/C.1/2006/CRP.4). The Subcommittee noted that the list was a useful tool to avoid duplication of efforts and to create synergies among end-users and space-capability providers interested in implementing actions called for in the Plan of Implementation. The Subcommittee also noted that the Office for Outer Space Affairs had created a web page that facilitated the navigation of the list (www.uncosa.unvienna.org/wssd/index.html).

25. The Subcommittee noted that, immediately following its twenty-sixth session, on 20 January 2006, the Inter-Agency Meeting had held its third open informal session for the member States and observers of the Committee. The theme "Space technology for sustainable development and disaster management: opportunities within the United Nations system" had been discussed at the third open session. The Subcommittee took note of the invitation of the Inter-Agency Meeting to propose possible themes for its next open informal session.

26. The Subcommittee noted that the brochure entitled "Space solutions for the world's problems: how the United Nations family is using space technology for sustainable development", which had been issued by the Inter-Agency Meeting, had been translated into French and Spanish. The Subcommittee also noted that the Inter-Agency Meeting would update the brochure so that it would also cover the use of space applications in peacekeeping operations, food security and disaster reduction.

H. Adoption of the report of the Scientific and Technical Subcommittee

27. After considering the items before it, the Subcommittee, at its […]th meeting, on [...] March 2006, adopted its report to the Committee on the Peaceful Uses of Outer Space, containing its views and recommendations, as set out in the paragraphs below.

II. United Nations Programme on Space Applications

28. In accordance with General Assembly resolution 60/99, the Scientific and Technical Subcommittee continued its consideration of agenda item 5, "United Nations Programme on Space Applications".

29. At the 640th meeting, the Expert on Space Applications made a statement outlining the activities carried out and planned under the United Nations Programme on Space Applications.

30. The representatives of Brazil, Canada, China, Japan, India, Mexico, Morocco and the United States made statements under this agenda item.

31. The Subcommittee heard a technical presentation by the representative of South Africa entitled "Southern African Large Telescope (SALT)" under this agenda item.

32. In accordance with General Assembly resolution 60/99, the Subcommittee, at its 641st meeting, reconvened the Working Group of the Whole, under the chairmanship of Muhammad Nasim Shah (Pakistan). The Working Group of the Whole held […] meetings from […] to […]. At its […] meeting, on […], the Subcommittee endorsed the report of the Working Group of the Whole, which is contained in annex [I] to the present report.

A. Activities of the United Nations Programme on Space Applications

33. The Subcommittee had before it the report of the Expert on Space Applications (A/AC.105/861). The Subcommittee noted that the United Nations Programme on Space Applications for 2005 had been carried out satisfactorily and commended the work accomplished by the Expert in that regard.

34. The Subcommittee noted with appreciation that, since its previous session, additional resources for 2005 had been provided by various Member States and organizations and had been acknowledged in the report of the Expert (A/AC.105/861, paras. 51-52).

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

36. The Subcommittee noted that the United Nations Programme on Space Applications was assisting developing countries and countries with economies in transition in benefiting from space-related activities as proposed in the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III), in particular those contained in the resolution entitled "The Space Millennium: Vienna Declaration on Space and Human Development",[1] and those contained in the plan of action contained in the

report of the Committee on the Peaceful Uses of Outer Space on the review of the implementation of the recommendations of UNISPACE III (A/59/174).

37. The Subcommittee noted that, in addition to the United Nations conferences, training courses, workshops, seminars and symposiums planned for 2006 (see para. […] below), there would be other activities of the Programme in 2006, which would place emphasis on:

(a) Providing support for capacity-building in developing countries through the regional centres for space science and technology education, affiliated to the United Nations;

(b) Strengthening its long-term fellowship programme to include support for the implementation of pilot projects;

(c) Promoting the participation of youth in space activities;

(d) Supporting or initiating pilot projects as follow-up to activities of the Programme in areas of priority interest to member States;

(e) Providing technical advice, upon request, to Member States, bodies and specialized agencies of the United Nations system and relevant national and international organizations;

(f) Enhancing access to space-related data and other information.

1. Year 2005

Meetings, seminars, symposiums, training courses and workshops

38. With regard to the activities of the United Nations Programme on Space Applications carried out in 2005, the Subcommittee expressed its appreciation to the Governments of Algeria, Argentina, Australia, Austria, Brazil, China, Japan, Nigeria, Sweden, the United Arab Emirates and the United States, as well as to the Economic and Social Commission for Asia and the Pacific, UNESCO, ESA, the International Academy of Astronautics and IAF, for co-sponsoring the various workshops, symposiums and training courses that had been held within the framework of the Programme referred to in the report of the Expert on Space Applications (A/AC.105/861, para. 52 and annex I).

Long-term fellowships for in-depth training

39. The Subcommittee expressed 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.

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

Technical advisory services

41. The Subcommittee 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).

2. Year 2006

Meetings, seminars, symposiums, training courses and workshops

42. The Subcommittee recommended the approval of the following programme of meetings, seminars, symposiums, training courses and workshops, to be organized jointly by the Office for Outer Space Affairs, host Governments and others in 2006:

(a) United Nations/European Space Agency/International Centre for Integrated Mountain Development Expert Meeting on Remote Sensing Projects for the Hindu Kush Himalaya, to be held in Kathmandu from 6 to 10 March;

(b) United Nations/Syrian Arab Republic/European Space Agency Regional Workshop on the Use of Space Technology for Disaster Management in Western Asia and Northern Africa, to be held in Damascus from 22 to 26 April;

(c) United Nations/Zambia Regional Workshop on the Application of Global Navigation Satellite System Technologies for Sub-Saharan Africa, to be held in Lusaka from 26 to 30 June;

(d) United Nations/Austria/European Space Agency Symposium on Space Applications for Sustainable Development: Supporting the Plan of Implementation of the World Summit on Sustainable Development to be held in Graz, Austria, in September;

(e) United Nations/International Astronautical Federation Workshop on Bringing Space to Classrooms, to be held in Valencia, Spain, on 29 and 30 September;

(f) United Nations/European Space Agency Training Course on Global Navigation Satellite System Applications, to be held in China in November;

(g) United Nations/Ukraine Workshop on Space Law, to be held in Ukraine from 6 to 9 November;

(h) United Nations Workshop on Basic Space Science: Solar and Heliospheric Sciences, to be held in Bangalore, India, from 27 November to 1 December;

(i) United Nations/South Africa Training Course on Satellite-Aided Search and Rescue, to be held in South Africa in November/December;

(j) Workshops and training courses to be organized at the regional centres for space science and technology education, affiliated to the United Nations.

B. International Space Information Service

43. The Subcommittee noted with satisfaction that the seventeenth and final in the series of documents containing selected papers from the activities of the United Nations Programme on Space Applications, entitled *Seminars of the United Nations Programme on Space Applications*, had been issued. The Subcommittee also noted with satisfaction the publication of *Highlights in Space 2005*,[2] which had been compiled from a report prepared by IAF, in cooperation with the International Institute of Space Law. The Subcommittee expressed its appreciation to the contributors for their work.

44. The Subcommittee noted with appreciation 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 Subcommittee 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

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

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

47. The Subcommittee 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.

48. The Subcommittee noted with satisfaction that in 2005 the Programme had made efforts: (a) to support the development of web pages for all the regional centres; (b) to disseminate worldwide information on the educational activities of the regional centres; (c) to submit information on the regional centres for inclusion in international directories and newsletters; (d) to develop information panels on regional centres for incorporation in the permanent space exhibit of the Office for Outer Space Affairs in Vienna; (e) to arrange for presentations on the accomplishments of the regional centres to be made at the sessions of the Committee on the Peaceful Uses of Outer Space and during activities organized

under the Programme; and (f) to establish a common accounting procedure for the financial resources provided by the Programme to the regional centres.

49. The Subcommittee also 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).

50. The Subcommittee noted with satisfaction that the Centre for Space Science and Technology Education for Asia and the Pacific, located in New Delhi, had celebrated its tenth anniversary in 2005 and had made exemplary achievements. The Subcommittee also noted that the Centre was developing a framework of courses, in addition to the four courses of the education curricula developed by the United Nations, focusing on the application of space technology in the areas of disaster management, tele-health and the management of natural resources.

51. The Subcommittee noted that the African Regional Centre for Space Science and Technology Education—in English Language, located in Ile-Ife, Nigeria, was currently conducting a postgraduate course on Satellite Communications and Remote Sensing/Geographical Information Systems (GIS).

52. The Subcommittee noted that the African Regional Centre for Space Science and Technology—in French Language, located in Rabat, was currently conducting a postgraduate course in Remote Sensing and GIS.

53. The Subcommittee noted that the Brazil Campus of the Centre for Space Science and Technology Education in Latin America and the Caribbean had conducted a third postgraduate course on Remote Sensing and GIS in 2005 and was planning to hold a fourth such course in 2006. In addition to the nine-month postgraduate courses, the Centre also provided short-term courses on remote sensing and cartography at its Mexico Campus. The Subcommittee also noted that the Centre would be cooperating with the Pro Tempore Secretariat of the Space Conference of the Americas.

54. The Subcommittee noted that the China National Space Administration, 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 Asia and the Pacific.

55. It was noted that the General Assembly, in its resolution 60/99, had noted with satisfaction that the Government of Ecuador would be hosting the Fifth Space Conference of the Americas in Quito in July 2006. The Subcommittee also noted that Ecuador had established a national preparatory committee for the Conference and that the Government of Chile would hold a preparatory meeting for the Conference during the International Air and Space Fair (FIDAE) to be held in Santiago on 28 and 29 March 2006.

56. The Subcommittee noted with satisfaction that the first African Leadership Conference on Space Science and Technology for Sustainable Development had

been held in Abuja from 23 to 25 November 2005. The Subcommittee also noted that the African Leadership Conference would be held on a biennial basis: the Government of South Africa had offered to host the second Conference, to be held in 2007, and the Government of Algeria had offered to host the third Conference, to be held in 2009.

57. The Subcommittee noted that the 12th meeting of the Asia-Pacific Regional Space Agency Forum (APRSAF) held in Kitakyushu, Japan, in October 2005, had focused on the reduction of the impact of natural disasters using space technology. The Subcommittee also noted that the 13th meeting of the Forum would be held in Indonesia in November 2006.

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

58. In accordance with General Assembly resolution 60/99, the Subcommittee continued its consideration of agenda item 7, relating to remote sensing of the Earth.

59. In the course of the discussions, delegations reviewed national and cooperative programmes in remote sensing. Examples were given of national programmes and bilateral, regional and international cooperation. The representatives of Brazil, Canada, France, Germany, India, Japan, Nigeria, the Republic of Korea and the United States made statements under the agenda item. The observer for UNITAR also made a statement.

60. The representative of Germany made a technical presentation entitled "Remote sensing applications for sustainable development and natural hazards by DLR: current activities".

61. The Subcommittee emphasized the importance of Earth observation satellite data to support activities in a number of key development areas, for example: hydrology, oceanography (including altimetry and sea surface temperature), water resource management, fishing, wetland management, monitoring the marine environment, management of coastal zones and agriculture, food security, forestry and deforestation, drought and desertification, land-use management, land administration and natural resource management, prospecting gas and oil reserves, ecosystem studies, monitoring malaria and other vector-borne diseases, environmental monitoring, early warning for disasters, monitoring and controlling forest fires, meteorology and weather monitoring and prediction of special weather conditions (such as typhoons, floods, yellow sandstorms and red tide), atmospheric circulation and air quality monitoring and forecasting, monitoring global climate change and greenhouse gases, monitoring ice sheets, high-resolution mapping, urban planning, transportation management, aviation safety and humanitarian relief. The Subcommittee highlighted the increasing current and future availability of space-based sensors on board satellites such as ADEOS-II (MIDORI-II), the Advanced Land Observing Satellite (ALOS), Aqua, Aquarius/SAC-D, the Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations (CALIPSO) satellite, CARTOSAT-1, the China-Brazil Earth Resources Satellite (CBERS-2B), CBERS-3, CBERS-4, the Communication, Ocean and Meteorological Satellite (COMS), Earth

Observing System (EOS) satellites, the Environmental Satellite (Envisat), the Global Climate Observing Mission (GCOM) satellite series, the Geostationary Operational Environmental Satellite (GOES), GOES-R, the Greenhouse Gases Observing Satellite (GOSAT), the Indian remote sensing satellite (IRS), IRS-1C, IRS-1D, IRS-P3, Jason 2, KOMPSAT-2, KOMPSAT-3, the Land Remote Sensing Satellite (Landsat-5), Landsat-7, the meteorological operational satellite (Metop), the National Polar-orbiting Operational Environmental Satellite System (NPOESS), NigeriaSat-1, NigeriaSat-2, OCEANSAT-1, Oceansat 3, Odin, the Polarization and Anisotropy of Reflectances for Atmospheric Sciences coupled with Observations from a Lidar (PARASOL) satellite, the Synthetic Aperture Radar Satellite (RADARSAT), RESOURCESAT-1, SciSat-1, Soil Moisture and Ocean Salinity (SMOS) satellites, the Earth Observation Satellite (SPOT), SSR-1, Terra, the Technology Experiment Satellite (TES) and the Tropical Rainfall Measuring Mission (TRMM) satellite.

62. The Subcommittee noted a number of international projects in the field of the use of satellite technologies aimed at supporting sustainable development, such as the ALTIKA programme, the Earth Observation Partnership of the Americas (EOPA), the ESA Terrestrial Initiative of Global Environmental Research (TIGER), the Megha-Tropiques programme, the Pleiades project, the Vegetation and Environment Monitoring on a New Microsatellite programme, the Global Precipitation Measurement (GPM) mission, the information gathering and warning system for disaster and crisis management, which included the pilot project “Sentinel-Asia”, and the strategic partnership between Brazil and relating to the CBERS programme. The Subcommittee noted with satisfaction the establishment in Guyana of a centre for monitoring environmental change in the Amazon and the Caribbean.

63. The Subcommittee emphasized the importance of providing non-discriminatory access to remote sensing data and to derived information at reasonable cost and in a timely manner and of building capacity for the adoption and use of remote sensing technology, in particular to meet the needs of developing countries.

64. The Subcommittee encouraged further international cooperation in the use of remote sensing satellites, in particular by sharing experiences and technologies through bilateral, regional and international collaborative projects. The Subcommittee noted the important role played by organizations such as the Committee on Earth Observation Satellites (CEOS), IAF and ISPRS and by international entities such as the Integrated Global Observing Strategy (IGOS) Partnership in promoting international cooperation in the use of remote sensing technology, especially for the benefit of developing countries.

65. The Subcommittee noted that the Group on Earth Observations (GEO) was continuing to implement its 10-year plan for a Global Earth Observation System of Systems (GEOSS), which had been endorsed by Governments participating in the third Earth Observation Summit, held in Brussels on 16 February 2005. The plan was designed to make tangible contributions to global society in nine broad socio-economic areas. The Subcommittee also noted that significant progress had been made by GEO during 2005 in establishing GEO governance relationships and in developing the 2006 GEO Work Plan.

66. The Subcommittee noted with satisfaction that the European programme Global Monitoring for Environment and Security (GMES) not only fostered cooperation within Europe, but also strengthened international cooperation.

67. The Subcommittee noted that the Third International Conference on Early Warning, to be held in Bonn, Germany, from 27 to 29 March 2006, would deal with the application of satellite-based remote sensing for disaster prevention.

Notes

[1] *Report of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space, Vienna, 19-30 July 1999* (United Nations publication, Sales No. E.00.I.3), chap. I, resolution 1.

[2] United Nations publication, Sales No. E.06.I.6.