United Nations A/AC.105/885



### **General Assembly**

Distr.: General 29 January 2007

Original: English

# Committee on the Peaceful Uses of Outer Space

# Report of the Inter-Agency Meeting on Outer Space Activities on its twenty-seventh session\*

(Vienna, 17-19 January 2007)

### Contents

			Paragraphs	Page
I.	Introduction			3
II.	Substantive issues considered at the Meeting		4-74	3
	A.	Coordination of plans and programmes and exchange of views on current activities in the practical application of space technology and related areas	4-37	3
	В.	Space-related outcomes of the World Summit on Sustainable Development.	38-42	9
	C.	Implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space	43-49	9
	D.	Use of the Charter on Cooperation to Achieve the Coordinated Use of Space Facilities in the Event of Natural or Technological Disasters by the United Nations system and methods to increase operational collaboration in the use of space technology in emergency response	50-56	11
	E.	Lessons learned and good practices in the use of space technologies for relief efforts and disaster reduction	57-63	12
	F.	Participation of the entities of the United Nations system in the process of the Group on Earth Observations.	64-68	13
	G.	Public outreach and information exchange to promote inter-agency cooperation	69-74	14

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<sup>\*</sup> The present report was adopted by the Inter-Agency Meeting on Outer Space Activities at its twenty-seventh session, held from 17 to 19 January 2007.

### A/AC.105/885

	III.	Other matters	15	
	A. Enhancement of the participation of United Nations entities in the work of the Committee on the Peaceful Uses of Outer Space, its subcommittees and the Inter-Agency Meeting on Outer Space Activities	15		
		B. Future programme of work	16	
Annexes	S			
	I.	List of participants at the twenty-seventh session of the Inter-Agency Meeting on Outer Space Activities, held in Vienna from 17 to 19 January 2007		
	II.	Agenda for the twenty-seventh session of the Inter-Agency Meeting on Outer Space Activities, held in Vienna from 17 to 19 January 2007		
	III.	Guidelines for preparation of submissions for the report of the Secretary-General on coordination of space-related activities within the United Nations system		
	IV.	Agenda for the informal open session of the Inter-Agency Meeting on Outer Space Activities, held in Vienna on 19 January 2007	22	

### I. Introduction

- 1. The Inter-Agency Meeting on Outer Space Activities held its twenty-seventh session at the United Nations Office at Vienna from 17 to 19 January 2007. Yolanda Berenguer of the United Nations Educational, Scientific and Cultural Organization (UNESCO) was elected Chairman. The list of participants is contained in annex I to the present report.
- 2. The Director of the Office for Outer Space Affairs of the Secretariat opened the Meeting and welcomed the participants. He informed the Meeting on recent activities of the Committee on the Peaceful Uses of Outer Space in promoting the benefits of space technology for sustainable development for all. The Director recalled that in 2007 the Committee would celebrate its fiftieth session together with the fiftieth anniversary of the launch of Sputnik I, the first artificial Earth-orbiting satellite, on 4 October 1957, as well as the fortieth anniversary of the entry into force of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies¹ on 10 October 1967.
- 3. The Meeting adopted the agenda contained in annex II to the present report.

### II. Substantive issues considered at the Meeting

# A. Coordination of plans and programmes and exchange of views on current activities in the practical application of space technology and related areas

- 1. Current and future plans of common interest, including consideration of how the activities of organizations of the United Nations system in the area of space science and technology and its applications relate to their mandated programmes
  - 4. The secretary of the Meeting briefed participants on the work of the Committee on the Peaceful Uses of Outer Space and its subsidiary bodies, bringing to their attention matters relating to inter-agency coordination.
  - 5. At its forty-third session, in 2006, the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space had noted the work conducted by the Inter-Agency Meeting at its twenty-sixth session. The report of the Meeting (A/AC.105/859) as well as 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) were before the Subcommittee.
  - 6. Representatives of participating United Nations entities reported on their activities and plans for 2007 and 2008. Activities involving significant cooperation among United Nations entities have been included in 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 2007-2008 (A/AC.105/886).

<sup>&</sup>lt;sup>1</sup> General Assembly resolution 2222 (XXI), annex.

- 7. The Meeting took note of the report of the United Nations Expert on Space Applications of the Office for Outer Space Affairs on activities carried out in 2006 and the future planned activities, as well as the orientation of the United Nations Programme on Space Applications.<sup>2</sup> Several United Nations entities had contributed to the definition of the Programme and participated in its activities. The Expert on Space Applications invited organizations of the United Nations system to continue contributing to activities of interest to them.
- 8. The Meeting noted the activities of the United Nations Industrial Development Organization (UNIDO), which was seeking a stronger involvement in space-related activities. In particular, UNIDO was considering applications in telecommunications and remote sensing for resources management and disaster management. Concepts were still at an initial stage and UNIDO was seeking cooperation with relevant organizations.
- 9. The Meeting noted the current and future plans of the Economic and Social Commission for Asia and the Pacific (ESCAP) in implementing the Regional Space Applications Programme for Sustainable Development (RESAP)<sup>3</sup> to promote applications of space technologies for development through regional cooperation. RESAP, established by the Ministerial Conference on Space Applications for Development in Asia and the Pacific in 1994, was promoting regional cooperative mechanisms on space-based disaster management supporting capabilities, including cooperation with the Food and Agriculture Organization of the United Nations (FAO), the International Telecommunication Organization (ITU) and other regional initiatives, such as the Asia-Pacific Regional Space Agency Forum (APRSAF) and the Asia-Pacific Multilateral Cooperation in Space Technology and Applications. In 2007, the third Ministerial Conference would be held, at which the future evolution, strategy and action plan of RESAP would be discussed. ESCAP invited other United Nations entities to participate in those initiatives in the Asia and Pacific region.
- 10. The Meeting noted various space-related activities of the Economic Commission for Africa (ECA). ECA was providing support for developing policies and strategies on national spatial data infrastructures. In April 2007, ECA would organize the fifth session of its subsidiary body, the Committee on Development Information, including the subcommittees of that Committee on information and communication technologies and on geo-information, providing policy and technical guidance for harnessing information for development.
- 11. The Meeting took note of the activities of the International Strategy for Disaster Reduction, which was driven by the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. The Strategy was moving towards reporting on implementation and engaging civil society and the private sector. The representative of the Strategy pointed out the many opportunities for cooperation with other United Nations entities.
- 12. The Meeting further noted that ITU, the oldest intergovernmental organization, founded in 1865, continued to work on standardization and frequency coordination related to space activities. As part of its mandate, ITU was preparing

<sup>&</sup>lt;sup>2</sup> See http://www.unoosa.org/oosa/en/sapidx.html.

<sup>&</sup>lt;sup>3</sup> See http://www.unescap.org/icstd/SPACE/resap/resap\_main.asp.

<sup>&</sup>lt;sup>4</sup> A/CONF.206/6 and Corr.1, chap. I, resolution 2.

recommendations, handbooks and reports, addressing passive and active sensors of Earth observation satellites, including meteorological satellites. The representative of ITU made reference to the Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations,5 which had been ratified by 35 countries and had entered into force on 8 January 2005. The Convention facilitated the transport and use of telecommunications equipment in disaster situations, which was of particular interest to organizations involved in disaster management activities, such as the Office for the Coordination of Humanitarian Affairs of the Secretariat (OCHA) and the Office of the United Nations High Commissioner for Refugees (UNHCR), reducing the technical complexities of the practical use of telecommunications equipment. ITU expressed its interest in cooperating with other United Nations entities in the use of geospatial data, for which it was referred to the activities of the United Nations Geographic Information Working Group (UNGIWG). The representative of the United Nations Environment Programme (UNEP) indicated that UNEP would be pleased to work with ITU on Geographic Information System (GIS) and digital elevation model applications.

- 13. The Meeting noted the use of space technology by OCHA. OCHA was using image maps prepared by the United Nations Institute for Training and Research (UNITAR) Operational Satellite Applications Programme (UNOSAT), distributed through ReliefWeb,<sup>6</sup> field offices and humanitarian information centers. OCHA, together with UNHCR, would co-chair UNGIWG in 2007 and 2008, and the Working Group would pursue the development of the United Nations spatial data infrastructure.
- 14. The Meeting was briefed on space-related activities of UNEP and noted that under the United Nations reform process UNEP would intensify its efforts to seek partnerships with other entities. The twenty-fourth UNEP Governing Council/Global Ministerial Environment Forum, to be held from 5 to 9 February 2007, would review trends in the global environment, emerging policy issues, coordination and international environmental governance, including the idea of establishing a world environmental organization. The UNEP Division of Early Warning and Assessment had completed and published a number of assessments and early warning reports in 2006 and would continue to do so in 2007, when the fourth *Global Environment Outlook* report would appear. The UNEP Division would also continue to operate the network of Global Resource Information Database centres for environmental data management, GIS and remote sensing, under the banner of the proposed "environment watch" strategy.
- 15. The Meeting took note of the UNITAR report on UNOSAT. In 2006, UNOSAT had supported various United Nations entities through its crisis and rapid mapping capacity and as a provider of geographical information for areas such as sustainable development and risk reduction. In Lebanon, UNOSAT had successfully deployed staff to the field to validate its products. The coordination with OCHA's ReliefWeb has been consolidated.
- 16. The Meeting noted various space-related activities of the World Health Organization (WHO), including: the use of satellite imagery in the WHO Regional

<sup>&</sup>lt;sup>5</sup> United Nations, Treaty Series, vol. 2296, No. 40906.

<sup>6</sup> See http://www.reliefweb.int.

Office for South-East Asia region to advocate the need to control air pollution and global warming; the use of free images to improve the quality of some thematic layers (roads and rivers); the growing number of initiatives in the area of telemedicine; and the progresses made in the extension of the WHO Global Private Network. The development of new tools, as well as the efforts to collect data in advance, were also reported.

- 17. The Meeting took note of the report of the World Meteorological Organization (WMO), which contained information about recent developments in its World Weather Watch programme, including the space-based Global Observing System, operated by meteorological satellite organizations. WMO, in cooperation with other United Nations entities, had continued its strong involvement in global initiatives such as the Committee on Earth Observation Satellites (CEOS), the Group on Earth Observations (GEO) and its Global Earth Observation System of Systems (GEOSS) and the Global Climate Observing System.
- 18. The Meeting noted the activities of the Space Education Programme of UNESCO in 2006, which were implemented in cooperation with the Office for Outer Space Affairs, APRSAF and the International Astronautical Federation. UNESCO was presently chairing the CEOS Working Group on Education, Training and Capacity-Building and would co-chair the GEO Capacity Building Committee. The meeting also noted the activities of UNESCO in Africa on water resource management using space technology in the framework of the European Space Agency TIGER initiative and the UNESCO Space Hydrology International Partnership programme.
- 19. The Meeting noted that UNHCR used high-resolution imagery for the mapping of refugee camps and of settlements of internally displaced persons. A partnership with UNOSAT facilitated access to remote sensing data and services.

## 2. Draft guidelines for inputs to the report of the Secretary-General on the coordination of outer space activities within the United Nations system

- 20. At its twenty-sixth session, the Meeting had agreed to develop precise guidelines to assist United Nations entities in preparing their input for the report of the Secretary-General on the coordination of space-related activities within the United Nations system and to assist the Meeting in keeping the report within the prescribed page limits. The Meeting had agreed that the draft guidelines would be developed jointly with all of its focal points during the intersessional period.
- 21. In accordance with that agreement, the Office for Outer Space Affairs prepared a preliminary draft of the guidelines and posted them for discussion on the web board<sup>7</sup> of the Meeting in May 2006. On the basis of the preliminary draft, agreement was reached on the guidelines, which were used for preparing the reports for consideration by the Inter-Agency Meeting at its twenty-seventh session.
- 22. The Meeting reviewed and adopted the guidelines, as contained in annex III to the present report.

<sup>&</sup>lt;sup>7</sup> http://www.itu.int/jive/index.jspa?categoryID=176.

### 3. Structure of the report of the Secretary-General on coordination of space-related activities within the United Nations system

- 23. The present structure of the report of the Secretary-General on the coordination of space-related activities within the United Nations system, as revised by the Inter-Agency Meeting at its session in 2003 (see A/AC.105/791, annex III) was reviewed by the Meeting.
- 24. The Meeting decided to revise the structure, which is contained in the appendix to annex III to the present document. It was agreed that the value of the matrix of participants and space-related programmes of the United Nations system included under chapter I of the structure would be reviewed by the Meeting at the next session.

# 4. Report of the Secretary-General on the coordination of space-related activities within the United Nations system: directions and anticipated results for the period 2007-2008

- 25. The Meeting had before it the draft report of the Secretary-General on the coordination of space-related activities within the United Nations system: directions and anticipated results for the period 2007-2008 (A/AC.105/886). The report was the thirty-first on the subject, containing information received from United Nations entities on major new initiatives and activities involving two or more United Nations entities and prepared in accordance with the guidelines.
- 26. The Meeting agreed that the report should identify key initiatives and activities that promoted, enhanced and contributed to inter-agency cooperation and coordination. It reviewed and amended the draft report. The final text of the report will be considered by the Scientific and Technical Subcommittee at its forty-fourth session.

## 5. Preparation of a report on initiatives and applications for space-related interagency cooperation

- 27. The Meeting recalled that, on the basis of a proposal made in 2003, the Committee on the Peaceful Uses of Outer Space and its Scientific and Technical Subcommittee had invited United Nations entities to submit annual reports to the Subcommittee on specific themes. The Meeting also recalled the agreement reached at its twenty-fifth session, in 2005, that a separate report should be prepared on the theme "New and emerging initiatives and applications for space-related inter-agency cooperation" for submission to the Scientific and Technical Subcommittee at its forty-third session, in 2006 (see A/AC.105/842, para. 19).
- 28. At its twenty-sixth session, the Meeting agreed to suspend the preparation of that document with a view to evaluating, at its twenty-seventh session, the need for and value of the information to be presented in a second report and to consider the reorientation of the report towards specific thematic areas.
- 29. The meeting agreed to continue suspending the preparation of a report on specific themes.

## 6. Means of strengthening further inter-agency coordination and cooperation in space-related activities

- 30. The Meeting noted a number of joint projects and initiatives carried out by United Nations entities. The Meeting also noted a number of invitations extended by representatives of several United Nations entities to the Meeting participants to become involved in joint initiatives.
- 31. The Meeting took note of the oral report of the secretary of the Meeting on the establishment of a closer link between the work of the Committee on the Peaceful Uses of Outer Space to implement the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III) and the work of the Commission on Sustainable Development. The Meeting agreed that the thematic areas addressed by the Commission would provide a framework to which its members could make valuable contributions. The Meeting took note of the preparation of a report of the Committee entitled "Contribution of the Committee on the Peaceful Uses of Outer Space to the work of the Commission on Sustainable Development for the thematic cluster 2008-2009: space for sustainable development".
- 32. The Meeting noted in that regard the offer of OCHA to establish contact with the Department of Economic and Social Affairs of the Secretariat in New York and to draw its attention to the Meeting's work.
- 33. The Meeting took note of the report of the Secretary-General's High-level Panel on United Nations System-wide Coherence in the areas of development, humanitarian assistance and the environment, entitled "Delivering as one" (see A/61/583). The Meeting noted that the recommendations of the report should be initially implemented, as pilot cases, in six countries. It was suggested that, as a contribution to the reform initiative, the Meeting might wish to coordinate a report on ongoing space-related activities of United Nations entities in those countries.
- 34. The Meeting agreed to consider, at its next session, the thematic clusters of the Commission on Sustainable Development and its potential contributions to the implementation of the recommendations of the Secretary-General's High-level Panel as a way of further strengthening inter-agency cooperation.
- 35. The Meeting noted that the theme of its fourth open, informal session for an exchange of information between the representatives of United Nations entities and the representatives of member States of the Committee on the Peaceful Uses of Outer Space, would be "The use of space-derived geospatial data for sustainable development in the United Nations system".
- 36. The focal points of the Inter-Agency Meeting had agreed on that topic in view of a new agenda item on space-derived geospatial data for sustainable development that would be included on the agenda of the Committee on the Peaceful Uses of Outer Space under a three-year workplan, starting with its fiftieth session, to be held from 6 to 15 June 2007. In the work to be conducted during the first year of the workplan, the Committee would seek to identify and assess the interfaces among existing international forums where States undertake discussions regarding the implementation of space-derived geospatial data infrastructures, in order to avoid duplication of international cooperative efforts.

37. The Meeting finalized the agenda of the informal open session, which is contained in annex IV to the present report.

# **B.** Space-related outcomes of the World Summit on Sustainable Development

- 38. The Office for Outer Space Affairs presented the updated list of space-related initiatives and programmes carried out by member States of the Committee on the Peaceful Uses of Outer Space and within the United Nations system that responded to specific recommendations contained in the Plan of Implementation of the World Summit on Sustainable Development,<sup>8</sup> which could be accessed on the website for the United Nations Coordination of Outer Space Activities.<sup>9</sup>
- 39. In accordance with the agreement reached at the Meeting's twenty-sixth session, the Office for Outer Space Affairs, in a letter dated 3 April 2006, had brought the list, and the benefits to be derived therefrom, to the attention of the GEOSS secretariat, whose work was closely associated with the outcomes of the World Summit.
- 40. United Nations entities were encouraged to continue providing updated information for inclusion in the list. The Office for Outer Space Affairs, as the Meeting's secretariat, would continue to invite the focal points of the Inter-Agency Meeting participants on a quarterly basis to provide updates to the list. In particular, it was suggested that direct contact information of project personnel and direct links to the project websites should be included in the list in order to facilitate and promote interaction.
- 41. The Meeting noted with appreciation that the Office for Outer Space Affairs had created a user-friendly webpage on the website for the United Nations Coordination of Outer Space Activities that facilitated navigation between various initiatives and recommendations of the World Summit.
- 42. It was suggested that organizations should include a link to the website for the United Nations Coordination of Outer Space Activities from their respective websites.

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

43. The Office for Outer Space Affairs briefed the Meeting on the status of the implementation of the recommendations of UNISPACE III, in particular in the context of the work that had been undertaken by some action teams and the follow-up carried out in the framework of the Plan of Action resulting from the five-year

<sup>8</sup> 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>9</sup> http://www.uncosa.unvienna.org/uncosa/en/wssd/index.html.

review by the General Assembly of the implementation of the recommendations of UNISPACE III (see A/59/174).

- 44. The Meeting welcomed, in that regard, that the General Assembly in its resolution 61/110 had decided to establish the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (SPIDER), to be implemented as a programme of the Office for Outer Space Affairs under the Director of the Office, and that the programme should report to and receive guidance from the Committee on the Peaceful Uses of Outer Space through the Office for Outer Space Affairs.
- 45. The Meeting noted that the programme aimed to provide universal access for all countries and all relevant international and regional organizations to all types of space-based information and services to support the full disaster management cycle, and that it would focus on three main pillars: being a gateway to space information for disaster management support; serving as a bridge to connect the disaster management and space communities; and being a facilitator of capacity-building and institutional strengthening, in particular for developing countries. The programme would have offices in Beijing and Bonn, Germany, as well as benefit from regional support offered by some 12 States.
- 46. The Meeting noted the importance of enhancing coordination, identifying synergies and avoiding duplication of efforts with other existing initiatives, such as GEOSS, the Global Monitoring for Environment and Security initiative, the Integrated Global Observing Strategy Partnership, CEOS, the Charter on Cooperation to Achieve the Coordinated Use of Space Facilities in the Event of Natural or Technological Disasters (International Charter "Space and Major Disasters") and the International Strategy for Disaster Reduction.
- 47. The Meeting noted that the lack of availability of data following a disaster hindered efficient disaster management and that some States did not know where to gain access to data and tools that were available to them. The new SPIDER programme could help in that regard. The Meeting also noted the potential role of the SPIDER programme in the building of international global early warning systems.
- 48. The Meeting noted potential synergies between the SPIDER programme and the work of several United Nations entities, such as ESCAP, the International Strategy for Disaster Reduction, ITU, OCHA, UNEP, UNHCR, UNOSAT and WHO.
- 49. The Meeting also noted with satisfaction that the International Committee on Global Navigation Satellite Systems, established in 2005 as an informal body that would promote the use of global navigation satellite systems while facilitating the interoperability of the Global Positioning System (GPS) of the United States of America, the global navigation satellite system (GLONASS) of the Russian Federation and the future satellite navigation system (Galileo) of the European Union, had held its first meeting on 1 and 2 November 2006 in Vienna.

- D. Use of the Charter on Cooperation to Achieve the Coordinated Use of Space Facilities in the Event of Natural or Technological Disasters by the United Nations system and methods to increase operational collaboration in the use of space technology in emergency response
  - 50. The Meeting noted that throughout 2006, the International Charter "Space and Major Disasters" has been activated 25 times by United Nations entities such as OCHA, the World Food Programme, FAO, UNEP and the United Nations Development Programme (UNDP), through the Office for Outer Space Affairs, in cooperation with UNOSAT. The activations by United Nations entities in 2006 were in response mainly to floods, as well as one landslide, a hurricane and an oil spill, in developing countries.
  - 51. The Meeting noted with appreciation that the International Charter had continuously provided satellite data free of charge, which was frequently used for various humanitarian relief operations, and that there was a growing involvement of the United Nations entities in its activation.
  - 52. The Meeting took note of the third United Nations-wide meeting on "The United Nations and the International Charter 'Space and Major Disasters'", jointly hosted by UNOSAT and the Office for Outer Space Affairs in Geneva on 20 March 2006.
  - 53. The Meeting noted that the International Charter, in cooperation with nine space agencies, including the Disaster Monitoring Constellation (comprised of Algeria, Nigeria, Turkey and the United Kingdom of Great Britain and Northern Ireland), was a useful mechanism and had a direct impact on the way the United Nations operated during natural and technological disasters.
  - 54. The Meeting noted that the scope of the International Charter was very specific and only covered the provision of raw data in the event of natural or technological disasters. For Charter activations by United Nations entities, UNOSAT was acting as the in-house project manager of the United Nations, generating end-user products based on the raw data. The advantage of that approach was that UNOSAT was usually well aware of the needs of users among United Nations entities and provided first products within six hours of a disaster event. The Office for Outer Space Affairs was asked by the Meeting to encourage the International Charter to consider the application of the mechanism to complex humanitarian disasters if a need arose in the period 2007-2008.
  - 55. The Meeting noted that SPIDER might be a useful mechanism for emergencies other than natural or technological disasters.
  - 56. The Meeting also noted the limitations in sharing among other United Nations entities the raw data provided through the International Charter mechanism, owing to the existing licensing and data policy rules and that those limitations were being addressed through various initiatives, such as the UNGIWG, and within the framework of GEOSS.

## E. Lessons learned and good practices in the use of space technologies for relief efforts and disaster reduction

- 57. At its session in 2006, the Inter-Agency Meeting had agreed to invite United Nations entities dealing with humanitarian issues to report at its twenty-seventh session on lessons learned and best practices from the use of space-based data for disaster relief efforts.
- 58. The Representative of UNHCR presented its refugee camp mapping activities, which used satellite imagery, GPS receivers, existing maps and refugee registration data to develop a GIS. Camp mapping was being implemented so far in Chad, Kenya, Namibia, Rwanda, Sierra Leone and the United Republic of Tanzania. Two camps in Lugufu, United Republic of Tanzania, totalling 95,000 inhabitants at the time of the project were used to illustrate the application of the camp mapping guidelines. In addition, to showcase the use for camp management and camp coordination, the project aimed at developing capabilities for continuous updates of the GIS. The GIS in Lugufu included layers of basic camp structures such as the street network, access to potable water, sanitation facilities and the location of services such as education, health and security. Standards and indicators designed to monitor welfare and the living conditions in the camps were also illustrated in the GIS for planning purposes.
- 59. UNHCR wished to expand the application of spatial analysis to environmental and socio-economic impacts and for the creation of contingency plans. Piloting and adaptation of the mapping guidelines was also happening in the context of internally displaced persons in northern Uganda and for large urban concentrations such as Cairo and Nairobi.
- The representatives from OCHA presented the following lessons learned from its experience in using space technologies for relief efforts and disaster reduction: (a) the use of satellite images and satellite telecommunications was of high value; (b) access to data and imagery within 24-48 hours following a disaster was critical; (c) satellite data obtained in the visible part of the electromagnetic spectrum was not sufficient owing to the frequent presence of clouds and high resolution radar images, when available from future satellite missions, should also be used; (d) as disasters often happened in the same areas, it was necessary to plan ahead by, for instance, acquiring or locating archived data showing high-risk areas; (e) entities from the United Nations system could coordinate purchases of satellite images to obtain better prices and distribution conditions; (f) as old satellite data did not contain new road and communications infrastructure, urbanization and other landuse elements, work on extracting information should concentrate on new satellite data; (g) communications connectivity should not rely only on existing land infrastructure as this often failed in the event of a disaster; instead direct satellite transmission and broadcast antennas should be utilized; and (h) it was important to partner with the private sector as sometimes companies were the best or only providers of needed technologies or value-added services.
- 61. The Inter-Agency Meeting agreed that the use of space technologies was making it possible for those responding to disaster events to provide critical emergency assistance more effectively and in a shorter period of time.

- 62. However, the Meeting noted that the capacity to use those technologies in specific situations was still being developed and refined. In particular, the capability to produce rapid population estimates, extract information needed for large scale (camp level) disaster management and for contingency planning, as well as to develop efficient data exchange mechanisms, was still being developed. The Meeting agreed that sustained commitments of human and financial resources were needed for that purpose and that that situation should be brought to the attention of senior management of institutions dealing with humanitarian issues and with relevant funding institutions or programmes.
- 63. The Meeting expressed interest in the United Nations Spatial Data Infrastructure initiative of UNGIWG as it provided an umbrella framework for policies, technologies, data, common standards, standard practices, protocols and specifications that facilitated discovery of, ready access to, evaluation of and dependable utilization of geospatial data, including satellite imagery and derivative products. In that context, the participants also acknowledged the significance of the growing installed base of GeoNetwork opensource geospatial metadata and map visualization software at United Nations organizations and member State agencies, especially since that platform featured a keyword-based search capability for geospatial data assets across the network of GeoNetwork nodes. The Meeting encouraged the incoming co-chairs of UNGIWG, namely OCHA and UNHCR, to forge a close working relationship with the Office for Outer Space Affairs, as the secretariat of the Inter-Agency Meeting.

# F. Participation of the entities of the United Nations system in the process of the Group on Earth Observations

- 64. The Chairman of the Meeting recalled the process of the establishment of GEO and its 10-year plan to implement GEOSS. The establishment of GEO directly related to the recommendations of the 2002 World Summit on Sustainable Development, held in Johannesburg, which had highlighted the urgent need for coordinated observations relating to the state of the Earth. GEO now comprised 66 States, the European Commission and 46 participating organizations, including many entities of the United Nations system.<sup>10</sup>
- 65. The Meeting noted that the Inter-agency Coordination and Planning Committee for GEO/GEOSS, comprising FAO, UNESCO, including its Intergovernmental Oceanographic Commission, UNEP and WMO, and the International Council for Science as an observer, had been established.
- 66. The Meeting noted that within GEOSS several mechanisms had been established through which users could provide their input. This included the GEO Capacity Building Committee,<sup>11</sup> User Interface Committee<sup>12</sup> and Communities of Practice. However, several participants also noted the organizational difficulties in interfacing with the complex structure of GEO/GEOSS activities and its many

<sup>&</sup>lt;sup>10</sup> FAO, the Office for Outer Space Affairs, UNEP, UNESCO, the Intergovernmental Oceanographic Commission of UNESCO, the United Nations Framework Convention on Climate Change, UNITAR and WMO.

<sup>11</sup> http://www.earthobservations.org/roles/cmtes\_wgs/cbc.html.

<sup>12</sup> http://www.earthobservations.org/roles/cmtes\_wgs/uic.html.

committees and working groups and the need to establish an effective mechanism to coordinate with the initiative. The Meeting reiterated that it was highly desirable for the agencies members of the Inter-agency Coordination and Planning Committee for GEO/GEOSS to include other United Nations entities in their consultations.

- 67. The Meeting agreed that the representatives of UNEP, WMO and UNESCO should contact their respective representatives to inquire on the status of the Interagency Coordination and Planning Committee for GEO/GEOSS.
- 68. The Meeting requested WMO, assisted by the Office for Outer Space Affairs, to prepare for its next session a report on GEO activities relevant to the Meeting, including an overview of tasks in which United Nations entities were involved.

# G. Public outreach and information exchange to promote interagency cooperation

- 69. The Office for Outer Space Affairs briefed the Meeting on the re-designed website dedicated to the coordination of outer space activities within the United Nations system. 13 The revised website provided news and announcements related to inter-agency coordination, a schedule of activities, a directory of organizations, information on the annual Inter-Agency Meeting, a reports archive and a link to the updated list of space-related initiatives and programmes carried out by member States of the Committee on the Peaceful Uses of Outer Space and within the United Nations system that responded to specific recommendations contained in the Plan of Implementation of the World Summit on Sustainable Development, as discussed above under section B.
- 70. The Meeting agreed that the focal points of the Meeting should provide the Office for Outer Space Affairs on a regular basis with updated information on their space-related programmes and activities, including relevant website addresses and upcoming activities, for posting on the site. Furthermore, the Office as the secretariat of the Meeting, would continue to remind the focal points to provide updated information for the website on a quarterly basis.
- 71. The Meeting recalled that following its agreement at its twenty-fourth and twenty-fifth sessions to create, with the participation of members of the Committee on the Peaceful Uses of Outer Space, inventories of equipment, educational and training materials, satellite data sets and other capacity-building resources provided by United Nations entities that carried out national or regional technical cooperation projects, the Office for Outer Space Affairs had set up a web page to provide links to resources in the following categories: equipment; educational and training materials; satellite and other data; capacity-building resources and space-related publications within the United Nations system.<sup>14</sup>
- 72. The Secretariat briefed the entities on the inventories database. The Meeting agreed that in order to populate the web page, United Nations entities should provide the Office for Outer Space Affairs with information on links to relevant web resources that could be included in the online inventory of space-related resources.

<sup>13</sup> http://www.uncosa.unvienna.org/uncosa/index.html.

<sup>14</sup> http://www.uncosa.unvienna.org/inventories/index.html.

In that context, the Meeting noted the potential usefulness of including information on the regional inventory of space capabilities, facilities and activities, including best practices to be established by ESCAP and the setting up of very small aperture terminal facilities to assist field operations by OCHA.

- 73. The Meeting noted the usefulness of the web board, set up by ITU, to exchange views and drafts of the documents prepared for the Meeting. The web board was also accessible through the website dedicated to the coordination of outer space activities within the United Nations system. The Meeting encouraged the focal points of United Nations entities to use the web board in preparing for future sessions of the Meeting. The Meeting expressed its appreciation to ITU for maintaining the web board.
- 74. The Meeting noted with appreciation that, in accordance with an agreement reached at its twenty-sixth session, the Office for Outer Space Affairs had revised and printed the brochure entitled "Space solutions for the world's problems: how the United Nations family uses space technology for achieving development goals". The Meeting also noted with appreciation that the brochure had been produced in Arabic, English, French and Spanish. It was also available in electronic format on the website dedicated to the coordination of outer space activities within the United Nations system.<sup>13</sup>

### III. Other matters

# A. Enhancement of the participation of United Nations entities in the work of the Committee on the Peaceful Uses of Outer Space, its subcommittees and the Inter-Agency Meeting on Outer Space Activities

- 75. The Meeting noted that the General Assembly, in its resolution 61/111 (paras. 30-34), had recognized the work of the Inter-Agency Meeting and had encouraged entities of the United Nations system to participate fully in the work of the Committee on the Peaceful Uses of Outer Space, its Scientific and Technical Subcommittee and the Inter-Agency Meeting.
- 76. The Meeting also noted that the Committee had welcomed enhanced cooperation with United Nations entities, as evidenced by the interest of member States in the informal open sessions of the Meeting that had been held immediately following the regular sessions of the Meeting in the past years.
- 77. It was noted that the participation of the Comprehensive Test Ban Treaty Organization, FAO and UNDP should be encouraged.
- 78. The Meeting noted with appreciation that the representative of OCHA would contact a representative of UNDP at its headquarters to encourage the participation of UNDP in the work of the Meeting.

<sup>15</sup> http://www.uncosa.unvienna.org/uncosa/en/iamos/index.html.

79. The Office for Outer Space Affairs, as the secretariat of the Meeting, would continue encouraging and inviting the United Nations entities that did not attend the sessions of the Meeting to consider their participation.

### B. Future programme of work

- 80. The Meeting agreed that, at its twenty-eighth session, in 2008, it would consider the following items:
  - 1. Coordination of plans and programmes and exchange of views on current activities in the practical application of space technology and related areas:
    - (a) Current and future plans of common interest, including consideration of how the activities of organizations of the United Nations system in the area of space science and technology and its applications relate to their mandated programmes;
    - (b) Report of the Secretary-General on the coordination of spacerelated activities within the United Nations system: directions and anticipated results for the period 2008-2009;
    - (c) Preparation of a report on initiatives and applications for spacerelated inter-agency cooperation;
    - (d) Means of strengthening further inter-agency coordination and cooperation in space-related activities.
  - 2. Space-related outcomes of the World Summit on Sustainable Development.
  - 3. Implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space.
  - 4. Use of the Charter on Cooperation to Achieve the Coordinated Use of Space Facilities in the Event of Natural or Technological Disasters by the United Nations system and methods to increase operational collaboration in the use of space technology in emergency response.
  - 5. Lessons learned and good practices in the use of space technologies for relief efforts and disaster reduction.
  - 6. Participation of the entities of the United Nations system in the process of the Group on Earth Observations.
  - 7. Public outreach and information exchange to promote inter-agency cooperation.
  - 8. Other matters.
- 81. The Meeting agreed that, in order to take into account major events or changing circumstances over the course of the year, United Nations entities could propose new items for inclusion in its agenda, or delete items, during the intersessional period.

- 82. The participants expressed their appreciation to the Office for Outer Space Affairs for hosting the twenty-seventh session of the Meeting. The Meeting recalled its agreement that the venue of the annual sessions should alternate between Vienna and other cities and noted that its twenty-eighth session would be hosted by UNOSAT in Geneva, from 16 to 18 January 2008.
- 83. The Meeting noted with appreciation that the Office for Outer Space Affairs had offered to host the twenty-ninth session in Vienna, in 2009.

### Annex I

# List of participants at the twenty-seventh session of the Inter-Agency Meeting on Outer Space Activities, held in Vienna from 17 to 19 January 2007

Chairman: Y. Berenguer (United Nations Educational, Scientific

and Cultural Organization)

Secretary: N. Hedman (Office for Outer Space Affairs)

Assistant Secretaries: W. Balogh (Office for Outer Space Affairs)

J. Gaziyev (Office for Outer Space Affairs)

United Nations Secretariat

Office for the Coordination of S. Ulgen Humanitarian Affairs L. Czaran International Strategy for Disaster D. Pattie

Reduction secretariat

Office for Outer Space Affairs S. Camacho

A. LeeD. StevensS. Gadimova

G. Wu

F. Pisano

Economic and Social Commission for

Asia and the Pacific

Economic Commission for Africa A. Nonguierma

United Nations programmes and funds

Office of the United Nations High L. St-Pierre

Commissioner for Refugees

United Nations Environment Programme R. Witt

United Nations Institute for Training and Research, United Nations Operational Satellite Applications Programme

Specialized agencies and other organizations of the United Nations system

United Nations Educational, Scientific and Y. Berenguer

Cultural Organization

International Telecommunication Union A. Matas
World Health Organization S. Ebener

World Meteorological Organization J. Liu

United Nations Industrial Development V. Kozharnovich

Organization

### Annex II

### Agenda for the twenty-seventh session of the Inter-Agency Meeting on Outer Space Activities, held in Vienna from 17 to 19 January 2007

- 1. Opening of the session.
- 2. Election of the Chairman.
- 3. Adoption of the agenda.
- 4. Coordination of plans and programmes and exchange of views on current activities in the practical application of space technology and related areas:
  - (a) Current and future plans of common interest, including consideration of how the activities of organizations of the United Nations system in the area of space science and technology and its applications relate to their mandated programmes;
  - (b) Draft guidelines for inputs to the report of the Secretary-General on the coordination of outer space activities within the United Nations system;
  - (c) Structure of the report of the Secretary-General on coordination;
  - (d) Report of the Secretary-General on the coordination of space-related activities within the United Nations system: directions and anticipated results for the period 2007-2008;
  - (e) Preparation of a report on initiatives and applications for space-related inter-agency cooperation;
  - (f) Means of strengthening further inter-agency coordination and cooperation in space-related activities.
- 5. Space-related outcomes of the World Summit on Sustainable Development.
- 6. Implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space.
- 7. Use of the Charter on Cooperation to Achieve the Coordinated Use of Space Facilities in the Event of Natural or Technological Disasters by the United Nations system and methods to increase operational collaboration in the use of space technology in emergency response.
- 8. Lessons learned and good practices in the use of space technologies for relief efforts and disaster reduction.
- 9. Participation of the entities of the United Nations system in the process of the Group on Earth Observations.
- 10. Public outreach and information exchange to promote inter-agency cooperation.
- 11. Other matters.

### **Annex III**

### Guidelines for preparation of submissions for the report of the Secretary-General on coordination of space-related activities within the United Nations system

- 1. In 1975, the Committee on the Peaceful Uses of Outer Space requested the Secretary-General to prepare an annual, integrated report on the plans and programmes of United Nations entities related to outer space activities. The annual report is considered by the Committee's Scientific and Technical Subcommittee. Since 1975, the Inter-Agency Meeting has been assisting in the preparation of the report. The Inter-Agency Meeting also approves the report, which is subsequently cleared by the Secretary-General.
- 2. The purpose of the annual report of the Secretary-General on the coordination of space-related activities within the United Nations system is to provide United Nations entities with a strategic tool to further inter-agency cooperation and avoid duplication of efforts related to the use of various space applications. The report contains updated information provided by United Nations entities on their plans for space-related activities to be carried out in the subsequent biennium.
- 3. The structure of the annual report of the Secretary-General on the coordination of space-related activities within the United Nations system was revised by the Inter-Agency Meeting on Outer Space Activities at its session in 2003 (A/AC.105/791, annex III). It is contained in the appendix to the present guidelines.
- 4. The Office for Outer Space Affairs will compile submissions by the entities of the United Nations system to each topic of the report of the Secretary-General and prepare a final draft for review by the Inter-Agency Meeting at its subsequent session. In compiling the submissions, the Office will follow the instructions circulated by the Secretary-General in April 2002, which require the Office to adhere to the 16-page limit (8,500 words) for all reports originating in the Secretariat.
- 5. The Office for Outer Space Affairs will prepare drafts for the summary and chapter I of the report of the Secretary-General. Chapters II, III and IV will consist of submissions by the United Nations entities. The information to be included in the submissions should be based on the following general criteria: major, new initiatives and activities that involve coordination and cooperation by two or more United Nations entities (see A/AC.105/791, para. 28).
- 6. In view of the instructions by the Secretary-General (see para. 4 above), maximum efforts should be made for each submission not to exceed 3 pages per entity. The submission should clearly indicate a section of the draft report in which each paragraph should be included.
- 7. Full names and titles of projects, programmes and institutions should be spelled out when their acronyms and abbreviations appear for the first time in the submissions and especially if they have not appeared in previous reports.

### **Appendix**

# Structure of the report of the Secretary-General on the coordination of space-related activities within the United Nations system

(As revised by the Inter-Agency Meeting on Outer Space Activities at its twenty-seventh session, in 2007)

Summary

(Input from participating United Nations entities should be generic in nature, reflecting important milestones and new capabilities within the United Nations system)

#### I. Introduction

(Introductory paragraphs, including a matrix of participants and space-related programmes of the United Nations system)

### II. Policies and strategies pertaining to coordination of space-related activities

### III. Current and forthcoming coordination of space-related activities

(Input from participating United Nations entities should reflect ongoing or planned coordination efforts by two or more United Nations entities under each subsection)

- A. Earth environmental protection and resources management
- B. Human security and welfare, humanitarian assistance and disaster management
- C. Capacity-building, training and education
- D. Enabling technologies for development, including information and communications technology and global navigation satellite systems
- E. Advancing scientific knowledge of space and protecting the space environment

#### IV. Other activities

(Input from participating United Nations entities should reflect briefly, limited to five lines, major new space-related initiatives that encourage inter-agency coordination and cooperation)

### Annex IV

### Agenda for the informal open session of the Inter-Agency Meeting on Outer Space Activities, held in Vienna on 19 January 2007

Theme: "The use of space-derived geospatial data for sustainable development in the United Nations system"

Introductory remarks

Chairman of the InterAgency Meeting on Outer

Space Activities

Introduction of participants

All participants

The use of space-derived geospatial data for sustainable development in the United Nations system

- Presentation of the theme and its relevance in relation to the work schedule of the Committee on the Peaceful Uses of Outer Space

Office for Outer Space

Affairs

- United Nations Spatial Data Infrastructure

United Nations Geographic Information Working Group/Office for the Coordination of Humanitarian Affairs

- United Nations Institute for Training and Research (UNITAR) Operational Satellite Applications Programme (UNOSAT) activities in the use of space-derived geospatial data UNOSAT

- Example of use of space-derived geospatial data in the context of the World Health Organization (WHO) Eastern Mediterranean Regional Office Atlas of Disaster Risk

WHO

- Example of use of space-derived geospatial data for camp mapping at Office of the United Nations High Commissioner for Refugees (UNHCR)

UNHCR

Briefings on initiatives and activities in the use of space-derived geospatial data for sustainable development

- International Committee on Global Navigation Satellite Systems K. Hodgkins, United States of America

- United Nations Platform for Space-based Information for Disaster Management and Emergency Response (SPIDER)

Summary of issues of interest and concern to the United Nations entities and members of the Committee on the Peaceful Uses of Outer Space

Discussions among United Nations entities and member States of the Committee and concluding remarks Office for Outer Space Affairs and German Aerospace Centre

Chairman of the Inter-Agency Meeting on Outer Space Activities