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Item [7] of the provisional agenda\*
Implementation of the recommendations of the
Third United Nations Conference on the Exploration and
Peaceful Uses of Outer Space (UNISPACE III)

Draft report of the Committee on the Peaceful Uses of Outer Space on the implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III)

Addendum\*\*

### III. Progress achieved in implementing recommendations

- C. Activities of entities of the United Nations system that have contributed to the implementation of recommendations of UNISPACE III
- 1. Achievements of the Inter-Agency Meeting on Outer Space Activities
  - 1. The Inter-Agency Meeting on Outer Space Activities, which has been serving as a focal point for inter-agency coordination and cooperation in space-related activities since its establishment in 1975, contributed to the work of the Scientific and Technical Subcommittee during its consideration of the agenda item relating to inter-agency coordination and cooperation under a three-year work plan (see paragraph [...]) and submitted a set of proposals to the Subcommittee for its consideration. Through this process, the Meeting created synergy between its efforts

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and those of the Committee on the Peaceful Uses of Outer Space and its Scientific and Technical Subcommittee to increase awareness of the contributions that space applications can make towards the economic, social and cultural work programmes of entities of the United Nations system that have not used space applications.

- 2. For example, the results of the survey conducted by the Office for Outer Space Affairs in 2001 (see A/AC.105/C.1/L.241 and Corr.1 and A/AC.105/C.1/L.241/Add.1) indicated that, within the United Nations system, particularly at the senior management level, there was limited awareness of the relevance of space applications to their mandates, including mandates closely related to the promotion of sustainable development.
- 3. As regards the barriers to wider use of space applications and services, the Inter-Agency Meeting noted that there were different constituencies in the governing bodies of each organization of the United Nations system. Delegations of a same State to different intergovernmental forums within the United Nations system are not necessarily fully aware of each other's positions and directions pursued on similar, space-related matters. The Meeting therefore felt that closer coordination and more timely information-sharing among government agencies represented at different forums on issues relating to space activities could be achieved through existing government mechanisms, resulting in coordination efforts similar to those being pursued by the entities of the United Nations system at the secretariat level.
- 4. The Inter-Agency Meeting has further strengthened its role as the body to coordinate space-related activities within the United Nations system, by agreeing, for example, to create a consolidated web site that would contain information on education and training activities in space-related areas organized within the United Nations system. In the preparatory process leading up to the World Radiocommunication Conference held in 2003, members of the Inter-Agency Meeting concerned agreed to keep each other informed of their positions on the protection of the radio frequency bands necessary for their activities.
- 5. The annual reports of the Secretary-General on the coordination of outer space activities within the United Nations system have provided, since 1975, comprehensive information on space-related activities carried out within the United Nations system. Following UNISPACE III, the Inter-Agency Meeting revised the structure of the annual report a number of times to reflect the structure of the Vienna Declaration, thus allowing readers to identify those entities which were carrying out activities that responded to specific actions called for in the Declaration. The Meeting also took the initiative to use the report to focus its discussions on specific activities and initiatives that should be supported by the United Nations system as a whole.
- 6. In its resolution 56/51 of 10 December 2001, the General Assembly took note of a letter from the Chairman of the Committee on the Peaceful Uses of Outer Space to the Secretary-General drawing his attention to the need to consider the contributions of space science and technology to a greater extent in major United Nations conferences, and invited all entities of the United Nations system to identify recommendations of major United Nations conferences that could benefit from space applications. In response to that invitation, the Inter-Agency Meeting prepared a list of actions recommended in the Plan of Implementation of the World

Summit on Sustainable Development,¹ held in Johannesburg, South Africa, to which space science and technology and their applications had direct or potential relevance and agreed to invite United Nations entities to complete the list with their space-related activities and programmes that corresponded to the recommended actions. The Committee endorsed the proposal by the Inter-Agency Meeting that States members of the Committee should also conduct a similar exercise. Once completed, the integrated list could serve as a comprehensive survey of the space community's response to the outcomes of the World Summit.

- 7. Following UNISPACE III, some entities of the United Nations system that had not been involved in the Inter-Agency Meeting began to contribute to its work, including the Office of the United Nations High Commissioner for Refugees (UNHCR), the United Nations Office for Project Services (UNOPS) and the secretariat for the Convention on Biological Diversity. Those entities which had been involved in the Inter-Agency Meeting, such as the secretariat of the International Strategy for Disaster Reduction, the Economic Commission for Africa, the Economic and Social Commission for Asia and the Pacific (ESCAP), the United Nations Environment Programme (UNEP), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the International Civil Aviation Organization, the World Health Organization (WHO), the International Telecommunication Union (ITU), the World Meteorological Organization (WMO) and the International Atomic Energy Agency continued to contribute to its work.
- 8. In order to further increase interactions with member States of the Committee from its session in 2004, the Inter-Agency Meeting has begun to convene an informal open session to which representatives of States members of the Committee are invited. The first informal session, attended by 10 United Nations entities and 13 States members of the Committee, addressed challenges and opportunities in the United Nations system in education and training in space-related areas.
- 9. In the area of capacity-building, the Inter-Agency Meeting took steps, in cooperation with members of the Committee, towards further enhancing interagency cooperation to maximize available resources. The Meeting agreed to create, with the participation of States members of the Committee, inventories of equipment, education and training materials, satellite data sets and other capacity-building resources provided by United Nations entities to the beneficiaries of their technical cooperation projects. Once established, the inventories would be made available to all entities of the United Nations system.

#### 2. Achievements of the Office for Outer Space Affairs

- 10. Following UNISPACE III, the Office for Outer Space Affairs developed a plan of action pursuant to General Assembly resolution 54/68 of 6 December 1999. The plan of action was endorsed by the Committee in 2000.
- 11. In the area of strengthening the role of the Committee and its subcommittees in promoting international cooperation in the peaceful uses of outer space, the Office for Outer Space Affairs provided technical and administrative support to the work of all the action teams established by the Committee to implement recommendations of UNISPACE III. The Office also provided, upon request,

including through the activities of the United Nations Programme on Space Applications, substantive advice to some action teams.

- 12. In 2002, the Office for Outer Space Affairs launched a capacity-building programme in space law. To date, the following achievements have been made:
- (a) Launch of a series of workshops on space law. Two workshops have been held, one in The Hague in 2002 and the other in Daejon, Republic of Korea, in 2003, contributing to the work of the Legal Subcommittee in achieving full understanding and acceptance of the five United Nations treaties related to outer space;
- (b) Preparation and dissemination of space-law-related documents and publications, including an annual report on the current status of signatures and ratification of and accession to the various multilateral international agreements relating to outer space;
  - (c) Development and maintenance of a database on national space laws;
- (d) Development and updates of a directory on education opportunities in space law, containing information on institutions offering courses and education in space law.
- 13. In planning and managing the post-UNISPACE III activities of the United Nations Programme on Space Applications, the United Nations Expert on Space Applications adopted a new strategy in response to paragraph 11 (d) of General Assembly resolution 54/68, which called for strengthening of the activities of the Programme. The Programme now concentrates on a few themes of major importance for developing countries and establishes objectives that can be achieved in the short and medium term, while maintaining a few long-term capacity-building activities.
- 14. Priority themes of the Programme are (a) disaster management; (b) satellite communications for tele-education and telemedicine applications; (c) monitoring and protection of the environment, including the prevention of infectious diseases; (d) management of natural resources; and (e) education and capacity-building, including research areas in basic space sciences. Other areas of work include developing capability in enabling technologies, such as the use of global navigation and positioning satellite systems, spin-offs of space technology, applications of small satellites and micro-satellites and promoting the participation of private industry in activities of the Programme. Within each priority theme, the Programme pursues the following main objectives: (a) capacity-building; and (b) building awareness among decision makers in order to strengthen local support for the operational use of space technologies.
- 15. The Programme has launched training modules consisting of a series of regional workshops and follow-up activities. Post-UNISPACE III regional workshops in the use of space technology for disaster management started in 2000 and, by the end of 2003, the Programme had convened five such workshops and had begun to define and develop follow-up pilot projects for Southern Africa and South America. Four regional workshops and two international meetings on the use and applications of global navigation satellite systems (GNSS) were also organized in the period 2001-2003. The second international meeting, held in December 2003, identified priority follow-up projects and initiatives that should be supported by the Programme in the period 2004-2005.

- 16. The number of workshops and training courses organized by the United Nations Programme on Space Applications has increased in the past few years. The Programme also supports additional training courses and workshops organized by the regional centres for space science and technology education affiliated with the United Nations for the regions of Asia and the Pacific, Africa and Latin America and the Caribbean.
- 17. Since UNISPACE III, the number of requests received by the Office for Outer Space Affairs from Member States and intergovernmental and non-governmental organizations for technical advisory services has continued to increase. The Office has expanded the scope of its technical advisory services to respond to operational needs. An example of the latter is the service provided by the Office through an agreement with the International Charter "Space and Major Disasters", which enabled the Office to start providing services in July 2003 on a round-the-clock basis to entities of the United Nations system that need spatial data and information to respond to disaster-related emergencies. Between July 2003 and [March 2004], United Nations entities have requested the activation of the Charter five times: for floods in Nepal and the Dominican Republic; for landslides in the Philippines; and earthquakes in Indonesia and Morocco. Currently, five United Nations entities (the Office for Outer Space Affairs, UNOPS, UNHCR, UNESCO and WHO) have provided the contact information of their focal points and are involved in the arrangement.
- 18. The Programme also established a network to distribute satellite data on the entire African continent to African institutions. With contributions from the Government of the United States of America, the Programme began to distribute sets of Landsat data covering any area of interest to African institutions upon request.
- 19. The Programme has strengthened its support to participants of past training courses in their efforts to develop a critical mass of personnel trained in the use of space technologies in developing countries. An example is the follow-up evaluation exercise carried out between 2001 and [2004] to assess the local impact of the series of annual United Nations/Sweden international training courses on remote sensing education for educators, which began in 1990. The exercise was aimed at assessing the local impact of the courses, at identifying key elements of success or impediments and at determining the nature and scope of support that should be provided to strengthen the work of past participants in the courses.
- 20. The Programme expanded its outreach activities for young people. Through a series of symposiums organized with the sponsorship of the Government of Austria and the European Space Agency (ESA) from 2000 to 2002 on enhancing the participation of youth in space activities, the Programme provided opportunities for young professionals and students to exchange information and experience on their efforts to promote space activities.
- 21. The symposiums also strengthened the work of the Space Generation Advisory Council (SGAC), consisting of young professionals and students interested in space activities from different countries around the world. The Council convened its annual assemblies during the symposiums mentioned above to review their activities and prepare plans for future actions, including a request to the Committee on the Peaceful Uses of Outer Space to participate in its work as a permanent observer. In

its resolution 56/51 of 10 December 2001, the General Assembly endorsed the decision of the Committee to grant permanent observer status to SGAC.

- 22. Following the proclamation by the General Assembly of World Space Week from 4 to 10 October, on the recommendation of UNISPACE III, the Office for Outer Space Affairs has worked closely with the Spaceweek International Association, a non-governmental organization with permanent observer status with the Committee, to celebrate the Week around the world through the organization of special events aimed at promoting and enhancing global awareness of space and human development.
- 23. In 2001, the Office refurbished the permanent space exhibit in the United Nations Office at Vienna. The exhibit now includes an interactive computer program, a Moon rock and a replica of a biosphere experiment flown on board the International Space Station, models of spacecraft and rockets as well as panels with satellite images. The exhibit attracts the attention of many visitors to the Vienna International Centre, especially school children, and contributes to increasing public awareness of the benefits of space activities.
- 24. The Office enhanced its International Space Information Service and made available a searchable index of the United Nations Register of Objects Launched into Outer Space. The web site of the Office also includes an index that provides information on the status of signatures and ratification of the five United Nations treaties related to outer space.

#### 3. Achievements of entities of the United Nations system

- 25. In its resolution 54/68, the General Assembly urged entities of the United Nations system to take the necessary action for the effective implementation of the Vienna Declaration. In response to that call, some entities of the United Nations system actively contributed to the work of the action teams. For example, WMO provided substantial assistance to the Action Team on Weather and Climate Forecasting in developing recommendations and preparing the final report as cochair; ITU provided an important tool for exchange of documents among members of the Action Team on Global Navigation Satellite Systems by hosting a web board and kept the action team informed of developments concerning the World Radiocommunication Conference relating to the use of frequency spectrums by GNSS; a number of United Nations entities, including the Office for the Coordination of Humanitarian Affairs, the secretariat of the International Strategy for Disaster Reduction, UNOPS, UNEP, UNHCR, UNESCO and WMO, provided substantive contributions to the work of the Action Team on Disaster Management; UNESCO was instrumental in drawing up the recommendations of the Action Team on Capacity-building; and many entities cooperated with the action teams by responding to their requests for information on their activities.
- 26. As part of their mandates, a number of entities of the United Nations system carry out activities that contribute to implementing recommendations of UNISPACE III, such as in the promotion of sustainable development. Many of them carry out capacity-building activities in space applications for the benefit of developing countries.
- 27. Immediately following UNISPACE III, the second Ministerial Conference on Space Applications for Sustainable Development in Asia and the Pacific, held by

ESCAP in New Delhi in November 1999, translated the recommendations of UNISPACE III into regional actions by adopting the Delhi Declaration on Space Technology Applications in Asia and the Pacific for Improved Quality of Life in the New Millennium and the Strategy and Action Plan on Space Technology Applications for Sustainable Development in Asia and the Pacific for the New Millennium. The second phase of the Regional Space Applications Programme for Sustainable Development (RESAP II), which was launched following the Ministerial Conference, promotes regional cooperative mechanisms and operational utilization of space technology applications for such priority areas as the environment and natural resource management, natural disaster management and poverty alleviation. Through the Information, Communication and Space Technology Davison of ESCAP, established in July 2002, ESCAP has been also active in promoting sustainable development applications communications and in preparing for the World Summit on the Information Society. Capacity-building and human resources development continue to be key elements in all activities under RESAP II.

- 28. As regards protection of the environment and related monitoring strategies, UNEP and the secretariat of the Convention on Biological Diversity conduct assessment and monitoring activities. UNEP has been carrying out such activities through its Global Environment Outlook process, a comprehensive international framework for environmental assessment conducted since 1995 through a network of about 40 institutions in all regions of the world. The third Global Environment Outlook report was issued in May 2002, and the next report is planned for release in 2007. Global Environment Outlook reports are being complemented with Global Environment Outlook Yearbooks, the first of which, for the year 2003, was released in March 2004.
- In the areas relating to the management of natural resources, the Illicit Crop Monitoring Programme of the United Nations Office on Drugs and Crime combines ground- and remote-sensing-based techniques to assist Member States in their monitoring of the extent and evolution of illicit narcotic crops in their territories. The Land Cover Map and Geodatabase for Africa (AFRICOVER) project of FAO developed an interactive land cover classification system, which has become a de facto international standard for landcover mapping and is now being considered an International Organization for Standardization (ISO) standard. The AFRICOVER programme has a concrete follow-up in a similar project, called ASIACOVER, involving seven countries in Asia. ASIACOVER is being carried out under the Global Land Cover Network (GLCN) initiative, promoted by FAO and UNEP. The FAO Advanced Real-Time Environmental Monitoring Information System (ARTEMIS) provides long-term low-resolution satellite-based assessment of vegetation dynamics and rainfall patterns in support of the FAO Global Information and Early Warning System on Food and Agriculture (GIEWS). The entities involved in the Integrated Global Observing Strategy (IGOS) Partnership (IGOS-P) made further progress in the development and the implementation of IGOS, one of the recommendations contained in the Vienna Declaration. UNEP, FAO, UNESCO and WMO continue to play an essential role in the activities of IGOS-P and in the development, planning and implementation of the Global Climate Observing System (GCOS), the Global Terrestrial Observing System (GTOS) and the Global Ocean Observing System (GOOS), in particular.

- 30. The WMO Space Programme, launched in May 2003 to enhance weather and climate forecasting, aims to coordinate environmental satellite activities throughout all WMO programmes and to provide guidance to these and other multi-sponsored programmes on the potential of remote-sensing techniques in meteorology, hydrology and related disciplines and their applications. The long-term objectives include development of the Global Observing System (GOS) as a composite system consisting of surface and space-based components, with a primary focus on matters related to both operational as well as research and development environmental satellites and promoting high-quality satellite-related education.
- 31. The secretariat of the International Strategy for Disaster Reduction, which provides secretariat services to the Inter-Agency Task Force on Disaster Reduction, supported the efforts to introduce the use of space technologies, such as Earth observation and communication satellites in disaster reduction. UNEP has made an important contribution to the work of the Inter-Agency Task Force by, among other things, developing and implementing the Strategic Framework on Emergency Prevention, Preparedness, Assessment, Mitigation and Response and developing the Inventory of Early Warning Systems, an Internet-based database on existing early warning systems. In addition to many activities of its Division of Early Warning and Assessment relating to dissemination of data and information, vulnerability and risk assessment and early warning, UNEP formulated an integrated support strategy for institutional capacity-building for disaster management and established an African regional network to improve access to information on disaster events.
- 32. In 2002, FAO established an Emergency Operations and Rehabilitation Division to respond to needs for emergency assistance in the agricultural, livestock and fisheries sectors in developing countries affected by disasters, using increasing space-derived information. The WMO Programme for Natural Disaster Prevention and Mitigation, which was established in May 2003, aims to ensure effective coordination of WMO activities with those of international, regional and national organizations and will promote the delivery of increasingly accurate and reliable warnings of severe weather and climate events.
- 33. Through its Space Education Project, launched in 2002, UNESCO makes important contributions to capacity-building and increasing awareness and aims, among other things, to enhance education in space-related subjects in schools, in particular in developing countries; to promote the integration of space subjects in the national curricula; to promote professional development programmes for teachers and educators and young professionals; to assist teachers and educators to develop educational materials adapted to their needs; and to contribute to the preparation of the next generation of the space workforce.
- 34. As part of its restructuring in 2003, WHO established a new E-Health Unit, which consists of five working groups including those dealing with remote sensing and geographic information systems (GIS) as well as tele-health. The E-Health Unit facilitated collaboration of WHO with other United Nations entities, complementing its work in the health committee of the United Nations Task Force on Information and Communication Technologies. The WHO Regional Office for the Americas recently supported the establishment of the Inter-American Network on the Use of GIS/RS to Control Infectious Diseases. In West Asia, WHO's Onchocerciasis Control Programme, with the use of satellite technology was successful in eliminating onchocerciasis (river blindness) from seven countries through

hydrological monitoring to support targeted spraying that killed off the larvae, the main vector of the disease. WHO also uses raster layers derived from satellite images, such as land cover, digital elevation models, population density and road and river networks, to measure accessibility to health care in order to relocate, reorganize and maximize human, physical and financial resources for the most disadvantaged populations.

The work being carried out by the United Nations Geographic Information Working Group relates to the implementation of many of the recommendations of UNISPACE III. The Working Group was established in March 2000 by the Administrative Committee on Coordination (now known as the United Nations System Chief Executives Board for Coordination), to coordinate activities and formulate policies concerning geographical information within the United Nations system. FAO is developing its GeoNetwork, a comprehensive international standard-based spatial information infrastructure jointly with the World Food Programme, UNEP and other partners. GeoNetwork aims to improve dynamic access to and integrated use of spatial information among FAO divisions, member States, United Nations entities, the centres associated with the Consultative Group on International Agricultural Research and other stakeholders in support of decision-making for sustainable development, by using the Internet as an interoperable information exchange mechanism between United Nations entities, intergovernmental and non-governmental organizations and the scientific community.

# D. Activities of intergovernmental and non-governmental organizations with permanent observer status with the Committee that have contributed to the implementation of the recommendations of UNISPACE III

- 36. In its resolution 54/68, the General Assembly urged intergovernmental and non-governmental organizations and industries conducting space-related activities to take necessary action for the effective implementation of the Vienna Declaration. The Committee stressed the importance of involving non-governmental entities in the implementation of recommendations of UNISPACE III when it established action teams in 2001 and agreed that those teams should consider non-governmental entities that could be invited to participate. As a result, as at March 2004, 10 out of 18 international organizations that have permanent observer status with the Committee as well as 3 other intergovernmental organizations and 14 other non-governmental entities have participated in the work of one or more action teams as members.
- 37. Through its open meetings, the Action Team on Disaster Management has opened an avenue for commercial entities involved in satellite manufacturing and operation as well as the insurance industry to contribute to its work. ESA, the European Commission and the International GPS Service have made an important contribution to the work of the Action Team on Global Navigation Satellite Systems, which also benefited from substantive inputs from such intergovernmental and non-governmental entities as the International Association of Institutes of Navigation, the International Federation of Surveyors and the International Bureau of Weights and Measures in formulating its recommendations. The International Astronomical

Union (IAU) and the Committee on Earth Observation Satellites (CEOS), through its Working Group on Education and Training, has assisted the Action Team on Capacity-building in formulating its recommendations.

- 38. The Action Team on Near-Earth Objects has benefited from the contributions of the Committee on Space Research (COSPAR), IAU and the Spaceguard Foundation, which participated in the Action Team as members. The Action Team also worked with the Organisation for Economic Cooperation and Development (OECD) and built upon OECD's work in the framework of its Global Science Forum on matters relating to near-Earth objects. A number of international non-governmental entities contributed to the survey conducted by the Action Team on Increasing Awareness by providing information on their outreach activities and suggestions for further increasing awareness of the benefits of space activities among policy makers and the general public.
- 39. SGAC established working groups to examine the implementation of nearly all the recommendations contained in the Vienna Declaration and submitted its proposal and recommendations to the Scientific and Technical Subcommittee at its fortieth session, in 2003, for consideration, as necessary and appropriate, in particular by the action teams. Some entities, such as ESA and IAU, contributed to the implementation of a number of recommendations of UNISPACE III by providing substantive inputs for the work of the Committee on the Peaceful Uses of Outer Space and its subsidiary bodies in the consideration of issues on their agendas.
- Many initiatives by intergovernmental and non-governmental entities followed UNISPACE III in the area of environmental monitoring and management of natural resources. For example, following the meeting of the European Council in Gothenburg, Sweden, in June 2001, ESA and the European Commission launched the Global Monitoring for Environment and Security (GMES), an initiative to provide independent, operational and relevant information in support of a range of policies serving sustainable objectives in areas such as environment, agriculture, fisheries, transport and regional development. CEOS launched a follow-up programme to the World Summit on Sustainable Development to demonstrate its continuing commitment to sustainable development and the long-term objectives of the World Summit and to provide a common framework for the actions undertaken by CEOS agencies individually in implementing actions called for by the World Summit. As part of this follow-up programme, ESA launched a "TIGER" project to respond to the needs of African countries in water resource management. In order to respond to the increasing need for more frequent and comprehensive space-derived data for weather forecasting, the European Organization for the Exploitation of Meteorological Satellites and ESA began the development of the Meteosat Second Generation system. More frequent collection of comprehensive data by the latter should assist significantly in timely recognition and prediction of extreme weather phenomena.
- 41. Announced by ESA and the *Centre national d'études spatiales* (CNES) during UNISPACE III, the International Charter "Space and Major Disasters" became operational in November 2000 (see para. [...]). Through the Charter, satellites of member agencies can be used to provide Earth observation images to civil protection authorities as well as to United Nations entities responding to a major disaster. By the end of 2003, the Charter had been activated 41 times in response to

various natural disasters, such as earthquakes, volcanic eruptions, landslides and floods, in a number of countries.

- 42. The International Organization of Space Communications (Intersputnik) is carrying out a number of projects using communication satellites to help bridge the gap between developed and developing countries, including the establishment of a global fleet of small communication satellites with a view to reducing lease prices and expanding the base of potential users, mainly in developing countries. The activities of Intersputnik contribute to enhancing knowledge-sharing through the promotion of universal access to space-based satellite communication services.
- 43. One of the initiatives taken by the International Society for Photogrammetry and Remote Sensing (ISPRS) is expected to provide new and innovative sources of funding to support the implementation of recommendations of UNISPACE III. The Society is developing a foundation to administer an extensive and broad-based international programme that would provide grants, scholarships, training supplies and other forms of scientific assistance to qualified individuals and organizations pursuing and/or applying knowledge for the advancement of the sciences and technologies associated with disciplines in which ISPRS is active.
- 44. CEOS has played an important role in coordinating efforts of its members to demonstrate the usefulness of space applications in advancing sustainable development on the occasion of the World Summit on Sustainable Development. The presentations and demonstrations made by CEOS members at the World Summit and their information materials helped to increase awareness among decision makers and the general public of the importance of space activities in promoting sustainable development by applying results of space research; increasing the use of space-related systems and services by the entities of the United Nations system and by the private sector; and improving the management of the Earth's natural resources. The follow-up programme established by CEOS contemplates actions to be taken by its members in the following five areas, which would contribute to implementing recommendations of UNISPACE III: (a) education, training and capacity-building; (b) water resource management; (c) disaster management; (d) climate change; and (e) global mapping, land-use monitoring and GIS.
- 45. Some intergovernmental and non-governmental organizations help implement many of the recommendations of UNISPACE III as part of their continuing, mandated activities. ESA, for example, promotes international cooperation, advances scientific knowledge and enhances education and training opportunities. The activities of the International Law Association, through its Space Law Committee, contribute to the efforts of the Committee on the Peaceful Uses of Outer Space in the development of space law as well as possibly several other recommendations from a legal point of view.

#### Notes

<sup>&</sup>lt;sup>1</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>&</sup>lt;sup>2</sup> The Charter was announced by the European Space Agency and the French Space Agency

(CNES) during UNISPACE III and became operational in November 2000, following the signing of the Charter by the Canadian Space Agency (CSA) in October 2000. Through the Charter, satellites of ESA, CNES, CSA, the Indian Space Research Organisation (ISRO), the National Oceanic and Atmospheric Administration (NOAA) of the United States of America and the National Commission on Space Activities (CONAE) of Argentina can be currently used to provide Earth observation images to civil protection authorities responding to a major disaster, and it is anticipated that the number of space agencies that participate in the Charter will increase.

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