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COMMITTEE ON THE PEACEFUL USES OF
OUTER SPACE

Scientific and Technical Subcommittee

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Agenda item 6

Implementation of the
recommendations of UNISPACE III

Status of the implementation of the recommendations of UNISPACE III

Note by the Secretariat

The Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space, at its forty-fourth session, requested the Office for Outer Space Affairs to prepare a summary of the status of further implementation of the recommendations of UNISPACE III (A/AC.105/890, Annex I, para. 13). The replies received would be taken into account in preparing a report on the status of the implementation of the recommendations of UNISPACE III in tabular form, to be considered by the Working Group of the Whole during the forty-fifth session of the Subcommittee (A/AC.105/890, Annex I, para. 14).

The attached table on “Status of implementation of the recommendations of UNISPACE III (as contained in resolution 54/68) and the Committee’s Plan of Action to further implement the Recommendations (as endorsed in resolution 59/2)”, is based on information received by the Secretariat in response to Note Verbale CU 2006/130 from the following member States: Ecuador, Greece, Japan, Pakistan, Republic of Korea, Thailand (information reflected in A/AC.105/C.1/2007/CRP.4); as well as on the replies received in response to Note Verbale CU 2007/160, from the following member States and entities of the United Nations system: Algeria, Argentina, Chile, Japan, Turkey, Food and Agriculture Organization (FAO), World Health Organization (WHO) and World Meteorological Organization (WMO).

This summary identifies actions contained in the plan of action that could be considered as implemented in accordance with the following criteria:

- 1) the recommendation is by all practical means being considered and implemented by another intergovernmental body and reporting lines have been established with COPUOS to keep it informed about the ongoing implementation progress;
- 2) the recommendation has been considered by a UNISPACE III Action Team which has concluded its work and/or the recommendation has been or is being considered by the Committee and/or its Subcommittees; and
- 3) the recommendation has been fully implemented.



STATUS OF IMPLEMENTATION OF THE RECOMMENDATIONS OF UNISPACE III (as contained in resolution 54/68) AND THE COMMITTEE'S PLAN OF ACTION TO FURTHER IMPLEMENT THE RECOMMENDATIONS (as endorsed in resolution 59/2)

**Recommendations of UNISPACE III
(United Nations General Assembly Resolution 54/68)**

No.	Recommendations of the Resolution "The Space Millennium: Vienna Declaration on Space and Human Development" that still remain to be implemented (see A/59/174, paragraph 179)	Action/Activites taken or being undertaken (Replies received by member States and international organizations in 2008 in response to Note Verbale CU 2007/160)	Partners
5	Minimize the harmful effects of space activities on the local and global environments	<p>2008 Chile: In 2007, Chile officially joined the International Charter “Space and Major Disasters” as the Authorized User. In March, the National Emergencies Office of the Ministry of the Interior signed a letter of commitment with the Charter. The installation of the Earth station with direct reception of satellite images in Santiago, operated by the Aerial Mapping Service of the Chilean Air Force, has been completed. The National Territorial Information Coordination System (SNIT) has been established under the management of a ministerial council.</p> <p>Turkey: Turkish space activities are for peaceful purposes and do not contain harmful effects for global environments.</p>	
19	Establish/strengthen national mechanisms for the coordination of space activities	<p>2008 Algeria: Taken care by the mission of the Algerian Space Agency (ASAL).</p> <p>Chile: The Government is currently finalizing the establishment of the Chilean Space Agency as an interministerial council, chaired by the Finance Ministry and administered by an executive director. A draft supreme decree is undergoing legal scrutiny in the Finance Department of the Office of the Public Prosecutor.</p> <p>Turkey: Legislation for the establishment of Turkish Space Agency is at Turkish Parliament and waiting for approval. The National Space Research Programme of Turkey was launched by TÜBITAK in March 2005. National and International workshop and conferences were organized under this programme. R&TD space research projects have been granted by TÜBITAK since 2005.</p> <p>FAO: Through the Global Land Cover Network (GLCN), Global Terrestrial Observing System (GTOS).</p>	Turkish Research Area, Turkish Institutions UNEP, WMO, UNESCO, national agencies

23	Create awards to recognize outstanding contributions in space activity	2008 Chile: None.
30	Call upon the international community to consider the recommendations of the regional preparatory conferences for UNISPACE III	2008 Chile: Chile is engaged in efforts to establish a regional space consultation mechanism using the framework of the Space Conference of the Americas and its International Experts Group.

Plan of Action of the Committee to further implement the recommendations of UNISPACE III (Document A/59/174, pages 57-77)

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
1. THE USE OF SPACE TO SUPPORT OVERARCHING GLOBAL AGENDAS FOR SUSTAINABLE DEVELOPMENT		
(a) Establishing a closer link with the work of the Commission on Sustainable Development		
<u>Paragraph 232</u> <u>Action</u> Synchronize work of COPUOS with CSD by: (a) examining contribution made by space science and technology and their applications to issues selected by Commission as a thematic cluster; (b) providing substantive inputs for consideration by the Commission during the policy year <i>See also operative paragraph 7 of General Assembly Resolution 59/2</i> <u>Primary Actor(s)</u> COPUOS	<p>2007</p> <p>Ecuador: - Territorial Landuse Plan of Ecuador – Scale 1:250,000: Studies of the natural (bio-physical) and socio-economic resources of Ecuador will be carried out to determine adequate land use without deteriorating natural resources. The Territorial Landuse Plan will be translated into short-, mid- and long-term plans and projects.</p> <p>Japan: Asia-Pacific Regional Space Agency Forum (APRSAF), which was established in 1993 in response to the declaration adopted by the Asia-pacific International Space Year Conference (APIC) in 1992, is to enhance the development of each country's space program and to exchange views toward the future cooperation in space activities in the Asia-Pacific region. APRSAF intends to ensure wider participation of space agencies, government officials, regional and international organizations and institutions responsible for applying space technology, as well as space agencies from outside the region and private sectors as observers. Through the activities of the APRSAF, we contribute to the WSSD Plan of Implementation.</p>	<p>Ministerio de Agricultura y Ganaderia (MAG) – SIGAGRO</p> <p>JAXA</p>
ASSESSMENT		
OOSA, in the framework of the Programme on Space Applications, organizes the annual United Nations/Austria/European Space Agency Symposium (see http://www.unoosa.org/oosa/en/SAP/graz/index.html). The theme of the Symposium is synchronized with the thematic clusters of the CSD. The Committee contributed to the work of the Commission on Sustainable Development during the policy year for the thematic cluster 2006-2007 and 2008-2009 (A/AC.105/872, A/AC.105/892). The Committee has agreed that the Director of the Division for Sustainable Development of DESA should be invited to participate in the sessions of the Committee, and that the Director of the Office for Outer Space Affairs should participate in the sessions of the Commission on Sustainable Development to raise awareness and promote the benefits of the use of space science and technology within the context of the work of the Commission. OOSA has established working relations with the Division for Sustainable Development/CSD Secretariat. Document A/AC.105/892 will be distributed at CSD 16; Inter-Agency Meeting (IAM) agreed at its 28 th meeting in January 2008 to contribute to cluster 2010-1011 and to prepare a report on space technology and its applications for sustainable development for Africa, to be presented to the 31 st African Leadership Conference in 2009. Since Africa is a major		

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	theme for CSD 16 and a cross-cutting issue for all clusters, that report is also relevant in the context of the CSD process. <u>Could be considered implemented.</u>	
Paragraph 233 <u>Action</u> Identify actions in the WSSD Plan of Implementation and establish follow-up programmes to be carried out jointly with multilateral, bilateral development programmes and relevant user institutions, in particular in developing countries. <u>Primary Actor(s)</u> Space Agencies and Space-related entities	<p>2008 Chile: The Chilean Space Agency, now undergoing restructuring as an interministerial council based in the Finance Ministry, and the Directorate of Special Policy of the Ministry of Foreign Affairs are being kept informed and will be responsible for the follow-up programme.</p> <p>Japan: Jaxa has implemented the Asia Pacific Earth observation Pilot Project as step-2 partnership project in cooperation with GISTDA and LAPAN in order to promote use of satellite data and GIS.</p> <p>Turkey: Establishment of Turkish Space Agency is still on development stage and waiting for approval at the Turkish Parliament</p> <p>FAO: supports a number of WSSD related activities, including coastal ecosystem monitoring and management, environmental management, forestry, environmental observation (such as glaciers, snow cover, land cover, etc, which use space as well as in situ data. In addition, support is provided to activities such as GTOS and the Global Climate Observing System (GCOS) implementation plan which includes a remote sensing component (through CEOS).</p> <p>2007 Thailand: Thailand has participated in the Regional Space Applications Programme for Sustainable Development (RESAP) by ESCAP. Its goals have evolved from awareness-raising and networking for capacity building to promoting regional cooperative mechanisms supporting practical uses of relevant information and communication tools for achieving internationally agreed objectives.</p> <p>ASSESSMENT On-going activities by the primary actors.</p>	
(b) Applying the results of space research to promote sustainable development <u>Paragraph 237</u> <u>Action</u>	2008 Algeria: - Algerian Space Agency has elaborated a national space programme	Ministries, Researches

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
Consider (a) developing and committing to a sustainable development agenda that can benefit from space technology, at a level commensurate with its capability and resources; and (b) undertaking measures towards the systematic collection, accurate analysis and proper management of space-acquired and in situ data as a starting point towards sustainable development. <u>Primary Actor(s)</u> Each Country	<p>(horizon 2020) to consider the requirements of several sectors such as agriculture, land planning, water resources in field of sustainable development.</p> <ul style="list-style-type: none"> - Creation of the graduate school in a national universities network in space technology and applications. - The ASAL plans to launch a project of designing and realizing an Algerian Atlas of solar deposit by using satellite imaging with all the involved national partners. - The project provides in the next 20 years, the production of 12% of renewable electricity, mostly from solar energy. <p>Argentina: (b) The Argentine National Space Program, implemented by CONAE (National Commission on Space Activities), provides for the development of space tools to acquire information that contribute to sustainable development.</p> <p>Chile: Chile has begun the process of acquiring an Earth observation satellite which will be widely used by the Chilean academic and scientific sector, the State administration at every level (ministries, departments, public services, public and private universities and research centres, regional governments, municipalities, etc.) and the whole private enterprise sector. In addition, a next-generation Earth station will go into operation from 2008, which, together with SNTT and other installed capacities, will make it possible to give priority to the utilization of space products such as images to conduct space research in the interests of sustainable national and global development.</p>	Centres, universities
	<p>Japan: JAXA has been promoting systematic space-based observation through CEOS, IGOS-P and GEO.</p> <p>FAO: Has a number of initiatives, for example: GTOS supports national and international networks which undertake environmental observations based on in situ and satellite observations. GTOS also supports activities related to the terrestrial Essential Climate Variables (ECVs) as well as supporting the observational requirements of UNFCCC. GLCN has activities which are supported by methodologies such as the Land Cover Classification system (LCSS) to generate harmonized land cover products from the local to the global scale. Other FAO activities include: the Global Forest Resources Assessment (2010 assessment has a remote sensing component), climate change, bioenergy, vulnerable ecosystems (mountain and coast), disaster relief (eg. tsunami), etc. FAO also supports activities such as GLCC2000 and Globecover.</p>	CEOS, IGOS-P, GEO Numerous, including national government agencies, inter-governmental agencies, networks, etc.

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	<p>WHO: UNESCAP and the Asian institute of Technology (AIT) have now joined the network of institutions that contribute to the development and update of the Second Administrative Level Boundaries data set (SALB). Through this efforts, the contact information of the National Mapping Agencies for more than 160 countries can now be downloaded from the project web site (http://www3.who.int/whosis/gis/salb_contact.htm). This resource as well as the historic changes tables and GIS format maps also continue to represent an additional support to UN agencies and the international community which needs to have access to geographic information in countries.</p> <p>2007 Greece: Space technology can greatly contribute to sustainable development. Several institutes and Research Centres in Greece are already involved in the collection, analysis and evaluation on space-acquired and in situ data. These data are used by the public authorities.</p>	Ministries, Universities, NAGREF, NOA, FORTH, NCSR Demokritos, CRES, HCMR
	<p>Pakistan: - (a) Considering the requirements of sustainable development in the field of agriculture, coastal resources, water resources, forestry, urbanization and uplift of country, Pakistan has prepared 25 years space program including development of high resolution satellites and is committed to its realization.</p> <p>- (b) Effects of space weather disturbances (solar flares, magnetic storm) and various Ionospheric anomalies e.g. Spread-F, total blanking due to Es, bite-outs, short wave fadeouts, Travelling Ionospheric Disturbance etc. are monitored on HF communication using Ionospheric Sounders and Geomagnetic Observatory being operated by SUPARCO. The study helps in minimizing their negative effects on HF communication as usable frequencies can be computed for such events.</p> <p>ASSESSMENT On-going activities by the primary actors.</p>	SUPARCO, WAPDA, Forest Department, Central Authority, Agricultural Department
Paragraph 238 <u>Action</u>	<p>2008 Algeria: Organization of an international workshop on climate change in Africa with the collaboration of CRASTE (Union Nations) and the Association for Climate and environment researches (ARCE). This workshop took place in el Djazair Hotel, Algiers, and it was focused on the role of space technologies to strengthen the African adaptation capacities to the climate change.</p> <p>One of recommendations the workshop was to implement a local or a regional project</p>	CRASTE (UN), OOSA, ELUMETSAT, ICG(GNSS), ARCE

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
Affairs, UNEP, FAO, UNESCO and WMO, as well as non-governmental organizations such as COSPAR, the International Astronautical Federation and ISPRS <i>See also paras. 299-310.</i> Primary Actor(s) Member States	<p>related to the climate change in association with African entities and also with some data providers like EUMETSAT.</p> <p>Chile: Chile belongs to all the organizations of the United Nations system, in particular COPUOS, the Group on Earth Observations (GEO), WMO, the International Civil Aviation Organization, the World Health Organization, UNESCO and FAO. The new Chilean Space Agency, with its new institutional framework, is providing support to the Chilean academic and scientific community, which is already consulting with the Agency on the proper use of space technology.</p> <p>FAO: works closely with UNEP, UNESCO, WMO, ICSU, and many other agencies.</p>	NOA, MAGREF, National Meteorological Service, Ministry of Culture, HCMR
2007	<p>Greece: There is a strong collaboration between Greek authorities and international organizations that provide valuable data leading to a scientific and technical foundation of sustainable development issues. Such international entities are UNEP, UNESCO and WMO.</p>	SUPARCO, FAO, MINFAL APMSCTA
Pakistan:	<ul style="list-style-type: none"> - Collaboration with FAO in order to develop sustainability in agricultural production, a project carried out for Ministry of Food and Agriculture (MINFAL). - Participation in COSPAR, presenting scientific publications and presentations. - Participation in APMSCTA's MS programs and short training courses. 	MOST, KARI, Daejeon City
Republic of Korea:	Korea was chosen as a hosting country to hold the 2009 International Astronautical Conference (IAC) which is annually organized by International Astronautical Federation (IAF).	
Thailand:	FAO organized the Regional Workshop on Information Management and Coordination Mechanisms of the Tsunami Emergency and Rehabilitation Operations on Agriculture, Fisheries and Forestry held during 30 October – 1 November 2006 at Amari Water Gate Hotel, Bangkok. During the workshop FAO arranged the visit to GISTDA programme for 30 participants from Maldives, Sri Lanka, Indonesia and Thailand. GISTDA offered 2 presentations for the visitors: “Activities on Disaster Management” and “Tsunami Disaster and Warning System Along the Andaman Sea (Thailand)”. Thailand will exhibit during the 44 th session of Scientific and Technical Subcommittee with the theme of “Thailand’s Contribution to Earth Environment from Its Space-Related Activities”.	

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	ASSESSMENT On-going activities by the primary actors.	
(c) Developing a comprehensive, worldwide environmental monitoring strategy Paragraph 243	<p>2008</p> <p><u>Action</u> Coordinate implementation of the work plan of Action Team on the Environmental Monitoring Strategy at the global level. (The work plan consists of the following four technical components: (i) networking and knowledge-sharing; (ii) capacity-building of national and regional organizations; (iii) regional systems for collection and distribution of information; and (iv) space technology applications for environmental monitoring. Each of these components will consist of a set of outputs, which will be delivered through specific activities.)</p> <p><u>Primary Actor(s)</u> COPUOS with OOSA</p> <p><u>Action</u> Invite WMO, the Intergovernmental Oceanographic Commission of UNESCO, CEOS and other members of IGOS-P, as well as the entities involved in implementing GMES initiative and the ad hoc Group on Earth Observations to implement the work plan.</p> <p><u>Primary Actor(s)</u> COPUOS (through OOSA)</p>	<p>Algeria: providing ALSAT-1 data to local and foreign centres in order to perform several applications related to the environment.</p> <p>Argentina: Argentina is a member of both CEOS and GEO, and contributes the information provided by the satellite missions of the National Space Program.</p> <p>Chile: Yes. Chile belongs to GEO. It has formed the GEO Chile Group and is supporting the establishment of the GEO Regional Group.</p> <p>FAO: provides capacity building options to its member countries, including in relevant areas such as geoinformation, remote sensing, mapping and the development of environmental databases and management systems. Geonetwork is an example of data sharing. GLCN and GTOS support a number of environmental observation networks. FAO is also co-Chair of the land theme of IGOS and also supports the IGOS themes (eg. carbon theme). In addition, FAO is supporting the Group on Earth Observations in the development and implementation of GEOSS and is also supporting the observational requirements of international conventions such as the UNFCCC.</p> <p>Pakistan:</p> <ul style="list-style-type: none"> - Global participation of Aerosol Robotic Network program (Aeronet) is being pursued under SUPARCO-IST-NASA collaborative program. Sun photometer is being operated and data is submitted to online data base of Aeronet data base on every day basis. - Arranged training courses for professionals of various organizations involved in environmental research, like IUCN, PFI, and PARD in Pakistan. - Satellite Remote Sensing data is being provided to local and foreign agencies regarding their various space related applications for environmental monitoring activities.
	ASSESSMENT Final report of the Action Team for the Development of a Comprehensive Worldwide	9

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
	<p>Environmental Monitoring Strategy (Action Team 1) (A/AE.105/C.1/L.275). On-going activities by Action Team 1.</p> <p>The Group on Earth Observations (GEO), launched in response to calls for action by the 2002 World Summit on Sustainable Development and by the G8 (Group of Eight) leading industrialized countries, is coordinating efforts to build a Global Earth Observation System of Systems (GEOSS). GEOSS addresses nine “Societal Benefit Areas”: disasters, health, energy, climate, water, weather, ecosystems, agriculture and biodiversity. (http://www.earthobservations.org). Membership in GEO is open to all member States of the United Nations and to the European Commission. Current Members of GEO include 72 countries and the European Commission, as well as 52 Participating Organizations, among them all relevant entities of the United Nations system. GEO-related activities of the United Nations entities are also discussed at the Inter-Agency Meeting on Outer Space Activities. In accordance with the agreement reached by COPUOS at its fiftieth session, and endorsed by the General Assembly in its resolution 62/217, the Director of the secretariat of the Group on Earth Observation (GEO) will annually report to the Subcommittee on progress made in the implementation of the ten-year implementation plan for GEOSS.</p> <p>Could be considered implemented.</p>	
Paragraph 244	<p>2008</p> <p>Algeria: A space application centre is currently underway by the ASAL.</p> <p>Chile: Chile has set up an interministerial council named the National Territorial Information Coordination System, which is affiliated to the Global Spatial Data Infrastructure that meets annually in various countries. In 2007, the meeting was held in Santiago de Chile, hosted by the Military Geographical Institute.</p> <p>FAO: geonetwork: http://geonetwork-opensource.org/</p>	
	<p>2007</p> <p>Pakistan: SUPARCO is establishing a National Centre for Remote Sensing and GIS at Karachi.</p> <p>ASSESSMENT On-going activities by the primary actors.</p>	10

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
(d) Improving the management of the Earth's natural resources		
Paragraph 247	<p>2008</p> <p>Action</p> <p>Articulate, through pilot and demonstration projects, the exact information needs of all stakeholders involved at all levels.</p> <p>Take advantage of existing capacity-building opportunities and the wealth of Earth observation data, interpretation and analysis tools that are available for specialized training to develop the necessary human resources</p> <p><i>See also paras. 299-310.</i></p> <p>Primary Actor(s)</p> <p>All States using or planning to use Earth observations on an operational basis in the management of natural resources</p> <p>Argentina: is active in the organization of capacity building activities for the management of natural resources using space information, in the framework of the Gulich Institute for Advanced Space Studies of CONAE, in Cordoba, and in cooperation with OOSA, and other space agencies.</p> <p>Chile: Chile is engaged in acquiring a high-resolution (approx. 2 metres) Earth observation satellite, which, together with the operations of the other Earth station in the Aerial Mapping Service, will manifestly improve the management of the country's natural resources and make it possible to raise the level of international space cooperation.</p> <p>Turkey: TUBITAK Space Technologies Research Institute is Turkish Government entity and developing RASAT optical earth observation satellite for the scientific and civilian purposes. Estimated launch date is 3rd Q of 2009. Satellite is planned to have 7.5m panchromatic, 15m multispectral resolutions.</p> <p>FAO: is undertaking a number of pilot activities to develop products on bioenergy potentials and risks (such as food security), deforestation, environmental management, carbon sinks and fluxes, ecosystem services, etc.</p> <p>2007</p> <p>Pakistan:</p> <ol style="list-style-type: none"> 1. Officials from user organizations and students from educational institutions at national as well as international level are being trained to become well versed with the applications of satellite remote sensing. 2. Pilot projects have been conducted addressing the exact requirements of the use. 3. A conference of all stake-holders was organized to compile user requirements of the low earth remote sensing satellite program of Pakistan. 4. Satellite Ground Station at Islamabad, is being used for acquisition, processing and providing data to local and foreign users. 5. Satellite Remote Sensing data products were provided to Sindh Local Authority for exploration and extract of coal sources in the province of Sindh-Pakistan. 6. Taking active part in capacity building in the field of RS/GIS techniques to develop the necessary human resources. 	<p>SUPARCO, ISNET, local users, Educational institutions, Space Engineering, Italy, Logitech, Pakistan</p>

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
	Republic of Korea: Korea Aerospace Research Institute (KARI) successfully launched an Earth observation satellite named KOMPSAT-II, funded by the Ministry of Science and Technology (MOST), on July 29, 2006. This satellite will play a pivotal role in the management of the Earth's natural resources. <u>ASSESSMENT</u> On-going activities by the primary actors.	MOST, KARI
Paragraph 248 <u>Action</u> To promote operational use of Earth observations and its role in managing natural resources: (a) Maintain and disseminate a compilation of best practices in use of Earth observation data in natural resource management, building on compilation developed by Action Team on Management of Natural Resources and additional information from members of the Committee; and (b) Organize specialized training courses on operational use of Earth observations, in cooperation with regional centres	2008 Algeria: Projects of a constellation of earth observation satellites, for the management of the African resources and the environment 'ARMS'. FAO: Manuals, methodologies, software and training workshops have been organized at the regional and national level (e.g. through GLCN) to promote data acquisition, interpretation, archiving and use and dissemination of the data. FAO undertakes systematic observations and promoting the adoption of standards and common methodologies. For example, FRA 2010. In addition, FAO supports the GEOSS process and contributes to the development of the agricultural monitoring strategy as well as the IGOS land theme. 2007 Pakistan: 1. UN/Pakistan Regional Workshop on "Monitoring and Protection of the Natural Environment" held at Islamabad from 30th August - 4th September 2004. 2. ISNET workshops and seminars and training courses during the period. 3. Training courses conducted on the subject. University PhD students enrolled to conduct research on drought assessment and flood risk assessment. 4. SRS data products are provided to National Highway Authority for alignment monitoring studies of National highways, bridges and underpasses. Utility of these technologies has brought a tremendous change in design of highways.	Afrique du Sud, Nigeria et Kenya Numerous, including universities, government institutions, and international agencies UN, SUPARCO ISNET
	Republic of Korea: A Remote Sensing Training Course was held at Korea Aerospace Research Institute (KARI) in Daejeon, Korea from October 25th to 27th 2006. The course was organized by Korea Aerospace Research Institute (KARI), Korean Society of Remote Sensing (KSRS), European Space Agency (ESA) and Intergovernmental Oceanographic Commission (IOC) of UNESCO. It consisted of 2 main branches: SAR and Remote Sensing Oceanography. About 40 participants from 26 organizations of 15 countries attended the Course.	

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ASSESSMENT	<p>Final Report of the Action Team on the Management of Natural Resources (A/AC.105/C.1/2004/CRP.12).</p> <p>Area covered by the United Nations Programme on Space Applications. Regarding (a) the regular maintenance of those best practices (collecting, compiling and updating the information for best practices) would require minimal voluntary financial contributions to cover the cost of two to three months of short-term contractual work. Regarding (b), while the Office could cover the expenses of a small number of trainees from its fellowship budget, additional voluntary financial contributions would be required to cover the air travel and living expenses for others. The Office would also need to reach agreement with each of the centres on the cost implications for the centres.</p>	
	<p>2. DEVELOPING COORDINATED, GLOBAL SPACE CAPABILITIES</p> <p>(a) Maximizing the benefits of existing space capabilities for disaster management</p> <p><u>2008</u></p> <p><u>Action</u></p> <p>Conduct study on possibility of creating an international entity to provide for coordination and means of optimizing effectiveness of space-based services for use in disaster management by fully utilizing existing and planned space- and ground-based assets and infrastructure and covering all phases of disaster management.</p> <p>(The study should (a) define the key functions of a possible disaster management international space coordination entity; (b) describe the benefits that it would provide to the disaster management community; (c) define the scope and nature of the entity (for example, intergovernmental or non-governmental); and (d) propose an implementation plan that would include details of the estimated cost of the establishment and operation of such an entity and possible sources of funding (that is, voluntary or assessed contributions), as well as the intended use of the funds. The study should also examine the options of providing sustainable resources for applying space technology in support of disaster management and for building the capacity of civil protection authorities to use space technology. Final report submitted by Action Team provides basis for conducting such</p>	<p>CRTS (Maroc) ARS (Soudan) - Ministry of Interior - DGPC, - INCT, - CTS, - INPV, - CRAAG, - INPV</p> <p>MOST, KARI</p> <p>Republic of Korea: UN-ESCAP ICC (Intergovernmental Consultative Committee) on Regional Space Applications Programme (RESAP) was held in Korea Aerospace Research Institute (KARI) with representatives from 13 Asia-Pacific countries attending. They exchanged various kinds of views on disaster management and made a draft Declaration of the Third Ministerial Conference 2007.</p> <p>ASSESSMENT The study was conducted and considered by the Scientific and Technical Subcommittee, and subsequently by the Committee and resulted in the creation of UN-SPIDER (A/A.C.105/C.1/L.285 and Add.1 "Study on the possibility of creating</p>

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<p>a study.)</p> <p><i>See also operative paragraph 9 of General Assembly Resolution 59/2</i></p> <p><u>Primary Actor(s)</u></p> <p>Ad hoc expert group, with experts to be provided by interested member States and relevant international organizations, including United Nations system entities in disaster management (para.257); OOSA to coordinate organization of work involved in preparing study; member States to provide support for study through voluntary contributions (para 257)</p>	<p>an international entity to provide for coordination and the means of realistically optimizing “the effectiveness of space-based services for use in disaster management”.</p> <p>Could be considered implemented.</p>	
<p><i>Paragraph 258</i></p> <p><u>Action</u></p> <p>Make cash or in-kind voluntary contributions for preparation of study</p> <p>(Work on study could commence as soon as sufficient voluntary contributions received. OOSA to communicate to member States date of commencement of work and provide information on organization of work, including list of experts, some of whom may work on a full-time basis at facilities provided by Office or by interested United Nations entity (para. 259))</p> <p><i>See also operative paragraph 10 of General Assembly Resolution 59/2</i></p> <p><u>Primary Actor(s)</u></p> <p>Interested Member States to communicate to OOSA</p>	<p>ASSESSMENT</p> <p>Interested Governments, Intergovernmental and Non-Governmental Organizations provided the services of experts to prepare the study.</p> <p>Could be considered implemented.</p>	
<p><i>Paragraph 260</i></p> <p><u>Action</u></p> <p>Report to S&T on status of preparation of study, indicate whether study could be completed in time for submission to Committee at 48th session and level of voluntary contributions received.</p> <p>Submit to S&T for review and approval, draft terms of reference for ad hoc expert group and propose how study might be reviewed by COPUOS and its subsidiary bodies for a decision to be made by COPUOS.</p> <p><u>Primary Actor(s)</u></p> <p>OOSA</p>	<p>ASSESSMENT</p> <p>See A/AC.105/C.1/2005/CRP.17.</p> <p>Could be considered implemented.</p>	

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
<u>Action</u> Provide further guidance on preparation of study on basis of OOSA report. <u>Primary Actor(s)</u> Scientific and Technical Subcommittee		
<p><i>Paragraph 261</i></p> <u>Action</u> Develop case history of benefits of using space technologies for disaster management and establish sample product catalogue. <u>Primary Actor(s)</u> Ad hoc expert group	<p>2008</p> Algeria: Establishment of an Atlas of forest fires identified by the Algerian satellite earth observation AISAT-1 over the period of 2003-2007. <p>Turkey: Information and data gathered about this subject should be distributed more effective for the benefits of the member states and also minimize the response time during disasters.</p> <p>WHO: The first volume of the WHO e-atlas of disaster risk for the Eastern Mediterranean Region, Exposure to Natural Hazards, will be available in the coming month under the form of a DVD containing country level and regional maps as well as all the material, data and protocols, used to create them. Copies of this DVD can be requested by sending an email to the Emergency Preparedness & Humanitarian Action (EHA) unit at WHO EMRO (eha@emro.who.int).</p> <p>2007</p> Pakistan: SUPARCO has its own Satellite Ground Station with a team of professionals in remote sensing and GIS. This technology was effectively used in the October 2005 earthquake for relief and rescue operations. Studies on disaster management have been conducted to monitor and make damage assessment in areas affected by flood, Earth quake, etc. A product catalogue has been generated from their findings.	SUPARCO, relevant local user agencies
<p><i>Paragraph 262</i></p> <u>Action</u> Consider	<p>ASSESSMENT</p> Covered by the UN-SPIDER programme. See http://www.unspider.org <p>Could be considered implemented.</p>	A) FAO for the fight against locusts, PNUE,

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
<p>(a) allocating a portion of disaster-management-related budget or funds to using space technology for disaster management; and</p> <p>(b) identifying single points of contact to focus their internal disaster management efforts and to provide liaison with external efforts with respect to use of space technology for disaster management.</p> <p><u>Primary Actor(s)</u> Governments and international organizations</p>	<p>space technology and the geographic information systems (SIG). B) The focal point is the person in charge in charge of space applications at the ASAL.</p> <ul style="list-style-type: none"> - A single point of contact in the field of monitoring of natural disasters : National Civil Protection (ministry of interior Algeria is member of the International charter " Space and major risks " in 2005. <p>Argentina: Use of satellite information for disaster management and the generation of an early warning system is one of the Sapce Information Cycles under development and a major goal in the National Space Program. As such, it is one of the two main lines of work of the Gullich Institute for Advanced Space Studies, the other being early warning systems for health. In this sense, CONAE participates in the Charter "Space and Major Disasters", and contributes to the UN SPIDER program.</p> <p>Chile: Implemented in Chile. Since 2007, the National Emergencies Office of the Chilean Ministry of the Interior is the Authorized User of the International Charter "Space and Major Disasters". It has actively used the Charter for the disasters at Aysén and the Llaima volcano and the earthquake in Tocopilla, northern Chile.</p> <p>2007 Greece: It would be quite helpful. There is a single point of contact that deals with all internal disaster management efforts.</p> <p>ASSESSMENT On-going activities by the primary actors. Activity (b) is being addressed by UN-SPIDER.</p>	UNDP, CCC. B) Ministry of Interior DGPC BNSC, SSTL (Royaume Uni); NASRDA (Nigeria)...
<p><i>Paragraph 263</i></p> <p><u>Action</u> Join and strengthen Disaster Charter (So that remote sensing capabilities and applications can be more effectively used in supporting disaster management activities)</p> <p><u>Primary Actor(s)</u> Member States with space agencies having remote sensing satellite capabilities</p>	<p>2008 Argentina: is a member of the Charter through CONAE since 2003, and has promoted within the Charter an activity for training of Project Managers in the Latin American region.</p> <p>Chile: Chile joined the Charter in 2007.</p> <p>Japan: JAXA has become a member of the Disaster Charter since February 2005 and provided satellite data for disaster monitoring and management.</p>	

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
<p>Turkey: TUBITAK Space Technologies Research Institute is Turkish Government entity and developing RASAT optical earth observation satellite for the scientific and civilian purposes. Estimated launch date is 3rd Q of 2009. Satellite is planned to have 7.5m panchromatic, 15m multispectral resolutions.</p> <p>2007</p> <p>Greece: There are several institutes having remote sensing satellite capabilities.</p> <p>Japan: By taking the opportunity of attending the Earth Observation Summit III held in Brussels, Belgium on February 16, 2005, the Japan Aerospace Exploration Agency (JAXA) has signed the "Charter On Cooperation To Achieve The Coordinated Use Of Space Facilities In The Event Of Natural Or Technological Disasters" and has acceded to the International Disaster Charter for the purpose of promoting its contribution to disaster management by Earth observation satellites.</p> <p>Pakistan: SUPARCO provided satellite data as well as expertise to all public, private, and other NGOs, in order to use in support of disaster management activities</p> <p>Republic of Korea: Korea recognizes the importance of regional and international cooperation on disaster management and considers active participation in establishing disaster prevention system.</p> <p>Thailand: Thailand is a member of the Sentinel Asia project to use and to pull satellite images of Thailand for disaster data on the server of Sentinel Asia Project.</p>	<p>JAXA</p> <p>NOA, IGME, NAGREF</p>	<p>ASSESSMENT</p> <p>COPUOS has been receiving regular reports from Member States on their efforts/intention to join and strengthen the Charter. Following the UNISPACE III conference held in Vienna, Austria in July 1999, the European and French space agencies (ESA and CNES) initiated the International Charter "Space and Major Disasters", with the Canadian Space Agency (CSA) signing the Charter on October 20, 2000. In September of 2001, the National Oceanic and Atmospheric Administration (NOAA) and the Indian Space Research Organization (ISRO) also became members of the Charter. The Argentine Space Agency (CONAE) joined in July 2003. The Japan Aerospace Exploration Agency (JAXA) became a member in February 2005. The United States Geological Survey (USGS) has also joined the Charter as part of the U.S. team. BNSC/DMC became a member in November 2005. The China National Space Administration (CNSA)</p>

Action and Primary Actor(s)	Actions/activities taken or being undertaken Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
	joined in May 2007. (see http://www.disasterscharter.org/). Could be considered implemented	
(b) Maximizing the benefits of the use and applications of global navigation satellite systems to support sustainable development		
<i>Paragraph 267</i>		
<u>Action</u>		
Establish international committee on GNSS including appropriate international organizations to:		
(a) optimize compatibility and interoperability;		
(b) identify mechanisms for implementing measures to protect the reliability and integrity of signals at the national, regional and global levels;		
(c) coordinate modernization activities to meet user needs;		
(d) develop road maps for the introduction of GNSS services; and		
(e) provide training opportunities in GNSS, in particular in developing countries (See also paras. 299-310)		
<i>See also operative paragraph 11 of General Assembly Resolution 59/2</i>		
<u>Primary Actor(s)</u>		
GNSS and augmentation providers		
<u>Action</u>		
Facilitate exchange of information among users and providers of GNSS, without prejudice to roles and functions of GNSS service providers and intergovernmental organizations such as International Civil Aviation Organization, the International Maritime Organization and ITU.		
<u>Primary Actor(s)</u>		
Proposed international committee on GNSS		
<i>Paragraph 268</i>		
<u>Action</u>		
Develop and maintain a web site to include information, inter alia, on recent application developments, training opportunities and sources for obtaining assistance in integrating GNSS into national infrastructure and in protecting signal reliability and integrity at the national and regional		
<u>ASSESSMENT</u>		
Implemented through the International Committee on GNSS (ICG). Could be considered implemented.		

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
<p>levels</p> <p><i>See also paras. 299-310</i></p> <p><u>Primary Actor(s)</u></p> <p>OOSA with GNSS and augmentation providers, or international committee on GNSS if established</p> <p>3. THE USE OF SPACE TO SUPPORT SPECIFIC AGENDAS TO MEET HUMAN DEVELOPMENT NEEDS AT THE GLOBAL LEVEL</p> <p>(a) Enhancing weather and climate forecasting by expanding international cooperation in meteorological satellite applications</p> <p><i>Paragraph 273</i></p> <p><u>Action</u></p> <p>Recognize the significant role of weather and climate forecasting in development and provide support, including necessary financial resources, to implement the WMO Space Programme, initiated by the fourteenth World Meteorological Congress in May 2003.</p> <p>Support implementation of WMO Space Programme Long-term Strategy, which was included in the Sixth WMO Long-term Plan, covering the period 2004-2011.</p> <p>(WMO) Long-term Plan aims (a) to make increasing contributions to the development of the Global Observing System of the World Weather Watch Programme and other associated observing systems of WMO; (b) to provide continuously improved data, products and services from both operational and research and development satellites; and (c) to facilitate and promote their wider availability and meaningful utilization around the world.) <i>See also operative paragraph 12 of General Assembly Resolution 59/2</i></p> <p>Support those national and international entities that provide space systems that seek to meet the WMO requirements.</p> <p><u>Primary Actor(s)</u></p> <p>Member States</p>	<p>The Chilean Meteorological Office, attached to the Civil Aeronautics Board, provides the country with an extremely efficient integrated system of Earth stations receiving satellite images, located in Antofagasta, Santiago, Puerto Montt, Punta Arenas and Easter Island, with a National Analysis Centre in Santiago. The Meteorological Office is a member of WMO and coordinates its work with the Chilean Space Agency. Chile therefore supports all national and international bodies providing space service providers that aim to comply with WMO requirements.</p> <p>Japan:(a) In 1977, Japan launched the first geostationary meteorological satellite (GMS) onto the geostationary orbit (about 36,000 km above the equator at 140 degrees East longitude) as part of a space based segment of the Global Observing System (GOS) of the WMO World Weather Watch (WWW) programme. Since then, continuous efforts have been made to operate and enhance observational capabilities of the following GMS series satellites.</p> <p>The Multi-functional Transport Satellite-1R (MTSAT-1R), successor to GMS, launched on 26 February 2005, has been operated in the geostationary orbit at 140 E since 28 June 2005. MTSAT-2, launched on 18 February 2006, has been on standby in orbit at 145 E since September 2006.</p> <p>(b) MTSAT-1R is observing 56 images a day (24 full disk, 24 Northern Hemisphere and 8 Southern Hemisphere). The images are disseminated as HRIT to the Medium-scale Data Utilization Stations (MDUSS) and as LRIT to the Small-scale Data Utilization Stations (SDUSS).</p> <p>(c) The observational data allows JMA and other National Meteorological and Hydrological Services (NMHSs) to continuously monitor significant meteorological phenomena such as typhoons, fronts, and low-pressure system in East Asia and the Western Pacific region. It contributes accordingly to the timely issuance of disaster prevention information and weather forecasts from JMA and NMHSs.</p>	

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
<p>FAO: Activities include poverty mapping, agro-meteorology, forestry, hydrology, climate change etc.</p> <p>Support provided through the GTOS-GCOS cooperation.</p>	<p>WMO: WMO Members and their Space Agencies are currently (January 2008) maintaining nine geostationary satellites and seven Low-Earth Orbit satellites in operational mode, complemented by nineteen Research and Development satellites contributing to the Global Observing System. Seven operational satellites are planned for launch in 2008, to renew and upgrade the current constellation, as well as a first operational altimetry satellite (Jason-2) and eight R&D satellites contributing to the GOS.</p> <p>In spite of these important achievements, the continuity of some climate measurement is not secured in long-term plans, e.g. for sea level altimetry, Earth radiation budget, concentration of ozone, aerosols and greenhouse gases.</p>	<p>Satellite agencies from: Brazil (INPE), China (CMA, CNSA), Europe (EUMETSAT and ESA), France (CNES), Germany (DLR), India (IMD), Japan (JMA), Russian Federation (Roshydromet, Roscosmos), United States (NASA, NOAA, USGS).</p> <p>The Coordination Group for Meteorological Satellites (CGMS) and the Committee on Earth Observation Satellites (CEOS)</p>
	<p>2007</p> <p>Japan:</p> <ul style="list-style-type: none"> - (a) In 1977, Japan launched the first geostationary meteorological satellite (GMS) onto the geostationary orbit (about 36,000km above the equator at 140 degrees East longitude) as part of a space-based segment of the Global Observing System (GOS) of the WMO World Weather Watch (WWW) programme. Since then, continuous efforts have been made to operate and enhance observational capabilities of the following GMS series satellites: The Multi-functional Transport Satellite-1R (MTSAT-1R), successor to GMS, launched on 26 February 2005, has been operated in the geostationary orbit at 140E since 28 June 2005; and MTSAT-2, launched on 18 February 2006, went through the In-Orbit Test and has been on standby in orbit at 145E since September 2006. - (b) MTSAT-1R is observing 56 images a day (24 full disk, 24 Northern Hemisphere and 8 Southern Hemisphere). The images are disseminated as HRIT/HirID to the 	<p>Japan Meteorological Agency (JMA)</p>

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
	<p>Medium-scale Data Utilization Stations (MDUSS) and as LRIT/WEFAX to the Small-scale Data Utilization Stations (SDUSS).</p> <ul style="list-style-type: none"> - (c) The observational data received from the spacecraft allows JMA and other National Meteorological and Hydrological Services (NMHSs) to continuously monitor significant meteorological phenomena such as typhoons, fronts, and low-pressure systems in East Asia and the Western Pacific region. It contributes accordingly to the timely issuance of disaster prevention information and weather forecasts from JMA and NMHSs. <p>Pakistan:</p> <ol style="list-style-type: none"> 1. Satellite data are being used for better understanding of the physics and chemistry of atmosphere in other regions. 2. Pakistan Meteorological Department is actively participating in the field of weather and climate forecasting. <p>ASSESSMENT</p> <p>On-going activities by the primary actors.</p>	SUPARCO Pakistan Meteorological Department
	<p>(b) Improving medical and public health services through the use of space technologies</p> <p>Paragraph 276</p> <p>Action</p> <p>Convene international conference on telemedicine for experts and government officials, as well as decision makers, including those from ministries responsible for public health.<i>(With voluntary contributions)</i></p> <p>Primary Actor(s)</p> <p>OOSA (under PSA), with WHO and other United Nations entities and international organizations and Member States</p>	<p>2008</p> <p>Algeria: Algeria and France, within the framework of the governmental agreement, signed in February 2006, have implemented a project based on space technology, aiming at sanitary opening up, in partnership the services of the Ministry of Health and the Development Centre of Advanced Technologies (CDTA).</p> <ul style="list-style-type: none"> - National Centre of Space Studies (France) - MEDESSAT; - MEDIAE; - Centre of Space Techniques (Arzew); - CDTA - Pasteur Institute - Hospitals <p>Chile: Thanks to the support of OOSA and the National Commission on Space Activities of Argentina (CONAE), Chile has been sending specialists from the Chilean Ministry of Health to installations in Argentina to receive instruction in the use of space technology in the area of epidemiological health.</p> <p>Turkey: Regional Satellite Operator Turksat AS may be considered as contact point for Telemedicine applications.</p>

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
2007 Pakistan: Pakistan together with OOSA (under PSA), with WHO and other United Nations entities and international organizations.	<p>ASSESSMENT On-going activities by the primary actor under the United Nations Programme on Space Applications. Convening, in cooperation with the World Health Organization and other relevant entities of the United Nations system, international organizations and Member States, of an international conference on telemedicine for experts and government officials, as well as decision makers, would require the commitment of significant additional human and financial resources and could only be undertaken if the necessary additional human and financial resources were provided.</p>	SUPARCO, Ministry of Health, Government of Pakistan
<i>Paragraph 277</i> <u>Action</u> Invite WHO to address the issue of telemedicine at its World Health Assembly. <u>Primary Actor(s)</u> COPUOS	<p>2008 Turkey: Regional Satellite Operator Turksat AS may be considered as contact point for Telemedicine applications.</p> <p>ASSESSMENT Covered by on-going work of Action Team on Public Health.</p> <p>Could be considered implemented.</p>	<p>2008 Algeria: A pilot project in Telemedicine provides for the deployment of a mobile infrastructure to carry out complete diagnostics in the field of maternal and childhood protection.</p> <p>Chile: We have taken note.</p> <p>Turkey: Regional Satellite Operator Turksat AS may be considered as contact point for Telemedicine applications.</p> <p>ASSESSMENT Covered by on-going work of Action Team on Public Health.</p> <p>Could be considered implemented.</p>
<i>Paragraph 277</i> <u>Action</u> Prepare, preferably before convening conference on telemedicine, a report on status and potential of telemedicine initiatives that would (a) examine range of telemedicine worldwide; (b) identify most promising areas for implementation; (c) examine needs for telemedicine, in particular in developing countries; and (d) make recommendations for decision makers. (Study should take into account results of discussions of Subcommittee during first two years of work plan and should be prepared in cooperation with WHO and any other relevant international organizations.) <u>Primary Actor(s)</u> Scientific and Technical Subcommittee, through an enlarged		Centre National d'Etudes Spatiales (France)

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
Action Team on Public Health (under work plan)		
<i>Paragraph 279</i> <u>Action</u> Consider mechanisms to conduct study on feasibility of establishing a possible international cardiovascular-disease knowledge-management network or other pilot projects. (Study to serve as clinical decision support tool for medical authorities to assess, monitor, diagnose, prevent and treat cardiovascular disease and to assist developing countries in combating cardiovascular disease. The study should, among other things, identify entities to be involved in establishing network, describe benefits for medical authorities, suggest a timetable, provide cost estimates and identify sources of funding.) <u>Primary Actor(s)</u> Scientific and Technical Subcommittee	<p>2008</p> <p>Algeria: proposes to expand the applications of the space technologies in medicine, in the implementation of system for prevention and treatment of the epidemics in Africa: malaria, leishmaniose, West Nile Fever ...</p> <p>Chile: We have taken note.</p> <p>ASSESSMENT Covered by on-going work of Action Team on Public Health.</p> <p>Could be considered implemented.</p>	
c) Promoting cooperation in the study of near-Earth objects as threats to society at large		
<i>Paragraph 282</i> <u>Action</u> Lead efforts towards better coordination at global level of research, detection, search and follow-up observations of NEOs and other relevant activities by identifying action to be taken at national level or through international cooperation. <u>Primary Actor(s)</u> COPUOS	<p>ASSESSMENT At its fiftieth session in 2007 the Committee noted with satisfaction the work carried out by the Working Group and the Action Team on Near-Earth Objects and endorsed a new multi-year workplan for 2008-2010. Some member States expect that the work of the Working Group on Near-Earth Objects may result in the proposal of international procedures to mitigate the threat of near-Earth objects for consideration by the Committee in the near future.</p> <p>Could be considered implemented.</p>	
<i>Paragraph 283</i> <u>Action</u> Consider, and encourage member organizations of International Council for Science to consider, recommendations contained in various reports on subject of NEOs and help plan necessary multidisciplinary activity. <u>Primary Actor(s)</u> International Council for Science	<p>2008</p> <p>Chile: We have taken note.</p> <p>ASSESSMENT Could be considered by Action Team 14 and Working Group on NEO.</p>	
4. OVERARCHING CAPACITY DEVELOPMENT		
(a) Increasing awareness of space benefits to improve the economic and social welfare of humanity		

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
<p><i>Paragraph 289</i></p> <p><u>Action</u></p> <p>Include items on future agendas of COPUOS to consider its contributions to work of entities responsible for convening United Nations conferences and/or for implementing their outcomes.</p> <p><i>See also operative paragraph 8 of General Assembly Resolution 59/2</i></p> <p>Include new item on 48th agenda of COPUOS to consider its contribution to work to be conducted by WSSIS second phase, November 2005</p> <p><u>Primary Actor(s)</u></p> <p>COPUOS (through OOSA and provisional agenda)</p>	<p>ASSESSMENT</p> <p>Related to paragraph 288 of A/59/174. OOSA has established working relations with the Division for Sustainable Development/Secretariat of Commission on Sustainable Development (CSD). At its forty-ninth session, the Committee considered an agenda item on the Recommendations of the World Summit on the Information Society (see A/61/20 (Supplement 20)).</p> <p>Could be considered implemented.</p>	
<p><i>Paragraph 290</i></p> <p><u>Action</u></p> <p>Invite ECA, ECLAC and ESCWA to consider integrating the use of space science and technology and their applications into their work towards achieving the Millennium Development Goals, taking into account the accomplishments of RESAP of ESCAP.</p> <p><u>Primary Actor(s)</u></p> <p>COPUOS</p>	<p>2008</p> <p>Chile: We have taken note.</p> <p>ASSESSMENT</p> <p>The UN Regional Commissions support national policies aimed at achieving MDGs and promote and monitor MDGs (see http://www.uneca.org/commission/MDGs/). Space related activities of the UN Regional Commissions, including RESAP of ESCAP, are coordinated at the Inter-Agency Meeting on Outer Space Activities (see http://www.uncoosa.unvienna.org/uncoosa/index.html). These activities make important contributions to the work of the United Nations, including in the implementation of recommendations of major world conferences and the recommendations of UNISPACE III, in efforts towards sustainable development and in the implementation of the United Nations Millennium Declaration on the development agenda.</p> <p>Could be considered implemented.</p>	
<p><i>Paragraph 291</i></p> <p><u>Action</u></p> <p>Promote awareness of role of space science and technology and their applications in support of achieving the</p>	<p>2008</p> <p>Chile: Chile is concerned to increase the capacities of the Chilean Space Agency and put in place a strong space infrastructure both in space and on Earth, promoting the role of space technology in achieving the objectives of global development.</p>	

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
<p>internationally agreed development goals.</p> <p>Invite international and national space-related organizations and non-governmental organizations to provide COPUOS with information on their efforts in this regard.</p> <p><u>Primary Actor(s)</u></p> <p>International and national space-related organizations, non-governmental organizations and COPUOS (through OOSA)</p>	<p>Turkey: TUBITAK Space Technologies Research Institute is Turkish Government entity and will be the contact point as national space related organization.</p> <p>FAO: Awareness raising has been undertaken through many international arenas, which include GEO, UNFCCC, CBD, regional and international conferences, etc.</p> <p>2007</p> <p>Greece: There are awareness activities to promote the role of space science and technology and their applications. There are frequent visits of international space related organizations to provide further information.</p> <p>Pakistan:</p> <ol style="list-style-type: none"> 1. A number of seminars, workshops and conferences have been organized to promote awareness of the role of space science and technology and their applications for the socio-economic development of the country. 2. Projects related to environmental degradation monitoring such as monitoring of mangroves, forests, wetlands etc have been conducted for national user organizations using satellite remote sensing data. 3. Short term training courses and seminars are organized to create awareness among respective agencies. 4. Helping Govt. & NGOs for HRD in the field of Space Technology and its Applications (SRS & GIS). 	<p>1. TUBITAK Space Technologies Research Institute 2. Istanbul Technical University</p> <p>GSRT, NOA</p> <p>SUPARCO, IUCN, local user agencies</p>
		<p>ASSESSMENT</p> <p>On-going activities by the primary actors.</p> <p>Covered by on-going work of COPUOS and Scientific and Technical Subcommittee. See also document A/AC.105/C.1/2004/CRP.10 “Correlation between UNISPACE III recommendations and recommendations of UN Millennium Declaration, WSSD and WSSIS”.</p> <p>Could be considered implemented.</p>

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
<p><i>Paragraph 292</i></p> <p><u>Action</u> Invite UNESCO to promote awareness of human development benefits of space activities as lead agency for United Nations Decade of Education for Sustainable Development, beginning 2005</p> <p><u>Primary Actor(s)</u> COPUOS (through OOSA)</p>	<p>2008</p> <p>Argentina: In October 2007 CONAE and UNESCO have organized in the Gulich Institute in Cordoba a Seminar for Training of Educators in the use of space information. The seminar was addressed to teachers of the secondary level of all of Latin America.</p> <p>Chile: We have taken note.</p> <p>ASSESSMENT UNESCO is reporting to COPUOS on its activities to promote awareness of human development benefits of space activities under the agenda item “Space and Society” (A/60/20, paras. 262-263, A/61/20, para. 248, A/62/20, para 238).</p> <p>Could be considered implemented.</p>	
<p><i>Paragraph 293</i></p> <p><u>Action</u> Disseminate through home page information on efforts to increase awareness of importance of space activities. Continue updating information, building on compilation of results of Internet-based survey conducted by Action Team on Increasing Awareness</p> <p><u>Primary Actor(s)</u> OOSA with UNESCO</p>	<p>2008</p> <p>Chile: We have taken note.</p> <p>Turkey: Turkish space activities may be found on TUBITAK Space Technologies Research Institute and Tubitak Head Quarters web page.</p> <p>FAO: as for paragraph 303.</p> <p>2007</p> <p>Pakistan: Information about space, and other relevant updates as well as information about SUPARCO is disseminated through its website.</p> <p>ASSESSMENT The website of the Office for Outer Space Affairs (http://www.unoosa.org) and the website dedicated to the coordination of outer space activities within the United Nations system (http://www.uncoosa.unvienna.org) provide information on efforts to increase awareness of importance of space activities. The Inter-agency Meeting periodically updates and publishes the brochure “Space Solutions for the World’s Problems: How the United Nations family is using space technology for sustainable development”.</p> <p>Could be considered implemented.</p>	SUPARCO

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
b) Improving knowledge-sharing by promoting universal access to space-based communication services <i>Paragraph 297</i> <u>Action</u> (a) identify existing and planned space-based communication infrastructures committed to universal access; (b) identify the barriers to the implementation of space-based communication systems; (c) promote usage of space-based communication systems to assist in improving knowledge-sharing; (d) identify priority areas and target groups for knowledge-sharing; and start developing pilot programmes for implementation in near future <u>Primary Actor(s)</u> Action Team on Knowledge-sharing	<p>2008</p> <p>FAO: mainly through GLCN and GTOS.</p> <p>WHO: intends to strengthen health information management at district level in Africa through The Africa Health Infoway (AHI) initiative. The AHI covers 53 African countries, and is focused on district level health data collection, processing, and evidence-based decision making in health. ICTs appropriate for rural district communities, such as satellite-based communication, long distance Wifi connectivity, and solar-powered computing devices are among technology solutions planned for a roll out in the countries. An integrated district-based health information systems are also planned for deployment in potentially 7000 districts, in close coordination with relevant WHO units and external partners. AHI is a WHO-led effort, and pursued in close partnership with UN-ECA, International Telecommunications Union, the African Union Commission, and a number of IT companies with technologies appropriate for the African environment.</p> <p>2007</p> <p>Pakistan:</p> <ul style="list-style-type: none"> - (a) SUPARCO has provided two transponders free of charge on board PAKSAT-1 satellite for educational purposes to Virtual University of Pakistan. <p>Thailand: The space-based communication services is a social contribution project to:</p> <ul style="list-style-type: none"> - Support national education projects in rural areas, - Encourage equal education by providing education via satellite, - Develop and support education, - Develop communications for education, especially in rural areas, - Support development of teaching, research and seminars, and other academic projects, - Support development of pedagogy suitable for modern society. <p>ASSESSMENT Action Team 9 on Knowledge-sharing has conducted a survey and received replies (see http://www.unoosa.org/docs/unisp-3/reports/at-09proposalcoupos.doc).</p>	

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
(c) Enhancing capacity-building in space-related activities	Could be considered implemented.	
<i>Paragraph 301</i>		
<u>Action</u>		
Support initiatives of Working Group on Education, Training and Capacity-Building of CEOS, to develop an Earth observation education and training Internet web portal and provide Earth observation data free of charge or at lowest possible cost for educational purposes. (To enhance capacity of developing countries in the development and wider use of Earth observation technologies, including satellite remote sensing and GIS) <u>Primary Actor(s)</u> Member States with OOSA	<p>2008</p> <p>Algeria: This portal is not available. Algeria has an education program in the field of space technology, which consists of: - the elaboration of an Arabic didactic system. - The organization of open days.</p> <p>Argentina: CONAE participates in the CEOS Working Group on Education. Argentine Space Program sets a data policy that contemplates provision of EO data free of charge or at lowest possible cost for educational purposes.</p> <p>Chile: In Chile, some of the information relating to territorial arrangements is available on www.smit.cl.</p> <p>2007</p> <p>Greece: There is an ongoing activity in Greece on education, training and capacity building to develop an Earth education and training scheme as well as a web portal.</p> <p>Pakistan: Data is being provided on low cost / free of cost for educational purposes. SUPARCO regularly conducts trainings on RS/GIS technologies for SRS user community. In this regard SUPARCO provided LandSAT data to NASA for its Global Mapping Project. Similarly SUPARCO provided data to IUCN and UNHIC.</p> <p>ASSESSMENT</p> <p>The CEOS Education Portal has been established (http://wgedu.ceos.org) OOSA is contributing to the work of the Working Group on Education, Training and Capacity-Building (WGEdu) of CEOS. This includes linking the WGEdu with the activities of the Regional Centres for Space Science and Technology Education (Affiliated to the United Nations).</p> <p>Could be considered implemented</p>	<p>Ministry of Education</p> <p>SUPARCO</p>
<i>Paragraph 302</i>		
<u>Action</u>		
Support the activities of regional centres, including possible organization of series of capacity-building activities in States	<p>2008</p> <p>Algeria: The ASAL works closely with the CRASTE-LF, through: - The provision of experts; - The organization of regional scientific demonstrations (seminar on climate</p>	

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
of their respective regions, by developing a database of experts from space agencies who could assist regional centres by providing specialized training, as well as making space-related education and training materials available for use by the regional centres. <u>Primary Actor(s)</u> Member States that have established space agencies	<p>Argentina: The Gulich Institute promotes the realization of capacity building activities in the use of space information. The National Space Program also includes the development of a program for spreading the capacity of using space information among children of ages 8 to 16.</p> <p>Chile: Chile supports all existing regional activities to provide educational outreach on space sciences and technology. It has established regular contact with the Brazilian and Mexican branches of the Regional Centre for Space Science and Technology Education in Latin America and the Caribbean CRECTEALC.</p> <p>Turkey: Establishment of Turkish Space Agency is still on development stage and waiting for approval at the Turkish Parliament.</p> <p>FAO: GLCN is developing a database which contains names and contact details of individuals involved in GIS and land cover related activities. In addition, country profiles are being developed to provide an overview of the status of activities and available data for each country.</p>	JAXA
	<p>2007</p> <p>Japan: Under the initiative of the APRSAF, Joint Project Team Meeting for establishing a disaster management support system in the Asia-Pacific region was held and the meeting discussed about the implementation plan of the "Sentinel-Asia". Sentinel Asia is an activity that shares disaster-related information such as images acquired by earth observation satellites through the Internet in order to contribute to disaster management in the Asia-Pacific region. It is jointly promoted by space organizations who are members of the Asia-Pacific Regional Space Agency Forum (APRSAF) and disaster related organizations in Asia such as the Asian Disaster Reduction Centre, as well as Keio University, which provides a geographic information system on the Internet called Web-GIS.</p> <p>JAXA has been operating Asia Pacific Earth Observation Pilot Project jointly with Asian Institute of Technology (AIT) for the wider use of earth observation technology, including satellite remote sensing, global mapping and GIS.</p>	SUPARCO
	<p>Pakistan:</p> <ol style="list-style-type: none"> 1. SUPARCO organizes on regular basis international; seminars, workshops, and symposiums on Remote Sensing and GIS technologies. Experts from SPOT Image, 	

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
	<p>EADS, ESA, SUPARCO, JICA, and participants from the South Asian countries participate in these conferences.</p> <p>2. SUPARCO has been assisting university students and faculty in carrying out Masters/ PhD research work on topics such as Assessing Flooding Extant of River Indus with MODIS (satellite) data, Drought monitoring using (satellite) data.</p> <p>3. SUPARCO, in collaboration with ISNET and Islamic Development Bank, organizes short training courses, seminars and workshops for human resource development of OIC countries.</p> <p>Thailand: Capacity building is one of GISTDA's mandates and GISTDA's Institute of Space Knowledge Development (ISKD) is responsible for training in areas of Space Technology and Geo-Informatics. The ISKD is now conducting more than 20 training courses per year and is well equipped with lecture rooms, computer laboratories and archived satellite data. Moreover, GISTDA has linkages with five regional centres in Chiangmai (Chiangmai University in the North), Pitsanuloke (Naresuan University in the Lower North), Khon Kaen (Khon Kaen University in the Northeast), Chonburi (Burapha University in the East) and Songkhla (Prince of Songkhla University in the South).</p> <p>ASSESSMENT On-going activities by the primary actors.</p>	
	<p>2008</p> <p>Argentina: CONAE contributes to the organization of capacity building activities in Latin America by providing the resources available at the Gulich Institute.</p> <p>Chile: We have taken note.</p> <p>Turkey: Turkish space activities may be found on TUBITAK Space Technologies Research Institute and Tubitak Head Quarters web page.</p>	<p>WHO: In Zambia, the project initiated by WHO, REACH Trust Malawi and the Southern African network on Equity in Health (EQUINET) has now moved into a capacity building exercise aiming at addressing the needs in terms of geographic information and GIS capacities to support HIV/AIDS monitoring, evaluation and response in Zambia. 17 local and international institutions, including WHO and UNECA, are now part of the Working Group which has been created in order to fill the exist gaps. The reports of the different meeting that already took place as well as</p>
<i>Paragraph 303</i>	<p><u>Action</u></p> <p>Assist international efforts to coordinate capacity-building activities by disseminating, through web sites, a list of international activities held around the world to strengthen capacity of developing countries, in particular those organized by developing countries seeking assistance.</p> <p><u>Primary Actor(s)</u> OOSA and UNESCO with regional centres</p>	30

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
	<p>the associated information can be downloaded from: http://www.who.int/whosis/database/gis/EQU/GIS_HIV_ZMB.htm. A similar process is also underway in Malawi, the related material being available from: http://www.who.int/whosis/database/gis/EQU/GIS_HIV_AIDS_MW1.htm.</p> <p>ASSESSMENT</p> <p>OOSA has been maintaining a 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 respond to specific recommendations contained in the Johannesburg Plan of Implementation of the World Summit on Sustainable Development (WSSD) (see http://www.uncosa.unvienna.org/uncosa/en/wssd/index.html). OOSA, in the framework of the Programme on Space Applications, organizes the annual United Nations/Austria/European Space Agency Symposium (see http://www.unoosa.org/unoosa/en/SAP/graz/index.html). The theme of the Symposium is synchronized with the thematic clusters of the CSD. The Committee contributed to the work of the Commission on Sustainable Development during the policy year for the thematic cluster 2006-2007 and 2008-2009 (A/AC.105/872, A/AC.105/892). See also recommendation under para. 232.</p> <p>International activities that are brought to the attention of the Office are regularly being disseminated to relevant parties, including the regional centres, through the OOSA and Inter-Agency Meeting websites, as well as through relevant mailing lists.</p> <p>Could be considered implemented</p>	
	<p>2008</p> <p>Algeria: contributed in the framework of the seminar held in Paris on May 30 and June 1, 2007 dedicated to the role of earth observation satellites in sustainable development in Africa by the proposal of a strategic plan in the short, medium and long term.</p> <p>Argentina: Activity organized together by CONAE and UNESCO in October 2007, in Argentina, at the Gulich Institute, for participants from Latin America.</p> <p>Japan: JAXA, Through its Space Education Center, organised the following Primary Actor(s)</p>	<p>CNES; ESA; NOAA; NASA; NOAA; USGS</p> <p>1. Vietnamise</p>
	<p><i>Paragraph 304</i></p> <p><u>Action</u></p> <p>Implement capacity-building activities, focusing particularly on teachers, young professionals and decision makers, to support UNESCO Space Education Programme. (This would be a contribution of COPUOS and OOSA to United Nations Decade of Education for Sustainable Development (2005 to 2014)).</p> <p><u>Primary Actor(s)</u></p> <p>Member States with OOSA</p>	

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
	<p>activities within the framework of the Asia-Pacific Regional Space Agency Forum (APRSAF) as part of the activities of UNESCO Space Educational Programme:</p> <ol style="list-style-type: none"> 1. APRSF/UNESCO Space Education Forum (4 March 2006, Ha Noi, Vietnam) for primary and secondary school teachers and students; 2. APRSF/UNESC/LAPAN Space Education Seminar (11-12 December 2006, Jakarta, Indonesia) school teachers. <p>JAXA, through its space Education Center, supported the following activities of UNESCO Space Education programme by sending experts (activities No.1-3 below) and by providing education materials and equipment for hands-on sessions to experience water rocket launch:</p> <ol style="list-style-type: none"> 1. UNESCO Space Camps held in Colombia (Dec. 2005); 2. UNESCO Space Workshops held in Vietnam (March 2006); 3. UNESCO Space Campus held in Ecuador (May 2007); 4. Water Rocket Launch events held during the World SpaceWeek in Argentina, Brazil, Colombia, Ecuador, Nigeria, Philippines and Vietnam and coordinated by UNESCO (October 2007). <p>APRSAF Space Education and Awareness Working Group, for which JAXA Space Education Office serves as the Secretariat, agreed at its last meeting, held in Bangalore, India, in November 2007, that the convening of space education forums and seminars in developing countries for students and teachers of primary and secondary schools should continue within the framework of APRSAF in cooperation with UNESCO.</p>	<p>Academy of Science and Technology (VAST) and UNESCO;</p> <p>2. National Institute of Aeronautics and Space (LAPAN) and UNESCO</p>

2007

Greece: There is an ongoing activity in Greece for the implementation of activities related to capacity-building, focusing particularly on teachers, young professionals and decision makers.

Pakistan: SUPARCO celebrates World Space Week (WSW) each year with the objective of involving students and teachers in creating awareness about space science, technology and their applications.

Thailand: Thailand organized related activities to support Space Education Programme on teachers, young professionals and decision makers, as follows:

- Children's Day 2007: In the year 2007, the children's day was organized on Saturday, 13 January 2007. GIISTDA held activities at Ladkrabang Ground Receiving Station and at the parliament. Space related activities games and entertainments were provided at the Ground Receiving Station, while THEOS mascot was be presented at

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
the parliament.	<p>- GISTDA Day: The event was organized by the Southern Regional Geo-informatics and Space Technology Center on Friday, 10 November 2006 at BP Simila Beach, Songkhla Province. 422 students and 83 teachers from 32 schools attended the lectures, learned from posters, and participated in many activities.</p> <p>- National Science and Technology Fair 2006: GISTDA arranged its exhibition in the National Science and Technology Fair 2006, organized by the Ministry of Science and Technology during 11-22 August 2006 at BITEC – Bangkok International Trade & Exhibition Centre, Bangna.</p> <p>- THEOS Satellite at The 9th Thailand International Kite Festival: Every two years, Thailand is hosting International Kite Festival. In 2006, over 30 kite teams representing 15 countries came to Rama VI Camp in Chaam, Phetchaburi Province in Thailand to participate in the 9th Thailand International Kite Festival held during 11-12 March 2006. THEOS kite was built in this festival as the first satellite kite in the world. Its size is equally to THEOS satellite that will be launched in mid 2007.</p>	
<i>Paragraph 305</i>	<p>ASSESSMENT Activities held in Nigeria and Colombia by UNESCO with contributions made by OOSA. Activities are also covered by the United Nations Programme on Space Applications. Activities organized by OOSA and other relevant organizations as part of the annual World Space Week contribute to the implementation of this recommendation.</p> <p>Could be considered implemented.</p>	<p>2007 Pakistan:</p> <ol style="list-style-type: none"> 1. Arranging OJTs, 2. Consultancy, 3. Short courses and hands on experience, 4. Seminars and discussions to make capacity building cost effective, 5. Collaborative projects in the relevant fields. <p>Thailand: Thailand plans to offer the training related to the Geo-informatics and</p>

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
	Space Technology to relevant agencies and organizations including neighbouring countries such as Vietnam, Laos, Myanmar, Cambodia etc. ASSESSMENT On-going activities by Inter-Agency Meeting on Outer Space Activities. Could be considered implemented.	ISNET, National user agencies
<i>Paragraph 306</i> <u>Action</u> Hold workshops and symposiums on regular basis with participation of youth in order to provide opportunities at regional level for exchange of experiences in capacity-building efforts. <u>Primary Actor(s)</u> OOSA and relevant organizations	2008 Algeria: Promote the use of space technologies by the organization of meeting and dedicated days to explain the role of space technologies and their application to improve economic and social sectors 2007 Pakistan: SUPARCO is regularly organizing seminars, workshops, and symposiums at local and international level in order to exchange the research based knowledge in various fields of space technologies and to educate and promote the use of space technology and its applications for national and international users. Undergraduate and graduate level students are invited to participate and attend these seminars/ workshops. ASSESSMENT OOSA in cooperation with other relevant organizations, such as UNESCO, IAF and the SGAC is continuing to regularly organize events with participation of youth. Activities organized by OOSA and other relevant organizations as part of the annual World Space Week contribute to the implementation of this recommendation. Could be considered implemented.	
<i>Paragraph 307</i> <u>Action</u> Develop and distribute educational booklets covering fundamentals of space science that could serve as educational tools for young people in all countries. <u>Primary Actor(s)</u> Space agencies	2008 Algeria: An educational program "Educspace" initiated by the ASAL, aims to disseminate basic knowledge of space science, in Arabic language. Chile: We have taken note. Japan: through its Space Education Center, developed and distributed the - UNESCO	

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
	<p>publication entitled “Educator’s Manual for Water Rockets”, which contains fundamentals of rocket science and suggestions for teaching scientific principles involved in making and launching water rockets, and the accompanying DVD in English language.</p> <p>In cooperation with UNESCO, the above Educator’s Manual and DVD are being translated into Spanish for distribution in 2008.</p> <p>At its last meeting, APRSAF Space Education and Awareness Working Group invited its members to submit to the Secretariat the educational materials available and information on the teaching methods used in their countries for circulation through the web site of the Working Group and that of UNESCO.</p> <p>Turkey: Establishment of Turkish Space Agency is still on development stage and waiting for approval at the Turkish Parliament.</p>	<ul style="list-style-type: none"> - Members of APRSAF Space Education and Awareness Working group, including UNESCO
<u>2007</u>	<p>Pakistan:</p> <ol style="list-style-type: none"> 1. “World Space Week” is held every year and includes distribution of booklets covering fundamentals of space sciences and conduction of quiz competition among students of various age groups for their awareness in the space science and technology. 2. Distributed brochure about Telemedicine and pamphlet on Role of satellites in cartography, meteorology and disaster monitoring etc to general public. <p>Thailand:</p> <ul style="list-style-type: none"> - Basic Knowledge for kids: Space Technology and Geo-Informatics. This book describes the basics of remote sensing, GPS, and GIS for kids. It is an updated version of the book printed last year. For more details please access to website: www.gistda.or.th/wsw/wsw.html <p>ASSESSMENT</p> <p>On-going activities by the primary actors.</p>	
<i>Paragraph 308</i>	<p>2008</p> <p>Chile: Chile is interested.</p> <p>FAO: Meetings have been organized but not specifically for addressing the above points.</p>	<p>Action</p> <p>Organize a meeting of interested Member States and space agencies to identify parties willing to undertake actions in paragraphs above (301-307)</p> <p>Primary Actor(s)</p>

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
OOSA	<p>2007 Pakistan: Provide training and organize seminars in space application programs to participants from OIC member countries.</p> <p>ASSESSMENT</p> <p>OOSA is working through several channels in implementing this recommendation. Meetings are held in cooperation with World Space Week Association during the annual International Astronautical Congress and on the margins of Committee Sessions. Activities with UNESCO and other UN entities are coordinated at the annual Sessions of the Inter-Agency Meeting on Outer Space Activities. As part of the United Nations Programme on Space Applications the Office is regularly addressing the actions in paragraphs 301-307. Space agencies have established their own coordination mechanism for education-related activities (Arrangement to establish the International Space Education Board (ISEB) signed on 17 October 2005).</p> <p>Could be considered implemented.</p>	SUPARCO
	<p>2008 Algeria: The archive ALSAT-1 images are provided free of cost to the student and researchers who use satellite images in their works.</p> <p>Argentina: Argentina's data policy for national space program missions is compatible with this request. Data accessible through CONAE's website.</p> <p>Turkey: TUBITAK Space Technologies Research Institute is Turkish Government entity and developing RASAT optical earth observation satellite for the scientific and civilian purposes. Estimated launch date is 3rd Q of 2009. Satellite is planned to have 7.5m panchromatic, 15m multispectral resolutions.</p> <p>FAO: through activities such as GLCN), has a large outreach and dissemination programme, providing data (such as Landsat) to national and regional entities.</p>	Mainly UNEP and Governments of the Netherlands and Italy
	<p>2007 Greece: This is done in the frame of bilateral scientific and technological cooperation programmes between Greece and several developing countries.</p>	GSRT, NOA, HCMR, NAGREF, NCSR, Demokritos

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
Japan:	<p>JAXA completed the initial functional verification phase of the Advanced Land Observing Satellite "Daichi" (ALOS) which was launched on January 24, 2006, from the Tanegashima Space Centre and moves to the operations phase from October 2006. Along with the start of the mission operation, observation data (called "ALOS data") from the "Daichi" will become available to the public. In Japan, you can receive data from two Japanese organizations: The Remote Sensing Technology Centre of Japan (RESTEC), and the Earth Remote Sensing Data Analysis Centre (ERSDAC), and some overseas local organizations designated by ALOS node agencies*¹ as they are ready to provide data. Some fees are required to receive the data. JAXA also started providing data to the Sentinel Asia, which JAXA and other related organizations are currently establishing as a disaster management support system in the Asia-Pacific region.</p> <p>*1The system to process and provide data in each region by dividing the world into four areas:</p> <ul style="list-style-type: none"> - Overseas Data Nodes and contact point: European Space Agency (ESA) for Europe and African regions; Alaska Satellite Facility (ASF), University of Alaska Fairbanks for North and South America regions; Geoscience Australia (GA) for Oceania regions; and Geo-Informatics and Space Technology Development Agency (GISTDA) for Asia regions (exclusively for Thailand). <p>Pakistan: SRS archived data is delivered to students of developing countries in the form of soft copies at the lowest costs for their research projects.</p> <p>Thailand: Geo-Informatics and Space Technology Development Agency – GISTDA, the core agency for Earth observation satellite and GIS activities in Thailand, has provided archived satellite images, upon request, free of charge and at the low cost for government agencies. For more information, please access to website: www.gistda.or.th</p> <p>ASSESSMENT</p> <p>On-going activities by the primary actors.</p>	JAXA
(d) Identifying sources of financing to support development activities with space applications	<p>Paragraph 313</p> <p>2008</p> <p>Action</p> <p>Implement the following:</p> <p>(a) Organize workshops for experts in development banks and</p>	<p>Argentina: has been granted a credit from the Interamerican Development Bank to support the PROSAT Project, that includes the development of the SAOCOM (SAR in L-Band) satellite mission and a capacity development program. To get the</p>

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
<p>aid agencies to learn about possibilities offered by space applications;</p> <p>(b) Identify specific measures to promote inclusion of training components in projects to be funded and encourage formal commitment from Governments concerned to maintain structures developed and to retain personnel trained as a result of project;</p> <p>(c) Identify ways to promote inclusion of funds for necessary investment in specific budget and amortization of that investment in subsequent budgets, in order to allow for reimbursement of initial investment, and to provide guarantees for foreseeable internal return in projects in order to ensure their operational nature in long term.</p> <p><u>Primary Actor(s)</u></p> <p>COPOUS through Action Team on Innovative Sources of Funding</p>	<p>approval, CONAE had to establish the return of the investment by studying the impact that improving EO observation data such as Soil Moisture would have on socio-economic activities.</p> <p>Chile: We have taken note.</p> <p>FAO: Numerous regional and national training activities have been undertaken, for details see : www.glen.org</p> <p>Pakistan:</p> <ul style="list-style-type: none"> - (b) Encourage the user organizations to include the training component and its financial aspects in their projects related to space technology applications. <p>ASSESSMENT</p> <p>Final report of the Action Team on New and Innovative Sources of Funding (Action Team 32) (A/AC.105/L.246) addresses the actions.</p> <p>To review the existing best practices within other United Nations entities, OOSA has included an item on “Public-private partnerships and innovative funding approaches in the United Nations system to promote the use of space technology and its applications” on the agenda of the Twenty-eighth Session of the Inter-Agency Meeting (IAM) on Outer Space Activities, held in January 2008. The Open Informal Session, immediately following the IAM, addressed the same topic and provided opportunities for discussions with Member States (see http://www.uncosa.org/uncosa/en/iamos/index.html).</p> <p>A webpage has been set up on OOSA’s website providing a summary of its fund-raising related activities (http://www.unoosa.org/oosa/en/fundraising/index.html)</p> <p>The issue of developing a fund-raising strategy was part of the recommendations by the United Nations Office for Internal Oversight Services (OIOS) as a result of its inspection of the Office for Outer Space Affairs in late 2006. A fundraising strategy is under consideration by OOSA as part of its overall implementation of the recommendations by OIOS.</p>	SUPARCO
<p><i>Paragraph 314</i></p> <p><u>Action</u></p> <p>(a) Consider placing a higher priority on capacity-building initiatives in fields of space science and technology; and</p>	<p>2008</p> <p>Chile: We have taken note.</p> <p>FAO: High priority is given to capacity building and it is encouraged that FAO</p>	38

Action and Primary Actor(s)	Actions/activities taken or being undertaken (replies received by member States and international organizations in 2007 and 2008 in response to Note Verbale CU 2006/130 and CU 2007/160, and overall assessment of the status of implementation)	Partners
(b) Use official development assistance funds to help achieve capacity-building goals. <i>See also paras. 299-310</i>	projects contain such a component. When requested by countries, FAO tries to secure funds for assistance. Activities are usually undertaken with national partners.	
<u>Primary Actor(s)</u> States that receive official development assistance funds	2007 Greece: There is a constant effort from Greece to provide official development assistant funds to support neighbouring countries for their capacity-building. Pakistan: SUPARCO is collaborating with OIC member countries by organizing training courses and seminars for capacity building in the field of space science, technology and its applications.	Ministry for Foreign Affairs SUPARCO
<u>Action</u> Make efforts to build partnerships with countries requesting assistance and directly support their capacity-building through exchanges of information and experience	Primary Actor(s) Countries that provide official development assistance funds	
<u>Paragraph 315</u>	ASSESSMENT On-going activities by the primary actors.	
<u>Action</u> Increase number of donors contributing to the Trust Fund for the United Nations Programme on Space Applications (To increase predictability of voluntary contribution to support work of Office for Outer Space Affairs)	2008 Chile: Chile is a participant. ASSESSMENT On-going activities by the primary actors. Member States and other entities are called upon at annual meetings of the Committee and its Subcommittees to contribute to the Trust Fund.	
<i>See also operative paragraph 17 of General Assembly Resolution 59/2</i>		
<u>Primary Actor(s)</u> Member States/COPUOS		

Recommendations contained United Nations General Assembly resolution 59/2

Action, Primary Completion	Primary Actor(s)	Actor(s) and Indicated Time for	Status of Implementation	Partners
<i>Operative Paragraph 5</i>				
<u>Action</u>				
Carry out the actions contained in the Plan of Action on a priority basis for the further implementation of the recommendations of UNISPACE III, in particular its resolution entitled “The Space Millennium: Vienna Declaration on Space and Human Development”				
<u>Primary Actor(s)</u>	All Governments, entities of the United Nations system as well as intergovernmental and non-governmental entities conducting space-related activities			
<i>Operative Paragraph 6</i>				
<u>Action</u>				
Implement some of the actions contained in the Plan of Action through the consideration of items of the agendas of the Committee or its subsidiary bodies and through those action teams that will continue their work as endorsed by the Committee				
<u>Primary Actor(s)</u>	COPUOS			
<i>Operative Paragraph 7</i>				
<u>Action</u>				
Examine the contributions that could be made by space science and technology and their applications to one or more of the issues selected by the Commission on Sustainable Development as a thematic cluster and to provide substantive inputs for consideration by the Commission				
<i>See also paragraph 232 of Plan of Action as contained in A/59/174</i>				
<u>Primary Actor(s)</u>	COPUOS			
<i>Operative Paragraph 8</i>				
<u>Action</u>				
<u>ASSESSMENT</u>				
At its forty-ninth session, the Committee considered an agenda item on the				

Action, Primary Actor(s) and Indicated Time for Completion	Status of Implementation	Partners
<p>Include items in the agendas of its future sessions, starting from its forty-ninth session, in 2006, to consider its contributions to the work of those entities that are responsible for convening United Nations conferences and/or for implementing their outcomes;</p> <p><i>See also paragraph 289 of Plan of Action as contained in A/59/174</i></p> <p><u>Primary Actor(s)</u> COPUOS</p>	<p>Recommendations of the World Summit on the Information Society (see A/61/20 (Supplement 20)).</p> <p>See also under paragraph 232 in table above regarding contribution by COPUOS to CSD thematic clusters.</p> <p>Could be considered implemented.</p>	
<p><i>Operative Paragraph 9</i></p> <p><u>Action</u></p> <p>Conduct study on the possibility of creating an international entity to provide for coordination and the means of realistically optimizing the effectiveness of space-based services for use in disaster management</p> <p><i>See also paragraph 256 of Plan of Action as contained in A/59/174</i></p> <p><u>Primary Actor(s)</u></p> <p>Ad hoc expert group, with experts to be provided by interested Member States and relevant international organizations</p> <p><u>Action</u></p> <p>Review progress in the work of the ad hoc expert group, at its forty-eighth session, in 2005</p> <p><u>Primary Actor(s)</u> COPUOS</p>	<p>2007</p> <p>Pakistan: SUPARCO carried out various studies, particularly in the disaster management, using satellite based information.</p> <p>ASSESSMENT</p> <p>The study was conducted and considered the Scientific and Technical Subcommittee, and subsequently by the Committee and resulted in the creation of UN-SPIDER.</p> <p>Could be considered implemented.</p>	SUPARCO
<p><i>Operative Paragraph 10</i></p> <p><u>Action</u></p> <p>Make contributions to the Trust Fund for the United Nations Programme on Space Applications for preparing the study by the ad hoc expert group</p> <p><i>See also paragraph 258 of Plan of Action as contained in A/59/174</i></p> <p><u>Primary Actor(s)</u> Member States</p>	<p>2008</p> <p>Chile: We have taken note.</p> <p>2007</p> <p>Greece: This can be considered since Greece has joined the European Space Agency.</p> <p>ASSESSMENT</p> <p>Resulted in the establishment of UN-SPIDER.</p> <p>Could be considered implemented.</p>	Ministry of Foreign Affairs
<p><i>Operative Paragraph 11</i></p> <p><u>Action</u></p>	<p>ASSESSMENT</p> <p>The International Committee on GNSS (ICG) was established in December 2005.</p>	

Action, Primary Actor(s) and Indicated Time for Completion	Status of Implementation	Partners
Establish an international committee on GNSS as proposed in the Plan of Action (In order to maximize the benefits of the use and applications of GNSS to support sustainable development.) See also paragraph 267 of Plan of Action as contained in A/59/174 Primary Actor(s) Global Navigation Satellite System (GNSS) and augmentation providers	<u>Could be considered implemented.</u>	
<i>Operative Paragraph 12</i> <u>Action</u> Provide support to implement the Space Programme of the World Meteorological Organization and its Long-term Strategy as proposed in the Plan of Action (In order to expand international cooperation in meteorological satellite applications to enhance weather and climate forecasting.) See also paragraph 273 of Plan of Action as contained in A/59/174 Primary Actor(s) Member States	2008 Chile: All the required support is provided by the Chilean Meteorological Office of the Civil Aeronautics Board. FAO: collaborates with WMO on numerous activities, including areas related to meteorology and hydrology. For example, support is provided to GCOS and its implementation plan to support the UNFCCC (which contains a satellite component). 2007 Greece: There is an involvement and fruitful collaboration with WMO Pakistan: Pakistan Meteorological Department is already participating in this regard.	National Meteorological Service, NOA, GSRT Pakistan Meteorological Department
<i>Operative Paragraph 13</i> <u>Action</u> ... (a) ... (b) ... (c) Requests the Committee to undertake further implementation of UNISPACE III recommendations with a view to enhancing the capacity of developing countries to initiate space application programmes Primary Actor(s) COPUOS	ASSESSMENT On-going activities by the primary actors. ASSESSMENT On-going consideration by COPUOS.	
<i>Operative Paragraph 14</i>	ASSESSMENT OOSA has identified priority themes as reflected in the annual reports by the Expert	

Action, Primary Actor(s) and Indicated Time for Completion	Status of Implementation	Partners
<u>Action</u> Cluster, to extent feasible, activities of the United Nations Programme on Space Applications, to address a few priority themes to be selected by the Committee for each year <u>Primary Actor(s)</u> OOSA and COPUOS	on Space Applications. Could be considered implemented.	
<u>Operative Paragraph 15</u> <u>Action</u> Review the activities that are included in the Plan of Action for implementation by the Office and submit a proposal to the Committee on how those activities could be included in its programme of work <i>See also paragraph 323 of Plan of Action as contained in A/59/174</i> <u>Primary Actor(s)</u> OOSA	<u>ASSESSMENT</u> In accordance with paragraph 323 of A/59/174, the Office presented to the 48 th session of the Committee the report: "Implementation of the Plan of Action of the Committee on the Peaceful Uses of Outer Space for the implementation of the recommendations of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space: strategy of the Office for Outer Space Affairs" (A/AC.105/L.262). Could be considered implemented.	
<u>Operative Paragraph 16</u> <u>Action</u> Implement activities of the Office for Outer Space Affairs as contained in the Plan of Action and ensure that those activities are included in the programme of work for the biennium 2006–2007 <u>Primary Actor(s)</u> OOSA and Secretary-General	<u>2008</u> <u>Chile</u> : We have taken note. <u>ASSESSMENT</u> See under paragraph 15 above. Activities identified for implementation by the Office in document L.262 that are still not implemented are being referred to under relevant recommendations as reflected in the table above. Could be considered implemented.	
<u>Operative Paragraph 17</u> <u>Action</u> Contribute to the Trust Fund for the United Nations Programme on Space Applications (To allow full flexibility for the Office for Outer Space Affairs to carry out the activities of the Programme in accordance with the priorities set by the Committee.) <i>See also paragraph 315 of Plan of Action as contained in A/59/174</i> <u>Primary Actor(s)</u> All Member States and space-related intergovernmental and	<u>2008</u> <u>Chile</u> : We have taken note. <u>2007</u> <u>Greece</u> : This has to be decided. <u>ASSESSMENT</u> On-going activities by the primary actors. Member States and other entities are called	Ministry of Foreign Affairs in cooperation with other competent authorities

Action, Primary Actor(s) and Indicated Time for Completion	Status of Implementation	Partners
non-governmental entities	upon at annual meetings of the Committee and its Subcommittees to contribute to the Trust Fund.	
<p><i>Operative Paragraph 18</i></p> <p><u>Action</u> Continue considering in future sessions the implementation of the recommendations of UNISPACE III until the Committee considers that concrete results are achieved.</p> <p><u>Primary Actor(s)</u> COPUOS</p>	<p>2008 Chile: We have taken note.</p> <p>FAO: will be considered.</p> <p>ASSESSMENT To be determined by the Committee.</p>	