

UN-SPIDER

September 2010 Updates

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http://www.ungiwg.org/cgi-bin/mailman/listinfo/unspider

UN-SPIDER News

1. High Level Conference "Space for the African Citizen" in Brussels

UNOOSA/UN-SPIDER Senior Expert Jörg Szarzynski participated in the High Level Conference "Space for the African Citizen" in Brussels. Organized by the Belgian High Representation for Space Policy under the auspices of the Belgian Presidency of the Council of the European Union, the main goal of the Conference was to demonstrate the relevance of space technologies as a transversal tool to favor development and growth, to facilitate good resource management, and to contribute to the preparation and the implementation of policies in various fields, such as health, education, agriculture, and transport. Major discussion points during this meeting were 1.) the concept and establishment of an African Space Agency, 2.) a Pan-African University Institute on Space Science, and 3.) current and future projects in Africa such as AMESD, TIGER and especially GMES for Africa. Mr. Szarzynski was also invited to participate in the preceeding High Level Policy Meeting on Space to give a statement on behalf of UNOOSA. This meeting was specifically intended as a discussion forum between high-level representatives from Europe and from Africa. During this meeting, Report No. 26 of the European Space Policy Institute (ESPI), called: "European-African Partnership in Satellite Applications for Sustainable Development - A Comprehensive Mapping of European-African Actors and Activities", was distributed to the participants. UNOOSA/UN-SPIDER is mentioned on pp. 56 – 58. The report is available on the ESPI website.

For further information >> <u>UN-SPIDER News</u>, <u>ESPI Report</u>

2. UN-SPIDER strengthening ties with Crisis Mappers at ICCM 2010 in Boston

UN-SPIDER Programme Coordinator David Stevens participated in the 2nd International Conference on Crisis Mapping (ICCM 2010): Haiti and Beyond that took place in Boston, USA from 1 to 3 October this year, organised by the International Network of Crisis Mappers, CM*Net. This year's conference saw a threefold increase in the number of participants demonstrating the growing importance of this informal community. There is an increasing awareness of the need to involve this network in the work of the emergency response

community. At this year's conference, several UN organizations were represented, including the United Nations Office for Information and Communication Technology (OICT), the UN Office for the Coordination of Humanitarian Affairs (OCHA), the United Nations Development Programme (UNDP), the United Nations Children's Fund (UNICEF), the UN Global Pulse, UNOOSA, United Nations Institute for Training and Research (UNITAR/UNOSAT) and the World Bank. The co-founder of CM*Net, Ms. Jen Ziemke, will be attending the upcoming UN-SPIDER workshop in Bonn providing an opportunity of further cooperation between the UN-SPIDER Network and the Crisis Mappers network. For further information >> Crisis Mappers

3. SpaceAid supporting response to floods in Senegal

In the past month, Senegal received support through the UN-SPIDER SpaceAid framework in support of its response to floods. UN-SPIDER was initially contacted by the local UN OCHA office in Dakar, Senegal, which communicated the extent of the event and areas of interest for the acquisition of satellite imagery. On 10 September, the Services and Applications For Emergency Response (SAFER) was activated at the request of the World Food Programme (WFP) on behalf of UNOOSA/UN-SPIDER, with the Center for Satellite Based Crisis Information (ZKI) as a value-adder, further supported by the Service Régional de Traitement d'Image et de Télédétection (SERTIT). On its SpaceAid Updates page UN-SPIDER provided the coordinates of the areas affected by the disaster and constantly updated information about the satellite imagery that was collected. Available space-based information, including a satellite tasking table as well as contact details were made available on the respective SpaceAid Updates page. During the upcoming UN-SPIDER workshop in Bonn, representatives from SAFER, from UN OCHA Dakar, and from ZKI will present their work and hold follow-up discussions on the response activities.

For further information >> SpaceAid Senegal

4. Research on the UN-SPIDER Knowledge Portal as a human-technology network

Mr. Florian Neisser, Geographer at the University of Bonn, has finalized his research on the UN-SPIDER Knowledge Portal as "An Interactive Platform to Foster Space Technology Utilization in Disaster Management". His thesis addresses the problem of a communication gap between the space technology and the disaster management community by applying the Actor-Network Theory and analyzing this network of human and technological actors. The abstract is available online on the Knowledge Portal and the complete thesis can be obtained upon request.

For further information >> UN-SPIDER News

5. Read our latest Newsletter and follow UN-SPIDER on Facebook and Twitter

With a steadily increasing number of people following our posts, UN-SPIDER is continuously updating its own and community news on its Facebook page and via the Twitter profile. Check out the links below to follow us on Facebook and Twitter!

A new issue of the UN-SPIDER Newsletter was released recently and can be downloaded from the Knowledge Portal. It includes a case study on flood monitoring by the Ukrainian Space Research Institute, an interview with the Executive Secretary of the Colombian Space Commission, and reports about the latest UN-SPIDER outreach activities, SpaceAid support, and developments in the UN-SPIDER Network.

For further information >> UN-SPIDER Newsletter, UN-SPIDER on Facebook, UN-SPIDER on Twitter

Community News

6. Sentinel Asia covering volcano eruption in Indonesia and flash flood in India

Sentinel Asia, the Asia-Pacific Regional Space Agency Forum (APRSAF)-led initiative for supporting disaster management activities in the Asia-Pacific region by applying web-GIS and space-based technology, has been observing two disasters in the month of September: the eruption of the Sinabung volcano on the island of Sumatra, Indonesia, and flash floods in northern India. The corresponding satellite imagery has been uploaded to Sentinel Asia's website.

For further information >> Sentinel Asia

7. International Charter Space and Major Disasters activated nine times in September

The International Charter Space and Major Disasters was activated nine times covering disasters in Nigeria, Sudan, India, Mexico, Bermuda, Slovenia, Canada, and the USA. Seven out of the nine activations were in response to floods, while Bermuda and Mexico were hit by hurricanes. Images and products delivered by the Charter are available on the respective pages on the Charter homepage.

For further information >> <u>International Charter Space and Major Disasters</u>

8. SAFER activated for fires in France

Late august 2010, several fires simultaneously occurred in the south of France, destroying thousands of hectares of scrubland and forcing for the evacuation of hundreds of people. Strong winds worsened conditions for fire fighters and rescue workers. Fire extent maps and damage assessment maps were produced by SERTIT in the SAFER framework.

For further information >> SAFER

9. NASA Administrator launches SERVIR-Himalaya Programme with ICIMOD in Kathmandu

The SERVIR-Himalaya system was launched on the occasion of the international symposium 'Benefiting from Earth Observation: Bridging the Data Gap for Adaptation to Climate Change in the Hindu Kush-Himalayan Region' by Mr. Charles F. Bolden Jr., NASA Administrator, and Mr. Michael Yates, Senior Deputy Assistant Administrator of USAID in Kathmandu. SERVIR is an earth observation, monitoring, and visualization system that integrates satellite and other geospatial data as a contribution to improved scientific knowledge to support decision-making by managers, as well as researchers, students, and the general public.

The SERVIR programme is designed to build the capacity of countries to use earth observation and geospatial information technologies in different regions around the world. The improved scientific knowledge will benefit disaster management, biodiversity conservation, transboundary air pollution monitoring, snow and glacier monitoring, and mountain ecosystem management. In the context of achieving these common goals, USAID, NASA, and ICIMOD have joined hands to work together to establish SERVIR-Himalaya as the third regional SERVIR operational facility.

For further information >> ICIMOD

10. MapAction reviews challenges of gathering and managing spatial data sets in humanitarian emergencies

In September, MapAction published a technical white paper that reviews the challenges of gathering and managing spatial data sets in sudden-onset humanitarian emergencies, and gives an outline of MapAction's new data management framework. The document aims to make MapAction's current and planned data model visible to other humanitarian organizations, in case this is of use in their own work. Comments are welcome (info@mapaction.org) and crisis mapping orgs are welcome to adopt/adapt the methods and tools if useful. For the full paper >> MapAction Data Model White Paper

11. Satellite to provide images of disasters

A team of Japanese scientists has installed a receiver that will directly provide real time satellite imagery when natural disasters occur in the country. The receiver was installed on the premises of International Centre for Integrated Mountain Development (ICIMOD) in Khumaltar of Lalitpur. The team led by Shinya Tanaka, senior engineer at Japan Aerospace Exploration Agency (JAXA) installed the receiver. "This satellite receiver will provide direct real time satellite imageries of disaster afflicted areas directly which would help in rapid response mapping and monitoring of major disasters," said Dr Giriraj Amarnath, remote sensing specialist at ICIMOD. The JAXA WINDS (Wideband Internetworking Engineering Test and Demonstration Satellites 'KIZUNA') receiving station at ICIMOD will be formally launched on October 3.

For further information >> The Himalayan Times

12.ESCAP launches Asia-Pacific mechanism on drought monitoring and early warning

The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), launched in to service a Regional Cooperative Mechanism on Drought Monitoring and Early Warning in Nanjing, China. The Mechanism provides satellite products for general drought monitoring and higher resolution products for identified high drought risk areas, and assists its members in developing localized products and services for relevant decision making. Countries with space-based capabilities in the region committed to provide satellite information based technical services through the Mechanism, to drought prone ESCAP member countries to help them achieve effective monitoring and early warning of drought events so that the Governments and relevant stakeholders will have more lead time to take measures in preventing drought hazards become major disasters.

For further information >> <u>Preventionweb</u>

13.DMCii-LED project exploits satellites to strengthen UK disaster response

Space is set to become an important resource for UK disaster response efforts. DMCii is leading a new European Space Agency (ESA) project to design and build a system for the UK civil resilience community - those tasked with responding to and recovering from disasters - putting space-based systems at their disposal. The system will be used for all types of emergencies listed in the UK's National Risk Register but the project's focus is on flood scenarios. Flooding in summer 2007 cost the UK an estimated Pounds 3 billion, with more than 55,000 homes and businesses inundated and hundreds of thousands of homes losing power or water. The project is being run by a consortium of five organizations: DMCii takes the lead role, with Infoterra Ltd supporting the Earth observation components, Avanti Communications taking the satellite communications role, Nottingham Scientific Ltd working on satellite navigation and the British Geological Survey providing additional expertise on geo hazards.

For further information >> SPACE DAILY

Upcoming UN-SPIDER Outreach Activities

Information on upcoming UN-SPIDER outreach activities can be obtained from the events section of the UN-SPIDER Knowledge Portal:

www.un-spider.org/events

Upcoming UN-SPIDER events

4th United Nations International UN-SPIDER Bonn Workshop on Disaster Management and Space Technology: "The 4C – Challenge: Communication – Coordination – Cooperation – Capacity Development", Bonn, 12-14 October 2010

The United Nations Office for Outer Space Affairs (UNOOSA), through its UN-SPIDER Programme (United Nations Platform for Space-based Information for Disaster Management and Emergency Response) together with the German Aerospace Center (DLR) are organizing the above mentioned workshop to promote the access and use of space-based technologies and solutions for disaster management and emergency response within relevant communities. Specifically, this Fourth International Workshop in Bonn will provide an opportunity to bring together decision-makers and experts from both the space technology and disaster management communities, international scientific organizations, knowledge transfer and educational institutions, as well as internationally active private companies, with the intention of sharing their best practices and to bring their knowledge, products and technologies for risk and disaster management, humanitarian aid and emergency response. Main topics of the fourth workshop will include:

- Space technology in support of risk and disaster management
- Satellite communications technology
- International support mechanisms and SpaceAid
- The UN-SPIDER network

For more information and registration: UN-SPIDER Events

Upcoming events supported by UN-SPIDER

4th Asian Ministerial Conference on Disaster Risk Reduction: Incorporating space-based information and technologies into DRR and CCA, Incheon, 25-28 October 2010

The main theme of the conference will be Disaster Risk Reduction (DRR) through Climate Change Adaptation (CCA). UN-SPIDER and ADRC, which is hosting one of the UN-SPIDER Regional Support Offices, are leading a technical session on 26 October 2010, from 12:30-14:00, to address the promotion of the utilization of satellite-based information and technologies for DRR and CCA. The objectives of this session are to recognize the rationale of the utilization of space technologies for DRR-CCA, to learn of the current use of space technologies for DRR-CCR, and to discuss how to be able to introduce the technologies in participants' own countries and what issues and challenges they could face. The outcomes and recommendations of this session will be addressed by the Ministers at the High-level Round.

For more information and registration: AMCDRR Korea

8th International Conference of the African Association of Remote Sensing and the Environment, Addis Ababa, 25-29 October 2010

This is one of the two major conferences in Africa in the area of GIS and Remote Sensing and anyone who is involved in geospatial technology and information should make a point of attending. UN-SPIDER will be

attending and contributing to a disaster management session. The four major scientific sub-themes of the conference are:

- Food and water security (mapping production zones, yield forecast, agricultural and pastoral systems, assessing (quality and quantity) of water resources in Africa, surface water body monitoring, seasonal hydrological characteristics assessment, flood forecasting).
- Energy resources (mapping, monitoring and management of energy resources, power infrastructure management, etc.).
- Disaster risk reduction (risk assessment for sustainable development, provision of geo-information on hazards and risks, disaster risk reduction in national policy, strengthening community level capacities to reduce disaster risk at the local level, disaster mitigation, vulnerability to compounded disasters, predicting vulnerability to urbanization and to climate change).
- Marine and costal management (resources & sustainable development, marine ecosystem, coastal, marine, and oceanography resources management, assimilation, modelling and forecasting: towards ocean and coastal products and services in Africa, quantitative indicators of risk and resilience of coastal populations, impacts of coastal inundation on coastal ecosystems, monitoring and modelling coastal lagoons).

For more information and registration: <u>AARSE</u>

34th International Symposium on Remote Sensing of Environment: "The GEOSS Era: Towards Operational Environmental Monitoring", Sydney, 10-15 April 2011

The Organizing Committee of the 34th International Symposium for Remote Sensing of the Environment (ISRSE) cordially invites you to visit Sydney and participate in what promises to be an excellent high quality Symposium on Remote Sensing of the Environment. ISRSE has become one of the main forums for programmatic discussions on remote sensing components of the 'Global Earth Observation system of Systems-GEOSS", currently being implemented through the Group on Earth Observation GEO, which (at the time of preparation) is composed of 80 member countries, 58 participating organizations and 5 observers. The Symposium will provide a platform for countries with established and emerging earth observation programs to report on their progress, as well as new initiatives in the remote sensing arena. As well, the 10-year Implementation Plan of the Group on Earth Observation (GEO) is well underway and therefore the Symposium provides an important opportunity for GEO members and task teams to present details of progress of their work. UNOOSA/UN-SPIDER will be attending and plans to organize a joint session with Sentinel Asia.

For more information and registration: ISRSE34

Gi4DM 2011 – GeoInformation for Disaster Management, Antalya, 3-8 May 2011

Geomatics technologies are able to support management and recovery in the aftermath of manmade and natural disasters. However, disaster management also poses big challenges in all aspects of the geo-information cycle, from data acquisition, processing, management and delivery. For the seventh time, the International Symposium on Geo-information for Disaster Management (Gi4DM) brings together researchers, developers, data providers and users from all over the world to discuss these challenges. The Gi4DM is coordinated by the ISPRS Ad hoc Committee on Risk and Disaster Management, Working Group 1 (Disaster) of the ISPRS Commission VIII (Remote Sensing and Policies) and Working Group 8 (3D Spatial Data Integration for Disaster Management and Environmental Monitoring) of the ISPRS Commission IV (Geodatabases and Digital Mapping). The indicative topics of interest will at least cover the fields of enterprise crisis management, public security and crisis management in city development, geo-information systems for disaster management, industrial crisis management, incident management systems, etc. The following themes are for reference:

- User Requirements
- Monitoring and processing
- Early Warning systems
- Early Impact systems
- Spatial Data Infrastructures

For more information and registration: Gi4DM

Conferences and Workshops

We maintain a Calendar of Events with upcoming Conferences, Meetings and Events relevant to the area of space-based solutions for disaster management and emergency response. The Calendar can be viewed at:

www.un-spider.org/events

The **United Nations Office for Outer Space Affairs (UNOOSA)** implements the decisions of the General Assembly and of the Committee on the Peaceful Uses of Outer Space and its two Subcommittees, the Scientific and Technical Subcommittee and the Legal Subcommittee. The Office is responsible for promoting international cooperation in the peaceful uses of outer space, and assisting developing countries in using space science and technology. Headquartered in Vienna, Austria, UNOOSA maintains a website at http://www.unoosa.org.

In its resolution 61/110 of 14 December 2006 the United Nations General Assembly agreed to establish the "United Nations Platform for Space-based Information for Disaster Management and Emergency Response - UN-SPIDER" as a programme within UNOOSA. UN-SPIDER focuses on the need to ensure access to and use of space-based solutions during all phases of the disaster management cycle.