



UN-SPIDER

March 2012 Updates

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UN-SPIDER at a glance

Technical Advisory Mission to Myanmar

At the request of the Government of Myanmar, UN-SPIDER carried out a Technical Advisory Mission to Myanmar from 19 to 23 March 2012. The mission aimed at evaluating the current and potential use of space-based information in all the aspects of disaster management and strengthen disaster risk management in the country by providing better access to space-based information for disaster risk reduction as well as response.

The mission allowed Myanmar agencies to exchange and establish links with the institutions represented by the team members. At the same time, the mission members were able to get in contact not only with representatives of Relief and Resettlement Department (RRD) of the Ministry of Social Welfare but with many stakeholders of the Myanmar disaster management, including the Ministry of Science and Technology, the Ministry of Water Resources, the Survey Department, the Forest Department, the Department of Meteorology and Hydrology, the Remote Sensing Department (Mandalay), Myanmar Engineering Society and Geosciences Society, the Fire Service Department, the Japanese International Cooperation Agency JICA, the Red Cross, and various United Nations agencies. The workshop was not only effective in generating the awareness and but also in getting valuable inputs to strengthen space technology in disaster management.

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Technical Advisory Mission to Tonga

With the continuous support being provided by the Government of Austria, the UN-SPIDER Programme is increasing its support to the Kingdom of Tonga by having carried out a Technical Advisory Mission, at the request of the Tongan Government through the Ministry of Lands, Survey and Natural Resources. The Kingdom of Tonga is exposed to earthquakes, volcanoes, cyclones and other coastal hazards such as storm surges. In addition, in September 2009, Tonga was affected by a tsunami, which provoked extensive impacts on one of the outer islands.

David Stevens, UN-SPIDER Programme Coordinator, headed the mission team and was joined by experts from SOPAC, Dr. Wolf Forsttreuter, UN-OCHA, Ms. Rashmi Rita. Mr. Richard Kautoke Head of the GIS Division of the

Ministry of Lands, Survey and Natural Resources, as well as by Dave Leng a leading regional crowdsourcing expert. The mission builds upon the technical advisory support that UN-SPIDER has been providing to all Pacific Island Countries since 2008 with the support from the Government of Austria.

The Mission was carried out from 20 to 23 March and included meetings with key stakeholders and a half-day workshop for senior policy makers, data providers, and disaster management and disaster risk reduction end users with the purpose of awareness generation and assessing the country needs and capacity. The aim of the mission was to 1. Review current policies, procedures and mechanisms related to the use of geo-spatial information and make recommendations; 2. To engage key stakeholders who are custodians of geo-spatial data relevant to disaster risk management; 3. Develop an institutional strengthening strategy for stakeholder agencies (individuals, institutions and infrastructure), and finally 4. Develop a long-term association with UN-SPIDER to take advantage of outreach activities, institutional strengthening programmes and resources available through the UN-SPIDER network.

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UNOOSA co-hosts 12th Plenary Meeting of UNGIWG

The Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) and UNOOSA organised the 12th Plenary Meeting of the United Nations Geographic Information Working Group (UNGIWG) in Vienna, Austria, between 28th and 30th March 2012. After the official launch of the Centre of Excellence for UNSDI, UNGIWG members and participants discussed various developments in their domain in parallel sessions, and presented their activities in the field of geospatial information management to the Plenary as well. This Plenary benefitted from the presence at the opening ceremony of the Executive Secretary of CTBTO and of UN Assistant Secretary General for Information and Communication Technologies and Chief Information Technology Officer, together with the Director of OOSA, signalling the increasing importance senior management of the United Nations is giving to geographic information in general. Established in 2000, UNGIWG is a network of UN professionals working in the fields of cartography and geospatial information management science to address issues of common concern.

Read more >> [UNGIWG](#)



UN-SPIDER supports the response efforts to the recent floods impacting Fiji

Intense and continuous rains brought on by tropical depression TD17F caused flooding in large parts of Fiji. In some places more than 300 mm of rain fell in less than 24 hours since the early hours of 30 March and subsequent flash flooding caught many by surprise. Three deaths had been registered so far. As of 31 March 2012 49 evacuation centres (of which 31 schools) with in total more than 3700 people, approximately half of which are children, had been operational in Ra (4), Tavua (5), Ba (14), Lautoka (10), Nadi (8) and Sigatoka (8). The situation is being considered worse than the recent flooding in January 2012, as more areas are flooded. Deterioration of the situation can be expected as further weather systems accompanied by heavy rains are expected to affect Fiji. At the requested of OCHA Sub-regional Office for the Pacific and in close coordination with the Applied Geoscience and Technology Division (SOPAC) of the Secretariat of the Pacific Community (SPC), UNOOSA requested the activation of the International Charter Space and Major Disasters to ensure access to satellite-based information to support the response efforts.

Read more >> [UN-SPIDER Portal](#)

UN-SPIDER attends 7th FP ENVISION Project

UNOOSA was invited and attended the EU-funded 7th FP ENVISION Project (<http://www.envision-project.eu/>) meeting in Bucharest, Romania, in the March 13-14, 2012 period. A number of interesting applications in the context of a flood monitoring in trans-boundary context pilot case applied to the Danube river were presented and discussed, and the UN-SPIDER Knowledge Portal was also introduced to the workshop participants as a potential information dissemination tool for such use cases.

Read more >> [Envision Project](#)

UN-SPIDER participates in GMES IO Emergency Mapping Meeting

On 6-7 March 2012, UNOOSA/UN-SPIDER attended the User Meeting on the GMES Initial Operations (IO) of the Emergency Management Service-Mapping held in Brussels, Belgium to learn about the offered services of GMES IO Emergency Mapping component. GMES IO builds on to the previous GMES project SAFER which ended recently. This meeting brought together the SAFER and LinkeR focal points of the previous EU projects, as well as other civil protection national focal points, emergency mapping experts, European Commission and company representatives of the consortium that was awarded the operational contracts for the GMES operational services phase.

ESA will be partner in GMES IO through providing access to satellite images and emergency satellite tasking. The Emergency Management Service - Mapping will be provided to EU members, EC DGs, EU Agencies, and international humanitarian aid agencies as well. Focus will be put on the emergency phase for delivery of timely products, and another service provider will be used to do validation of products at irregular intervals. GMES IO is scheduled to start on 1 April.

Read more >> [GMES](#)

News from our Regional Support Offices

Space-based analysis of migratory locust in Algeria

The Algerian Space Agency (Agence Spatiale Algerienne, ASAL) conducted an analysis of the ecological conditions that lead to the development of migratory locust in several regions with the support of space-based information. To this end ASAL evaluated six satellite images to monitor reproduction of the insect on a surface of 214,622 km². By observing and interpreting the chlorophyll-activities, 68 areas with favorable conditions for proliferation of migratory locust have been identified.

Read more (French) >> [ASAL](#)

ADRC conducts training on Disaster Risk Management

Asian Disaster Reduction Center (ADRC) conducted a training course entitled "Comprehensive Disaster Risk Management" in collaboration with the Japan International Cooperation Agency (JICA) from 16 to 24 February 2012. This course aimed to help participants formulate and further develop Disaster Risk Management (DRM) plans in their own countries.

Thirteen central/local government officials involved in disaster management in Brazil, China, Haiti, Indonesia, Jamaica, Myanmar, the Philippines, the Solomon Islands, and Tonga participated in the training. Participants attended a series of lectures on such topics as Japanese disaster management systems at the central and local levels, Japanese measures against flooding, sediment disasters, and earthquakes or community-based DRM. These experiences provided an invaluable opportunity for the participants to see how Japanese government agencies, NGOs, and the private sector are promoting disaster risk reduction in Japan.

Read more >> [ADRC](#)

Karoly Robert University College participates in UNGIWG meeting and HUNAGI Conference

As UN-SPIDER's newest Regional Support Office, the Karoly Robert University participated in the 12th Plenary Meeting of UNGIWG held on 28-30 March 2012 in Vienna. Dr. Csaba Lénárt, operations manager, and Dr. Péter Burai, technical advisor, represented the Karoly Robert University in this event. Apart from the presentations by UNGIWG members and partners on their geospatial information management and technology activities, Dr. Lénárt and Dr. Burai benefitted from discussions focusing on the EuroGEOSS Broker (INSPIRE), GeoCat, Geospatial Data Warehouse and UNSDI Gazetteer Framework.

Karoly Robert University also participated in the 3rd HUNAGI Conference and Exhibition held on 21-22 March 2012 in Budapest. Dr. Tamás Tomor, Director of the Institute, talked about Karoly Robert University's support to UN-SPIDER in a presentation entitled "Institutional Support of the Disaster and Emergency Response Program of the United Nations Using Mobile GIS Data Collection Infrastructure". The University had previously established a strategic partnership with HUNAGI, the Hungarian Association for Geo-information.

Read more >> [HUNAGI](#)



CATHALAC: Satellite-aided analysis of land subsidence

UN-SPIDER's Regional Support Office CATHALAC prepared a preliminary analysis of the effects of land subsidence in Mixco, one of the suburbs of Guatemala City, using space-based information. The analysis was prepared in the context of SERVIR and with the collaboration of Guatemala's Ministry of the Environment (MARN), the National Protected Areas Council (CONAP), and UN-SPIDER.

In summarizing the analysis, it is noted that overlaying the map of the area's hydro-geology allows one to see that the communities affected are located not only above an aquifer, but also near a system of geological faults, both of which may be contributing to the land subsidence. Additionally, the preliminary analysis shows that the urbanized area above the aquifer has been rapidly expanding at a rate of approximately 28% per year, from approx. 84 hectares in 1986 to approx. 680 hectares in 2011.

Read more (Spanish) >> [SERVIR](#)

ESA's launch base in Kourou, French Guiana. The eight-tonne satellite has doubled its planned five-year lifetime, circling Earth more than 50 000 times. With ten sophisticated optical and radar sensors, the satellite is continuously observing and monitoring Earth's land, atmosphere, oceans and ice caps. An estimated 2000 scientific publications have been based on this information. Envisat's largest instrument is the Advanced Synthetic Aperture Radar, which can be used day or night because it sees through clouds and darkness. This is particularly useful over polar regions, which are prone to long periods of bad weather and extended darkness. Last summer, the radar monitored record-low sea ice cover in the Arctic.

Read more >> [ESA](#)

China's advanced satellite operating soundly

China's first high-resolution remote sensing satellite ZY-1-02C has carried out orbit tests, and images delivered from it reach international levels, China Center for Resources Satellite Data and Application said Wednesday. The ZY-1-02C, which was launched on 22 December last year, is the first customized land resources satellite for Chinese clients, the center said. With two high-resolution color cameras and one multi-spectral camera, the satellite will provide clients with images for disaster relief services, agriculture development, environmental monitoring and other applications.

Read more >> [China Daily](#)

News from our Community

SAFER is activated for Mozambique

Tropical storm Irina was forecasted to strike Mozambique as a tropical cyclone at about 20:00 GMT on March 3. According to the information supplied by the Joint Typhoon Warning Center (JTWC), the point of landfall was the border between Mozambique and South Africa. IRINA was expected to bring 1-minute maximum sustained winds to the region of around 129 km/h (80 mph). The cyclone was expected to cause heavy rain and flash flooding in Mozambique, and storm surges generally between 1.2 and 1.5 metres (4-5 feet). SAFER was consequently triggered on March 2, 2012 by ECHO-MIC.

Read more >> [SAFER](#)

The International Charter is activated for Madagascar

Torrential rain has flooded large parts of Madagascar following the passing of Tropical Cyclone Irina on 1 March 2012. The storm traversed east-wards across the north and central landmass of Madagascar, with wind speeds reaching 55 knots (63 mph / 102 kph). The storm then moved south along the island's west coast and into the Mozambique Channel. The International Charter Space and Major Disaster was triggered on 01 March 2012 by COIG.

Read more >> [International Charter](#)

The International Charter is activated for Ecuador

Heavy rains continued to pour in Jocay, Ecuador this week, causing flooding across coastal communities. In an official statement from the Ecuadorian government, they announced that at least 20 people were killed and 65 people were severely injured due to flooding within coastal provinces. 166 homes have been destroyed and 2,823 people have been evacuated from their homes to shelters and other communities. The International Charter Space and Major Disaster was triggered on 10 March 2012 by USGS.

Read more >> [International Charter](#)

Happy birthday, Envisat

On 1 March 2012 Envisat turned 10. In the early hours of 1 March 2002, the largest Earth observation satellite ever built soared into orbit from

UK's new rapid response network

Britain will establish a new rapid response network from top UK-based businesses and charities to respond to major international crises, such as famine, floods and earthquakes, International Development Secretary Andrew Mitchell announced today.

The network, called the Rapid Response Facility, will mobilise life-saving support in the critical hours following a humanitarian disaster. It is the first time a British Government has brought together the power of the private sector as well as NGOs in this way to take part in emergency relief. The new Rapid Response Facility will be activated in the event of a future large scale humanitarian crisis. The selected organisations will be approached within hours and expected to take immediate action to deliver targeted aid to affected people.

Read more >> [Department for International Development](#)

Upcoming Events

Fifth International UN-SPIDER Bonn Workshop

The Fifth International UN-SPIDER Bonn Workshop will take place on 24-26 April 2012 in the premises of the United Nations Campus in Bonn, Germany. Under the title "Enhancing Resilience through Knowledge Management: Networks and the UN-SPIDER Knowledge Portal", the workshop aims to identify knowledge management strategies that will enhance synergies among institutions and mechanisms that generate space-based information and the disaster risk management and emergency response communities.



Co-organized by UN-SPIDER and the German Aerospace Center and conducted with the support of the Ministry of Economic and Technology of Germany, Secure World Foundation, and the City of Bonn, the workshop will focus on the role of Portals, Gateways and Geo-viewers as platforms to access space-based data and information to support all phases of the disaster management cycle and Knowledge management in the context of space-based information.

Read more >> [UN-SPIDER Portal](#)

UNOOSA/UN-SPIDER organises Crowdsourcing Mapping Event

The United Nations Office for Outer Space Affairs - with the support and cooperation of the Government of Austria – will organise an International Expert Meeting on Crowdsourcing Mapping for Disaster Risk Management and Emergency Response. The event will take place in Vienna, Austria 17-19 July 2012. Crowdsourcing mapping is by nature an interdisciplinary field bridging many areas of expertise, including the need to access and use space-based technologies. In order to understand how crowdsourcing mapping can contribute to disaster management there is a need to better define how the many fields come together to support crowdsourcing mapping activities, and more specifically the common questions being asked by all those getting involved.

Bringing together the relevant three communities (crowdsourcing mapping, disaster management and space technology communities) to brief about their fields of expertise provides an opportunity to understand better the questions being asked and how space-based technologies could contribute to solving them. To help build a tighter cooperation and further understanding among these three communities UN-SPIDER is organizing the above meeting which is the third one since it began its "Space-based information for Crowdsourcing Mapping" project in 2011. It will build upon the recommendations and conclusions of the previous two meetings. These recommendations and conclusions are contained in the project report which can be downloaded from the link below.

Read more >> [UN-SPIDER Portal](#)

About UNOOSA/UN-SPIDER

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.