



# JUNE 2013 UPDATES

### **UN-SPIDER AT A GLANCE**

#### Space-based information for Early Warning System: **UN-SPIDER Expert Meeting in Bonn**

On 26 June 2013, the UN-SPIDER Programme wrapped up a two-day expert meeting focusing on space-based applications in Early Warning Systems in Bonn, Germany. Taking into consideration the role of early warning systems in minimizing damages and losses in case of disasters, UN-SPIDER co-organized the meeting with the Government of Germany and the German Aerospace Center (DLR); with the support of Secure World Foundation (SWF) and the German Federal Office of Civil Protection and Disaster Assistance (BBK). The Expert Meeting brought together around 50 space technology and disaster management experts representing national, regional and international organizations, internationally active private companies as well as representatives of UN-SPIDER Regional Support Offices. The presentations of the event are available on the Knowledge Portal. The report will be published shortly.

Read more: Knowledge Portal

#### Call for experts: UN-SPIDER Technical Advisory Mission to Malawi

For the upcoming Technical Advisory Mission (TAM) to Malawi, UN-SPIDER is looking for professionals from the field of space technology and disaster/risk management who are already collaborating or are willing to collaborate in the future with authorities or respective institutions in Malawi. The mission will be carried out from 14 October to 18 October 2013 at the invitation of the Department of Disaster Management Affairs of Malawi. In the course of the TAM, the experts will meet with key disaster management authorities in the Government, UN agencies, regional and international organizations or initiatives and private companies to discuss the use of space technologies for disaster and risk management in depth, make recommendations and develop guidelines to improve the use of space-based information. UN-SPIDER invites

representatives of institutions, organizations, companies or universities interested in joining the expert team to contact markus.woltran@unoosa.org until 18 August 2013 and send a short background, résumé or CV and a short indication of the current, planned or possible type of collaboration with Malawi.

Read more: Knowledge Portal

#### **UN-SPIDER** Newsletter: Earth Observation and **Disaster Response**

UN-SPIDER's latest Newsletter is available! It focuses on the use of Earth Observation technologies for disaster response highlighting the importance of these data in emergency situations. We invite you to take a closer look at the usefulness of Earth Observation data for disaster response - by presenting international actors who provide such information but also by telling two success stories from UN-SPIDER's partners in Iran and Pakistan dealing with floods and droughts.

Read more: Knowledge Portal

#### **UN-SPIDER Portal: New section with links to free data** and products

In order to effectively use satellite data for disaster risk management and emergency response, technical know-how is just as important as the access to datasets and derived products. UN-SPIDER has compiled a list of freely available data resources on the Knowledge Portal. The list includes hazard specific datasets including hydro-meteorological hazards, geo hazards, fire, pollution and insects. It also features a list of links to digital elevation models and land use and land cover maps as well as general links to satellite data and search engines for geospatial data. Comments and additions are very welcome; please use the contact form in the upper right corner of the webpage to give us feedback.

#### **UN-SPIDER** participates in training for International **Charter Space and Major Disasters**

A UNOOSA/UN-SPIDER expert participated as a trainee and observer in the Project Manager training for the International Charter Space and Major Disasters in Frascati, Italy. The two day training course on 27 and 28 June 2013 offered sessions on the objectives and processes of the Charter and others on the specific roles of Project Managers. Demonstration and simulation exercises allowed the trainees to learn the whole process of coordinating Charter activations and of providing adequate products to end-users and authorized users of the Charter.

Read more: Knowledge Portal

#### UN-SPIDER compiles list of all available imagery of **European floods**

In early June 2013, widespread flooding in central Europe has inundated swathes of Austria, Germany, Slovakia and the Czech Republic, killing at least 15 people. UN-SPIDER has compiled a list of all the freely available satellite maps of these countries provided by the German Aerospace Center, Rapid Eye, the European Copernicus programme and other providers. The list is sorted by country and by acquisition date.

Read more: Knowledge Portal

#### **UN-SPIDER** publishes maps of heavy flooding in India

In June 2013, Northern India experienced heavy rainfall that triggered devastating floods and landslides in the states of Uttarakhand, Uttar Pradesh and Himachal Pradesh. The early monsoon rains causing the floods are believed to be the heaviest in 80 years. As of 24 June 2013, more than 600 people are confirmed dead while 80,000 have been rescued. BBC reported that thousands were stranded in the holy pilgrimage site of Badrinath in higher Himalayan altitudes after flash floods hit the region. UN-SPIDER's partner IWMI produced flood maps for Yamuna, Ghaghara and Ganga rivers and for the states of Uttarakhand and Uttara Pradesh using MODIS data from NASA Terra and Aqua satellites.

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#### Conclusion of 56th session of COPUOS

The United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) concluded its deliberations over ways and means of maintaining outer space for peaceful purposes at its 56th session, held from 12 to 21 June

2013 in Vienna, Austria. The goal is to ensure that space technology and its applications are used in support of the overarching global agendas for sustainable development. At its 56th session, the Committee endorsed the agreement for an enhanced international coordination to deal with potential asteroid threats. The Committee also endorsed a set of recommendations on national legislation relevant to the peaceful exploration and use of outer space that provide guidance and support for countries that are in the process of developing their own national space legislation. The 2013 session of COPUOS also marked the fiftieth anniversary of cosmonaut Valentina Tereshkova's historic space flight, using this unique opportunity to commemorate it from the perspective of women pioneers in advanced space and scientific endeavors. Tereshkova made her space flight as the first woman in Outer Space on 16 June 1963. To celebrate 50 years of Women in Space, UNOOSA presented on 12 June 2013 a panel of eminent women in the space-related fields of space exploration, science, technology, applications, business, policy and law entitled: "Space: Building the Future Today" including women space pioneers from Argentina, Canada, China, Italy, Japan, Nigeria, Russia, the United States and the European Space Agency.



### NEWS FROM OUR REGIONAL SUPPORT OFFICES

#### EMERCOM: New UN-SPIDER Regional Support Office in Russian Federation

On the sidelines of the 56th session of the annual meeting of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS), UNOOSA and EMERCOM signed an agreement making EMERCOM UN-SPIDER's 16th Regional Support Office on 19 June 2013. EMERCOM is the Ministry of Russian Federation for Civil Deference, Emergencies and Elimination of Consequences of Natural Disasters. UNOOSA's director Mazlan Othman welcomed the establishment of the new Regional Support Office: "EMERCOM Regional Support Office has an important role not only in the Russian Federation but also to become a leader and a source of knowledge in its region. It is a partnership that OOSA is looking forward to strengthening through different activities already planned for 2013 and beyond."

Read more: Knowledge Portal

#### **Hungary: Regional Support Office supports response** to Danube floods

In early June this year, Hungary, along with other European countries, was facing the largest-ever flood of the Danube. UN-SPIDER's Hungarian Regional Support Office (RSO) at Károly Róbert College, Gyöngyös, helped to manage the situation by processing archive satellite images, lidar data, highly precise orthophotos and hyperspectral and thermal data collection during the flood. The fellows of the RSO covered over 1200 km dyke of Danube and localized leakages by on board processing of the collected data. The result was transmitted to the operative center of the National Directorate of Disaster Management.

Read more: Knowledge Portal

#### Nepal and India: Impacts of the 2013 Monsoon Floods

UN-SPIDER's Regional Support Office in Nepal, ICIMOD, published an overview of the events following the heavy monsoon rains this past month in Nepal and India causing heavy flooding. In their brief note, the following questions are addressed: What kind of climatic events led to this disaster? Could anything have been done to reduce the loss of life and property? What can we learn from this disaster for the future?

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#### Colombia: Ready for the 2013 International Geomatic Week

On 30 September 2013, UN-SPIDER's Regional Support Office in Colombia, IGAC, will kick off the "Geomatic Week 2013" in Bogota, Colombia. The event aims at promoting academic and technological advances leading to the development of technologies, methodologies and applications in the field of Geomatics. International Geomatic Week 2013 will particularly look at geospatial technologies and management of the territory, developed through Geographic Information Systems (GIS), Remote Sensing, Global Positioning Systems (GPS) and Digital Mapping - decisive frameworks for using satellite data for development planning.

Read more: Knowledge Portal

#### Nigeria: Consultation of West Africa **Management Committee**

UN-SPIDER's Regional Support Office in Nigeria (National Space Research and Development Agency - NASRDA) participated in the 2013 annual consultation of the regional committee for disaster management in West Africa. The event was held in Abuja - Nigeria from 4th to 6th of June 2013. The forum was organised by the Economic Community of West African States, the National Emergency Management Agency, the International Federation of Red Cross and Red Crescent Societies, and the United Nations Office for the Coordination of Humanitarian Affairs. The objectives of the forum were to examine the lessons learnt from 2012 disasters, preparation status for 2013 rainy season and development of recommendations with a focus on cross-border cooperation.



### **NEWS FROM OUR COMMUNITY**

#### International Charter: DLR delivers satellite images for Indian flood assistance

Following severe flooding in northern India and Nepal, the Indian government activated the International Charter Space and Major Disasters on 19 June 2013 at 10:30 a.m. The German Aerospace Center (DLR) tasked its radar satellite TerraSAR-X with acquiring images of the affected areas and made these available to the Indian civil protection authorities. In India, the situation is far worse than first thought. The heavy rains surprised the people in the disaster areas. So far, the floods are known to have killed more than 600 people and thousands are still missing; about ten thousand military personnel have been deployed. The biggest rescue operation in the history of the Indian military is underway. The effects are especially bad in the mountainous state of Uttarakhand, where the Ganges River and its tributaries have flooded. The images were taken by the TerraSAR-X satellite.

Read more: Knowledge Portal

#### Global Platform for Disaster Risk Reduction: Output **Documents available**

The Fourth Session of the Global Platform took place from 19 to 23 May 2013 in Geneva, Switzerland. Two of the main output documents are now available: The Chair's Summary and the Communiqué of the High-Level. This final Chair's Summary is a comprehensive account and concise report that highlights the key messages that emerged and comments made following the Fourth Session of the Global Platform for Disaster Risk Reduction.

Read more: Knowledge Portal

#### Europe: Satellite measures pre-flood record soil moisture

Massive floods have heavily affected regions in Germany, Austria, Czech Republic and other European countries in June taking at least five human lives and causing damages of a yet undetermined extent. In order to better prepare for such floods in the future, satellites such as ESA's SMOS could help to improve the accuracy of flood prediction by measuring the soil moisture. Prior to the torrential rains, SMOS had shown that soils in Germany were showing record levels of moisture - in fact, the highest ever observed.

Read more: Knowledge Portal

#### South Korea: Earth Observation Satellite to be launched in August

In August 2013, a Russian rocket will launch South Korea's latest multipurpose Arirang-5 satellite, Seoul's science ministry has announced. The Arirang-5 is South Korea's first satellite with a synthetic aperture radar, which enables observation of the Earth's surface and also helps monitor natural disasters and the environment. South Korea began developing the satellite in 2005. It was originally scheduled to go into space in August 2011, but the launch was delaved.

Read more: Knowledge Portal

#### Big data: Satellite Image delivered in only 11 Minutes

DMCii (DMC International Imaging Ltd) and long-term partner Spacemetric, have successfully delivered an image from satellite to end-user in just 11 minutes, as part of a demonstration at the European Space Agency's 'Big Data from Space' conference, where industry experts discussed how to distribute large volumes of data from space to the people that need it. An image of Rome (where the event was being held) was acquired at 09:17 UTC on Wednesday the 5th June and it was processed and made available by 09:28 UTC the same morning.

Read more: Knowledge Portal

#### **India: Navigation Centre inaugurated**

On 28 May, 2013, the Indian Space Research Organisation unveiled a new Navigation Centre in Bangalore Rural Disctrict, as The Economic Times reported. The new Centre (INC) will serve the proposed Indian Regional Navigation Satellite System (IRNSS), a constellation of seven satellites that will enable users to determine their precise location and time.



### **UPCOMING EVENTS**

#### 2-4 September 2013: United Nations/Indonesia International Conference on Integrated Space **Technology Applications to Climate Change**

The Conference will take place in Jakarta, Indonesia, from 2 to 4 September 2013, coordinated by UN-SPIDER and the National Institute of Aeronautics and Space (LAPAN). This International Conference will bring together experts from the space and the climate change community as well as decision makers to discuss methods to use spacebased applications to support the identification and implementation of adaptation measures. It also serves to share experiences and lessons learned on the use of such applications in the context of climate change mitigation.

Read more: Knowledge Portal

#### 23-25 October 2013: United Nations International Disaster Risk Identification. Conference on **Assessment and Monitoring**

The UN-SPIDER Beijing Office is pleased to announce the "United Nations International Conference on Spacebased Technologies for Disaster Management - Disaster risk identification and response" from 23 to 25 October 2013. Additionally, an international training programme "Flood Risk Mapping, Modelling and Assessment using Space technology" will be organised for 25 participants of the conference. The conference is an opportunity to share information on latest methods, approaches and models used for identifying, assessing and reducing disaster risks. The conference will also focus on how to operationalize technological developments to address challenges at the national level by the national disaster management authorities. The purpose of this conference is to bring together the technologists and end-users on a single platform to ensure that space-based information is effectively employed in decision making that saves life and prevents economic losses.

Application is possible only online until 10 August 2013.

