



Overview of the use of space-based information to support disaster risk management and emergency response

UN-SPIDER

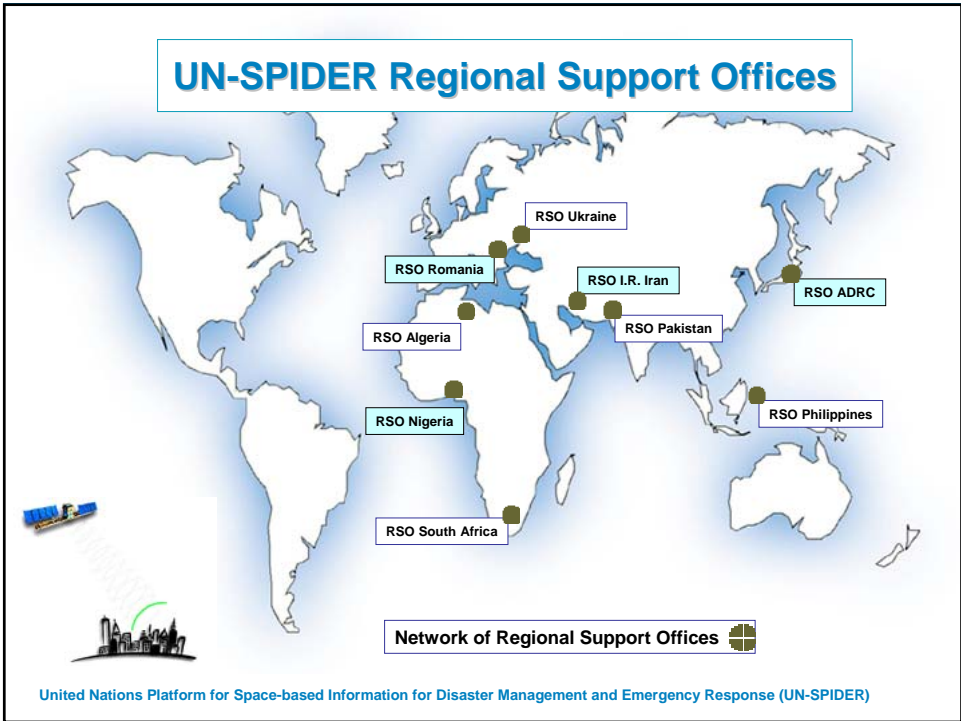
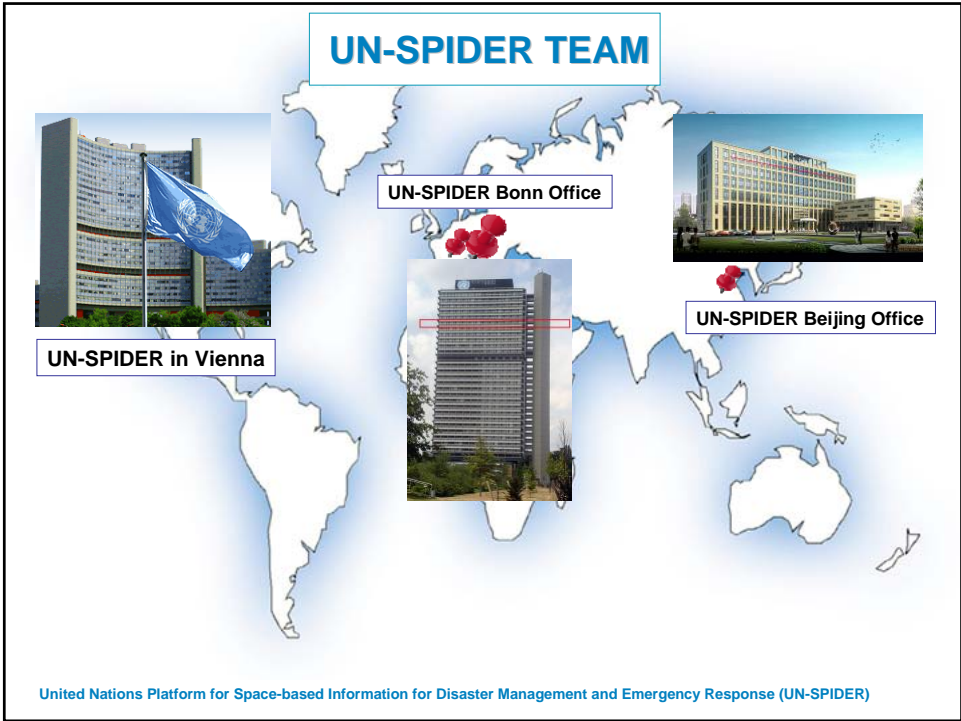
Shirish Ravan

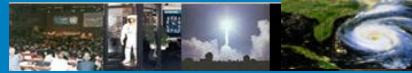
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UN-SPIDER

- The United Nations General Assembly established the “**United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)**” as a programme within the United Nations to provide universal access to all types of space-based information and services relevant to disaster management. (A/RES/61/110)
- “Ensure that all countries and international and regional organisations have access to and develop the capacity to use all types of space-based Information to support the full disaster management cycle”





National Focal Points

•NFP- Gateway to the country

•Role:

- to work with UN-SPIDER staff to strengthen national disaster management planning and policies and
- implement specific national activities that incorporate space-based technology solutions in support of disaster management.

• **Nominations:** Austria, Belarus, Belize, Bolivia, Bosnia & Herzegovina, Burkina Faso, Burundi, China, Egypt, El Salvador, Ethiopia, India, Iraq, Jordan, Kenya, Lebanon, Malawi, Malta, Mauritania, Mauritius, Morocco, Myanmar, New Zealand, Philippines, Qatar, Republic of Korea, Senegal, Singapore, Spain, Syria, Tanzania, Thailand, Trinidad and Tobago, Turkey, UAE, and Ukraine.



HORIZONTAL COOPERATION

Knowledge Portal

The UN-SPIDER Knowledge Portal is a web-based tool for information, communication and process support. Users can find and share case studies, guides and products through the portal.



The Knowledge Portal's dynamic matrix enables rapid information access

Fostering Cooperation

UN-SPIDER bridges the gap between the space and disaster management communities. UN-SPIDER fosters alliances and creates forums where both communities can meet.



TECHNICAL ADVISORY SUPPORT

Technical Advisory Support

UN-SPIDER provides support to countries in assessing national capacity and in evaluating disaster and risk reduction activities, policies and plans with regard to the use of space-based technologies.

UN-SPIDER Activities

OUTREACH AND CAPACITY BUILDING

Capacity Building

UN-SPIDER facilitates capacity building and institutional strengthening, including the development of curricula and an e-learning platform (e-SPIDER).





Technical Advisory Support and Technical Advisory Missions

Why Technical Advisory Mission?

Is the NDMO using space based information for risk reduction, response and recovery?

Is there a central spatial data provider within the country? If yes, is the NDMO accessing these resources? Status of SDI in the country...

Areas to be strengthened to enable them to use of space based information and geo-spatial data

Disaster Management Policy - need for updating?



Technical Advisory Support and Technical Advisory Missions

Why Technical Advisory Mission?

Generate awareness

Sensitise NDMOs to use Space Based Information for all stages of Disaster Management

Define Capacity Building needs

Link NDMO and its partners to the opportunities (national, regional, international)

Improve access to space based information



Current UN-SPIDER Technical Advisory Mission

Fiji (ongoing)

Samoa (next week)

Jamaica (ongoing)

*Report for internal
use to key
stakeholders*

*Building long-term
relationship*

*Communities of
practice*



Technical Advisory Mission (TAM) in Togo in July 2009

- Identified recommendations to update disaster management plans
- **Boosted efforts to establish NSDI**
- Strengthened links of Togo with regional and international initiatives for capacity building





Technical Advisory Mission (TAM) in Burkina Faso in November 2008

- Access to satellite image during September 2009 floods
- Fostered networking of experts at regional and international level to provide advice for monitoring of flood situation and formulate projects within Flash Appeal
- Active capacity building efforts



United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)



Namibia: Pilot project on integrated flood management and water related vector borne disease modelling

- UN-SPIDER co-leading efforts with NASA's GSFC and NOAA's CREST (Sensor Web Initiatives)
- Derivation of flood forecasting models based on weekly EO-1, Formosat and QB collection
- Useful for next flooding season
- Technical experts meeting hosted in Bonn in October 2009



United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)



SpaceAid Framework

- Facilitates access to space based information through multiple mechanisms
- **Network of space agencies and satellite data providers**
- Recently, SpaceAid consolidated the support Philippines cyclone



SpaceAid Framework

- Close coordination with commercial sources (GeoEye, Digital Globe)
- **Facilitates technical services through RSO network**
- SpaceAid support extends beyond immediate response phase.
- **Official gateway for UN agencies to activate the International Charter Space and Major Disasters**



How to get involved in UN-SPIDER

- Nominate NFP
- **Develop the country profile**
- Technical advisory support
- **Participate in UN-SPIDER workshops**
- **Contribute to UN-SPIDER Knowledge Portal**
(www.un-spider.org)

The screenshot shows the UN-SPIDER Knowledge Portal interface. At the top, there are navigation tabs for HOME, NEWS, SPACE AD, KNOWLEDGE BASE, COMMUNICATION, and ABOUT US. Below this, there's a 'What is UN-SPIDER' section with a brief description. To the right, a 'DISASTER INFORMATION' table lists various disasters with columns for Disaster, Region, and Date. Below the table is a 'SPACE APPLICATION MATRIX' section with a circular diagram. On the far right, there are 'GUIDE TYPES' and a 'User Profile' section with fields for Username and Password, and a 'Log in' button.

UN-SPIDER Knowledge Portal



UN-SPIDER in the Pacific

- Regional workshop with SOPAC in September 2008
- **Special session for Small Island Developing States in UN-SPIDER workshop in Vienna 2-4 June 2009**
- Ongoing Technical Advisory Support to Fiji, Samoa and Tonga

The screenshot shows the UN-SPIDER Newsletter. The header includes the United Nations logo and the text 'United Nations Platform for Space-based Information for Disaster Management and Emergency Response'. Below the header is the 'UN-SPIDER Newsletter' title. The main content area is divided into several sections: 'IN THIS ISSUE!' with a list of articles, 'UN-SPIDER Connects Disaster Managers with Satellite Imagery Providers' with a sub-headline 'Aerial Satellite Imagery Acquisition for Volcanic Activities in Montserrat and Iloilo in Tropical Nippon, Japan', 'UN-SPIDER Prepares Technical Mission to Burkina Faso', and 'UN-SPIDER Prepares Technical Mission to Samoa'. Each section includes a small image and a brief summary of the article's content.



UNITED NATIONS
Office for Outer Space Affairs



Check out: <http://www.unspider.org>

Knowledge portal: www.un-spider.org

UN-SPIDER Promotional Video:

<http://www.youtube.com/watch?v=pAnEzU5BIXM>

Contact: shirish.ravan@unoosa.org

Thank you

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