

10 years of the UN-SPIDER Beijing Office

Shirish Ravan

United Nations Office for Outer Space Affairs

United Nations Offices at Vienna

www.unoosa.org



UNITED NATIONS
Office for Outer Space Affairs



UNITED NATIONS
Office for Outer Space Affairs

United Nations Office for Outer Space Affairs (UNOOSA)

Vision

Bringing the benefits of space to humankind

Mission Statement

Promote international cooperation in the peaceful uses of outer space to achieve sustainable development goals



Image credit: Digital Globe/Maxar Technologies



UNITED NATIONS
Office for Outer Space Affairs



UNITED NATIONS
Office for Outer Space Affairs

Secretariat to the *UN Committee on the Peaceful Uses of Outer Space (COPUOS)*





UNITED NATIONS
Office for Outer Space Affairs



UNITED NATIONS
Office for Outer Space Affairs

Main programmes and platforms

- **Programme on Space Applications**
- UN-wide coordination on space affairs - UN-Space
- UN Register of Space Objects
- **UN-SPIDER (Disaster Management and Emergency Response)**
- **International Committee on Global Navigation Satellite Systems (ICG)**
- Space Mission Planning Advisory Group (SMPAG)

www.unoosa.org; www.un-spider.org





UNITED NATIONS
Office for Outer Space Affairs

UN-SPIDER Mission statement

“Ensure that all countries have access to and develop the capacity to use all types of **space-based information** to support the **full disaster management cycle.**”





UNITED NATIONS
Office for Outer Space Affairs

UN-SPIDER



Knowledge Portal

The UN-SPIDER Knowledge Portal is a web-based tool for information, communication and process support



Fostering Cooperation

UN-SPIDER fosters alliances and creates forums where both space and disaster management communities can meet



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

UN-SPIDER provides support to countries in assessing national capacity and in evaluating disaster and risk reduction activities, policies and plans

and many more...



UN-SPIDER Beijing Office

- Ministry of Civil Affairs of China – Host ministry until 2018
- Ministry of Emergency Management – Host ministry from 2018
- National Disaster Reduction Center of China – Technical support
- 3 funding agreements worth 18 million RMB implemented



Signing of the **3rd funding agreement**



UNITED NATIONS
Office for Outer Space Affairs



Located at the premise of the
National Disaster Reduction Center of China



Achievements

Technical Advisory Support and follow-up

Over 20 countries in Asia, the Pacific and Africa

Asia:

Afghanistan, Bangladesh, Bhutan, Cambodia, India, Indonesia, Lao PDR, Maldives, Mongolia, Myanmar, Nepal, Sri Lanka, Viet Nam

The Pacific:

Fiji, Samoa, Solomon Islands

Africa:

Ghana, Kenya, Mozambique, Sudan



- Strategic inventions
- Enhance institutional strengthening and coordination
- Improve access to data
- Promote data sharing
- Capacity building for effective utilization of space-based technologies



UNITED NATIONS
Office for Outer Space Affairs

Achievements

National and Regional level capacity building

Over 30 programmes offering benefit to over 800 participants

International training

8 programmes offering benefit to over 225 participants

Partners

- UN affiliated Regional Centres: RCSSTEAP, CSSTEAP
- RSO: LAPAN, IWMI, AHA Centre, GISTDA, Delta State University, ICIMOD
- NDRCC, SAARC DMC (IU), KARI, MAXAR, Airbus, IIT Rurkee – India





UNITED NATIONS
Office for Outer Space Affairs

Achievements

Annual UN-SPIDER conferences in Beijing

9 Conferences offering benefit to over 1000 participants



2011



2018

- 2011 - Best practices for risk reduction and rapid response mapping
- 2012 - Risk assessment in the context of global climate change
- 2013 - Disaster risk identification, assessment and monitoring
- 2014 - Multi-hazard disaster risk assessment
- 2015 - Consolidating role in the implementation of the Sendai Framework for Disaster Risk Reduction 2015–2030
- 2016 - Understanding disaster risks
- 2017 - Building resilience through integrated applications
- 2018 - Enhancing disaster preparedness for effective emergency response
- 2019 - A policy perspective



UNITED NATIONS
Office for Outer Space Affairs

Achievements

Outreach:

Over 30 international, regional and national workshops (organising/side events/participation)

Creating awareness of space-based technologies among the disaster management community and offering support for the implementation of the Sendai Framework for Disaster Risk Reduction 2015 – 2030.



APRSF
ASIA-PACIFIC REGIONAL
SPACE AGENCY FORUM

Asian Science and
Technology
Conference for
Disaster Risk
Reduction



UNITED NATIONS
Office for Outer Space Affairs

Achievements

Emergency Response:

Over 25 major disasters and several small disasters were supported by providing disaster management agencies with access to Earth observation images for rapid response mapping

Special efforts to enable countries to use international and regional emergency response mechanisms on their own



AIRBUS



Copernicus

MAXAR



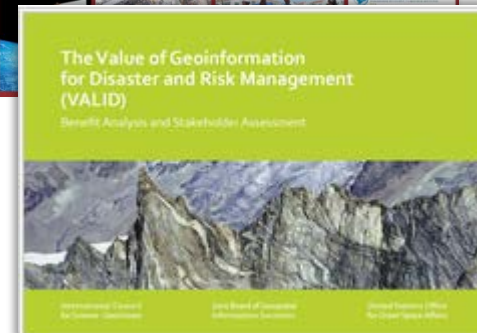
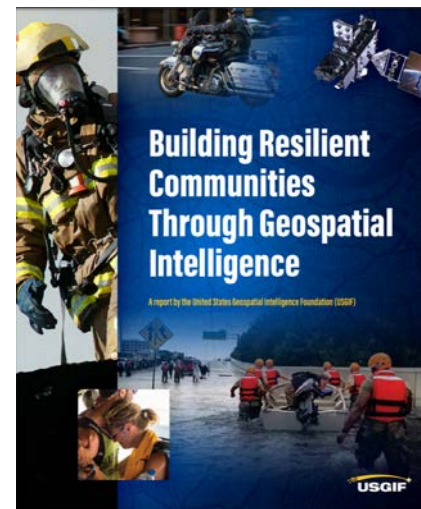
UNITED NATIONS
Office for Outer Space Affairs

Achievements

Knowledge Generation

Guidelines, Technical books, Training material, tutorials

Knowledge Portal
www.un-spider.org



Myanmar

- 2012 – UN-SPIDER Technical Advisory Mission
- Key recommendation: Establishment of "Hazard Response and Operations Centre"
- Follow up programmes jointly with Government, UNDP, OCHA and HABITAT
- Impact:
 - Emergency Operation Centre (EOC) established with "Remote Sensing Unit";
 - Trained personnel in remote sensing/GIS are available at EOC;
 - Disaster Management Training Centre conducts courses in remote sensing/GIS
 - NSDI and one map policy under consideration
 - Over 100 personnel trained
 - RRD became Authorised User of the International Charter



2012

Technical Advisory Mission

2012

Meeting of donors and partners, and training on "Geo-Informatics for Disaster Risk Management in Myanmar"

2013-2015

Establishment of a remote sensing unit in the Ministry of Social Welfare, Relief and Resettlement (MSWRR)

2016

TAM follow-up and training on the "Use of Earth Observation Data and GIS Techniques for Landslide Hazard Mapping"

2017

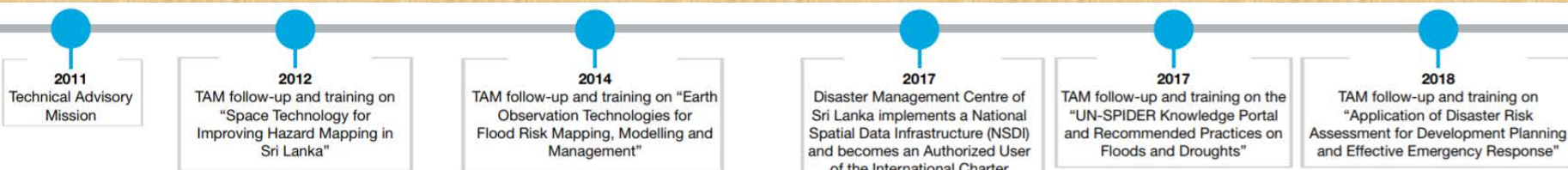
TAM follow-up and training on "Post-Disaster (Earthquake) Rapid Damage Assessment"

2017

Ministry of Social Welfare, Relief and Resettlement (MSWRR) becomes an Authorized User of the International Charter

Sri Lanka

- 2011 – UN-SPIDER **Technical Advisory Mission** strongly recommended **NSDI**
- 2012, 2014, 2017, 2018 – Follow up and capacity building activities
- 2013 – **Sri Lanka Spatial Data Infrastructure (SL SDI)** approved by the Cabinet of Ministers
- 2018 – SL SDI structure is ready
- NSDI components – Data, Data supply, Data Access & Applications, Governance, Legal and Policy
- 2019 – Support for monitoring targets of the Sendai Framework





UNITED NATIONS
Office for Outer Space Affairs

Network of UN-SPIDER Regional Support Offices



**Regional Support Offices have a big share
in the success of UN-SPIDER**

**Gratitude:
Government of the People's Republic of china**

**Ministry of Emergency Management
Ministry of Foreign Affairs
China National Space Administration
Ministry of Civil Affairs
Ministry of Finance
National Disaster Reduction Center of China**

THANK YOU

**Shirish Ravan
shirish.ravan@un.org**



UNITED NATIONS
Office for Outer Space Affairs
www.unoosa.org • @UNOOSA