



UNITED NATIONS
Office for Outer Space Affairs

19 Sept. 2016

UN International Conference on Space-based Technologies
for Disaster Risk Reduction “Understanding Risk”

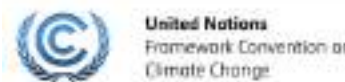
**UN-SPIDER's First Decade: Defining the path for an
improved understanding of risks through space-based
information**

United Nations Office for Outer Space Affairs
United Nations Office at Vienna
www.unoosa.org



UN-SPIDER's First Decade

- Establishing the Network of **Regional Support Offices (20 RSOs by 2016)** and more than **50 National Focal Points**;
- Establishing links and **synergies with key partners** including UN agencies (UNISDR, OCHA, UNDP, FAO, ESCAP, UNESCO and UNESCO-IOC, etc), regional and national institutions.





UN-SPIDER's First Decade

- **Provision of Technical Advisory Support to more than 30 developing countries in Africa, Asia, Latin America, and the Caribbean;**
- **Conduction of training activities and institutional strengthening efforts;**
- **Activation of the Charter in case of disasters in specific countries**





UN-SPIDER's First Decade

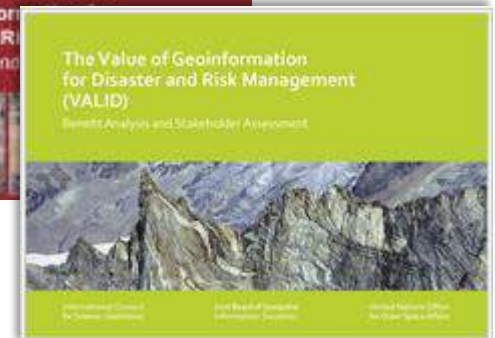
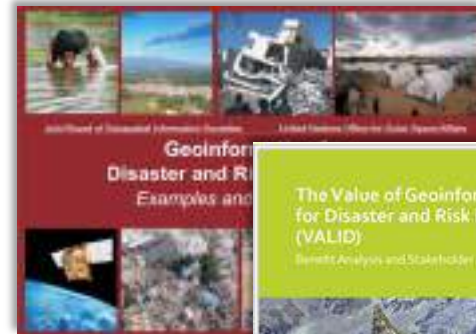
- Provision of visibility to space technologies for DRR and ER;
- Conduction of international conferences, workshops and experts meetings to bridge the space community, the disaster risk and the disaster management community; and
- Knowledge management efforts through the **UN-SPIDER Knowledge Portal**.





UN-SPIDER's First Decade

- Participation in events organized by partners;
- Mobilization of experts to events organised by partners;
- Participation in networks (IWG-SEM, IN-MHEWS, etc);
- Publication of Newsletters, monthly updates, Booklets; and
- Social media efforts





Shaping the next Decade

- **UN-SPIDER + 10 International Conference;**
- **UNISPACE +50;**
- **Sustainable Development Goals**
- **Sendai Framework for Disaster Risk Reduction 2015-2030**
- **Paris Climate Change Agreement**



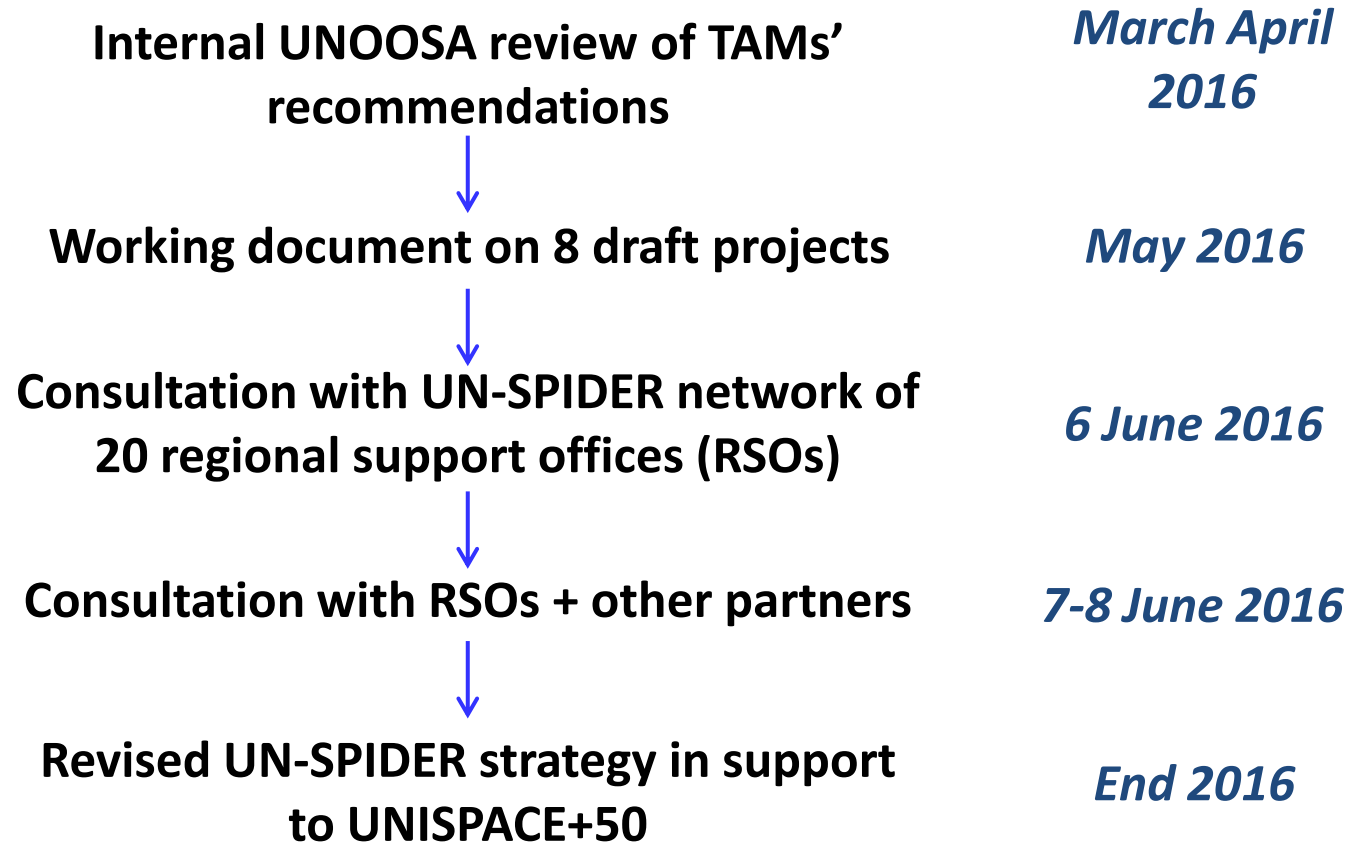
UN World Conference on
Disaster Risk Reduction
2015 Sendai Japan



PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11



UN-SPIDER+10: A revised strategy for UN-SPIDER for next decade





1. Strengthening International Cooperation

Objective / Activities	Providing procedural guidelines for strengthening utilization of space based and geospatial information for emergency response
Expected Outcomes	Guidelines distributed and implemented

2. Policy and Coordination

Objective / Activities	<ol style="list-style-type: none">I. Regional expert meetings in support of the establishment of national inter-institutions agreements for disaster risk reduction and emergency mapping.II. Technical support for the establishment of a central coordination centre for disaster risk reduction and emergency mapping.
Expected Outcomes	Organization of one expert meeting per year. Establishment of 3 central coordination centres.



3. Capacity Building and Institutional Strengthening

Objective / Activities	<ol style="list-style-type: none">I. Training of staff on rapid emergency mapping for damage and loss assessment in case of disastersII. Incorporating the use of space-based information in standard operating procedures in early warning systems and national emergency operation centers
Expected Outcomes	Curriculum developed, partnerships strengthened and increase volume of content on the UN-SPIDER Knowledge Portal

4. Awareness Raising

Objective / Activities	Develop dedicated printed material with key partners to raise awareness on the use and benefit of space-based applications; Regional High Level Meetings; and Expert Missions to raise awareness on the use of space-based information.
Expected Outcomes	Increased awareness on benefits of the use of space-based information



5. Information and Data Management Practices

Objective / Activities	<ol style="list-style-type: none">I. Facilitating space-based data access and processingII. Improving Information flow and information management in disaster-related activities
Expected Outcomes	Increased access to space-based data (including very high resolution) in 10 to 15 countries

And 3 “regular” UN-SPIDER initiatives

6. Enhancing Resilience – Global Earth Observation Partnership

Objective / Activities	Develop the governance mechanism for the partnership and elaborate a plan of work for the next 2 to 4 years with concrete outcomes
Expected Outcomes	Signatories to the Sendai Framework accessing and using space-based Earth observations in planning activities and monitoring of indicators;



7. Enhancing Resilience – Drought Early Warning Systems

Objective / Activities	Develop and improve with key partners the step-by-step procedures (Recommended Practices) to be incorporated in the Standard Operating Procedures (SOPs) of early warning systems targeting droughts Training courses to enhance the skills of staff in government agencies Institutional strengthening missions to 8 countries
Expected Outcomes	Project “Strengthening Early Warning Systems for Droughts (SEWS-D)” implemented in 8 countries

8. Mass Open Online Course on Earth observation for disaster management

Objective / Activities	Provide training resources to the disaster managers and other stakeholders agencies engaged with disaster management organizations
Expected Outcomes	Mass Open Online Course (MOOC) developed and ready for registration



The future of space: towards UNISPACE+50 in June 2018

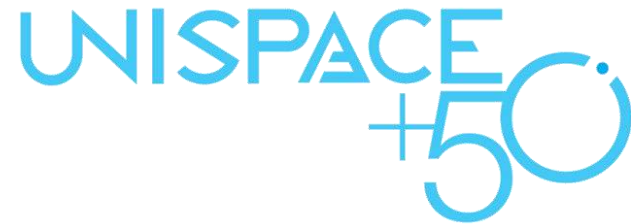
2018 marks the 50th anniversary of the first UN Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE), held in Vienna in 1968.

The **Committee on the Peaceful Uses of Outer Space (COPUS)** decided in June 2015 to use this milestone anniversary to renew and strengthen its mandate as **a unique platform for interrelationship between major space faring nations and emerging space nations**, supported by the UN Office for Outer Space Affairs (**UNOOSA**).



@UN Photo

UNISPACE+50 will articulate a long-term vision for Space: from a domain of States towards a domain of a commonly shared human experience.



7 Thematic priorities were approved by COPUOS in June 2016

- (1) Global partnership in space exploration and innovation
- (2) Legal regime of outer space and global space governance: current and future perspectives
- (3) Enhanced information exchange on space objects and events
- (4) International framework for space weather services
- (5) Strengthened space cooperation for global health
- (6) International cooperation towards low-emission and resilient societies**
- (7) Capacity-building for the 21st Century**



The Sendai framework for DRR (2015 – 2030)

Priorities for Action

1. Understanding disaster risk;
2. Strengthening [governance / institutional arrangements / organizational, legal and policy frameworks] to manage disaster risk;
3. Investing in disaster risk reduction for resilience;
4. Enhancing disaster preparedness for effective response, and to Build Back Better in recovery, rehabilitation and reconstruction.



Support from space technologies



The Sendai framework for DRR (2015 – 2030)

Priority 1: Understanding disaster risk

National and local levels

- 22(f) Promote real-time access to reliable data, **make use of space and in situ information, including GIS**, and use information and communications technology innovations to enhance measurement tools, collection, analysis and dissemination of data;

Global and regional levels

- 23(c) Promote and enhance, through international cooperation and technology transfer [...] access to, and the sharing and use of, [...] data, information, [...] communication and **geospatial and space-based technologies and related services. Maintain and strengthen in situ and remotely-sensed earth and climate observations. [...]**;



The Sendai framework for DRR (2015 – 2030)

A Global partnership on Earth observation: A Voluntary commitment

- **Continue facilitating the dialogue among stakeholders** in EO, satellite-based technologies and the global community of DRR experts and policy makers;
- **Serve as a collective source and repository of information** on efforts carried out worldwide by the EO and the satellite-based technology communities, including surveys and guidelines to improve the applications of existing and emerging technology to monitor hazards, exposure and risks;
- **Generate policy-relevant advice** to contribute to the integration of EO and satellite-based technologies into development process and public policies relevant to DRR;
- **Facilitate the use of EO and related satellite-based technology** to monitor progress in the implementation of the post-2015 framework for DRR.



UNITED NATIONS
Office for Outer Space Affairs

Global partnership



UNITED NATIONS
Office for Outer Space Affairs



UN-SPIDER



MEXT
MINISTRY OF EDUCATION,
CULTURE, SPORTS,
SCIENCE AND TECHNOLOGY-JAPAN



UNOSAT
satellite imagery for all
www.unosat.org



UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific



Deutsches Zentrum
für Luft- und Raumfahrt
German Aerospace Center



GFDRR
Global Facility for Disaster Reduction and Recovery

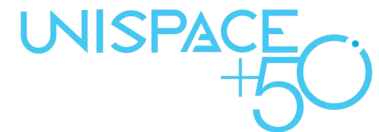


Disaster Management Centre



The way forward (2016 – 2030)

- To continue working with the networks (RSOs, NFPs) and partners the provision of technical advisory support; the conduction of events, and other knowledge management efforts;
- To develop an updated strategy in the context of the UNISPACE+50 process;
- To promote and facilitate the use of EO and related satellite-based technology to monitor progress in the implementation of the 2030 Development Agenda (Sendai framework, Paris Climate Change Agreement, Sustainable Development Goals).



UN World Conference on
Disaster Risk Reduction
2015 Sendai Japan





UNITED NATIONS
Office for Outer Space Affairs

THANK YOU

United Nations Office for Outer Space Affairs
United Nations Office at Vienna

www.unoosa.org
@unoosa

Juan Carlos Villagran de Leon
UN-SPIDER Bonn Office
Juan-carlos.villagran@unoosa.org