UN-SPIDER+10

Anniversary Conference (7-8 June 2016): Enhancing the resilience of nations through use of space-based information

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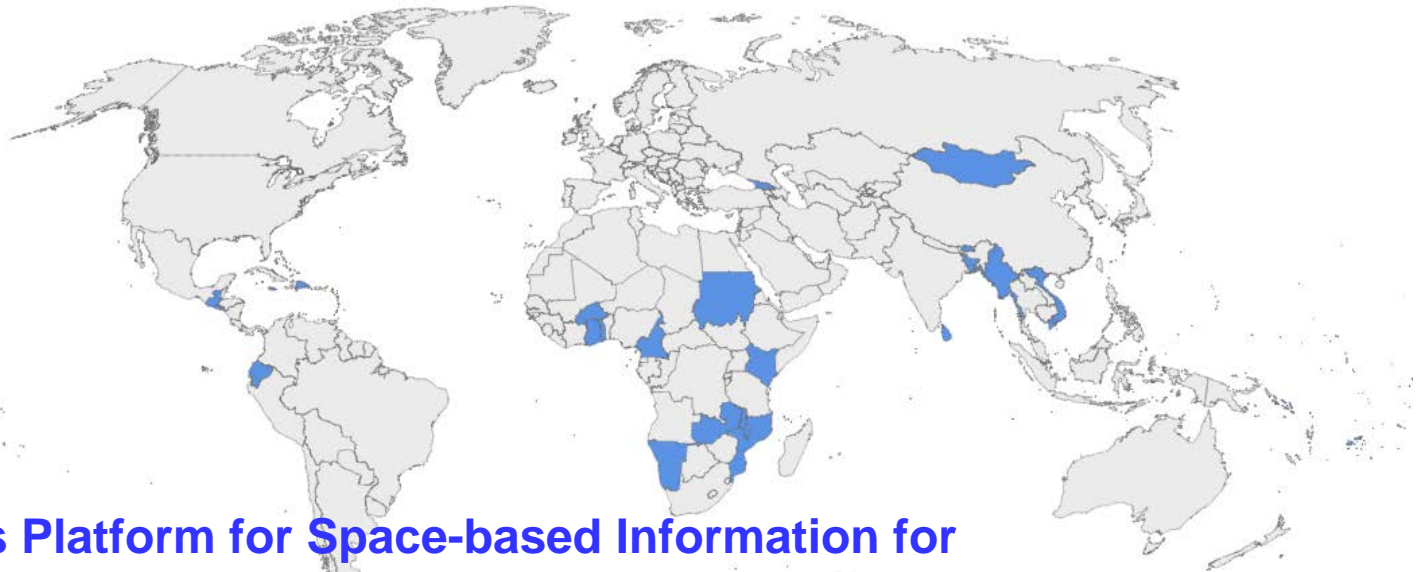
UNITED NATIONS
Office for Outer Space Affairs

10 years of knowledge at the service of UNISPACE+50

Technical Advisory Support

- Over 55 countries supported
- 34 national Technical Advisory Missions (end 2016)
- **Over 350 recommendations**
- With financial support from governments of Austria, China and Germany, and regular budget UNOOSA and in-kind contributions of network of regional support offices and various (many) other partners

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

UNITED NATIONS
Office for Outer Space Affairs

VIENNA

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BONN

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BEIJING

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UNISPACE +50

Seven **thematic priorities** proposed by STSC and LSC:

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

2030 AGENDA for SUSTAINABLE DEVELOPMENT

PEOPLE
End poverty and hunger in all forms and ensure dignity and equality

PROSPERITY
Ensure prosperous and fulfilling lives in harmony with nature

PLANET
Protect our planet's natural resources and climate for future generations

Sustainable Development

PARTNERSHIP
Implement the agenda through a solid global partnership

PEACE
Foster peaceful, just and inclusive societies
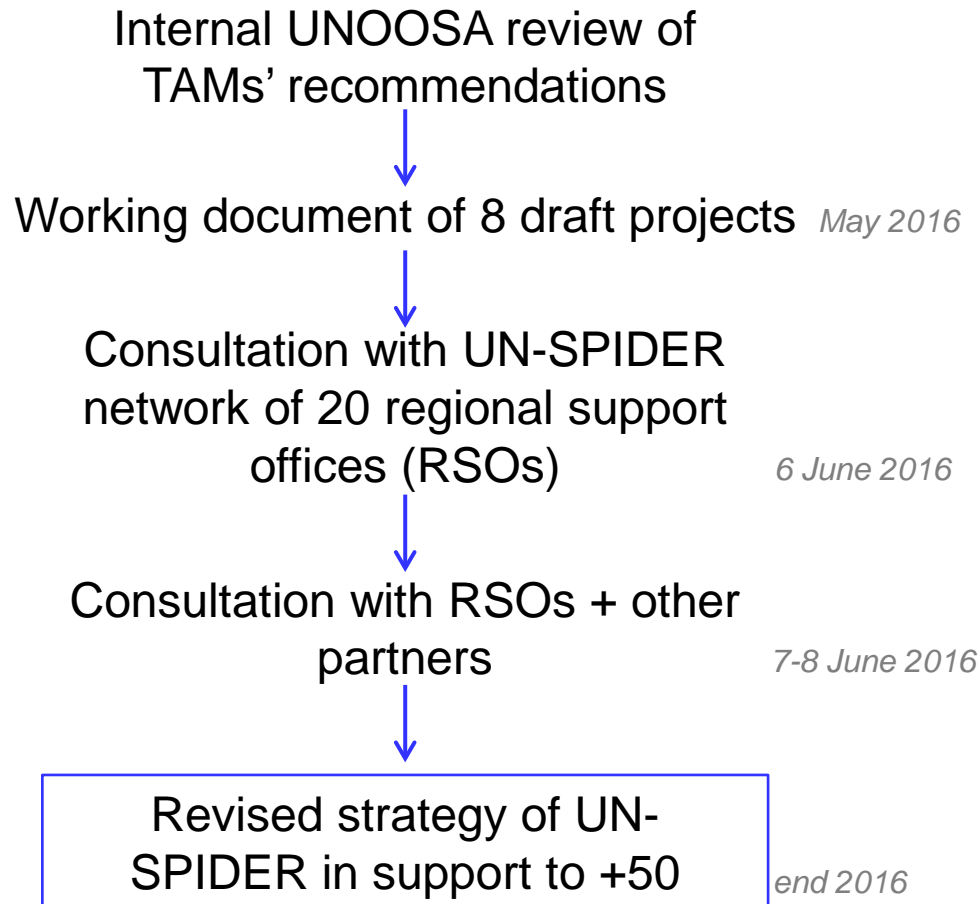

SUSTAINABLE DEVELOPMENT GOALS

UN World Conference on Disaster Risk Reduction
2015 Sendai Japan

PARIS2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

A revised strategy for UN-SPIDER for next decade

Internal UNOOSA review of
TAMs' recommendations

↓

Working document of 8 draft projects *May 2016*

↓

Consultation with UN-SPIDER
network of 20 regional support
offices (RSOs) *6 June 2016*

↓

Consultation with RSOs + other
partners *7-8 June 2016*

↓

Revised strategy of UN-
SPIDER in support to +50 *end 2016*

Categories of recommendations from Technical Advisory Mission (TAMs)

1. *Strengthening international cooperation*
2. *Policy and coordination*
3. *Capacity building and institutional strengthening*
4. *Awareness raising*
5. *Accessing and processing of data*
6. *Information flow and management*
7. *Local/regional recommendations*

TAMs' impacts: 5 long-term projects

1. Strengthening International Cooperation
2. Policy and Coordination
3. Capacity Building and Institutional Strengthening
4. Awareness Raising
5. Information and Data Management Practices

TAM recommendations: (example) **Policy and Coordination**

Policy and Coordination		#
PC_010	Review disaster management policy and consider provision that highlight the importance of geospatial and space-based information	11
PC_011	Space-based information and technology elements should be introduced into national multi-risk contingency plan	6
PC_012	Disaster management laws should be adopted to focus on disaster risk reduction taking into account new technologies, incl. space technology and geospatial info.	6
PC_013	National Disaster Risk Reduction platform should be established	1
PC_015	Incorporate in the law: "free access to all space-based information and data in case of disaster"	1
PC_016	An open-data policy for all data relevant to disaster management and DRR activities has to be implemented at the national level. Such data policy improvements must be applicable to all sub-fields of disaster management.	1
PC_020	Establishing a policy which creates a National Spatial Data Infrastructure (NSDI) should be a top priority to ensure optimal use of existing resources	11
PC_021	Make the central governmental organization for promoting the use of space-based technology operational	1
PC_025	Revitalize National Spatial Data Infrastructure/ augment implementation of NSDI	5
PC_026	Revive the MAGIC platform as an independent geospatial user group/platform to facilitate the exchange on NSDI issues	1
PC_030	Facilitate the creation of a professional body or association bringing together geospatial experts	3
PC_040	Disaster Management agencies / authorities keep record of the support offered by UN-SPIDER and establish mechanism to coordinate with UN-SPIDER (e.g.. Sentinel, International Charter)	3
PC_041	Focal points for the national platform and for UN-SPIDER should be identified	1
PC_043	Establish a list of actors involved in the full disaster cycle	1
PC_045	Clarify and formalize points of contacts and role of institutions in the use of international mechanisms	1
PC_050	Coordinate all the organizations using early warning systems using geospatial data, and improve dissemination of spatial information	5
PC_051	State the role in information management of all the linked disaster related entities and organizations managing geographic information	2
PC_052	Provide clear guidelines on baseline geospatial information to be used to develop new portal/tools and establish inter-operability between portals of difference ministries.	1
PC_055	Stronger coordination, cooperation and resource sharing policy of all relevant agencies and governmental institutions, the UN Country Team and Academia as well, with a strong backing	2

Number of countries recommendation applies to

TAM recommendations:

(example) **Strengthening International Cooperation**

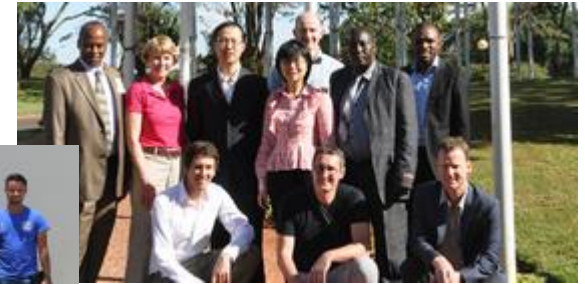| Strengthening International Cooperation		#
IC_001	International cooperation and network enhanced	5
IC_010	Link the country to international space-based information mechanisms for emergency purposes (e.g. International Charter)	3
IC_011	Formalize the contact with the mechanisms of SpaceAid, SERVIR-nodes and the Charter in case of disasters as well as with OCHA, UNSPIDER, SERVIR-nodes, and local regional institutions and agencies in the area of risk management, in order to make full use of existing resources	2
IC_015	Identify partnerships with organizations such as ISDR, OCHA etc. to combine efforts to conduct joint activities	1
IC_020	Identify focal point for requesting the activation of International Charter	5
IC_030	Strengthening cooperation with regional centres	3
IC_040	Coordinate the geospatial information until or department with similar initiatives already existing in Latin America and the Caribbean	1
IC_060	Include the topic of satellite data (imagery and derives products), software and hardware in technical assistance applications to international cooperation	1
IC_070	Identify sources of funding through international cooperation efforts	1
IC_080	Frequent mentoring with selected international organizations for ongoing R&D is essential	2
IC_090	The training and mock drills should be carried out on routine basis to enable stakeholders to make good use of international support (International Charter, Sentinel Asia etc.) during major disasters.	1

Mongolia

Honduras

Kenya

El Salvador

TAMs

Bhutan

Zambia

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	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	I. Training of staff on rapid emergency mapping for damage and loss assessment in case of disasters II. 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

Capacity Building in the context of UN-SPIDER
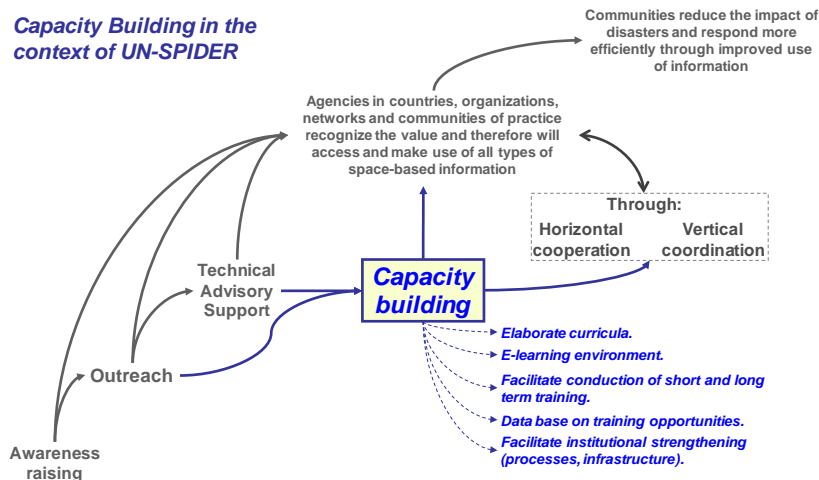
4. Awareness Raising

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	I. Facilitating space-based data access and processing II. 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

Outcomes of consultation process, 6 to 8 June 2016 (1)

Capacity building
- Training of staff on rapid emergency mapping with **guidelines or norms to acquire data**
- Training programme for emergency response of geospatial community regarding **standards**
- Establish a programme of **train-the-trainers** courses
- Focus on **pilot projects** (20.000 USD per project/year investment range)
- **Continuous** capacity building programmes
- Raise awareness in **private entreprises**, including in agricultural and insurance sectors
- UN-SPIDER: from a facilitator to **innovator**

Information Management
- Focus on **online services**, ensure service subscriptions available for developing countries
- Consider national protocols and workflows, and **serve those with data and services**
- Need to rely on **existing know-how**, **good practices** to facilitate knowledge transfer for local implementation
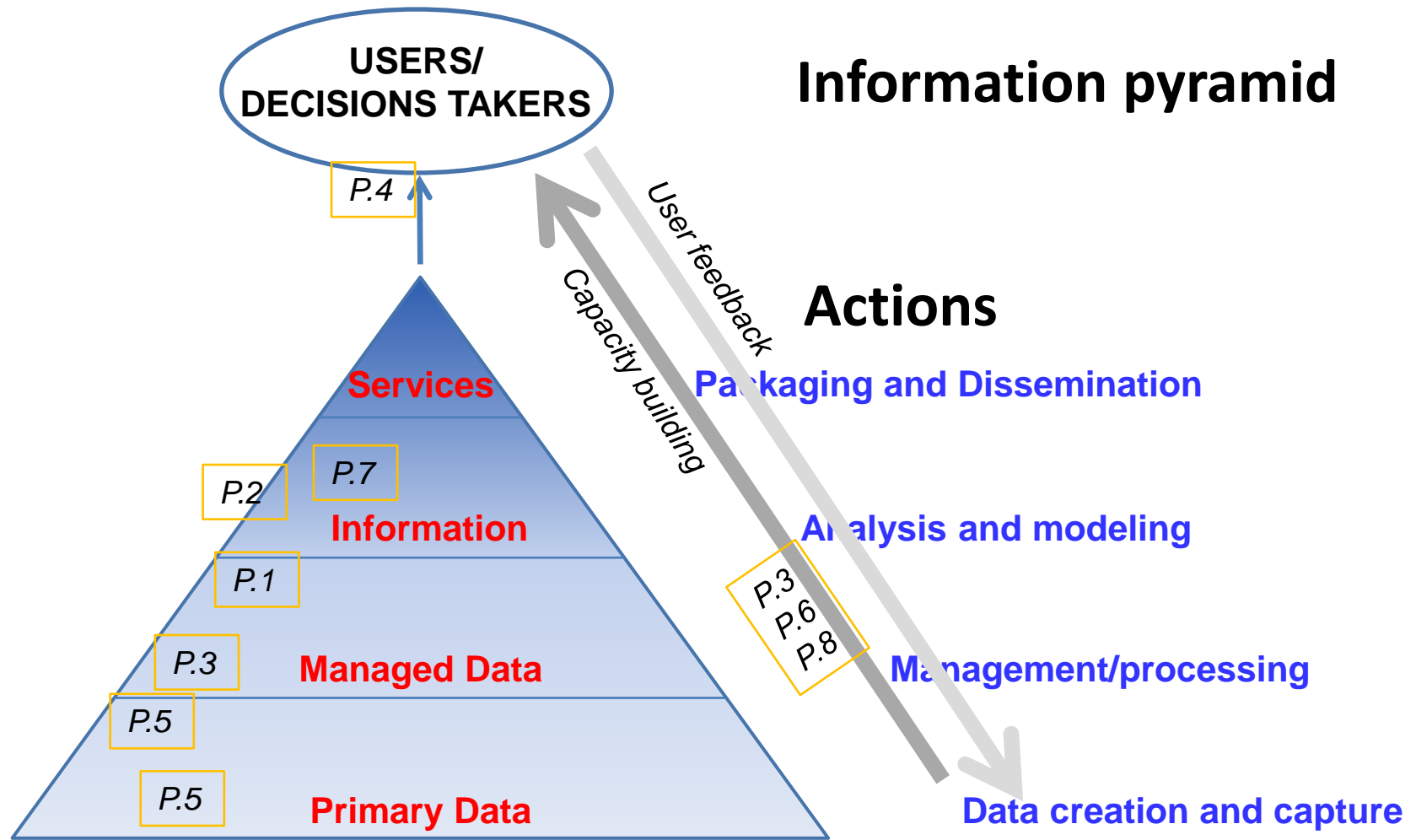
Slow onset disaster, e.g. drought
- incorporation of a segment related to **adaptation**, in complement to early warning efforts
- **Regional** and **transboundary** approaches needed

Outcomes of consultation process, 6 to 8 June 2016 (2)

Strategy and framework related comments
- Be more specific, e.g. clear reference to components of **Sendai framework**, to actions to mitigate/adapt to effects of **El Niño**
- Target also **local stakeholders** in addition to central govermental authorities
- contextualize project proposal outlining the number of **communities and people benefitting** and define how
- Highlight **relationships** between projects and activities under each
- Map area of implementation of projects to **identify gaps and duplications**

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Information pyramid

USERS/
DECISIONS TAKERS

P.4

Actions

Services — **Packaging and Dissemination**

P.2   P.7

Information — **Analysis and modeling**

P.1

P.3   P.6   P.8

Managed Data — **Management/processing**

P.3

P.5

P.5   Primary Data — **Data creation and capture**

User feedback
Capacity building

1. *Strengthening International Cooperation*
2. *Policy and Coordination*
3. *Capacity Building and Institutional Strengthening*
4. *Awareness Raising*
5. *Information and Data Management Practices*

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Thank You

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