The UN-SPIDER Knowledge Portal and its role in capacity building

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To fulfil this mission, **UN-SPIDER** has been established on three pillars:

<table>
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<tr>
<th><strong>As a Bridge</strong></th>
<th>to foster alliances between the space and the disaster-risk management and emergency response communities.</th>
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</thead>
<tbody>
<tr>
<td><strong>As a Gateway</strong></td>
<td>to promote access to and the dissemination of information, including case histories and best practices.</td>
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<tr>
<td><strong>As a Facilitator of Capacity Building</strong></td>
<td>to increase the ability of organizations and individuals to effectively use space-based services for disaster risk management, preparedness, response, and recovery.</td>
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</table>
Capacity Building in the context of UN-SPIDER

To support the full disaster management cycle

DRM and ER communities making use of all types of space-based information

Through:
- Horizontal cooperation
- Vertical coordination

Technical Advisory Support

Outreach

Awareness raising

Elaborate curricula.

E-learning environment.

Facilitate conduction of short and long term training courses.

Data bases on training opportunities.

Facilitate institutional strengthening (processes, infrastructure).
Capacity Building

The Capacity-Building Strategy can be stated as follows:

To increase the capacity of networks of practitioners from the disaster-risk management and emergency response communities to use horizontal cooperation and vertical coordination as a means to access and to use all types of space-based information to support activities within the full disaster management cycle.
Four conditions to possess the capacity to access and use space-based information:

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
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<tbody>
<tr>
<td>Space-based data is available and accessible.</td>
<td>Institutions recognize the relevance of using space-based information to make decisions.</td>
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<tr>
<td></td>
<td>Staff in institutions possess the knowledge and the skills to access and process this information.</td>
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<tr>
<td></td>
<td>Facilities, hardware and software to acquire, process, and use this information are available and operational.</td>
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And, we need to consider the full disaster management cycle:

The Cycle of disasters:
- Prevention and Mitigation
- Preparedness
- Recovery
- Response
- Disaster
Capacity building in the framework of UN-SPIDER is suggested as:

The process to facilitate the strengthening of the capacity of individuals and institutions related to the use of space-based information to prevent, to mitigate, and to react effectively to the challenges posed by natural hazards and humanitarian crises.

Capacity building would then include three types of activities:

- Providing policy-relevant advice to institutions and governments regarding the use of space-based (spatial) information to support the full disaster management cycle.
- Facilitating training of individuals on access to and use of such data.
- Facilitating access to infrastructure, hardware, and software, for space-based information.
### Examples of direct training activities

<table>
<thead>
<tr>
<th>Definition</th>
<th>Organisation &amp; Frequency</th>
<th>Targeted Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Training Course</strong></td>
<td>Training institution</td>
<td>Technical staff</td>
</tr>
<tr>
<td>Provide in-depth training on a technical subject</td>
<td>Recurring, 3 days to 3 weeks</td>
<td>Max. 30</td>
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<tr>
<td><strong>Summer School</strong></td>
<td>RSO, NFP, Partner…</td>
<td>Participants with different backgrounds</td>
</tr>
<tr>
<td>Professional and/or academic training for a small group with different backgrounds</td>
<td>Tbd, 1 or 2 weeks</td>
<td>Max. 40</td>
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<tr>
<td><strong>Seminar</strong></td>
<td>by UN-SPIDER</td>
<td>Experts, usually similar group for a series of seminars</td>
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<td>Small group for intense discussion on a topic.</td>
<td>when needed duration flexible</td>
<td>Max. 25</td>
</tr>
<tr>
<td><strong>Workshop - Exercise</strong></td>
<td>UN-SPIDER with partners</td>
<td>Technical staff from different backgrounds in selected cases,</td>
</tr>
<tr>
<td>Small group for intense discussion on a topic.</td>
<td></td>
<td>Max. 30</td>
</tr>
<tr>
<td>Approach</td>
<td>Target</td>
<td>Range</td>
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<tr>
<td>---------------------</td>
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<td>--------------------------------------------</td>
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<tr>
<td></td>
<td></td>
<td><strong>Short</strong></td>
</tr>
<tr>
<td>Disaster-risk reduction</td>
<td>Individuals Institutions Infrastructure UN-SPIDER</td>
<td>Strengthening knowledge / skills Institutional strengthening</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Medium</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strengthening knowledge / skills Institutional strengthening</td>
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<tr>
<td></td>
<td></td>
<td><strong>Long</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Institutional strengthening Facilitating horizontal cooperation</td>
</tr>
</tbody>
</table>
Activities in 2011:

• Conduction of Regional Training courses in India, Burkina Faso and Mexico.

• Completion of Curriculum on Remote Sensing for Emergency Response.

• Databases of training opportunities updated every 3 – 4 months.
The role of the UN-SPIDER Knowledge Portal in Capacity Building efforts

• Hosting the 3 databases on training opportunities.

• Hosting the curricula and content material for training courses.

• Hosting relevant documents (for example Cap. Bldg Strategy, etc)
Databases on Training Opportunities

- Short-term web-based courses.
- Short-term presencial courses.
- Academic programmes leading to degrees.

Contents:
- Title
- Duration
- Dates, registration deadline
- Language
- Location
- Organizers and Co-organizers
- Certificate (yes / no)
- Topics
- Target Audience
- Requirements
- Tuition fee / support
- Web Link
- Additional information
Curricula

- Remote Sensing for Emergency Response. **Completed**
- Remote Sensing for Risk Management. **Foreseen**
- Satellite Telecommunications **Foreseen**
- GNSS for risk management and emergency response **Foreseen**

**Characteristics:**
- Organized in modules, each module targeting a different type of hazard
- Each module structured in terms of lessons, including learning objectives, suggested content material, exercises and evaluations.
- Reviewed by members of the UN-SPIDER Expert Group on Capacity Building
Curricula


- Floods
- Droughts
- Earthquakes
- Tsunamis
- Landslides
- Volcanic Eruptions
Next Steps

• Elaborating the remaining curricula;

• Designing the learning environment within the UN-SPIDER Knowledge Portal;

• Incorporating curricula and content material into the learning environment;

• Promoting the use of this content by the network of RSOs and RCSSTEs (UNOOSA); and other Centres of Excellence as partners of UN-SPIDER.
**UN-SPIDER CAPACITY BUILDING STRATEGY**

### Short term goals
- **RSOs**
  - Promoting the role of NFPs in identifying candidates, assisting in building capacities, networking

- **NFPs**
  - Enhancing the role of RSOs

- **INSTITUTIONS**
  - Strengthening institutional capacities (conduction of tasks)
  - Strengthening institutional arrangements (networking, sharing data, info, etc)

- **INFRASTRUCTURE**
  - Facilitate acquisition and implementation of infrastructure (facilities, Hardware, software, etc)

- **INDIVIDUALS**
  - Increasing knowledge
  - Improving Skills

- **BLENDED LEARNING APPROACH**
  - E-learning
  - Traditional approaches (courses, summer schools)
  - Workshops
  - Twinning efforts: Institutional visits, Joint exercises, etc

- **PARTNERS**
  - UN-SPIDER Knowledge Portal
  - Regional Centres for Space Science and Technology Education
  - Centres of Excellence (ITC, AIT, Z-GIS, etc)
  - Institutions in more developed nations
  - ISDR, GEO, ReliefWeb, OCHA, etc

### Medium term goals
- **Enhancing the role of RSOs**

- **Supporting new communities of practice**

### Long term goals
- **Expanding the list of countries that use space-based information to support the full disaster management cycle**

**Contributing to existing communities of practice**
Thanks for your attention