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Office for Outer Space Affairs

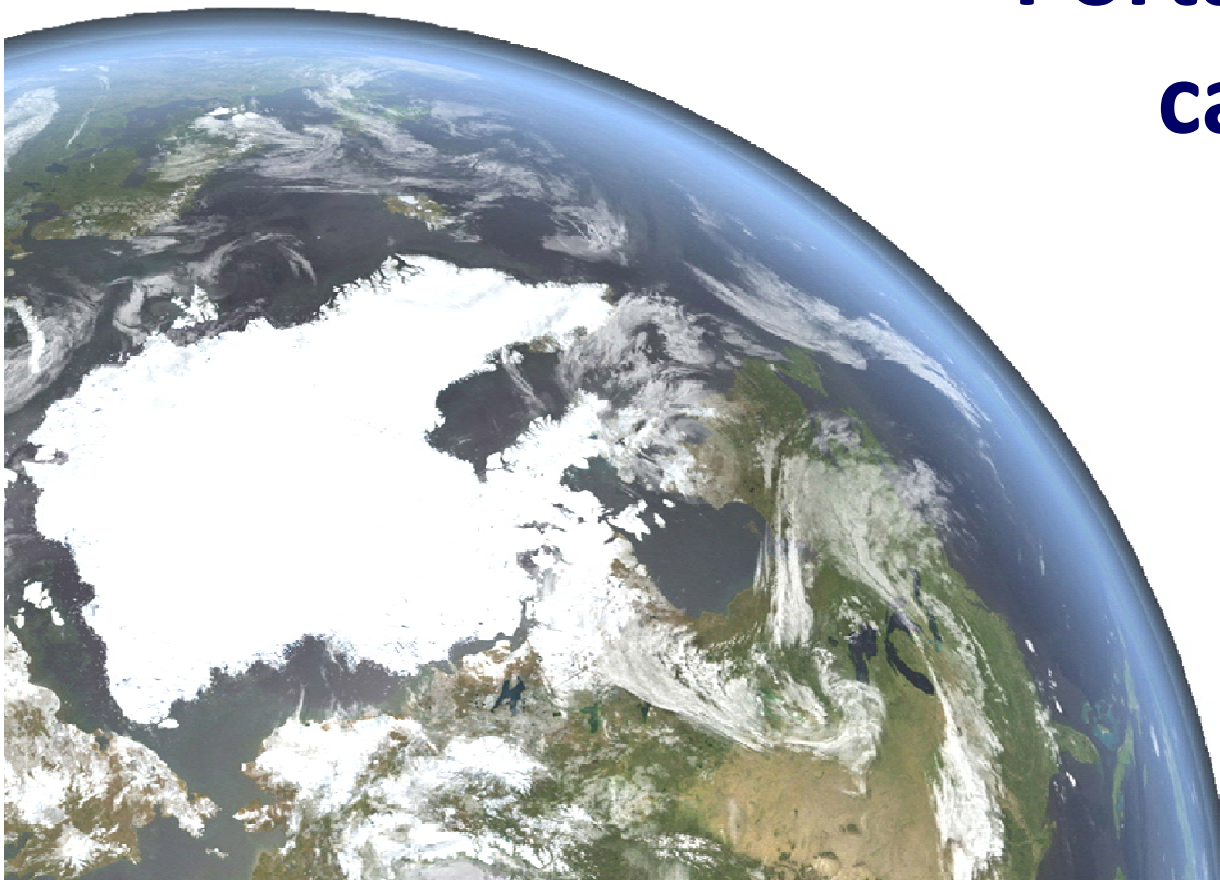


German
Aerospace Center

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

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Disaster Management and
Space Technology
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*United Nations Platform for Space-based Information for
Disaster Management and Emergency Response*

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

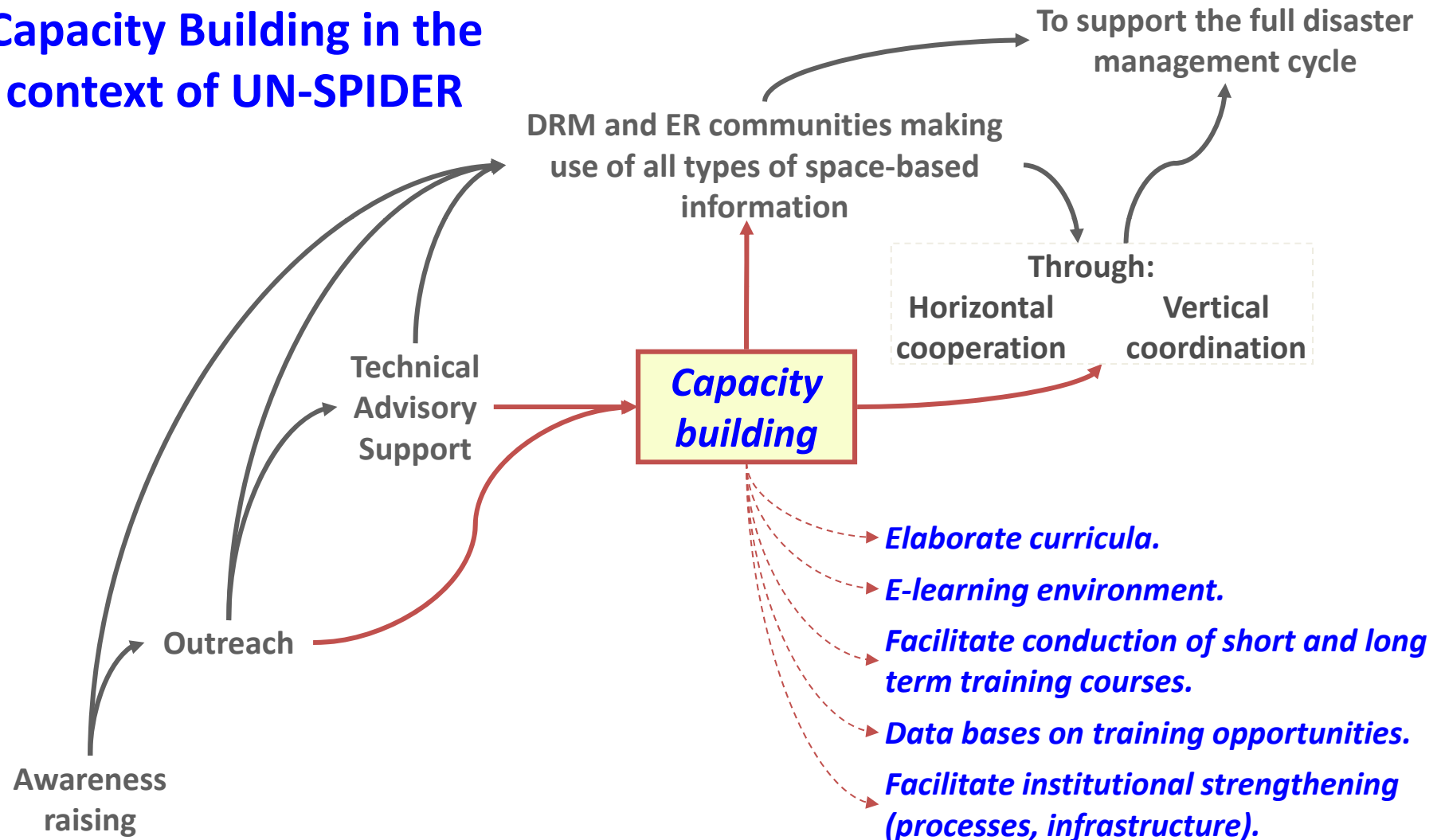
| | |
|-------------------------|--|
| As a Bridge | to foster alliances between the space and the disaster-risk management and emergency response communities. |
| As a Gateway | to promote access to and the dissemination of information, including case histories and best practices. |
| As a Facilitator | of Capacity Building to increase the ability of organizations and individuals to effectively use space-based services for disaster risk management, preparedness, response, and recovery. |



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Capacity Building in the context of UN-SPIDER





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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.



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Four conditions to possess the capacity to access and use space-based information :

Space-based data
is available and
accessible.

Institutions recognize
the relevance of using
space-based
information to make
decisions.

Staff in institutions
possess the knowledge
and the skills to access
and process this
information.

Facilities, hardware and
software to acquire,
process, and use this
information are available
and operational.

And, we need to consider the
full disaster management cycle





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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

| | Definition | Organisation & Frequency | Targeted Participants |
|---------------------|--|---|--|
| Training Course | Provide in-depth training on a technical subject | Training institution Recurring, 3days to 3 weeks | Technical staff Max. 30 |
| Summer School | Professional and/or academic training for a small group with different backgrounds | RSO, NFP, Partner... Tbd, 1 or 2 weeks | Participants with different backgrounds Max. 40 |
| Seminar | Small group for intense discussion on a topic. | by UN-SPIDER when needed duration flexible | Experts, usually similar group for a series of seminars Max. 25 |
| Workshop - Exercise | Small group for intense discussion on a topic. | UN-SPIDER with partners | Technical staff from different backgrounds in selected cases, Max. 30 |



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| Approach | Target | Range | | |
|-------------------------|--|---|--|--|
| | | Short | Medium | Long |
| Disaster-risk reduction | Individuals Institutions Infrastructure UN-SPIDER | Strengthening knowledge / skills Institutional strengthening | Strengthening knowledge / skills Institutional strengthening Enhancing capacities of communities of practice | Institutional strengthening Facilitating horizontal cooperation |
| Emergency response | Individuals Institutions Infrastructure UN-SPIDER | | | |



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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.**





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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)

The screenshot displays the UN-SPIDER Knowledge Portal website. The header includes the United Nations logo and the text "UNITED NATIONS | UNOOSA | UN-SPIDER" and "United Nations Platform for Space-based Information for Disaster Management and Emergency Response". A search bar is located in the top right corner. The main navigation menu includes links for HOME, SPACE APPLICATION, ADVISORY SUPPORT, KNOWLEDGE BASE, NETWORK, and ABOUT US. Below this, there are three highlighted sections: "Capacity Building" (circled in red), "Technical Support", and "Technical Advisory Missions". The "IN FOCUS" section features a large banner for the "UN-SPIDER Expert Meeting on Crowdsourcing Mapping" and several smaller articles. The "UN-SPIDER-WORLD" section shows a world map with various markers. The "NEWS AND UPDATES" section lists recent news items, including "UN launches new initiative for urban risk management" and "UN-SPIDER inaugurates international training course in India". The "SPACE APPLICATION MATRIX" section features a circular diagram and text describing the matrix's purpose. The "NETWORK" section lists various support offices and their logos.



Databases on Training Opportunities

- **Short-term web-based courses.**
- **Short-term presential 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



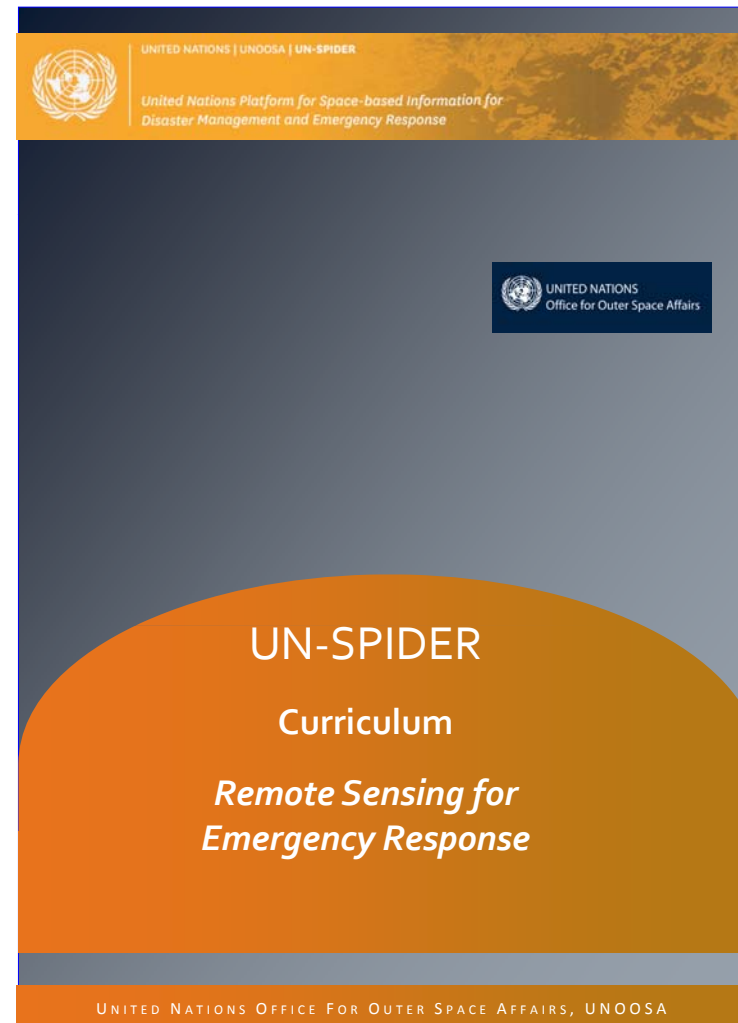
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Curricula

Remote Sensing for Emergency Response.

- *Floods*
- *Droughts*
- *Earthquakes*
- *Tsunamis*
- *Landslides*
- *Volcanic Eruptions*





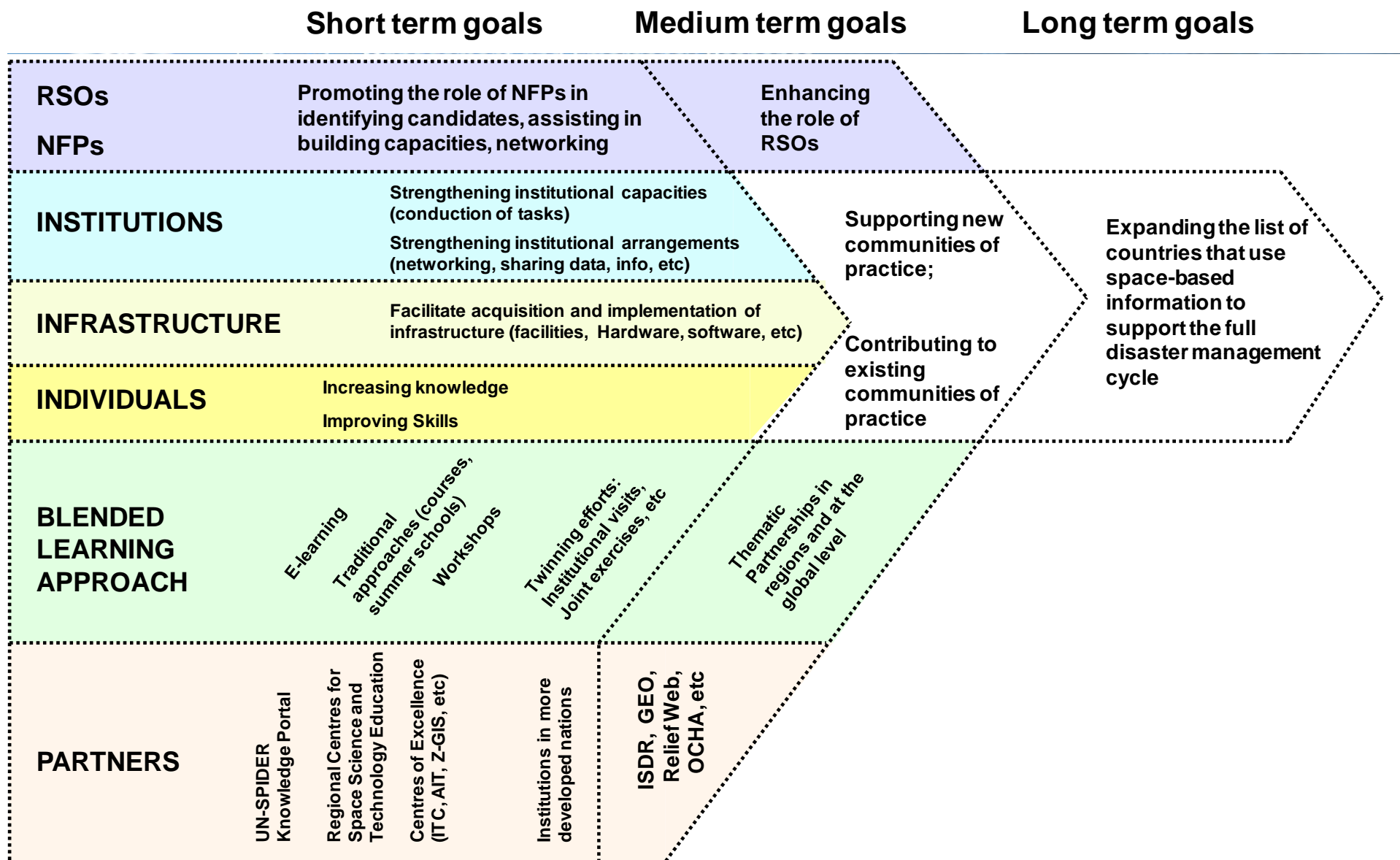
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Next Steps

- **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





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Thanks for your attention

