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

**UN-SPIDER    UN ECA    SWF**

# **Applications for Disaster Risk Management and Emergency Response in Africa**

**Addis Ababa, Ethiopia, 6 – 9 July 2010.**





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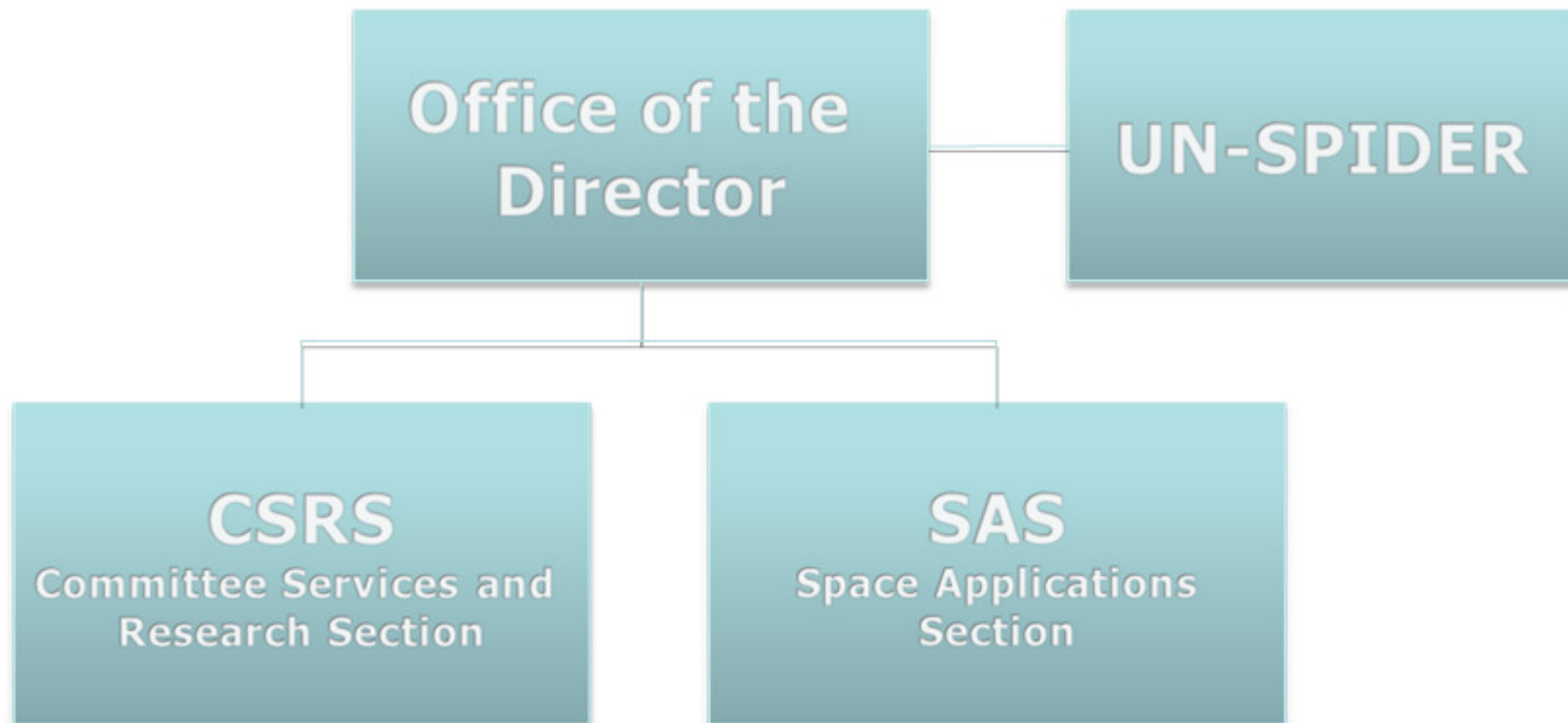
*United Nations Platform for Space-based Information for  
Disaster Management and Emergency Response*

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

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



# UNOOSA





# Mission Statement

“Ensure that all countries and international and regional organisations have access to and develop the capacity to use all types of space-based Information to support the full disaster management cycle”



## Space Technologies for Disaster Risk Management

**Satellite communications** help warn people who are at risk, especially in remote areas. They help connect a disaster zone to the outside world. Also support telemedicine networks



**Images from remote sensing satellites** help assess the damage caused by disasters like earthquakes, volcano eruptions, oil spills and floods.

**Global navigation satellite systems** enable us to obtain positional information on events that have to be mapped

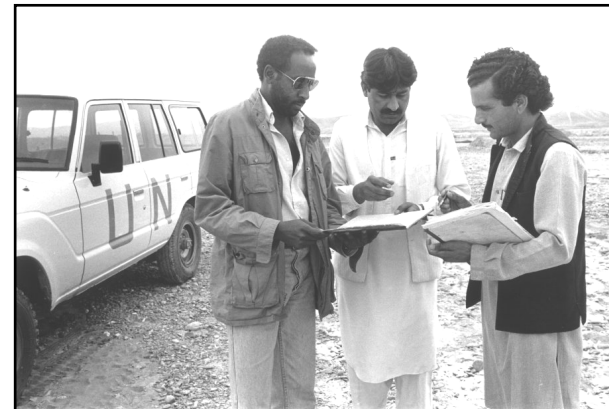


Photo Credit: UNHCR





# Activities

## **Outreach and Capacity Building**

- 1. Awareness Raising
- 2. Outreach Activities
- 3. Capacity Building

## **Horizontal Cooperation**

- 4. Communities of Practice
- 5. Platform for Ensuring Cooperation
- 6. Knowledge Management and Transfer
- 7. Knowledge Portal

## **Technical Advisory Support**

- 8. Country Profiles
- 9. Support at the National Level



HORIZONTAL COOPERATION

Knowledge Portal

The UN-SPIDER Knowledge Portal is a web-based tool for information, communication and process support. Users can find and share case studies, guides and products through the portal.



The Knowledge Portal's dynamic matrix enables rapid information access

Fostering Cooperation

UN-SPIDER bridges the gap between the space and disaster management communities. UN-SPIDER fosters alliances and creates forums where both communities can meet.



UN-SPIDER Activities

TECHNICAL ADVISORY SUPPORT

Technical Advisory Support

UN-SPIDER provides support to countries in assessing national capacity and in evaluating disaster and risk reduction activities, policies and plans with regard to the use of space-based technologies.

OUTREACH AND CAPACITY BUILDING

Capacity Building

UN-SPIDER facilitates capacity building and institutional strengthening, including the development of curricula and an e-learning platform (e-SPIDER).





# Networks

- UN-SPIDER Team
- Network of Regional Support Offices (RSOs)
- National Focal Points





# UN-SPIDER Team



**David Stevens**  
Programme Coordinator



E-Mail: [david.stevens@unoosa.org](mailto:david.stevens@unoosa.org)  
Telephone: +43-1-260 604633  
David is responsible for the overall programme coordination. This includes ensuring that the plan of work is implemented as approved by the United Nations General Assembly, that all administrative and financial procedures are followed closely, and that the staff is mobilised and involved in carrying out their responsibilities. He is also responsible for providing technical advisory support to all countries and territories in the Pacific Region.

**Juan Carlos Villagran de Leon**  
Programme Officer



E-Mail: [juan.carlos.villagran@unoosa.org](mailto:juan.carlos.villagran@unoosa.org)  
Telephone: +43-1-260 604158  
Juan Carlos is responsible for leading the implementation of the outreach and capacity building activities, which also includes awareness raising. He also coordinates our work with ISDR - International Strategy for Disaster Reduction, including the global coordination of the SPIDER Global Thematic Partnership. He is also responsible for providing technical advisory support to all countries and territories in the Latin America and Caribbean Region.

**Lorant Czarán**  
Programme Officer



E-Mail: [lorant.czarán@unoosa.org](mailto:lorant.czarán@unoosa.org)  
Telephone: +49-228-815 0682  
Lorant is responsible for leading the implementation of all horizontal cooperation activities which includes knowledge management, knowledge portal, communities of practice, cooperation among initiatives and agencies and institutions as well as SpaceAd. He is also responsible for the management of the UN-SPIDER Bonn office.

**Shirish Rayan**  
Programme Officer



E-Mail: [shirish.rayan@unoosa.org](mailto:shirish.rayan@unoosa.org)  
Telephone: +43-1-260 604158  
Shirish is responsible for leading all Technical Advisory Support activities (technical advisory support to countries and the development of country profiles). He is also responsible for establishing the UN-SPIDER Beijing Office and will take over the management of this office once it is established. He is also specifically responsible for providing technical advisory support to all countries in Asia and also coordinates the work of the Network of Regional Support Offices.



**Robert Bachhaus**  
Senior Expert

E-Mail: [robertbachhaus@unoosa.org](mailto:robertbachhaus@unoosa.org)  
Telephone: +49-228-815 0636  
Robert coordinates our efforts on knowledge management and transfer; synergies with relevant regional organisations and support at National level.



**Joana Szarzynski**  
Senior Expert

E-Mail: [joana.szarzynski@unoosa.org](mailto:joana.szarzynski@unoosa.org)  
Telephone: +49-228-815 0677  
Joana develops and coordinates the communities of practice, including health and climate change mitigation. He also contributes to the development of the Knowledge Portal, outreach activities, awareness raising, and coordination with relevant regional organisations in Africa. He is also responsible for providing technical advisory support to all countries in Africa.



**Yusuf Hasidzki**  
Senior Expert

E-Mail: [yusuf.hasidzki@unoosa.org](mailto:yusuf.hasidzki@unoosa.org)  
Telephone: +49-228-815 0696  
Yusuf is responsible for all our activities related to satellite communications, including establishing a framework to support emergency response. He also contributes to knowledge management and transfer, the knowledge portal and technical advisory support.



**Tony Lyu**  
Associate Expert

E-Mail: [tony.lyu@unoosa.org](mailto:tony.lyu@unoosa.org)  
Telephone: +43-1-260 603190  
Tony provides programme management support to UN-SPIDER. This includes staffing, internship programme, administration, finance, budget, procurement and fundraising. He is also responsible for developing specific programme strategies regarding information management, SpaceAd, communication and media.



**Peter Altmann**  
Associate Expert

E-Mail: [peter.altmann@unoosa.org](mailto:peter.altmann@unoosa.org)  
Telephone: +49-228-815 06 88  
Peter is responsible for managing all IT infrastructure of the Programme and also for the development, implementation and maintenance of the Knowledge Portal.



**Michael Leitgab**  
Associate Expert

E-Mail: [michael.leitgab@unoosa.org](mailto:michael.leitgab@unoosa.org)  
Telephone: +43-1-260 604472  
Michael provides programme management support to UN-SPIDER, including fundraising and finance. He supports outreach activities, capacity building, development of country profiles, support to technical advisory missions and information management. His responsibilities include maintaining all SpaceAd information updated. He is also focal point for inter-agency coordination with UNDP.



**Natalie Epick**  
Associate Expert

E-Mail: [natalie.epick@unoosa.org](mailto:natalie.epick@unoosa.org)  
Telephone: +49-228-815 06 83  
Natalie leads awareness raising activities and is in charge of information compilation, E-Newsletters and updates on the Knowledge Portal. She also co-leads the contact database efforts and aids with fundraising. She also supports inter-agency coordination and media management.



**Ahmed Osman**  
Assistant

E-Mail: [ahmed.osman@unoosa.org](mailto:ahmed.osman@unoosa.org)  
Telephone: +43-1-260 604977  
Ahmed provides administrative support to the whole programme including back-stopping the Bonn Office. He also leads the Programme efforts in the maintenance of the contact database. He also supports SpaceAd, fundraising and is responsible for maintaining the UN-SPIDER section on the UNOOSA website.



**Chris Nicholas**  
Consultant

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Telephone: +1-530-360 2950  
UN-SPIDER California-based consultant. Chris is responsible for providing technical guidance to the definition and implementation of the Knowledge Portal. He also supports the implementation of web map servers and other web-based applications to support SpaceAd activities.



**Michèle Jurdano**  
Consultant

E-Mail: [michèle.jurdano@unoosa.org](mailto:michèle.jurdano@unoosa.org)  
Telephone: +49-228-815 06 75  
Michèle provides expert support to the implementation of the Knowledge Portal, including information compilation and Knowledge Management and Transfer. She also develops operational frameworks to support the organisation of workshops and expert meetings as well as provides support to interagency coordination (specifically the United Nations Geographic Working Group - UNGWG).

# UN-SPIDER TEAM

UN-SPIDER in Vienna



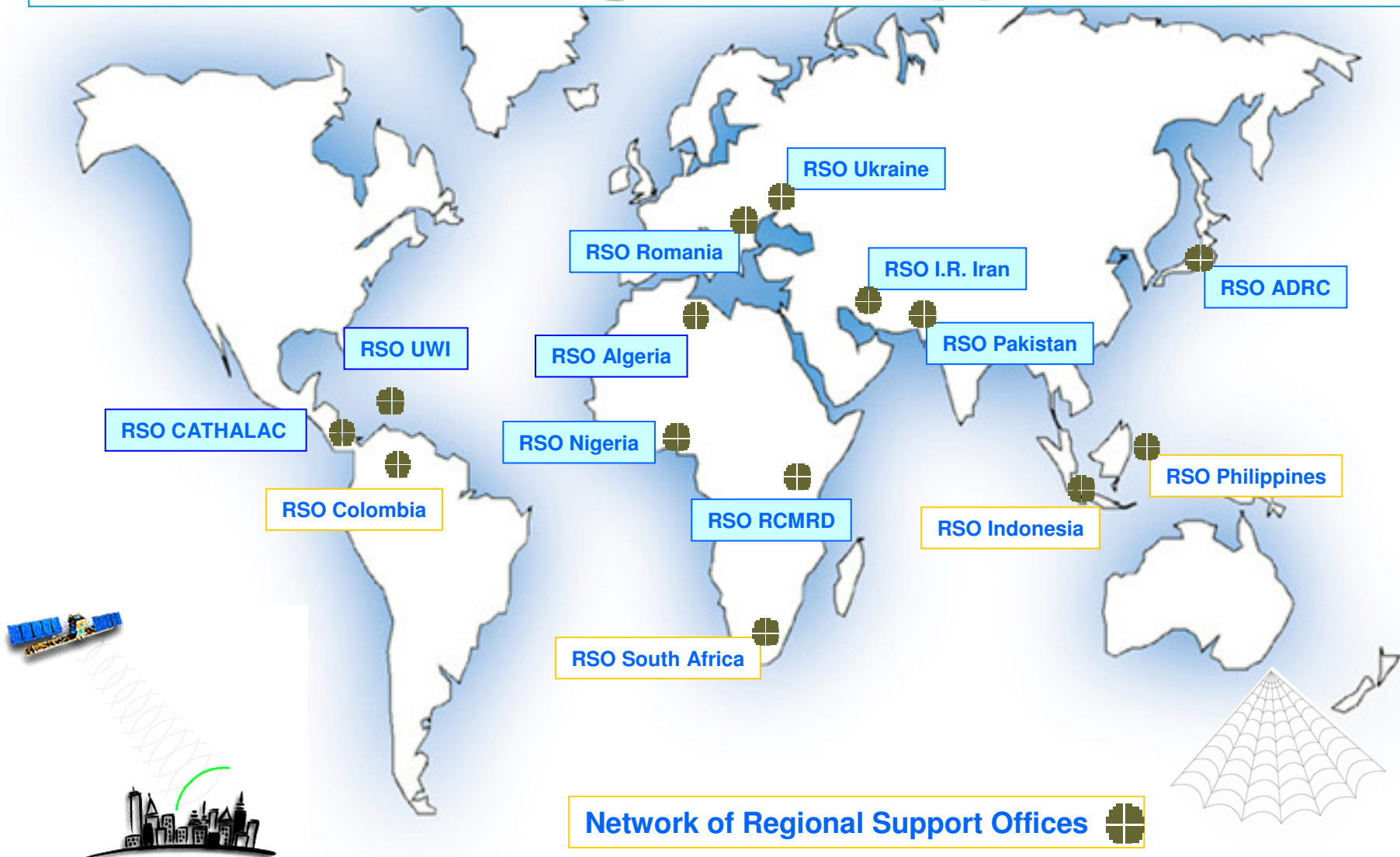
UN-SPIDER Beijing Office



UN-SPIDER Bonn Office

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

# UN-SPIDER Regional Support Offices



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



## NFP – National Focal Points

- **UN-SPIDER supports all countries through National Focal Points (NFP). A NFP is a national institution, nominated by the Government of the respective country, representing the disaster management and space application communities**
- **Role: to work with UN-SPIDER staff to strengthen national disaster management planning and policies and implement specific national activities that incorporate space-based technology solutions in support of disaster management.**
- **Nominations received from: Algeria, Austria, Belarus, Belize, Bolivia, Bosnia & Herzegovina, Burundi, China, Egypt, El Salvador, Ethiopia, India, Iraq, Jordan, Kenya, Malawi, Malta, Mauritania, Mauritius, Morocco, Myanmar, New Zealand, Philippines, Qatar, Republic of Korea, Senegal, Singapore, Spain, Syria, Tanzania, Thailand, Trinidad and Tobago, Turkey, UAE, and Ukraine.**



# Knowledge Management

## **1 The Knowledge Portal.**

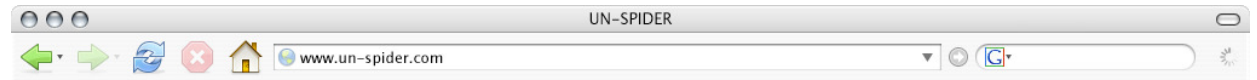
## **2 Communities of Practice: The SPIDER Global Thematic Partnership and the SPIDER Thematic Partnership for Africa**



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# The Knowledge Portal



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[Contact](#) [Profile](#) [Login](#) [T](#) [T](#) [T](#)

HOME | NEWS | SPACE AID | KNOWLEDGE BASE | COMMUNICATION | ABOUT US | YOUR LIST

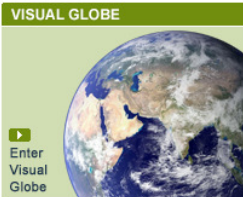
Search... [Advanced Search](#) [Visual Globe](#)

**WHAT IS UN-SPIDER?**

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Fusce tristique. Cras ipsum urna, semper vitae, aliquet eget, rutrum sed, pede. Morbi at sapien. Etiam cursus tincidunt est. Praesent et mauris. Nullam sodales, nulla et facilisis lobortis, libero enim posuere lacus, vitae convallis sapien odio in

**DISASTER INFORMATION**

Disaster	Region	Time
<a href="#">Hanna (Cyclone)</a>	Dominican Republic, Haiti	3 hours ago
<a href="#">Karina (Cyclone)</a>	East Pacific	29.08.2008
<a href="#">Ike (Cyclone)</a>	Atlantic	24.08.2008
<a href="#">Josephine (Cyclone)</a>	Atlantic	21.08.2008
<a href="#">Gustav (Cyclone)</a>	United States	21.08.2008
<a href="#">Nime (Cyclone)</a>	Atlantic	13.08.2008



**NEW ON UN-SPIDER** [View all](#)

[18.09.2008 / Spring School on Spatial Solutions for Disaster Management in Brazil](#)  
From 8 to 12 September 2008, ...  
[Read more](#)

[11.09.2008 / Supporting national disaster management in Burkina Faso.](#) Following a request of the Government of ...  
[Read more](#)

[10.09.2008 / International conference on "Global Change and Water Resources in West Africa.](#) More than 200 researchers, ...  
[Read more](#)

**SPACE AID MATRIX**

**YOUR SELECTION**

- 1 Disaster Type: TSUNAMI, DISASTER CYCLE: PREPAREDNESS, SPACE TECHNOLOGY: SAT, NAV
- 2 Disaster Type: RELIEF (HUMAN), DISASTER CYCLE: MITIGATION, SPACE TECHNOLOGY: SAT, NAV
- 3 No Selection
- 4 No Selection

[view selection](#)

**PLAY MOVIE**

**USER INSTRUCTIONS**

- 1 Choose your Type of Disaster (the matrix will rotate)
- 2 Choose the Disaster Cycle in combination with the Space Technology.
- 3 Choose up to 4 cases and view your selection.

Donec quam felis, ultricies nec, pellentesque eu, pretium quis, sem. Nulla consequat massa quis enim. Donec pede justo, fringilla vel, aliquet nec.

[Enter Space Aid Matrix](#)

- GUIDES**
- [Mechanisms Guides](#)
  - [Capacity Building Guides](#)
  - [Space Aid Guides](#)
  - [Technology Guides](#)
  - [Disaster Management Guides](#)
  - [Health Support Guides](#)
  - [Person Guides](#)
  - [Case Studies](#)
  - [Glossary](#)

**EVENTS CALENDAR** [View all](#)

October

4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

**13. / 14. / 15.10.2008 Disaster Management and Space Technology - Bridging the Gap**

[Read more](#)

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UN-SPIDER via RSS Feeds

United Nations Platform for Space-based



# **SPIDER Thematic Partnership**

- 1 Established within the framework of partnerships and networks designed by ISDR to thrust the Hyogo Framework for Action.**
- 2 Focusing on supporting National Platforms for Disaster Reduction begin set up by ISDR worldwide.**
- 3 Targeting the use of space-based information for disaster risk reduction.**
- 4 As a vehicle to achieve results that could not be achieved by individual institutions or agencies**
- 5 Initial efforts conducted in Latin America and the Caribbean.**



# Outreach Activities

- 1 Communication and advocacy.**
- 2 As a bridge to link the space and the disaster management communities.**
- 3 To attract and involve practitioners and experts to activities UN-SPIDER is conducting.**
- 4 As a gateway to provide Technical Advisory Support to countries.**
- 5 To support the role of RSOs, NFPs, and partners, including space agencies, in outreach activities.**





## International and regional workshops and expert meetings organized in 2009:

- United Nations international UN-SPIDER workshop on building capacities to reduce disasters. Vienna, Austria, 2-4 June 2009.
- UN-SPIDER regional workshop on space applications for disaster-risk management and emergency response in Latin America. Quito, Ecuador, 29 Sept. to 2 Oct. 2009.
- 3rd international UN-SPIDER workshop on disaster management and space technology: from concept to application. Bonn, Germany, 21 - 23 Oct. 2009.
- UN-SPIDER expert meeting on managing disasters using space-based technology in Central Asia, Bishkek, Kyrgyzstan, 26 Aug. 2009.





## Other events to be supported in 2010:

- (a) Second Hemispheric Encounter on Mechanisms and National Platforms for Disaster-Risk Management. Santa Marta, Colombia, April, 2010.**
- (b) Exhibition in October, 2010, to mark the International Day for Natural Disaster Reduction.**
- (c) Sixth Space Conference of the Americas, Mexico City, Mexico, Nov. 2010.**
- (d) Participation of UN-SPIDER staff in events organized by partner institutions.**
- (e) Supporting the mobilization of experts and practitioners to various regional and international events.**

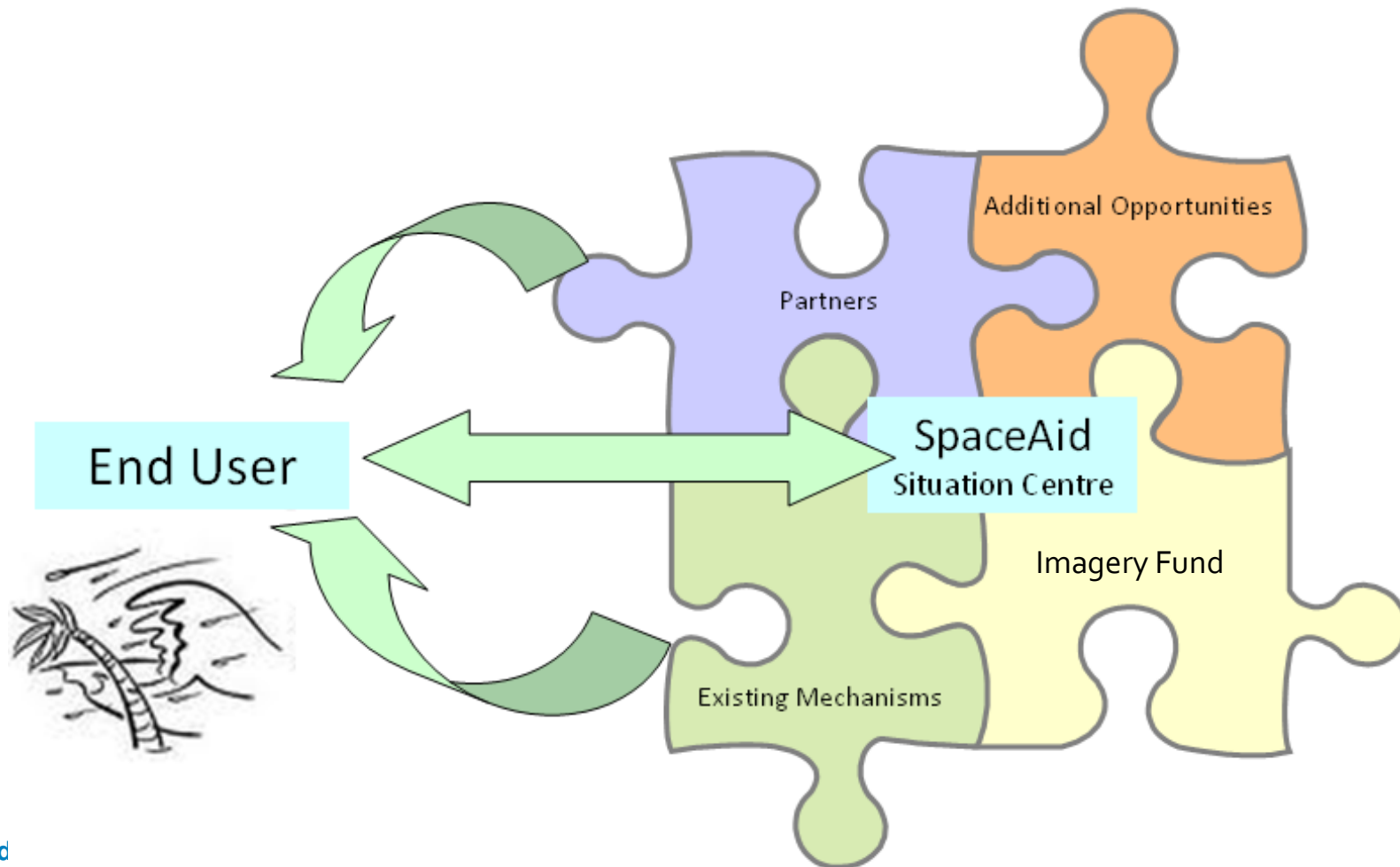


# Technical Advisory Support

- **Technical Advisory Missions** to assess current capacities and needs in countries as a means for the countries to elaborate a Plan of Action to target those needs. Missions have been conducted to Burkina Faso, Namibia, and Togo in Africa. Other countries include Ecuador, Dominican Republic and Jamaica in the American Hemisphere; Fiji, Samoa, and Tonga in the Pacific, and Maldives in the Indian Ocean.
- **Technical Advisory Support** in case of disasters through the **UN-SPIDER SpaceAid Framework** and via activations of existing mechanisms such as the CHARTER, SENTINEL ASIA, and space agencies and partners.
- **Projects in selected countries:** Namibia and Caribbean Flood Pilot Projects with National Partners, NASA, CSA, UN-SPIDER, and other agencies



# The SpaceAid Framework





# Capacity Building

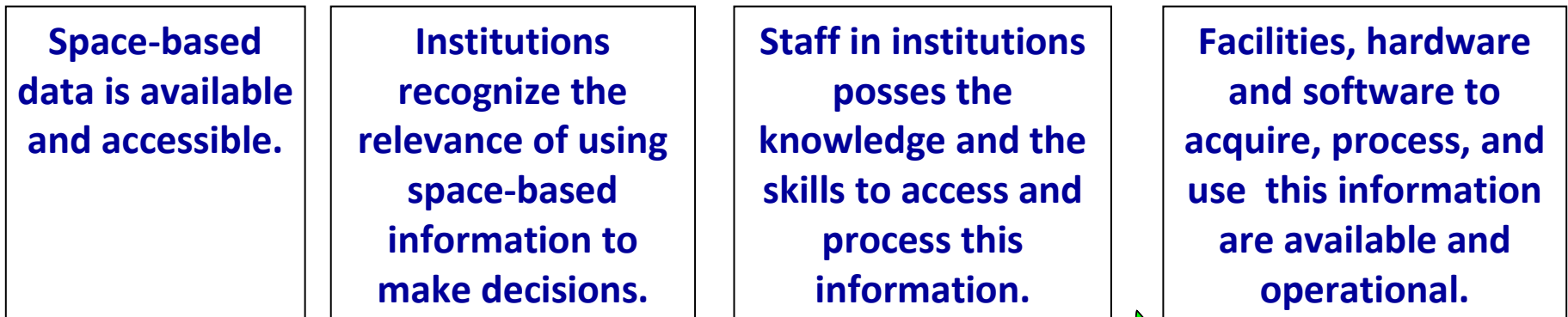
**The Capacity-Building Strategy can be stated as follows:**



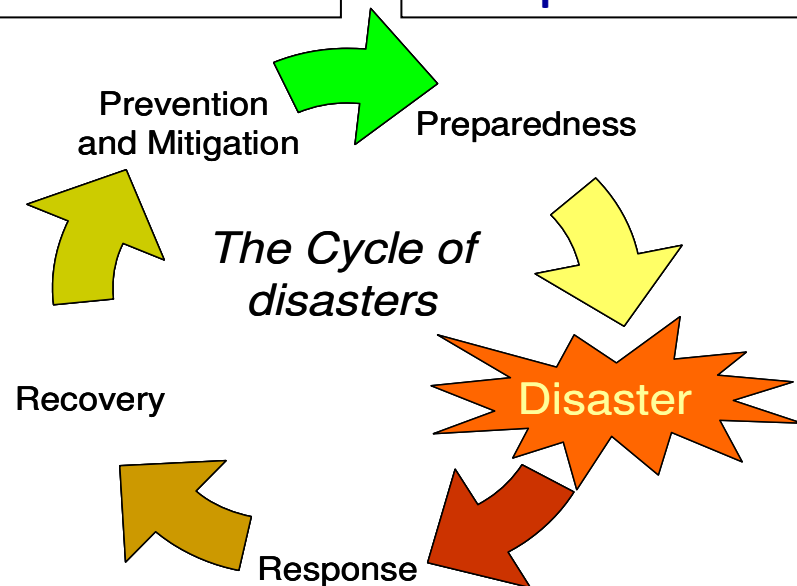
*To increase the capacity of **Networks of practitioners from the disaster management and space communities** to use horizontal cooperation and vertical coordination as a means **to access and to use all types of space-based information** to support the full disaster management cycle.*



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

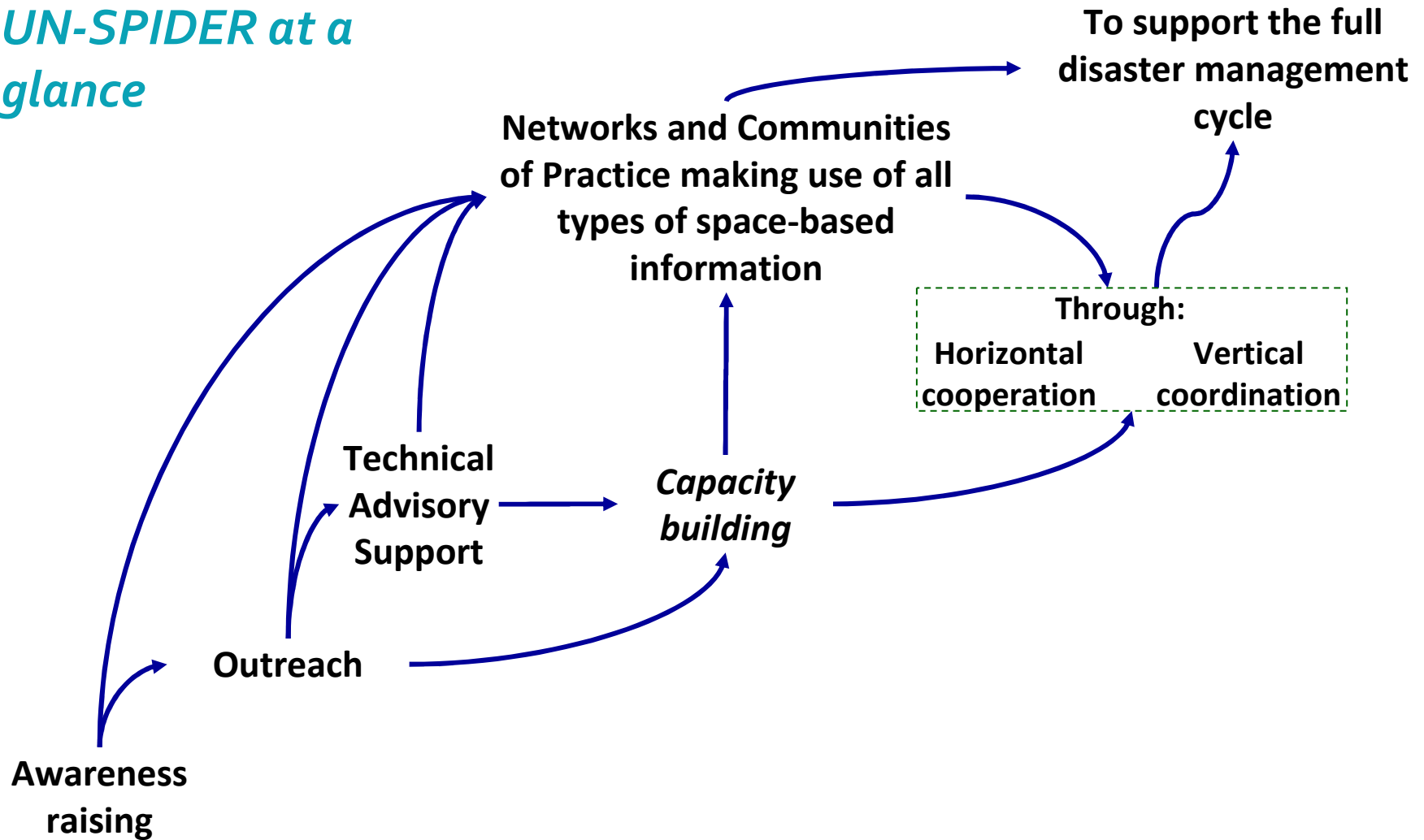


And, we need to consider the full disaster management cycle





## UN-SPIDER at a glance





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*United Nations Platform for Space-based Information for  
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**United Nations Office for Outer Space Affairs**

**UN-SPIDER**

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**THANK-YOU**