II Hemispheric Encounter
on National Mechanisms and Networks for Risk Reduction.
"Encounter of Santa Marta: From Theory to Practice,"

Special Session of the **SPIDER Thematic Partnership LAC**
Space-based Applications for Managing Risk Reduction and Emergency Response in Latin America and the Caribbean

Santa Marta, Colombia
14 April 2010
18:00 – 20:00

Introduction

The recent disasters that have taken place in the western hemisphere, including the most recent earthquakes in Haiti and Chile, have manifested the vulnerability of infrastructure of all types and weaknesses in early warning systems and disaster response efforts. However, these events, as well as other recent global events such as Ketana cyclone in the Philippines and the Indian Ocean tsunami have demonstrated the capacity of space agencies and other institutions to generate and provide space-based information to assess damages and identify needs.

In this context, earth observations from satellites are being used to assess and track hazards, to provide early warnings and to plan how to respond in a more efficient and timely way in the case of those disasters that cannot be avoided. Space-based information has proven its value when tracking tropical storms and cyclones, droughts, volcanic hazards, forest fires, desertification, and land degradation; as well as in the context of climate change, providing evidence concerning the reduction in size of polar caps and glaciers around the world. In addition, space-based information is being used to map the impacts of disasters, particularly through comparisons of images before and after a disaster; and is used by the humanitarian community to assess impacts and recovery efforts, as well as to support operations during the emergency response phase.

Taking into consideration these issues, the General Assembly of the United Nations established the **United Nations Platform for Space-Based Information for Disaster Management and Emergency Response** (UN-SPIDER) programme through its resolution 61/110 of 14 December 2006 to provide universal access to all countries and all relevant international and regional organizations to all types of space-based information to support the full disaster management cycle.

The mission of UN-SPIDER is:

> *To ensure that all countries and international and regional organizations have access to and develop the capacity to use all types of space-based information to support the full disaster management cycle*.

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

As a **Bridge**	to foster alliances between the space and the disaster management communities, through the creation of a forum where both communities can meet and discuss relevant issues.
As a **Gateway**	to promote access to and the dissemination of information, including case histories and best practices on the use of space-based data to support disaster management.
As a **Facilitator**	of Capacity Building to increase the ability of organizations and individuals to effectively use space-based services for disaster reduction, preparedness, response, and recovery.

Taking into consideration the framework of thematic partnerships as envisioned by ISDR, UN-SPIDER launched the **UN-SPIDER Global Partnership on the Use of Space-Based Information to Support the Full Disaster Management Cycle** during the Second Session of the Global Platform for Disaster Reduction, which took place in Geneva, Switzerland, on 16-19 June, 2009. This global partnership is envisioned as the forum where the space and the disaster-risk management communities meet to discuss a variety of issues and to work together to support national platforms for disaster risk reduction promoted by ISDR, with particular emphasis on risk management.

In October 2009 UN-SPIDER conducted its regional workshop for Latin America and the Caribbean in Quito, Ecuador, where participants discussed a variety of elements to establish the **SPIDER Thematic Partnership for Latin America and the Caribbean**. The following recommendations emerged from the discussion:

- The partnership should promote the use of all types of space applications to support all phases of the disaster cycle (satellite imagery and remote sensing, global geo-positioning GPS and GNSS, satellite telecommunications)
- The partnership should involve representatives of institutions from multiple types of sectors: space agencies, civil protection or civil defense agencies, institutions of the development sectors, universities, training centers and research institutions.
- The partnership should focus its efforts on supporting institutions in the countries to solve pressing problems related to risk management and emergency response. In this regard, one of its first tasks should be to analyze how space-based information offers relevant and pertinent solutions as well as the cost / benefit relation regarding the use of such information.
- The partnership must harmonize its efforts with other networks and regional and international organizations present in the region and interact with space agencies and other international organizations around the world which have an interest in supporting efforts in the region.
- The partnership needs to have well-established partners at the national level and should channel its efforts through the National Platforms for Disaster Reduction. It is important for the partnership to design products and programs with a focus on the end-user (the recipient and the user of the information). It is important to reach these end users.
- The partnership should facilitate horizontal cooperation between countries to facilitate access and subsequent use of space-based information to support all phases of the disaster cycle.

Objectives of the Special Session

The 2nd Hemispheric Encounter of Santa Marta offers the opportunity to bring together the space and disaster risk management communities. This special session is therefore conducted to:

1. Provide a forum for space agencies of various countries to provide examples of activities conducted in the areas of risk management and disaster response.
2. Discuss lessons learned with regard to access to, and use of space-based information, focusing on experiences from Haiti and Chile. In particular, the use of geo-viewers and the emergence of voluntary groups who can contribute to the generation of information on a virtual basis.
3. Discuss elements to develop a plan of action for the SPIDER Thematic Partnership for Latin America and the Caribbean with a focus on risk management to support the national platforms for disaster reduction.
4. Discuss the initiative presented at the Regional UN-SPIDER Workshop regarding the initiative to encourage space agencies in the region to support a regional training program for staff of the Ministries of Agriculture of the countries region that focus on the use of such information for the estimation of damage to crops due to droughts and other events in relation to food insecurity.

Expected Results

1. Build consensus on the proposal to be submitted within the Sixth Space Conference of the Americas, to be held in Mexico in November of this year targeting the involvement of space agencies of the hemisphere in strengthening capacities of agencies engaged in risk management and disaster response regarding access to and use of space-based information for food-security purposes.
2. Elements for a Plan of Action for the SPIDER Thematic Partnership for Latin America and the Caribbean.

Proposed Agenda

6:00 to 6:15 pm	Introduction to the session, brief introduction of participants.
6:15 to 6:30 pm	Presentation, Colombian Space Commission.
6:30 to 6:45 pm	Presentation, National Commission on Space Activities of Argentina, CONAE.
6:45 to 7:00 pm	Presentation Space Agency of Chile (pending confirmation).
7:00 to 7:15 pm	Presentation of Geo-viewer 3D-UDOP, Thermopylae Science and Technology, USA.
7:15 to 7:30 pm	Presentation, UN-SPIDER: SPIDER Thematic Partnership for LAC.
7:30 to 8:00 pm	Discussion: Lessons Learned, Action Plan for the Partnership, initiative for the VI SCA.