



UNITED NATIONS  
Office for Outer Space Affairs

## INFORMATION NOTE

### United Nations/Germany Expert Meeting on the Use of Space Based Information in Early Warning Systems

Organized by  
**The United Nations Office for Outer Space Affairs/ UN-SPIDER**

With the support of  
**The German Federal Ministry for Economics and Technology**

**Bonn, Germany, 26-27 June 2013**

#### 1. Introduction

In its resolution 61/110 of 14 December 2006 the United Nations General Assembly established the “**United Nations Platform for Space-based Information for Disaster Management and Emergency Response – UN-SPIDER**”, as a programme of the United Nations Office for Outer Space Affairs, to provide universal access to all countries and all relevant international and regional organizations to all types of space-based information and services relevant to disaster management to support the full disaster management cycle.

Taking into consideration the role of early warning systems in minimizing damages and losses in case of disasters, UN-SPIDER is organizing **the United Nations/Germany Expert Meeting on the Use of Space-based Information in Early Warning Systems** with the financial support from the Government of Germany. The expert meeting will take place in Bonn, Germany, from 26 to 27 June 2013 and will bring together space technology and disaster management communities representing national, regional and international organizations as well as internationally active private companies to share experiences and lessons learned regarding use of space-based information in early warning systems; to identify needs and to discuss knowledge management strategies to improve existing early warning systems through the incorporation of recent advances in space-based applications.

#### 2. Background

As stated by the International Strategy for Disaster Reduction of the United Nations (UNISDR), an Early Warning System is the “set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss”. Complete and effective early warning systems include four inter-related elements: *Risk knowledge, monitoring and*

*warning service, dissemination and communication, and response capability.* Good Early Warning Systems have strong linkages between the four elements. Failure in any part of the system will imply failure of the whole system.

Space-based technologies, especially Earth Observation, provide valuable information on sudden-onset as well as on slow-onset hazards, be it information on land cover for risk assessment or to improve the warning service and response capability. A typical example is the use of imagery derived from satellites to track hurricanes and cyclones. In selected cases such as in the case of tsunamis, satellite telecommunications are the ideal mechanism to disseminate warnings in different continents.

Taking into consideration UN-SPIDER's mandate to serve as a bridge between the space community, the disaster risk management and the emergency response communities and to serve as a gateway to space-based information for applications including early warning systems and disaster preparedness; this expert meeting aims to define an agenda of worked aimed at improving early warning and preparedness efforts through the use of space-based information.

### **3. Objectives and Expected Outcomes**

The main objectives of the expert meeting are to raise awareness concerning the most recent advances regarding the use of space-based information in early warning systems and disaster preparedness; to identify and systematize areas where space-based information can improve the functionality of existing early warning systems, to identify knowledge management strategies that can facilitate access to and use of space-based information in early warning and preparedness and to bridge the space and the early warning communities.

Expected outcomes include:

- The compilation of experiences and lessons learned from existing early warning systems that already make use of space-based information;
- The identification of directions and priorities to improve the functionality of existing early warning systems through the incorporation of space-based information;
- The identification of knowledge management strategies that can enhance the use of space-based information in early warning and disaster preparedness;
- The identification of strategies or procedures to facilitate or improve the transition between early warning and response efforts;
- The identification of strategies to enhance synergies between the space community and those members of the disaster-risk management and emergency response communities that are involved in early warning and disaster preparedness;
- The identification of potential experts for the UN-SPIDER group of mentors.

### **4. Working Modality for the Expert Meeting**

The Expert Meeting will make use of keynote presentations as a way to set the stage for discussion sessions. Keynote presentations will include contributions from experts of the space community on the use of space-based information in early warning systems; from those experts involved in early warning systems on the lessons learned regarding the use of space-based information in the routine operation of the early warning systems and from experts focusing on the notion of efficient early warning and disaster preparedness.

Discussion sessions in the format of break-out sessions will target specific topics. Issues to be discussed in these break-out sessions include:

- Elements of existing early warning systems that can be improved through the use of space-based information (*Risk knowledge, monitoring and warning service, dissemination and communication, and response capability*);
- Strategies to make use of space-based information to link early warning, preparedness and response efforts in tasks such as damage and needs assessments based on risk knowledge and geo-spatial information;
- Enhancing the UN-SPIDER Knowledge Portal to support day-to-day operations in early warning systems and in disaster preparedness and to improve elements of early warning systems;
- Tailoring knowledge management efforts as a way to improve early warning and preparedness through the use of space-based information
- Tailoring the UN-SPIDER portal to facilitate synergies among the space, the disaster-risk management and the emergency response communities that are involved in early warning and disaster preparedness.

## **5. Participants**

The expert meeting is expected to bring together a selected number of participants from national, regional, and international public and private organizations including:

- Experts from the space community who focus their efforts on disaster-risk management and emergency response activities;
- Experts from the Disaster-Risk Management and Emergency Response communities who are involved in early warning and disaster preparedness activities;
- UN-SPIDER National Focal Points;
- Experts from the UN-SPIDER Network of Regional Support Offices;
- Experts from the UN-affiliated Regional Centres for Space Science and Technology Education, and other national, regional, and international Centres of Excellence.

Applicants must have a well-established professional working experience in a field related to the theme of the expert meeting. Applicants should ideally be involved in the planning or implementation of relevant space, disaster-risk management or early warning programmes in relevant governmental organizations, international or national agencies, non-governmental organizations, research or academic institutions or industry.

## **6. Financial Support to Selected Participants**

Taking into consideration the limited financial resources available for this expert meeting, a number of qualified applicants from developing countries, who have expressed the need for financial support, will be offered financial support to attend the expert meeting. This may include the provision of a round-trip air ticket between Bonn and the applicant's international airport of departure and/or daily subsistence allowances to cover board and lodging for the duration of the Expert meeting. Any changes made to the air tickets must be the responsibility of the participants.

Due to this limited availability of financial resources, applicants and their nominating organizations are therefore strongly encouraged to find additional sources of sponsorship to allow them to attend the Expert meeting.

#### **7. Language of the Expert Meeting and Presentations by Participants**

The working language of the Expert Meeting will be English.

#### **8. Dates and Location of the Expert Meeting**

The Expert Meeting will be held in Bonn, Germany, from 26 to 27 June 2013. All selected and invited participants will receive information with details on board, lodging and other local options.

#### **9. Deadline for Submission of Applications**

The detailed information for applications will be made available in a timely manner via the UN-SPIDER Knowledge Portal. Deadline for applications for those requesting financial assistance is 31<sup>st</sup> March 2013. Only complete applications, with all requested information and signatures, will be considered.

Information on the application process will be made available at: <http://www.un-spider.org/earlywarning>

#### **10. Life and Health Insurance**

Life and major health insurance is the responsibility of each selected participant or his/her nominating institution or government. UNOOSA and the co-sponsors will not assume any responsibility for life and major health insurance nor for any other expenses related to medical treatment or accidental events.

#### **11. Visas**

Participants are responsible for making their own arrangements to secure the visas which may be required when making stop-overs in countries other than Germany due to flight connections and to enter Germany.

#### **12. Point of Contact**

**UN-SPIDER**

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Please check <http://www.un-spider.org/earlywarning> for the latest information about the Expert Meeting.