



INFORMATION NOTE

United Nations/Syria Regional Workshop on the Use of Space Technology for Disaster Management in Western Asia and Northern Africa

Hosted by the General Organization of Remote Sensing

**Damascus, Syria
22 – 26 April 2006**

1. Introduction

Each year, natural disasters such as storms, floods, volcanoes and earthquakes cause the death of thousands of people and tremendous damage to property around the world, displacing tens of thousands of people from their homes and destroying their livelihoods. From 1994 to 2003 there were more than 300 natural disasters on average each year, impacting more than 100 countries, killing over 50,000 people, affecting nearly 260 million people and causing economic damage totalling US\$ 55 billion each year. The impact of natural disasters on developing countries is particularly severe. In some instances, disasters destroyed in minutes the progress in social and economic development that developing countries had made over a period of years.

Managing disasters effectively has become a global challenge and is essential if impact is to be minimized. Governments, when implementing risk reduction and disaster management activities, must recognize the use of space-based technologies as a source of timely and accurate information at the local and regional scales. Furthermore, governments must recognise their responsibility to support the integration of space-based technologies into national risk reduction plans and policies.

Space technologies such as earth observation satellites, meteorological satellites, global navigation satellite systems (GNSS) and communication satellites have a proven success record in supporting not only the emergency response phase of disasters but also the pre-disaster phase, and are being integrated into modern disaster management programmes.

Earth observation satellites have demonstrated their utility in providing data for a wide range of disaster warning applications, such as cyclone tracking, drought monitoring, and predicting the possible damage due to volcanic eruptions, oil spills, forest fires and desertification. Current research indicates the potential of earth observation imagery to support the prediction of earthquakes. Remotely sensed data provide a historical database from which hazard maps can be compiled, in order to identify potentially vulnerable areas.

Communication satellites can be used during both the pre-disaster and the post-disaster phases. Satellite-based communications can be used as part of an early warning system for disasters such as a tsunami. Ground-based data from an earthquake can be transmitted by communication satellites, which can in turn trigger a warning in cases where the likelihood of a tidal wave is high. Based on such information, authorities could decide to evacuate a region, thus preventing the loss of lives.

Following a natural disaster such as an earthquake or a flood, ground-based communication infrastructure is often destroyed. Communication satellites have proven their value in connecting the afflicted areas to the rest of the world, enabling rescuers to plan and provide aid. As a result of Hurricane Katrina, ground-based communication links were severed in the Gulf Coast region of the United States of America. As an alternative, satellite phones were heavily used for disaster relief. Similarly, satellite-based communications were used following the tsunami in the Indian Ocean region.

Meteorological satellites are also used for early warning by providing accurate detection, forecast and tracking of weather-related phenomena such as hurricanes, typhoons and floods. Images and data from meteorological satellites are often the main sources of information used by local authorities when deciding to evacuate vulnerable areas. Meteorological satellites are also used during the disaster relief phase to warn rescuers of bad weather that could hamper their efforts, and to assist them in developing contingency plans.

Global navigation satellite systems (GNSS), such as the Global Positioning System (GPS) of the United States of America and GLONASS of the Russian Federation, provide accurate position, velocity and time information that is readily accessible on the ground to anyone with a receiver, enabling them to collect data to support risk reduction and emergency response activities.

Under the theme “Space benefits for humanity in the twenty-first century”, the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space UNISPACE III was held in Vienna from 19 to 30 July 1999. The most important result of UNISPACE III was the adoption of the Vienna Declaration on Space and Human Development, which recommended 33 specific actions that should be carried out in order to enable space technologies to contribute to meeting the global challenges of the new millennium.

One of the recommendations put forward was “to implement an integrated, global system, especially through international cooperation, to manage natural disaster mitigation, relief and prevention efforts, especially of an international nature, through Earth observation, communications and other space-based services, making maximum use of existing capabilities and filling gaps in worldwide satellite coverage”.

Building upon this recommendation the Committee on the Peaceful Uses of Outer Space put forward a proposal (which was adopted by the General Assembly at its 59th session) for a study to be conducted on the possibility of creating an international entity to provide for coordination and the means for optimizing the effectiveness of space-based services for use in disaster management. This proposed coordinating entity is known as DMISCO (Disaster Management International Space Coordination Organization). It is expected that this study will enable the implementation of such a coordinating entity by 2007 which would contribute to helping developing countries have access to and incorporate space-based technology solutions for risk reduction and disaster management.

The United Nations Office for Outer Space Affairs (UNOOSA) organised between 2000 and 2004 a series of regional workshops on the use of space technology for disaster management and considered the results of the regional workshops at a final international workshop, which was held in Munich in October 2004. This wrap-up workshop was jointly organised by UNOOSA and the German Aerospace Center (DLR), and was co-organised by UNESCO, UN/ISDR, and the European Space Agency. A total of 170 participants from 51 countries developed a global strategy, “The Munich Vision: A Global Strategy for Improved Risk Reduction and Disaster Management Using Space Technologies”, which would contribute to helping developing countries have access to and be able to use space technology for disaster management.

The participants in Munich recognized that space-based technologies (earth observation satellites, communication satellites, meteorological satellites and global navigation satellite systems) play an important role in risk reduction and disaster management and put forward a number of observations and recommendations in the areas of: capacity development and knowledge building; data access, data availability and information extraction; awareness raising; and the need for national, regional and global coordination.

Specifically with regard to the need for coordination, participants in Munich recommended that at the national level, institutions within a country should be jointly responsible for defining actions to be carried out collectively, with the appropriate space technology institutions taking the lead. Particular attention should be given to local communities and to involving local leaders and grassroots organizations. At the regional level, interested international, regional and national institutions should cooperate to advance the actions that are relevant to the region as a whole.

UNOOSA is committed to providing support to these efforts by contributing to maintaining the list of institutional focal points, connecting relevant institutions from other regions, and linking and synergizing the work of these institutions with other international initiatives such as the coordination entity being proposed by the UN Committee on the Peaceful Uses of Outer Space (COPUOS), the proposed Global Earth Observation System of Systems (GEOSS) and the International Charter Space and Major Disasters.

2. Workshop objectives

The United Nations Office for Outer Space Affairs and the General Organization of Remote Sensing, on behalf of the Government of Syria, are organising the above workshop from 22 – 26 April 2006.

The overall objective of this regional workshop is to increase the awareness of policy makers, planners and managers in the area of disaster management and civil protection in Northern Africa and Western Asia of the potential benefits and cost effectiveness of using space technology for preventing and managing disasters and also to build upon the recommendations put forward in “The Munich Vision”.

The specific objectives include: 1) Learning of the current and potential uses of space technology for disaster management in the region; 2) Identification of national and regional activities to be carried out jointly by space technology and civil protection institutions; 3) Identification of existing and planned initiatives that national and regional institutions should be aware of, and; 4) Strengthening of existing networks such as UN-OOSA’s **“Global Network for Space Technology and Disaster Management”**.

3. Programme

The workshop programme will include presentations that detail the current use of space technologies for disaster management, presentations that discuss the on-going and planned initiatives that national and regional institutions should be aware of and take advantage of, and discussion sessions that will contribute to the creation and consolidation of existing networks and partnerships.

Presentations on the current use of space technologies for disaster management will include the following topic areas:

- Geo-hazards: seismic hazards and landslides;
- Floods;
- Dust and sand storms;
- Desertification;
- Wild fires;
- Satellite communications for tele-health and telemedicine, focusing on the use of space technology for medical treatment during the rescue and rehabilitation phases of disasters, and;
- Technological disasters (including detection and monitoring of oil spills).

Presentations will be made on on-going and planned initiatives such as DMISCO (Disaster Management International Space Coordination Organization), the International Charter Space and Major Disasters, the Global Earth Observation System of Systems (GEOSS), and the Disaster Monitoring Constellation (DMC).

Further information on the workshop programme will be posted on the web site of the United Nations Office for Outer Space Affairs (<http://www.oosa.unvienna.org/SAP/stdm>).

4. Participation

The workshop is being planned for a total of 80 decision-makers and technical experts drawn from the following groups: international, regional, national and local institutions, private organizations, academic institutions, multi-lateral and bi-lateral development agencies, non-governmental organizations, and also from the private industry. Experts and professionals from both space-related and disaster management institutions will be invited, providing an opportunity to exchange experiences and strengthen networks and partnerships that will contribute to the increased use of space technology-based solutions in disaster management activities in the region. Applicants who demonstrate that the workshop is central to his/her professional activities/responsibilities will be selected on a priority basis.

5. Language of the seminar

The workshop will be conducted in **English**.

6. Financial support

Within the limited financial resources available, a number of selected participants from Western Asia and Northern Africa will be offered financial support to attend the workshop. This financial support will defray the cost of travel (a round trip ticket – most economic fare – between the airport of international departure in their home country and Damascus, Syria) and/or the room and board expenses during the duration of the workshop. Participants that are able to provide full or partial support will be chosen on a priority basis.

All funded participants will be requested to contribute to the development of a Country Profile on the “Current, Planned and Potential Use of Space Technology for Disaster Management” within their country.

7. Deadline for Submission of Applications

The completed application form, properly endorsed by the applicant's government/ institution, should be submitted by mail to the United Nations Expert on Space Applications, Room E-0970, United Nations Office at Vienna, Vienna International Centre, P.O. Box 500, A-1400 Vienna, Austria, **no later than Friday 18 February 2006**. To accelerate processing of your application, you should also fax an advance copy directly to the Office for Outer Space Affairs, FAX: (++43-1)-26060-5830. **Only complete applications, with all the requested information and signatures, will be considered.**

8. Life and Health Insurance

Life/major health insurance for each of the selected participants is necessary and is the responsibility of the candidate or his/her institution or government. The co-sponsors will not assume any responsibility for life and major health insurance, nor for expenses related to medical treatment or accidental events.

9. Points of Contact

For information regarding the programme and participation in the workshop, please contact **Ms. Raechelle NEWMAN**, United Nations Office for Outer Space Affairs.

E-mail: raechelle.newman@unvienna.org
Telephone: +43 1 26060 4946
Fax: +43 1 26060 5830

The focal point for Syria is **Ms. Dahouk RUKIEH**, Deputy Director of Scientific and International Relations, General Organization of Remote Sensing. Ms Rukieh can be contacted regarding local arrangements including venue of the workshop, arrival in Damascus, hotel accommodation, transportation to and from the hotel and other logistical details.

E-mail: gors@mail.sy
Telephone: + 963 11 3920673/4/5/6
Fax: + 963 11 3920700



United Nations/Syria Regional Workshop on the Use of Space Technology for Disaster Management in Western Asia and Northern Africa

Hosted by the General Organization of Remote Sensing

Damascus, Syria, 22 – 26 April 2006

APPLICATION FORM
(To be typed in or handwritten in block letters)

DEADLINE FOR SUBMISSION: FRIDAY 18 February 2006

This form, FULLY COMPLETED, should be submitted by mail to the United Nations Expert on Space Applications, Room E-0970, United Nations Office at Vienna, Vienna International Centre, P.O. Box 500, A-1400 Vienna, Austria, **no later than Friday 18 February 2006**. To accelerate processing of your application, you should also fax an advance copy directly to the Office for Outer Space Affairs, United Nations Office at Vienna, FAX: (+43 1) 26060 5830.

I hereby apply to participate in the United Nations/Syria Regional Workshop on the Use of Space Technology for Disaster Management in Western Asia and Northern Africa. Applicants should be familiar with the objectives and programme topics of the seminar as described above.

A. PERSONAL DATA

1. Family Name: _____ First Name: _____
2. Sex (Male/Female): _____ 3. Date of Birth: ____/____/____
Day Month Year
4. Nationality: _____
5. Current Title/Position: _____
6. Agency/Organization: _____
7. Principal Functions/Duties: _____
8. Official Mailing Address: _____

City: _____ State: _____ Country: _____
9. Phone 1: _____ Phone 2: _____
Fax 1: _____ Fax 2: _____
E-mail: _____

(Please double check your phone/fax numbers and E-mail address, since this will be our principal means to contact you)

10. In case of emergency contact: _____

Address: _____

_____ Phone: _____ Fax: _____

B. ACADEMIC AND PROFESSIONAL BACKGROUND

11. Your academic background (degrees, where and when obtained, and a description of your fields of study):

12. Your professional experience and current activities in the area of disaster management:

13. Provide information on the programmes and mandates of your institution that could benefit from your participation in this seminar, including your involvement and responsibility. We are specifically interested in possible projects/activities that might be initiated/supported through your participation in this seminar:

14. Have you previously participated in training courses/workshops/seminars (regional or international) organized by the United Nations or its specialized agencies? Yes () No ()
If yes, please indicate the following: title of the meeting(s), location(s), date(s) of attendance and subject(s) covered by the programme:

C. PARTICIPANT CONTRIBUTIONS

15. Seminar participants have the opportunity to give a presentation on the topics listed in section 3 of the information note as well as contribute to the development of a Country Profile on the "*Current, Planned and Potential Use of Space Technology for Disaster Management*" within their country. If you wish to make a presentation please provide a title for the presentation and a brief description. You may wish to attach a 100-word abstract to this application form.

D. HEALTH REQUIREMENTS

16. Life/major health insurance for each selected participant is the responsibility of his/her institution.

E. FUNDING

17. ***Funds available to support participants in the seminar are limited.*** Qualified participants whose nominating agency/organization agrees to fund round-trip travel and/or living expenses **will be considered on a priority basis.** Due to limited funding availability, the organizers strongly encourage you to seek alternative funding to secure your participation. Please indicate below if you are able to pay for your round trip travel and/or living expenses for the duration of the seminar (covered either by your sponsoring agency/organization, or another international, regional or national organization) or if you wish to be considered for funding support. Also, if you are requesting funding support for round-trip travel you must fill in Section 20 at the end of this Application Form.

Living expenses for the duration of the seminar

I have my own funding and do not wish to be considered for funding support ()

I do not have funding and I do wish to be considered for funding support ()

Round trip travel to Damascus, Syria

I have my own funding and do not wish to be considered for funding support ()

I do not have funding and I do wish to be considered for funding support ()

IMPORTANT: We will only consider your request for funding support if your Application Form is complete, including the travel information and the signature and stamp/seal of the Head of the nominating agency/organization. It is important that our Office receives the original of this application form.

18. Applicant's signature:

(Signature of Applicant) (Place) (Date)

19. Head of nominating agency/organization (required for processing of application):

(The head of the nominating agency/organization also confirms with their signature that the nominating agency/organization will be able to provide funding for the participation of its nominee as indicated in paragraph E of this application form)

(Signature of Head of nominating organisation) (Place) (Date)

(Full name and title of Head of nominating agency/organization/company in print)

(Seal of agency/organization)

**IF YOU ARE REQUESTING FUNDING SUPPORT FOR TRAVEL
PLEASE PROVIDE THE FOLLOWING INFORMATION.**

20. The financial support for the cost of travel that will be provided to a limited number of participants will be for a round trip ticket – most economic fare – between the airport of international departure in your home country and Damascus. In order to help us in providing this funding support we request that you verify in your home country the cost of such a ticket and the routing. Please contact either an airline company that connects your country to Damascus or a Travel Agency and provide us with the following information. You should plan to arrive in Damascus on Friday 21 April 2006 and depart on Wednesday 26 April 2006 after 2:00 PM.

Name of Airline or Travel Agency

Address

Tel / FAX / E-mail

Details of route going to Damascus – date and time of departure and arrival and flight numbers

Details of route returning to your home country – date and time of departure and arrival and flight numbers

Cost of ticket in local currency and US dollars – include in the cost all airport taxes and other fees

IMPORTANT: If the above information is not provided you will not be considered for funding support for travel.