

INFORMATION NOTE United Nations/Islamic Republic of Iran Workshop on the Space Technology Applications for Drought, Flood and Water Resource Management

Online event Organized jointly by

The United Nations Office for Outer Space Affairs through the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)

and

The Islamic Republic of Iran

Hosted by

Ministry of I.C.T. (The Iranian Space Agency)

9-11 August 2021, Tehran, Iran

Important deadlines

Registration by speakers/presenters: 14 July 2021 Registration by other participants: 1 August 2021





Introduction

Space-based applications related to Earth Observation and geospatial data play an important role in supporting disaster risk reduction, response, and recovery efforts through providing accurate and timely information for decision-makers. Monitoring floods, drought conditions and water resource environments using satellite remote sensing (RS) technologies have become more essential recently in particular for developing countries.

This Workshop will address the use of space technologies (remote sensing, telecommunication and global navigation satellite systems) for various applications in natural disaster managements that can provide sustainable social and economic benefits. Current and planned projects/researches that use space-based technologies for both practical applications and scientific explorations will be presented. Cooperative efforts and international partnerships for capacity-building, training and research will be discussed.

Background and objectives

The Workshop will be held in Tehran, Iran, from 9 to 11 August 2021, in virtual format, hosted by the Iranian Space Agency (ISA). The Workshop will explore how current space technologies help to identify and monitor the effects of a changing climate – including the onset of drought, flash floods and generally water resources conditions as a result of global climate change in particular on an international and regional scale. The discussions at the Workshop will also be linked to the Sustainable Development Goals (SDGs). The main objectives of the Workshop are, therefore, to promote collaborative research, identification of challenges and provide recommendations to enhance regional efforts towards disaster management and emergency response.

Workshop Program and Expected Outcomes

The specific objectives of the Workshop will be:

- Introduce latest applications of space-based technologies to the management of natural resources, environment, as well as disaster management, in particular for drought, flood and water resources;
- ii. Promote the greater exchange of experiences on space-based applications projects related to water resources at national and/or regional scales;
- iii. Encourage greater cooperation among stakeholders of disaster management to promote partnerships within the region;





iv. Define recommendations and findings to be forwarded as a contribution to the Office for Outer Space Affairs, in forging partnerships to strengthen and deliver capacity-building on satellite remote sensing and other technologies for disaster risk reduction and management.

The expected outcomes of the Workshop are:

- a. Recommendations and findings on the use of space technology for benefit of the Workshop participants;
- b. Facilitate the partnerships between countries in the region and international networks;
- c. Define road map to address issues and concerns identified during the workshop
- d. Nurture the ideas of pilot projects and research to strengthen collaboration at a regional scale.

Participation requirements

The Workshop is being planned for disaster management professionals, technical experts, researchers and educators from international, regional, national and local institutions, academic institutions, multi-lateral and bilateral development agencies, non-governmental organizations (NGOs) as well as from private industry. Experts and professionals will be invited, providing an opportunity to exchange views and strengthen networks and partnerships that will contribute to the increased use of space-based technology solutions for drought, flood and water resource management. Applicants must have a university degree and have a well-established professional working experience in a field related to the theme of the Workshop. Applicants should be in managerial, decision-making, technical or academic positions within government agencies, international, regional and national institutions, universities, NGOs or private industry with responsibilities for carrying out programs or projects in the areas related to the themes of the Workshop.



Ministry of I.C.T
IRANIAN SPACE AGENCY



Program of activities

| 09 August 2021 | | |
|----------------------------|---|-----------------|
| Time(Local time in Tehran) | Activity | Lead/Moderation |
| 11:00 - 13:00 | Opening Remarks (keynote speeches) | UNOOSA/ISA |
| | Session 1 Earth Observation for drought and flood monitoring - National, regional and international initiatives/tools | UNOOSA/ISA |
| 13:00 – 14:00 | Break | |
| 14:00 – 16:00 | Session 2 Space technology for ecosystem health monitoring and drought monitoring, early warning, preparedness and response | UNOOSA/ISA |
| 10 August 2021 | | |
| 11:00 - 13:00 | Session 3 Vulnerability mapping and risk analysis of sand & dust storm | UNOOSA/ISA |
| 13:00 – 14:00 | Break | |
| 14:00 – 16:00 | Session 4 Earth Observation and environmental modelling for flood and water resources management in the context of global climate change | UNOOSA/ISA |
| 11 August 2021 | | |
| 11:00 - 13:00 | Session 5 Geoinformatics applications in water resources management in the west Asia; challenges and opportunities | UNOOSA/ISA |
| 13:00 – 14:00 | Break | |
| 14:00 – 15:30 | Session 6 Interactive Session Institutional strengthening and preparedness for improving disaster management risk assessment (Strategies to raise cooperation among public and private stakeholders of disasters management in an international, national and regional scale) | UNOOSA/ISA |
| 15:30-16:00 | Closing Remark | UNOOSA/ISA |





Language of the Workshop

The only working language of the Workshop will be English.

Deadline for submission of applications

Please note that the online application form is available here. $\underline{https://forms.office.com/r/y0D9z1yqxu}$

If you would like to give a presentation, please submit the completed application form together with a presentation abstract online by Wednesday, 14 July 2021 at the latest.

The registration deadline for other participants is Sunday, 1 August 2021.

Points of contact

UNOOSA:

Ms. Alice Bourdet Alice.bourdet@un.org and

Dr. Shirish Ravan

United Nations Office for Outer Space Affairs

Phone: +43 699 1459 5293 E-mail: shirish.ravan@un.org

ISA:

Ms. Fatemeh Fereydooni Iranian Space Agency Phone: +982188538916

E-mail: uniranworkshop2021@isa.ir