

INFORMATION NOTE

United Nations / International Astronautical Federation Workshop on Space Technology for Socio-Economic Benefits "Water Resources Management"

Israel 9-11 October 2015 in conjunction with the 66th International Astronautical Congress

> Co-sponsored by European Space Agency Hosted by Israel Space Agency

1. Introduction

The United Nations through its Programme on Space Applications implemented by the United Nations Office for Outer Space Affairs (UNOOSA) and the International Astronautical Federation (IAF) are jointly organizing a Workshop on Space Technology for Socio-Economic Benefits on the theme "Water Resources Management" to promote the use of space technology for the benefit of Member States. The Workshop will be held in Israel, from 9 to 11 October 2015 in conjunction with the 66th International Astronautical Congress (IAC) (see http://www.iac2015.org/). A limited number of Workshop participants from developing countries, selected by the United Nations and the IAF, will also be invited to attend the IAC to be held from 12 to 16 October 2015.

Only 2.5 percent of our Planet's water resources are fresh water, two-thirds of which are confined to the planets Earth's polar caps. Consequently only one-third of Earth's fresh water is readily available to us as usable ground- and surface water. It is a severely limited resource with more than 700 million people still having no access to clean fresh water. The Workshop will focus on the contributions of space science, technology and its applications to manage our limited water resources.

The Workshop will be the 25th in a series of Workshops jointly organised by the Office for Outer Space Affairs and by the International Astronautical Federation and has been endorsed by the United Nations General Assembly as part of the 2015 activities of the United Nations Programme on Space Applications. It will be co-sponsored by the European Space Agency (ESA), with contributions from the International Academy of Astronautics (IAA), the Committee on Space Research (COSPAR) and the International Institute of Space Law (IISL).

The presentations made at the Workshop will be published online on the website of the Office for Outer Space Affairs to increase the awareness of the capabilities and benefits of space technology applications. A report of the Workshop, including observations and recommendations made by the participants, will be published as an official United Nations document.

2. Workshop Objectives

The Workshop will discuss space science, technologies and applications in support of economic, social and environmental sustainable development with a focus on water resources management, in particularly also in the developing countries.

The main objectives of the Workshop will be to:

- Enhance the capabilities of countries in the use of space-related technology, applications, services and information for identifying and managing water resources;
- Examine relevant low-cost, space-related technologies and information resources;
- Increase awareness among decision makers and the research and academic community of space technology applications for addressing water-related issues, primarily in developing countries;
- Strengthen international and regional cooperation in that area; and
- Promote educational and public-awareness initiatives in the area of water resource management and contribute to capacity building.

The discussions will be closely linked to Sustainable Development Goal 6 "Ensure availability and sustainable management of water and sanitation for all" in the Open Working Group proposal for Sustainable Development Goals (see https://sustainabledevelopment.un.org/sdgsproposal.html). The Workshop shall also address how space solutions can contribute to relevant aims proposed for Sustainable Development Goal 6, in particular, by 2030 to:

- Achieve universal and equitable access to safe and affordable drinking water for all;
- Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity;
- Implement integrated water resources management at all levels, including through transboundary cooperation as appropriate;
- Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes;
- Expand international cooperation and capacity-building support to developing countries in water and sanitation related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.

3. Workshop Programme

The Workshop programme will be structured around a series of topical sessions related to water resources management. Presentations will be solicited through a Call for Papers. In addition, renowned experts in the field will be invited to make presentations.

The following topics will be considered in dedicated sessions:

- Space technology and applications for water resources management, including relevant space missions and their sensors
- Detecting and discovering water resources from space

- Sustainable use of water
- Regulatory and legal issues
- Initiatives to help integrate space solutions in water resources management
- Capacity building initiatives

In addition to the topical sessions there will be panel and round-table discussions to share experiences and lessons learned and to discuss opportunities for international and regional cooperation among the participants.

It is also planned that the sessions will be complemented by a **poster session** and technical visit. The co-sponsors strive to organize an attractive programme of side-events for the Workshop participants. The detailed Workshop programme will be made available at the Workshop website at http://www.unoosa.org/oosa/en/SAP/act2015/un-iaf/index.html.

4. Participation Requirements and Qualifications

The Workshop primarily targets relevant space technology and application experts as well as water resources experts in relevant government organizations, international or national agencies, non-governmental organizations, research or academic institutions or industry. Applicants should have a university degree and well-established professional working experience in a field related to the theme of the Workshop. Applications from qualified female applicants are particularly encouraged. Special consideration will be given to the applicants, who

- are relevant policy- and decision- makers;
- have Workshop-related papers accepted by the IAC International Program Committee;
- have experience in leading or conducting project(s) related to water resources management, or who have sound proposals for future projects.

The co-sponsors of the Workshop will jointly select participants on a competitive basis. Selected participants will be notified by the end of August 2015. Invited participants will receive a formal invitation letter with further information with details on board and lodging and other local arrangements.

5. Financial Support

Applicants and their nominating organizations are strongly encouraged to find their own sources of sponsorship to participate in the Workshop. However, within the limited financial resources available to the co-sponsors, a limited number of qualified applicants from developing countries expressing the need for financial support will be offered financial support to attend the Workshop and the IAC. This may include the provision of a round-trip air ticket between Israel and the applicant's international airport of departure and/or room and partial board for the duration of the Workshop and the 66th International Astronautical Congress. En-route and other daily expenses or any changes made to an air ticket provided by the co-sponsors must be borne by the participants.

Applicants expressing the need for funding support will be selected on a competitive basis based on their qualifications and expected contributions to the Workshop. All selected applicants are required to make either an oral or poster presentation related to the Workshop theme. The presentations will be selected on the basis of the submitted abstracts, which will be judged on how well they address the Workshop objectives or propose solutions that contribute to achieving the aims of Sustainable Development Goal 6.

6. Dates and Location

The Workshop will be held from 9-11 October 2015 in Israel, in conjunction with the 66th International Astronautical Congress.

7. Language of the Workshop

Applicants must have a good working knowledge of English, which will be the official working language of the Workshop.

8. Life and Health Insurance

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

9. Applications and Deadline for Submission of Applications

Please use the online application form available from <u>https://register.unoosa.org/civicrm/event/info?id=51&reset=1</u>

Applications must be received by the Office for Outer Space Affairs at the latest by 12 July 2015. Only complete applications with all the requested information and signatures will be considered.

10. Points of Contact

For questions related to the Workshop programme in general and to co-sponsorship opportunities, please contact **Mr. Werner Balogh** (werner.balogh@unoosa.org, Tel: +43-1-26060-4952).

For questions related to the application process, please contact **Mr. Kurian Maniyanipurathu** (kurian.maniyanipurathu@unoosa.org, Tel: +43-1-26060-4268).

For questions related to the International Astronautical Congress, please contact **Mr. Christian Feichtinger** (christian.feichtinger @iafastro.org, Tel: +33-1-4567 4260).

For questions related to the local arrangements and logistics, please contact **Mr. Daniel Barok** (danielbarok@inter.net.il, Tel: +972-3-9013254).

Please frequently consult http://www.unoosa.org/oosa/en/SAP/act2015/un-iaf/index.html for the latest information on the Workshop.