

INFORMATION NOTE

3rd International Conference on the Use of Space Technology for Water Management Jointly Organized by the United Nations, Morocco and Prince Sultan bin Abdulaziz International Prize for Water

Rabat, Morocco, 1 - 4 April 2014

Co-sponsored by European Space Agency and by the Inter-Islamic Network on Space Sciences and Technology

1. Introduction

The United Nations Office for Outer Space Affairs (OOSA), the Government of Morocco and the Prince Sultan bin Abdulaziz International Prize for Water (PSIPW) are jointly co-organizing the above Conference to promote the use of space technology for benefits of the developing countries.

The Conference will be held in Rabat, Morocco, from 1 to 4 April 2014. It will be hosted by the Royal Center for Remote Sensing (CRTS) on behalf of the Government of Morocco and cosponsored by European Space Agency (ESA) and by the Inter-Islamic Network on Space Sciences and Technology (ISNET).

The Conference is the third international event focusing on water-related issues in the series of meetings organised in co-operation with, and with financial assistance of, the Prince Sultan bin Abdulaziz International Prize for Water (PSIPW) and European Space Agency (ESA). The first UN/UNESCO/Saudi Arabia International Conference on the Use of Space Technology for Water Management took place in Riyadh, Saudi Arabia, in April 2008, and the second UN/Argentina meeting was held in March 2011 in Buenos Aires, Argentina.

2. Background and objectives

Space technologies, including satellite remote sensing technology in particular, have demonstrated proven capabilities in meeting challenges of water resource management, as rapid population growth and development pressures continue to impose additional stresses on scarce resources. Continuous Earth observations from space are crucial to manage water resources for the benefit of mankind and the environment, as well as to provide important forecasting services to prevent water-related disasters such as floods and droughts.

Remote sensing satellites provide data on several key water-related variables (for example, rainfall, precipitations, water storage, soil moisture and evaporation) using spatial and temporal scales that are appropriate for reliable assessment. A satellite-based approach to assessment and management of water resources is especially important in countries and regions of the world where adequate hydrological networks do not exist.

Starting with its session in 2004, the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) began to consider matters related to the use of space-related technology in water resource management. The Committee noted that in response to the deepening water crisis, space technology could contribute to a better water resource management by providing data and information on the availability of water resources and water use. The Committee also noted that once converted into

practical information, scientific data on water resources provided by satellites could be used to formulate policy and implement programmes at the national, regional and international levels, including those of the World Bank, the United Nations Development Programme and other entities of the United Nations system.

The Conference will address these issues, and will discuss how space technology can contribute in better management of water resources, including combating desertification, ensuring access to safe drinking water and managing water-related emergencies in developing countries, with the following primary objectives:

- To enhance capabilities of countries in the use of space-related technologies, applications, services and information for identifying and managing water resources;
- To strengthen international and regional cooperation in this area;
- To increase awareness among decision-makers and research and academic community of space technology applications for addressing water-related issues, primarily in developing countries;
- To promote educational and public awareness initiatives in the area of water resources management, as well as to contribute into capacity building process in this area.

3. Programme

The Conference will be composed of a series of technical presentations with sufficient time set aside for discussions. Technical sessions will be followed by open discussions, which will focus on specific topics of interest and will provide additional opportunities for participants to voice their opinions.

The programme of the Conference will include technical sessions addressing the following themes:

Session 1: International Initiatives to Integrate Space Technologies in Water Resource Management.

Session 2: Space application for Water Productivity and Economy.

The session will present and discuss good practices of use of satellite applications and innovative technologies by government, scientists and value added companies working on water resources management.

Session 3: Space Applications for Water Security and Risk Management.

The session will focus on the operational programmes and case studies where Earth observation data and space tools were developed for assessment and mitigation of risks and disasters related to water.

Session 4: Geospatial Information for Ground Water Resources Management.

The session will focus on integration of geospatial information and the role of geodata infrastructures for evaluation, exploration and exploitation of groundwater resources.

Session 5: Capacity Building and Cooperation Initiatives.

The session will discuss the ways to develop capacity and national competencies for an efficient use of space technologies, as well as will identify cooperation opportunities for national capacity building activities.

Presentations at the above technical sessions may include, but are not limited to, the following topics:

- Applications of space technologies that provide cost-effective solutions and essential information for planning and implementation of programmes or projects to enhance management, protection and restoration of water resources.
- Use of space-related technologies in mitigating water-related emergencies, providing safe drinking water and combating desertification.
- Capacity building in water management, including development of human resources, establishing technical infrastructures and legal frameworks, and access to financial resources.
- Education and training required for various target groups on using space technologies for addressing water-related challenges, as well as public awareness initiatives in this area.
- International, regional and national initiatives and international and inter-regional cooperation.

• Case studies on successful applications of space technologies for enhancing water resources management in developing countries.

The Conference discussions will consider ways of expanding the use of space technologies and information/data for better water resources management, as well as will identify the priority areas where pilot projects could be launched and will examine possible partnerships that could be established.

The Conference will also feature the special "Water Prize Day" session which will be organized by PSIPW as an exclusive event within the framework of the event and with participation of Prize winners.

Participants of the Conference are encouraged to make presentations on the topics suggested above, as well as to participate actively in all discussions.

4. Participation

The Conference is being planned for a total of 100 - 150 decision-makers, technical experts, researchers and educators drawn from the following groups: international, regional, national and local institutions, academic institutions, multi-lateral and bi-lateral development agencies, non-governmental organizations (NGOs) and also from private industry. Experts and professionals from both space-related and water 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 for water resources management.

5. Participation requirements

Applicants must have a university degree and well-established professional working experience in a field related to the theme of the Conference. Applicants should be in managerial, decision-making, technical or academic positions within governmental agencies, international, regional and national institutions, universities, NGOs or private industry with responsibilities for carrying out programmes or projects in the areas related to the theme of the Conference.

Applicants who demonstrate that the Conference is central to his/her professional activities/responsibilities will be selected on a priority basis. **Equally qualified female applicants are particularly encouraged.**

The co-sponsors of the Conference will jointly select participants on a competitive basis. Selected participants will be notified by 15 February 2014.

6. Dates and location

The Conference will be held in Rabat, Morocco, at the facilities of the Royal Center for Remote Sensing, from 1 to 4 April 2014.

All selected and invited participants will receive an information package with details on boarding, lodging and other local arrangements.

7. Language of the Conference and presentation by participants

The working language of the Conference will be English. In addition, interpretation to/from French will be provided by local co-organizers.

Selected participants who are funded by the cosponsors of the Conference will be required to prepare a presentation of approximately 15 to 20 minutes on topics relevant to the Conference objectives and the programme. Presentations on actual on-going projects will be of particular interest to organizers of the Conference. It is expected that selected participants will submit their full papers/presentations to

organizers by the end of February 2014.

The best papers presented at the Conference will be published at the special section of the International Water Portal run by PSIPW (http://water-portal.com).

8. Financial support

Within the limited financial resources available, a number of selected participants will be offered financial support to attend the Conference. This financial support will defray the cost of travel (a round trip air ticket – **most economic fare** – between the airport of international departure in their home country and Rabat, Morocco) and/or room and board expenses for the duration of the Conference.

Due to limited availability of financial support, not all participants can be funded. In this respect, applicants and their nominating organizations are strongly encouraged to find additional sources of sponsorship to allow them to attend the Conference.

Funded participants will receive detailed information upon notification of their selection.

9. Deadline for submission of applications

The completed application form, properly endorsed by the applicant's government/institution, should be received by the UN Office for Outer Space Affairs <u>no later than 20 January 2014.</u> Applications received after the deadline will be considered, but applicants will not be eligible for financial support.

We strongly encourage all candidates **to apply for the Conference online**, as it helps us to streamline the processing of applications. The online application form can be accessed through the following Internet link: http://www.unoosa.org/oosa/en/SAP/act2014/Morocco/index.html

Alternatively, candidates may download a copy of application form from the above Internet site, complete it and submit it by mail to:

Office for Outer Space Affairs United Nations Office at Vienna Vienna International Centre P.O. BOX 500 A-1400 Vienna, AUSTRIA

Fax: (+43-1) 26060-5830 E-mail: <u>unpsa@unoosa.org</u>

In that case, an advanced copy of completed application form should be e-mailed to the Office or sent there by fax. The applicant may also submit the original of his/her application through the Office of the Resident Representative of the United Nations Development Programme (UNDP) in the applicant's respective country.

Only complete applications, with all the requested information and signatures, will be considered for financial support.

10. 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.

11. Points of contact

UN-OOSA:

Mr. Sergei Chernikov UN Programme on Space Applications Office for Outer Space Affairs United Nations Office at Vienna Phone: +43 1 26060 4948

Fax: +43 1 26060 5830

E-mail: sergei.chernikov@unvienna.org

PSIPW:

Mr. Ali-Wafa Abu-Risheh

PSIPW

Phone: +966 50 343 9478 E-mails: <u>aliwafa@gmail.com</u>,

aliwafa@ksu.edu.sa http://www.psipw.org

CRTS:

Mr. Amal Layachi Head of Training Department Royal Center for Remote Sensing (CRTS) Secteur 21, Angle Avenue Sanawbar et Avenue Allal El Fassi, Hay Riad

Rabat, Morocco

E-mail: <u>layach@crts.gov.ma</u>