

INFORMATION NOTE

22nd UN/IAF Workshop on "Space Technologies Applied to the Needs of Humanity: Experience from Cases in the Mediterranean Area"

To be held in Naples, Italy, from 28 to 30 September 2012, in conjunction with the 63rd International Astronautical Congress

Co-sponsored by European Space Agency (ESA)

1. Background

The United Nations Office for Outer Space Affairs (UNOOSA) and the International Astronautical Federation (IAF) are jointly co-organizing a Workshop on the theme "Space Technologies Applied to the Needs of Humanity: Lessons Learnt from Cases in the Mediterranean Area" to promote the use of space technology for benefits of the developing countries. The Workshop will be held in conjunction with and as associated event of the 63rd International Astronautical Congress (IAC), which will take place from 1 to 5 October 2012 in Naples, Italy. Workshop participants selected by the UN and IAF will be also invited to attend the IAC.

The Workshop is being organized with participation of ESA, International Academy of Astronautics (IAA) and Committee on Space Research (COSPAR).

This Workshop is the 22nd in the series of meetings jointly organised by the Office for Outer Space Affairs, under the United Nations Programme on Space Applications, and by the International Astronautical Federation. It builds on the recommendations and experience gained from previous workshops. The UN/IAF Workshop has been endorsed by the United Nations General Assembly as part of the 2012 activities of the United Nations Programme on Space Applications.

The UN/IAF Workshop and the 63rd IAC provide a unique forum for discussions among space experts, policy and decision makers, representatives from academic community and private industry. Participants are encouraged to share their experiences and to examine opportunities for better cooperation. In the past, contacts established among participants have resulted in a number of initiatives and activities strengthening the role of space technology applications for improving the quality of life in developing countries.

The proceedings of the Workshop will be published online by the Office for Outer Space Affairs to increase the awareness of the capabilities and benefits of space technology applications. The report of the Workshop, including findings and recommendations formulated by the participants, will be presented to the United Nations Committee on the Peaceful Uses of Outer Space.

2. Objectives

At the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III), held from 19 to 30 July 1999 in Vienna, Austria, a fundamental requirement was agreed to assist States, especially developing countries, in applying the results of space research with a view to promoting the sustainable development of all people. The resolution entitled "Space Millennium: Vienna Declaration for Space and Human Development" adopted by UNISPACE III, contains a strategy for enhancing the use of space science and technology to contribute to the solutions of major global issues.

Space-based systems deliver information and services that protect lives and the environment, enhance security and stimulate industrial and economic development. Earth observation from space, complimented with other applications, is a cost-effective method for effective monitoring of environment and management of land, ocean and fresh water resources, and providing essential data to decision-makers. Advances in satellite remote sensing, global navigation satellite systems and geographic information systems now make it easier to integrate ecological, environmental and other information for formulating policy and implementing programmes at the national, regional and international levels.

Naples, the venue of the Workshop and IAC, is located at the very heart of Mediterranean Sea, from both the geographical and historical points of view. In particular, Naples is a maritime city with the second largest Italian port. Of course, economic and development programs of all countries surrounding the Mediterranean are strongly related to the sea and, as a consequence, Mediterranean is affected by very intensive navigation and exploitation of the sea resources. Thus, the Mediterranean is the area where applications of space technologies for maritime goals (including maritime surveillance and security, vessels monitoring, fishery control, oil spill monitoring, etc.), proved to be extremely beneficial.

Naples rests under Mt. Vesuvius, which became the touristic symbol of the city. Excellent fertility of agricultural land in the Campania region is due to the volcanic soil, which is ideal for farming, ranging from fruits and vegetables to wine production, and that contributes a lot into economy of the region. On the other hand, volcanic areas are frequently hit by catastrophic events of varying extent and severity. Actually, Italy and the whole Mediterranean region are affected by complex hydro-geological, volcanic and tectonic phenomena. And space technology has proven to be a valuable tool both for land use mapping (agriculture and forestry, crop monitoring, water content, ecology, etc.) and for natural disasters preparedness, monitoring and relief (crustal motions, landslides, real time mapping, etc.). Furthermore, future space missions particularly devoted to these aspects are under study and development.

Naples is one of the oldest European cities, with unique archeological sites discovered under the lava of Mt. Vesuvius or under alluvial deposits, or along the shoreline under the level of sea. Again, these aspects are common to many countries in Mediterranean regions, from the Nile Delta to the Venice Lagoon, to the Phoenician and Greek shipwrecks, and Earth observation data are used on a regular base for detecting archaeological remains in the region. Another issue that is very common to the countries in the Mediterranean region is desertification which also can be effectively addressed with the use of space technologies.

Obviously, most of problems experienced by countries of the Mediterranean basin are common to many other regions of the world, and the solutions and tools developed for the Mediterranean will be of interest to participants from all geographical regions. Discussions on multidisciplinary approaches, needs and experiences of other regions of the world, and particularly of developing countries, will provide a good platform for initiating international cooperative ventures. The Workshop will address the above issues and will discuss space technologies, applications, information and services that contribute into sustainable economic and social development programmes, primarily in developing countries, with the following main objectives:

- To increase awareness among decision makers and representatives of research and academic community of space technology applications for addressing human and environmental issues, primarily in developing countries;
- To examine low-cost space-related technologies and information resources available for addressing human and environmental needs in developing countries;
- To promote educational and public awareness initiatives in the areas of natural resources management and environmental monitoring, as well as to contribute into capacity building process in this areas; and
- To strengthen international and regional cooperation in the subjects.

3. Programme

The Workshop 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 Workshop will include 4 technical sessions addressing the following themes:

- Session 1: Space applications for discovery and preservation of cultural heritage
- Session 2: Maritime applications of space technologies (surveillance and security, vessels monitoring, movements at and under the sea, fishery control, oil spills, management of islands' environment)
- Session 3: Space applications to desert environment monitoring (water monitoring and management, dust storms)
- Session 4: Space applications to land management (costal areas management, volcanoes, earthquakes, floods)

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

- Applications of space-related technologies, services and information that provide costeffective solutions and essential input for planning and implementation of programmes or projects addressing in the above thematic areas.
- Needs of end users engaged in the above-referenced activities in developing countries.
- International initiatives, programmes and cooperation.
- Capacity building in developing countries, including discussions on human, financial and technical resources required for successful use of space technologies, information and services.
- Presentations on practical experiences and case studies by participants from various regions.

A number of presentations in each session will focus on concrete cases in the Mediterranean area, with emphasis on issues that are common to other regions and on how Mediterranean experience could be extended to application in other parts of the world.

Co-organizers of the event also plan to continue a practice of holding a concluding round table discussion with participation of heads/top managers of space agencies and other relevant national/regional/international institutions and organizations from both space faring and non-space faring countries in order to establish a direct dialogue with the Workshop participants on how space technologies and policies can contribute into sustainable economic and social development programmes in developing countries. The round table will also discuss issues and problems in

participants' countries as well as will open an exchange of pragmatic ideas between decision-makers and leaders from the above-mentioned organizations and participants of the Workshop.

Prior to the round table discussion, two or three Working Groups will be established in order to summarize critical issues/focal themes identified in the presentations delivered at the technical sessions of the Workshop for addressing those to the panelists.

Participants of the Workshop are encouraged to make presentations on the topics suggested above, as well as to participate actively in all discussions of the meeting and its Working Groups.

The latest version of the programme will be made available on the web site of the UN Office for Outer Space Affairs (<u>http://www.unoosa.org</u>).

4. Date and location of Workshop

The Workshop will be held from 28 to 30 September 2012 as part of the 63rd International Astronautical Congress (IAC). Participants who are selected and funded by the co-sponsors will be able also to attend the IAC, which will take place from 1 to 5 October 2012, also in Naples, Italy.

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

5. Language of the Workshop and presentation by participants

Applicants must have a good ability of English, which will be the **only** working language of the Workshop.

Selected participants who are funded by the cosponsors of the Workshop will be required to prepare a presentation of approximately 15 to 20 minutes on topics relevant to the Workshop objectives and the programme. Presentations on actual on-going projects will be of particular interest to organizers of the Workshop.

6. Participation requirements

Applicants must have a university degree and well-established professional working experience in a field related to the theme of the Workshop. Applicants should be working in relevant government organizations, international or national agencies, non-governmental organizations, research or academic institutions or industry.

Special consideration will be given to the applicants:

- who are policy- and decision- makers;
- who have papers accepted by the IAC International Program Committee;
- who have experience in leading or performing project(s) in the topic areas, or who have sound ideas and good potential of realizing the ideas to real projects.

Equally qualified female applicants are particularly encouraged.

The co-sponsors of the Workshop will jointly select participants on a competitive basis. Selected participants will be notified by 1 July 2012.

7. Financial arrangements

Within the limited financial resources available to the co-sponsors, a number of selected participants from developing countries will be offered financial support to attend the Workshop and IAC. Funded participants will be provided with round trip air tickets between the international airport

of their home countries and the international airport at Naples, Italy. The funded participants will also be provided with daily subsistence allowance to cover board and lodging for the duration of the Workshop and IAC. Any en-route expenses or any changes made to the tickets will be at the participant's own expense.

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 Workshop.

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

8. 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 25 May 2012</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 Workshop online**, as it helps us to streamline the processing of applications. The online application form can be accessed through the following Internet link: <u>http://www.oosa.unvienna.org/oosa/en/SAP/act2012/un-iaf/index.html</u>

Alternatively, candidates may download a copy of application form from the above website, 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: unpsa@unoosa.org

In that case, *an advanced copy of completed application form should be e-mailed or faxed directly to the Office for Outer Space Affairs*. 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.

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

9. Life and Health Insurance

Life/major health insurance for each of the selected participants is necessary and <u>is the</u> responsibility of the participant or his/her 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 accidental events.

10. Additional information

For up-to-date information on this activity please refer to the Office for Outer Space Affairs website at <u>http://www.unoosa.org</u>.

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: <u>sergei.chernikov@unoosa.org</u>

IAF:

Mr. Christian Feichtinger IAF Secretariat 94 bis, Avenue de Suffren 75015 Paris, France Phone: +33 1 4567 4260 Fax: +33 1 4273 2120 E-mail: Christian.feichtinger @iafastro.org