



INFORMATION NOTE

**United Nations/Austria/European Space Agency
Symposium on Small Satellite Programmes for Sustainable Development:
“Payloads for Small Satellite Programmes”**

21 – 24 September 2010, Graz, Austria

1. Introduction

Since the organization of the Third United Nations Conference on the Peaceful Uses of Outer Space (UNISPACE III) in 1999 there has been considerable progress in the operational use of space technology and its applications for sustainable development. Space-based assets such as telecommunications, Earth Observation and navigation satellites support a wide range of applications and are increasingly integrated into public infrastructures and contribute to policy- and decision making in support of sustainable development to improve people's lives. In practice all countries today are users of space-based solutions.

Several countries that have previously been users of space applications are interested in establishing basic capacities in space technology development. This desire has partially been guided by the fact that increasingly capable small satellites can be developed with an infrastructure and at a cost that is today affordable also to universities and smaller institutions. There are even some examples where university-based small satellite projects have led to the establishment of small and medium-sized space enterprises that are now marketing their products on a commercial and world-wide basis. Such developments not only create new opportunities for international space cooperation but also contribute to further promoting the use of space technology and its applications.

In reaction to these developments a new initiative in the framework of the United Nations Programme on Space Applications, the United Nations Basic Space Technology Initiative (UNBSTI) (see <http://www.unoosa.org/oosa/en/SAP/bsti/index.html>), has been established with the aim to support capacity building in basic space technology. The series of three United Nations/Austria/European Space Agency Symposia on “Small Satellite Programmes for Sustainable Development” is part of this initiative.

In 2010 the Symposium will focus on “Payloads for Small Satellite Programmes” and is the second in the series of three consecutive symposia to promote the use of space technology and its applications for sustainable development. The first Symposium in the series was held from 8-11 September 2009. Background information and the report containing the recommendations emanating from this event are available from <http://www.unoosa.org/oosa/en/SAP/act2009/graz/index.html>.

The Symposium will be hosted and co-sponsored by the Government of Austria, the State of Styria and the City of Graz and co-sponsored by the European Space Agency (ESA).

2. Symposium Objectives

The Symposium will build on the outcomes of the United Nations/Austria/ESA Symposium on Small Satellite Programmes for Sustainable Development held in 2009 which had the following objectives:

(a) To promote ongoing relevant national, regional and global initiatives related to the demonstrated capabilities of small satellite technology as a means of providing specific solutions to development issues;

(b) To promote international cooperation in basic space technology development between and among countries at all levels of development, with a particular focus on supporting developing countries through capacity-building activities in small satellite technology development;

(c) To assist countries wishing to develop and use small satellite technology and to benefit from the spin-offs of the development of such technology to have appropriate access to the relevant information and means (e.g. information exchange, databases, cooperation opportunities with the private sector); and

(d) To contribute to the development of indigenous capabilities in small satellite technology in the participants' institutions and to contribute to building up a critical mass of professionals.

The objectives of the Symposium in 2010 are:

(a) To review the status of world-wide small satellite activities, with a particular focus on regional cooperation;

(b) To examine the potential of using small satellites for education, research and operational applications;

(c) To discuss the technical and programmatic issues of developing payloads for small satellites; and

(d) To consider the relevant regulatory issues (such as frequency allocations, space debris mitigation, registration) specific to small satellite programmes.

3. Symposium Programme

The Symposium will consist of a series of invited technical presentations with sufficient time set aside for presentations by participants on their relevant activities. The participants will discuss the following topics in dedicated sessions:

- **Review and Status of Small Satellite Programmes World-Wide**
Among other issues this session will discuss experiences with and challenges of establishing small satellite programmes and opportunities for international and regional cooperation.
- **Payloads for Small Satellites – State of the Art, Integration, Challenges**
This session will include presentations on the basic technical and managerial considerations for the development of payloads for small satellite missions.

- **Payloads for Small Satellites – Examples**

This session will discuss examples of payloads for small satellites for various applications, such as science, telecommunications or Earth Observations. Examples may include experiences with already flown payloads as well as payloads still under development

- **Standardization and Regulatory Issues**

This session will address issues of standardization (such as systems engineering standards, communication protocols, ground stations) and regulatory issues (such as frequency allocation, registration of space objects, space debris mitigation guidelines) relevant for small satellites.

The session may be supplemented by demonstrations of relevant software tools, technical visits and by practical hands-on exercises. In addition time will be set aside for work in dedicated Working Groups which will address specific issues related to the Symposium theme. The co-sponsors will also be organizing an attractive programme of side-events for all Symposium participants. The detailed Symposium programme will be made available at <http://www.unoosa.org/oosa/en/SAP/bsti/index.html>.

4. Participants

Applicants must have a university degree and well-established professional working experience in a field related to the theme of the Symposium. Applicants should ideally be involved in the planning or implementation of small satellite programmes in relevant governmental organizations, international or national agencies, non-governmental organizations, research or academic institutions or industry. Applications from qualified female applicants are particularly encouraged. The co-sponsors of the Symposium will jointly select participants on a competitive basis. Successful applicants will be notified from 30 June 2010.

5. Financial Support to Selected Participants

Within the limited financial resources available to the co-sponsors, a number of qualified applicants from developing countries, who have expressed the need for financial support, will be offered financial support to attend the Symposium. This may include the provision of a round-trip air ticket between Graz and the applicant's international airport of departure and daily subsistence allowances to cover board and lodging for the duration of the Symposium. En-route expenses or any changes made to the air ticket must be borne by the participants.

Due to the limited availability of financial resources it is usually not possible to provide assistance to all qualified applicants that express the need for financial support. Applicants and their nominating organizations are therefore strongly encouraged to find additional sources of sponsorship to allow them to attend the Symposium.

6. Dates and Location

The Symposium will be held from 21 to 24 September 2010 in Graz, Austria, at the Space Research Institute of the Austrian Academy of Sciences. Selected participants will receive information with details on board and lodging and other local arrangements.

7. Language of the Symposium

Applicants must have a working knowledge of English, which will be the only language of the Symposium. Selected participants who receive funding support from the co-sponsors will be required to make a 10-20 minutes presentation on their work related to the Symposium theme.

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 neither assume any responsibility for life and major health insurance, nor for any other expenses related to medical treatment or accidental events.

9. Deadline for Submission of Applications

The fully completed original of the application form should be mailed directly or forwarded through the Resident Representative of the United Nations Development Programme (UNDP) to:

Office for Outer Space Affairs
United Nations Office at Vienna
Vienna International Centre
P.O. BOX 500
1400 Vienna, AUSTRIA
Fax: (+43-1) 26060-5830

The application must be received **no later than Friday, 18 June 2010**. To accelerate the processing of your application, please e-mail an advance copy of the completed form (.pdf, .doc) to the Office for Outer Space Affairs (unpsa@unoosa.org). Only complete applications, with all the requested information and signatures, will be considered.

10. Points of Contact

For questions related to the submission of nominations and funding, please contact **Ms. Ayoni Oyenyin** (ayoni.oyenyin@unoosa.org, Tel: +43-1-26060-4953).

For questions related to the local arrangements in Graz, please contact **Ms. Birgit Kößler** (birgit.koessler@joanneum.at; Tel: +43 316 876 1256; Fax: +43 316 876 1404).

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

Please frequently check <http://www.unoosa.org/oosa/en/SAP/bsti/index.html> where the latest information about the Symposium will be posted.