



## INFORMATION NOTE

**United Nations/Austria/European Space Agency  
Symposium on Small Satellite Programmes for Sustainable Development:  
“Implementing Small Satellite Programmes:  
Technical, Managerial, Regulatory and Legal Issues”**

**13 – 16 September 2011, 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 now affordable to organizations with limited budgets for space activities, such as universities and other institutions. There are examples where university-based small satellite projects have led to the establishment of small and medium-sized space enterprises that are 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 the United Nations Programme on Space Applications has launched a new initiative called the Basic Space Technology Initiative (BSTI) (see <http://www.unoosa.org/oosa/en/SAP/bsti/index.html>) which aims to support capacity building efforts in the development of basic space technology. The present series of three United Nations/Austria/European Space Agency Symposia on “Small Satellite Programmes for Sustainable Development” is part of this initiative.

The first Symposium in the series was held from 8 to 11 September 2009 and discussed case studies of successful applications of small satellite technology that provide cost-effective solutions and essential information for planning and implementing programmes or projects related to sustainable development. The second Symposium in the series was held from 21 to 24 September 2010 and focussed on “Payloads for Small Satellite Programmes”. The reports of these two past Symposiums, including the recommendations made by the participants, are available from <http://www.unoosa.org/oosa/en/SAP/bsti/fundamentals.html>.

This year's Symposium will be the third and final in the series and will be hosted and co-sponsored by the Government of Austria, the State of Styria and the City of Graz, co-sponsored by the European Space Agency (ESA) and held in Graz, Austria, from 13 to 16 September 2011.

## 2. Symposium Objectives

The Symposium will build on the objectives and outcomes of the United Nations/Austria/ESA Symposiums on Small Satellite Programmes for Sustainable Development held in 2009 and 2010.

Objectives of the 2009 Symposium:

- (a) 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) 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) 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) 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.

Objectives of the 2010 Symposium:

- (a) Review the status of world-wide small satellite activities, with a particular focus on regional cooperation;
- (b) Examine the potential of using small satellites for education, research and operational applications;
- (c) Discuss the technical and programmatic issues of developing payloads for small satellites; and
- (d) Consider the relevant regulatory issues (such as frequency allocations, space debris mitigation, registration) specific to small satellite programmes.

In 2011 the objectives of the Symposium will be to:

- (a) Review the latest status of world-wide small satellite (<100 kg) activities, with a particular focus on international and regional cooperation;
- (b) Examine issues relevant to the implementation of small satellite programmes, such as space technology development activities as part of a country's or organisation's research and development strategy, financing, programmatic issues, and project management of small satellite programmes;
- (c) Elaborate on regulatory issues of small satellite programmes, such as frequency allocation and space debris mitigation measures;

- (d) Elaborate on legal issues of small satellite programmes, such as the registration of satellites and launching state liabilities;
- (e) Discuss the way forward for the Basic Space Technology Initiative (BSTI), in particular the organisation of regional conferences and the development of an education curriculum for aerospace engineering.

### 3. Symposium Programme

The Symposium will consist of a series of invited technical presentations by the World's most renowned experts in the field with sufficient time set aside for discussions and for presentations by participants on their own relevant activities. The following topics will be considered in dedicated sessions:

- **Review 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.
- **Programmatic and Managerial Issues**  
This session will consider general issues of programme and project management related to small satellite programmes and projects as well as operational issues, including ground and space segment operation. Standardization efforts and the identification and arrangement of launch opportunities for small satellites will also be discussed.
- **Regulatory and Legal Issues**  
Several regulatory and legal aspects have to be taken into account when implementing small satellite programmes. The session will cover the registration and allocation of frequencies with the International Telecommunications Union (ITU), the registration of satellites, launching state liabilities and space debris mitigation measures.
- **Working Groups on the Future of BSTI**  
Time will be set aside for work in dedicated Working Groups which will address specific issues related to the Symposium theme and in particular the plan for the future work to be conducted under the Basic Space Technology Initiative.

The sessions may be supplemented by demonstrations of relevant software tools, technical visits and by practical hands-on exercises. 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 the Symposium webpage at <http://www.unoosa.org/oosa/en/SAP/act2011/graz/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 beginning from July 2011.

## **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 13 to 16 September 2011 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 to 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, 17 June 2011**. 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 application process, 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 to 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> and <http://www.unoosa.org/oosa/en/SAP/act2011/graz/index.html> where the latest information about the Symposium will be posted.