

INFORMATION NOTE

**United Nations/Austria/European Space Agency
Symposium on Space Applications for Sustainable Development
to Support the Plan of Implementation of the
World Summit on Sustainable Development**

**“SPACE TOOLS AND SOLUTIONS FOR MONITORING THE
ATMOSPHERE AND LAND COVER”**

9 – 12 September 2008, Graz, Austria

1. Introduction

The United Nations Office for Outer Space Affairs, the Government of Austria and the European Space Agency (ESA) are jointly organizing in 2006-2008 the second series of three consecutive symposia to promote the use of space technology and its applications in support of activities to carry out the Plan of Implementation of the World Summit on Sustainable Development (WSSD), held in Johannesburg, South Africa, in 2002.

The symposia held from 2003 to 2005 focused on water-related issues, while the present series of symposia is dedicated to the Earth's atmosphere. The first symposium, held in September 2006, addressed the benefits provided by space technologies for monitoring air pollution and energy production and use for sustainable development. Building on this event, the Symposium in 2007 focused on space tools and solutions for monitoring the atmosphere in support of sustainable development, with the aim to enable and support participants to develop and implement projects in this area, and to provide reliable data and information for policy- and decision-making related to such issues as air quality, climate change, changing weather patterns, ozone depletion and monitoring of ultra-violet radiation.

The Symposium in 2008 will be the third and concluding symposium of the present series dedicated to atmosphere-related issues and aiming to promote the use of demonstrated capabilities of space technologies and their applications to support actions called for in the Plan of Implementation of the World Summit on Sustainable Development (WSSD). It will also provide for a transition to issues related to the monitoring of land cover, focussing on the particular interactions between land cover and the atmosphere including issues such as agriculture, rural development, land, drought and desertification, which have been identified as issues under consideration in the thematic cluster of the Commission on Sustainable Development for the two-year cycle 2008/2009. Participants will review the outcome and recommendations of the previous symposia in the series in light of recent developments, report on ongoing follow-up activities as well as consider additional activities. It is also anticipated that the Symposium will provide input for selecting the theme and content for the forthcoming series of symposia.

The Symposium will be hosted and co-sponsored by the Government of Austria (Federal Ministry for European and International Affairs and Federal Ministry for Transport, Innovation and Technology), the State of Styria and the City of Graz and by the European Space Agency (ESA). This will be the **fifteenth** in the series of symposia organized through the United Nations Programme on Space Applications in cooperation with these co-sponsors since 1994.

2. Background

A frequently used definition of sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own need.". At the World Summit on Sustainable Development (WSSD)^{*}, held in Johannesburg, South Africa, in 2002 (also known as the "Johannesburg Summit"), more than one hundred Heads of States and Governments reaffirmed their strong commitment to the full implementation of Agenda 21[†], which was adopted at the United Nations Conference on Environment and Development, held in Rio de Janeiro in 1992. They also committed themselves to achieving the internationally agreed development goals, including those contained in the United Nations Millennium Declaration[‡].

At the same time, the resolution entitled "Space Millennium: Vienna Declaration for Space and Human Development"[§], which was adopted by the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III), contains a strategy for enhancing the use of space science and technology to contribute to the solutions of major global issues. In particular, the Declaration notes the benefits and applications of space technologies in addressing the challenges to sustainable development, and the effectiveness of space instruments for dealing with the challenges posed by the pollution of the environment and depletion of natural resources.

The implementation of the recommendations contained in the Vienna Declaration could support many of the actions called for in the WSSD Plan of Implementation. Consequently, in 2002, the United Nations Office for Outer Space Affairs organized a symposium in Stellenbosch, South Africa, immediately prior to WSSD to consider steps to carry out actions proposed for inclusion in the WSSD Plan of Implementation. That symposium recommended that pilot projects should be launched to demonstrate operational capabilities of space technologies to support sustainable development. In follow up to that recommendation, the Office for Outer Space Affairs, with the sponsorship of the Government of Austria and ESA, held a series of symposia from 2003 to 2005 to examine how such projects could be initiated, in particular in water resource management. Based on the positive experience of that series of symposia, the Office for Outer Space Affairs, with the support of the Government of Austria and ESA, is organizing the next series of symposia from 2006 to 2008 to consider how the existing space technology based tools and solutions could contribute to and strengthen the capacities of developed and developing countries and countries with economies in transition to measure, assess and take steps to reduce the impacts of air pollution, climate change, changing weather patterns, and of ozone depletion, ultraviolet radiation and the associated health risks.

The themes for the symposia in the 2006 to 2008 series are closely linked to the work of the United Nations Commission on Sustainable Development. The Commission is an inter-governmental body set up in 1992 to consider the implementation of the recommendations on sustainable development made during major global conferences, such as the Earth Summit and the World Summit on Sustainable Development (WSSD). The Commission is pursuing a multi-year programme of work covering the period 2004 to 2017. This time period is split into two-year cycles, with each cycle focusing on a thematic cluster and on a number of cross-cutting issues. Each cycle is made up of a review year, in which the Commission seeks to identify obstacles and constraints to implementation, and a policy year,

^{*} A/CONF.199/20,

[†] A/CONF.151/26 (Vol. I-III, Corrections)

[‡] A/RES/55/2

[§] A/RES/54/68

in which the Commission decides on measures to accelerate implementation and to mobilize action to overcome the obstacles and constraint identified in the review year.

The thematic cluster for 2008/2009 includes the issues of agriculture, land and rural development, interaction between climate change and agriculture, particularly in developing countries improved management of land resources and combating drought and desertification, which will be reviewed by the Commission on Sustainable Development (CSD) at its sixteenth session in 2008^{**}.

3. Objectives and Outcomes

The goal of the current series of three symposia, to be held from 2006 to 2008, is to promote the use of the demonstrated capabilities of space technology to support some of the actions called for in the WSSD Plan of Implementation. The specific objectives of the Symposium in 2008 are:

- (i) Inform about the WSSD framework and the work of the United Nations Commission on Sustainable Development and provide an introduction and overview to the context and role of atmosphere monitoring in support of sustainable development;
- (ii) Promote and inform about ongoing relevant national, regional and global initiatives (e.g. CEOS, GEO/GEOSS, GMES, United Nations Programme on Space Applications, WMO programmes, and others) and the uses of the demonstrated capabilities of space technology related to monitoring the interaction between the atmosphere and land cover including issues such as agriculture, land and rural development, drought and desertification;
- (iii) Examine which space technology based tools, solutions and informational resources (e.g. operational/meteorological satellites, research satellites, data dissemination means such as GEONETCast and WMO IGDDS, and others) are available for addressing issues related to the monitoring of the atmosphere and land cover and how these tools, solutions and resources can be accessed and utilized;
- (iv) Examine possibilities and strategies for including space technology based tools, solutions and informational resources in decision-making processes on issues requiring information on the state of the atmosphere and land cover;
- (v) Identify the type and level of available or required training for using the relevant tools and solutions;
- (vi) Examine existing functional partnerships and cooperation opportunities as well as the possible need for new frameworks for cooperation that could be established through voluntary actions that could include governments, international organizations and other relevant stakeholders to promote the use of space technologies for atmosphere and land cover monitoring.

Having attended this symposium, the participants will gain:

- (i) Understanding the WSSD framework, the context of sustainable development, the role of atmosphere and land cover monitoring therein and the capabilities of the relevant space technology based tools, solutions and informational resources, as well as strategies for including them in applicable decision-making processes;
- (ii) Knowledge of space technology based tools, solutions and informational resources for atmosphere and land cover monitoring, and knowledge of ways how to utilize existing

^{**} <http://www.un.org/esa/sustdev/csd/review.htm>

- or establish new functional partnerships to promote the operational use of space technologies;
- (iii) Understanding of national, international and regional strategies, programmes and projects to promote sustainable development, in particular with regard to atmosphere and land cover related issues.

4. Programme

The programme of the Symposium will include a series of technical presentations of successful applications of space technology based tools that provide cost-effective solutions or essential information for planning and implementing programmes or projects related to monitoring the interaction between atmosphere and land cover. The Symposium will feature presentations on the needs of end users engaged in monitoring the interaction between atmosphere and land cover, such as the impacts of air pollution; climate change; and changing weather patterns on agriculture, land and rural development and tools and solution to combating drought and desertification.

Sufficient time will be set aside for presentations by participants on their relevant activities and for discussions among participants to identify the priority areas of possible follow-up actions as well as for examining possible partnerships that could be established or strengthened.

5. Dates and Location

The Symposium will be held in Graz, Austria, at the Space Research Institute of the Austrian Academy of Sciences **from 9 to 12 September 2008**. All selected and invited participants will receive an information package with details on board and lodging and other local arrangements.

6. Language of the Symposium

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

7. Qualifications and Requirements for Participation in the Symposium

Applicants must be in managerial or decision-making positions within governmental or research institutions with responsibilities for carrying out programmes or projects in the areas of the theme of the Symposium. Other applicants would work in space or meteorology-related institutions, environment agencies or companies that carry out activities that could support programmes or projects concerned with the monitoring of the atmosphere and land cover. Individuals who have started or are involved in atmosphere and land cover-related application projects or outreach activities in their institutions as well as women carrying any of the above responsibilities are particularly encouraged to apply.

Applicants are encouraged to become familiar with the WSSD Plan of Implementation and with the recommendations of UNISPACE III (see item 13 below for relevant references). Specifically, all applicants will be asked to prepare short presentations on their professional work related to the Symposium theme prior to their arrival in Graz. The presentations will be delivered as part of the Symposium programme. The presentations may also include ideas on how to implement particular recommendations, or proposals for starting launching new initiatives or for further enhancing to ongoing or planned projects and programmes. Applicants are also expected to actively contribute to the preparation of the Symposium's conclusions and recommendations, which will be published by the United Nations in the form of a report. Selected applicants may also be asked to act as session rapporteurs or chairpersons.

8. Deadline for Submission of Applications

The **original** of the completed application form, properly endorsed by applicant's government/institution, should be submitted by mail to Ms. Ayoni Oyeneyin, United Nations Office for Outer Space Affairs, United Nations Office at Vienna, Vienna International Centre, P.O. Box 500, A-1400 Vienna, Austria, **no later than Friday 20 June 2008**. To accelerate processing of your application, you should also fax an advance copy directly to the Office for Outer Space Affairs, United Nations Office at Vienna, FAX: (+43-1)-26060-5830. Only complete applications, with all the requested information and signatures, will be considered.

9. Selection of Participants

Participants will be selected by the co-sponsors of the Symposium on a competitive basis from those who meet the qualifications indicated in section 7 above. The selection will be based on the information provided in the application form. Selected participants will be notified in due course.

10. Financial Arrangements

Within the limited funds available to the co-sponsors, a number of selected participants from developing countries and countries with economies in transition, who have expressed the need for financial support, will be offered financial support to attend the Symposium. Funded participants will be provided with a round-trip air ticket between their international airports of departure and Graz, Austria, and daily subsistence allowances to cover board and lodging for the duration of the Symposium. Any cost associated with en-route expenses or any changes made to the air ticket must be borne by the participants.

Due to the limited availability of financial support, participants and their nominating organizations are strongly encouraged to find additional sources of sponsorship to allow them to attend the Symposium. In the past, nominating organizations have often provided for air-travel of participants while the co-sponsors of the Symposium covered all other expenses.

11. Life and Health Insurance

The co-sponsors will not assume any responsibility for life and major health insurance, nor for expenses related to medical treatment or accidental events. This will be the responsibility of each selected participant or of the nominating institution.

12. Points of Contact

For the submission of nominations for attendance and funding, please contact **Ms. Ayoni Oyeneyin**, United Nations Office for Outer Space Affairs, at the above address and fax number, or at the following e-mail address: **Ayoni.Oyeneyin@unvienna.org**.

For information regarding the agenda and programme of the Symposium as well as co-sponsorship, please contact **Mr. Levent Canturk**, United Nations Office for Outer Space Affairs, at the above address, or at: **Levent.Canturk@unvienna.org**; Tel: +43-1-26060-5748.

The focal point of the local organizer is **Ms. Elke Tatschl**, (Joanneum Research) who can be contacted regarding local arrangements at: **Elke.Tatschl@joanneum.at**; Tel: +43 316 876 1256; Fax: +43 316 8769 1256).

13. Useful Resources

- Latest information on this Symposium and its relevant documentation:
<http://www.unoosa.org/oosa/SAP/act2008/graz/index.html>
- CSD-16 Review Session: As the Review Session of the third implementation cycle, CSD-16 will focus on the following thematic issues: Agriculture, Rural development, Land, Drought, Desertification, and Africa. CSD-16 will be held between 5-16 May 2008:
<http://www.un.org/esa/sustdev/csd/review.htm>
- Johannesburg Summit 2002 – the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August to 4 September 2002:
http://www.un.org/jsummit/html/basic_info/basicinfo.html
- Report of the World Summit on Sustainable Development, including the Plan of Implementation of the World Summit on Sustainable Development, A/CONF.199/20:
http://www.un.org/jsummit/html/documents/summit_docs.html
- List of space-related initiatives and programmes carried out by member States of the Committee on the Peaceful Uses of Outer Space and within the United Nations system that respond to specific recommendations contained in the Johannesburg Plan of Implementation of the World Summit on Sustainable Development:
<http://www.uncosa.unvienna.org/uncosa/en/wssd/index.html>
- United Nations Millennium Development Goals:
<http://www.un.org/millenniumgoals/>
- Commission on Sustainable Development:
<http://www.un.org/esa/sustdev/csd/policy.htm>
- Report of UNISPACE III and UNISPACE III+5:
<http://www.oosa.unvienna.org/unisp-3/index.html>
- UN/Austria/ESA Symposium on Space Applications to Support the Plan of Implementation of the World Summit on Sustainable Development on "Space Tools for Monitoring Air Pollution and Energy Use for Sustainable Development", Graz, Austria, 12 - 15 September 2006:
<http://www.unoosa.org/oosa/en/SAP/act2006/graz/index.html>
- UN/Austria/ESA Symposium on Space Applications to Support the Plan of Implementation of the World Summit on Sustainable Development on "Space Tools and Solutions for Monitoring the Atmosphere in Support of Sustainable Development", Graz, Austria, 11 - 14 September 2007:
<http://www.unoosa.org/oosa/SAP/act2007/graz/index.html>