



United Nations Office for Outer Space Affairs (UNOOSA)

**Overview of the work of the Office in the field of
atmosphere-related space applications**

**NASA Air Quality Team Meeting
June 2007**

Werner Balogh (in absentia)



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United Nations Office for Outer Space Affairs

- Established 1962 as a unit within the Department of Political and Security Council Affairs. Became the Office for Outer Space Affairs in 1992
- Located in New York until 1993, and since then in Vienna, Austria
- Staff (Scientists, Lawyers, Political Scientists)
 - 20 staff members from Australia, Austria, Azerbaijan, Brazil, Costa Rica, Germany, Mexico, Nigeria, Philippines, Russian Federation, South Africa, Slovenia, Sweden, Ukraine, United States and Uzbekistan
 - Associate Experts provided on temporary assignments to the Office by United Nations Member States
- Organization of the Office
 - Office of the Director
 - Committee Services and Research Section
 - Space Applications Section
- Homepage: www.unoosa.org



UN Programme on Space Applications

- The Office, through its Space Applications Section, is mandated by the General Assembly of the United Nations to implement the United Nations Programme on Space Applications (PSA), established in 1971
- Programme Mandates
 - Promote exchange of experiences in space applications
 - Promote international cooperation
 - Develop fellowship programmes for in-depth training
 - Organize technology development activities (seminars, workshops)
 - Stimulate the growth of indigenous nuclei
 - Disseminate information on space technology and applications
 - Provide technical advisory services on space applications projects



UN Programme on Space Applications

- Priority Thematic Application Areas
 - Basic space sciences
 - Space technology applications for disaster management
 - Satellite communications for telemedicine and tele-education applications
 - Natural resources management and environmental monitoring
 - Global navigation satellite systems and their applications
 - Satellite-aided search and rescue
- Support to the four United Nations-affiliated regional centres for space science and technology education in Africa (Morocco and Nigeria), Asia and the Pacific (India), Latin America and the Caribbean (Brazil/Mexico)
- PSA supports the implementation of recommendations of global United Nations World Conferences, such as the World Summit on Sustainable Development (WSSD), World Conference on Disaster Reduction, World Summit on Information Society, and the Millennium Conference



PSA Activities on Atmosphere-related Applications

- United Nations/Austria/ESA symposium series focusing on atmosphere-related applications in 2006 to 2008 (details see following slides)
- Using space technology to establish an Early Warning System for Infectious Diseases, including Avian Flu
 - RS and GIS to acquire info about air moisture, temperature, landscape characteristics, water flow, wild bird migrating route, poultry transport, etc. to predict infectious diseases bird flu outbreak possibility and route.
 - Regional Expert Meeting, Bangkok, Thailand, 1 to 3 August 2007
 - Co-sponsored by the China National Space Agency (CNSA) and the Geoinformatics and Space Technology Development of Thailand (GISTDA).
- Planned workshops in 2007 and 2008 addressing impacts of climate change and global warming:
 - Forest management, Vietnam, November 2007
 - GNSS applications, Colombia, May 2008
 - Water & environmental management, Indonesia, July 2008
 - Agriculture & land use, Kenya, December 2008
- PSA schedule: <http://www.unoosa.org/oosa/en/SAP/sched/index.html>



UN/Austria/ESA Symposium Series

- United Nations/Austria/European Space Agency symposium series addresses Space Applications for Sustainable Development to Support the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg Summit, held in 2002)
- Co-sponsored by the Government of Austria, the European Space Agency (ESA) and others
- Held annually since 1993 in Graz, Austria, in September
- 2003-2005: Focus on water resource management
- 2006-2008: Focus on atmosphere-related issues
 - 2006 Symposium on Space Tools for Monitoring Air Pollution and Energy Use for Sustainable Development, 12-15 September 2006
 - 2007 Symposium on Space Tools and Solutions for Monitoring the Atmosphere in Support of Sustainable Development, 11-14 September 2007



UN/Austria/ESA Symposium 2007: Overview

- Purpose
 - Focus on space tools and solutions for monitoring the atmosphere in support of sustainable development
 - Enable and support participants to develop and implement projects in this area
 - 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 ultra-violet monitoring
- Participants selected from among all United Nations Members States
 - Space applications, RS and GIS experts and project managers
 - Experts with managerial and decision-making responsibility within governmental or research institutions
- Information note, application forms and supporting material available at <http://www.unoosa.org/oosa/SAP/act2007/graz/index.html>



UN/Austria/ESA Symposium 2007: Objectives

1. Inform about the WSSD and the United Nations Commission on Sustainable Development framework;
2. Promote and inform about ongoing relevant national, regional and global initiatives and the uses of the demonstrated capabilities of space technology;
3. Examine how space technology based tools, solutions and resources can be accessed and utilized;
4. Examine possibilities and strategies for including space technology based tools, solutions and informational resources in decision-making processes;
5. Identify the type and level of available or required training for using the relevant tools and solutions;
6. Examine existing functional partnerships and cooperation opportunities as well as the possible need for new frameworks for cooperation.



Conclusion

- The activities of the PSA provide a link to overarching initiatives within the United Nations framework and support the objectives of sustainable development
- These activities contribute to the promotion of using space technology and its applications to improve human life on Earth
- It is desired to collaborate PSA activities with other ongoing initiatives, such as those of the World Meteorological Organization (WMO) or the Group on Earth Observations (GEO)
- UNOOSA welcomes proposals and opportunities for cooperation!



Thank you for your Attention

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Useful References

- Latest information on this Symposium and its relevant documentation:
<http://www.unoosa.org/oosa/SAP/act2007/graz/index.html>
- 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>



Useful References

- 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>
- Report on the United Nations/Austria/European Space Agency series of symposiums on space applications to support the Plan of Implementation of the World Summit on Sustainable Development, held in Graz, Austria, in 2003, 2004 and 2005 (A/AC.105/844)
- Report on the United Nations/Austria/European Space Agency Symposium on Space Tools for Monitoring Air Pollution and Energy Use for Sustainable Development, Graz, Austria, 12-15 September 2006 (A/AC.105/877)
- All United Nations documents are available from the Official Document System of the United Nations: <http://documents.un.org>