Enhancing global security through space
the role of COPUOS and UNOOSA

ACUNS Annual Meeting. “New Security Challenges”
Panel on Space Security, 5 June, Vienna University

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The Committee on the Peaceful Uses of Outer Space (COPUOS)

Set up by General Assembly resolutions 1348 (XIII) in 1958 and 1472 (XIV) in 1959

Two standing subsidiary bodies established in 1961: Scientific and Technical Subcommittee (STSC) and Legal Subcommittee (LSC)

Reports annually to the General Assembly Fourth Committee

69 member States and 27 international intergovernmental and non-governmental organizations with permanent observer status

COPUOS is mandated to:
- Review international cooperation in the peaceful uses of outer space;
- Devise programmes in this field to be undertaken under the auspices of the United Nations;
- Encourage continued research and dissemination of information on outer space matters;
- Study legal problems arising from the exploration of outer space

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COPUOS and “space security”

Earth environment; space environment; fair and responsible use of outer space:

Recent achievements
- 2007 GA Resolution on Registration Practice (GA/RES/62/101)
- 2009 Safety Framework for Use of Nuclear Power Sources (A/AC.105/934)

Current agenda
- Space and climate change
- Space and water
- Use of Geospatial data for sustainable development
- Use of the geostationary orbit
- Long-term sustainability of space activities
- Use of space technology in the United Nations system
- COPUOS contribution to the Commission on Sustainable Development
- Near-Earth Objects
- Capacity-building in Space Law
- National space legislation
UNISPACE III


Mechanisms for implementing the recommendations of UNISPACE III included the revision by COPUOS of the structure of agendas of its Subcommittees, adoption of a plan of action of UNOOSA, establishment by Member States of Action Teams, as well as efforts at the national level.

UNISPACE III+5 report (A/59/174) with Plan of Action to:
- a) support overarching global agendas for sustainable development
- b) develop coordinated, global space capabilities
- c) support specific agendas to meet human development needs at the global level
- e) support overarching capacity development

General Assembly resolution 59/2 of 20 October 2004

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Five UN Treaties:
- Outer Space Treaty, 1967 (100 States Parties/26 Signatories)
- Rescue Agreement, 1968 (91/24)
- Liability Convention, 1972 (88/23)
- Registration Convention, 1975 (53/4)
- Moon Agreement, 1979 (13/4)

Five Declarations and Legal Principles:
- Declaration of Legal Principles Governing the Activities of States in the Exploration and Uses of Outer Space (1963)
- Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting (1982)
- Principles Relevant to the Use of Nuclear Power Sources in Outer Space (1992)
- Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries (1996)
Legal regime of outer space

- Province of all mankind
- Freedom of exploration
- Non-appropriation of Outer Space
- UN Charter
- Non-placement of weapons of mass destruction
- Responsibility for national space activities
- Liability for damage caused by objects launched into outer space
- Establishment of UN register of space object
- The Moon and its natural resources are common heritage of mankind

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Accomplishments and Future Prospects

- Greater awareness of space tools for sustainable development
- Greater understanding, acceptance and implementation of the United Nations Space Law Treaties
- Increased coherence and synergy in space-related work of United Nations entities and international space-related entities
- Advancing space exploration initiatives

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UNOOSA

Established in 1962 within the Department of Political and Security Council Affairs

Based in Vienna since 1992

24 Staff members from 21 countries: Australia, Austria, Azerbaijan, Brazil, Costa Rica, Germany, Guatemala, India, Japan, Malaysia, Nigeria, Philippines, Romania, Russian Federation, Slovenia, South Africa, Sweden, Turkey, Ukraine, United Kingdom and Uzbekistan

Areas of expertise: Aerospace Engineering, Astrophysics, International Relations, Physics, Remote Sensing, Satellite Communications, Space Law & Policy

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UNOOSA Operational priorities

A. Discharging the responsibilities of the Secretary-General under the treaties

B. Strengthening the intergovernmental process

C. Supporting sustainable development
   - Support to regional mechanisms
   - Technology spin-offs and indigenous capability
   - Integrated space technology applications

D. Securing global public goods
   - Support network of space weather instruments
   - Global platform for space-based information for disaster management and emergency response
   - Global navigation satellite systems

E. Enhancing cooperation and coordination within the UN system

F. Increasing public awareness of space
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- GPS, GLONASS, Galileo, Compass/BeiDou
- Provider’s Forum established in 2007 (China, India, Japan, Russian Federation, United States, and European Community)

- Achieve compatibility and interoperability of GNSS systems
- Encourage coordination among providers of GNSS core and augmentation systems
- Encourage and promote introduction and utilization of satellite positioning, navigation and timing services, particularly in developing countries
- Aims to better address the future needs of users with regard to GNSS development plans and applications

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Regional Centres

Four Regional Centres for Space Science and Technology Education, affiliated to the United Nations

- www.cssteap.org (Centre in India)
- www.enssup.gov.ma/craste (Centre in Morocco)
- www.aresstee.org (Centre in Nigeria)
- www.crectealc.org (Centre in Mexico/campus)
- www.inpe.br/unidades/cep/atividadescep/crectealc (Brazil campus)

Education curricula and education modules have been developed for:

- In preparation: Space Law, GNSS

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Inter-Agency Meeting on Outer Space Activities

UNOOSA is the secretariat of the IAM

UN wide coordination mechanism held annually since 1970’s

UNOOSA co-chair with ECA of UN Geographic Information Working Group (UNGIWG)

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UNOOSA programme on space law

Responsibilities of the Secretary-General under the space treaties

Maintaining the central UN Register of space objects

Series of Space Law Workshops held: 2002 in The Netherlands; 2003 in the Republic of Korea; 2004 in Brazil; 2005 in Nigeria; 2006 in Ukraine; 2009 in Iran; next Space Law Workshop planned for 2010 in Thailand

Space Law Website:
Treaty status database and national space legislation database
Bilateral and multilateral agreements database
Directory on education opportunities in space law

Technical legal assistance, including on UN Register

Development of curriculum on space law for Regional Centres
United Nations Register of Objects Launched into Outer Space

a) UN General Assembly resolution 1721 B (XVI) of 20 December 1961

b) Convention on Registration of Objects Launched into Outer Space “Registration Convention”, of 1975

Since 1957, about 35,000 space objects have been tracked in Earth orbit or beyond. Approximately 6,200 are “functional” (i.e. satellites, probes, manned spacecraft and/or space station components). The rest are spent rocket boosters, shrouds and detached components or other residual non-functional components resulting from the launch, operation or termination of the space object, collectively known as “non-functional”.

Number of space objects presently being tracked: 14,200. Over 3,300 functional (or previously functional) space objects remain in Earth orbit or beyond.
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