Global Space Governance – The Role of Capacity-building in Space Law and Policy

The 10th Symposium on Space Law, Keio University, Tokyo, Japan, 25 February 2019

Niklas Hedman, Chief CPLA, UNOOSA
• Substantive Secretariat of the Committee on the Peaceful Uses of Outer Space and its Scientific & Technical Subcommittee and Legal Subcommittee
• Coordinates the inter-agency coordination within the United Nations on the use of space technology (UN-Space)
• Maintains coordination and cooperation with space agencies and intergovernmental and non-governmental organizations involved in space-related activities
• Implements the United Nations Programme on Space Applications
• Implements the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) programme
• Discharges the responsibilities of the SG under the treaties and principles on outer space, including Register of Objects Launched into Outer Space
• Secretariat of ICG and SMPAG
• capacity-building in space law and policy
92 States members of COPUOS

AG: Algeria, Benin, Burkina Faso, Cameroon, Chad, Egypt, Ethiopia, Ghana, Kenya, Libya, Mauritius, Morocco, Niger, Nigeria, Senegal, Sierra Leone, South Africa, Sudan, Tunisia

APG: Bahrain, China, India, Indonesia, Iran, Iraq, Japan, Jordan, Kazakhstan, Lebanon, Malaysia, Mongolia, Oman, Pakistan, Philippines, Qatar, Republic of Korea, Saudi Arabia, Sri Lanka, Syrian Arab Republic, Thailand, United Arab Emirates, Viet Nam

EG: Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Czech Republic, Hungary, Poland, Romania, Russian Federation, Slovakia, Ukraine

GRULAC: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Mexico, Nicaragua, Paraguay, Peru, Uruguay, Venezuela

WEOG: Australia, Austria, Belgium, Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Israel, Italy, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, (Turkey), United Kingdom, (United States)
COPUOS mandates

1959: UN General Assembly resolution 1472 (XIV) reaffirmed the role of COPUOS and mandated the Committee to:

• Review international co-operation
• Study space-related activities that could be undertaken under United Nations auspices
• Encourage and assist with national space research programmes
• Study legal problems which may arise from the exploration of outer space
Current issues - COPUOS agenda:

- Space and climate change
- Space Debris
- Disaster Management
- Space and Water
- UNISPACE+50
- Space Security and TCBMs
- Space and Global Health
- Near-Earth objects
- Space Law
- Space Policy
- Long-term sustainability of outer space activities
- Global Navigation Satellite Systems
- Space Weather
New items on the LSC agenda

- General exchange of views on the legal aspects of space traffic management (2016)
- General exchange of views on the application of international law to small satellite activities (2016)
- General exchange of views on potential legal models for activities in exploration, exploitation and utilization of space resources (2017)
Space Law and Policy Consideration at National Level
National policy and regulatory frameworks

National perspectives (space economy, space society, space accessibility, space diplomacy); national security;
Integration of a wider range of national activities; overarching coordination;
To fulfil obligations under treaties to which a State has become a party;
To achieve consistency and predictability in the conduct of space activities under the jurisdiction of the State;
To provide a practical regulatory system for non-governmental and private sector involvement;
Basis for regional and international cooperation, etc.
International mechanisms for cooperation

Multilateral agreements, bilateral agreements, regional mechanisms:

Government-to-Government framework agreements;

Agency-to-Agency memorandums of understanding;

Implementing arrangements;

Coordination mechanisms: IADC, Charter on Space and Major disasters, ISEF, GEO, CEOS, ICG, SMPAG etc;

Regional space organizations and mechanisms: ESA, APSCO, APRSAF, AU and ALC, SCA, etc;

COPUOS, UNOOSA, UN system entities...
UNOOSA Role
UNOOSA and the discharging the Secretary-General’s treaty obligations

- Maintaining the Register of Objects Launched into Outer Space (Convention on Registration of Objects Launched into Outer Space art. III)
- Disseminating information relating to outer space activities (including discovery of harmful phenomena) provided by States (Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies art. V and art. XI)
- Disseminating information relating to the recovery of “foreign” astronauts in distress and/or space objects by States within their territory and their return (Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space art. II b)
- Disseminating information relating to lunar exploration and habitation (Agreement Governing the Activities of States on the Moon and Other Celestial Bodies art. IX)
Online Index of Objects Launched into Outer Space

- Web-based treaty monitoring/verification tool developed by UNOOSA in 2001 allowing States to identify whether a space objects has been registered and who is the State of registry.
- Fusion of official and unofficial data. Includes all registered and unregistered satellites/probes/spacecraft/space station flight elements from 1957 to present.
- Functional space objects only. Space debris and non-functional objects are not included.
- Each space object record contains (when available) information from the State of registry:
  - Initial registration document (Article IV, para. 1)
  - Documents containing additional information (Article IV, para.2)
  - Document containing date of decay/re-entry/deorbit (Article IV, para.3)
- Links to documents by other States containing information related to the space object are also provided (i.e. mentioned in a State providing launch services)
- Links to documents provided by States under other treaties and principles (Outer Space Treaty, Rescue Agreement, NPS Principles)
- Search could be performed using different parameters (name, international designator, launching State, date of launch, orbital status, etc.)

http://www.unoosa.org/oosa/osoindex/index.jspx
UNOOSA organized capacity-building activities in space law and policy

Series of UN workshops on space law: Netherlands (2002); Republic of Korea (2003); Brazil (2004); Nigeria (2005); Ukraine (2006); Iran (2009); Thailand (2010); Argentina (2012); China (2014); UNOV Vienna (2016).

New series of UN conference on space law and policy: Russian Federation (2018); planned with Turkey (2019)

• Promote awareness of legal and policy aspects
• Draw attention of authorities and decision-makers to topical issues
• Promote implementation of the legal regime of outer space
• Enhance capacity-building efforts
UN curriculum on space law

Module 1: Basic concepts of international law and space law

Module 2: International law and other regulations applicable to remote sensing and geographic information systems; satellite meteorology and global climate

Module 3: International law and other regulations applicable to satellite communications

Module 4: International law and other regulations applicable to space and atmospheric sciences

Module 5: International law and other regulations applicable to global navigation satellite systems
New UNOOSA project:
Space law and policy for new space actors: Fostering responsible national space activities

- 3-4 year project in different stages for targeted and tailored capacity-building and advisory services aimed for regulatory authorities of emerging space nations
- Assess needs of requesting States on technical legal assistance, taking into account judicial, administrative and technical requirements
- Raise awareness of the fundamental principles of international space law, and how those apply to operational space activities
- Work with space law and policy expertise around the world
UNISPACE+50
Transforming our world: 2030 Agenda For Sustainable Development

PEOPLE
End poverty and hunger in all forms and ensure dignity and equality

PLANET
Protect our planet’s natural resources and climate for future generations

PROSPERITY
Ensure prosperous and fulfilling lives in harmony with nature

PARTNERSHIP
Implement the agenda through a solid global partnership

PEACE
Foster peaceful, just and inclusive societies
SDGs: the relevance of space technology
UNISPACE+50 cross-cutting areas

UNISPACE+50 thematic priorities based on the following cross-cutting areas, where COPOUS has made its major contributions (A/AC.105/1137):

- **Space governance** (UN treaties and principles on outer space, COPUOS guidelines GA resolutions on outer space)

- **Capacity-building** (in the use of space science and technology and their applications for the benefit of all countries)

- **Resiliency** (disaster risk reduction, near-Earth objects, space weather)

- **Interoperability** (including work done by the International Committee on Global Navigation Satellite Systems (ICG) and other current and new coordination mechanisms, such as IAWN, SMPAG)

- **Space for sustainable development** (efforts by the Committee and its member States as well as UNOOSA to meet the 2030 Agenda for Sustainable Development)
7 thematic priorities with mechanisms agreed by COPUOS:

1. **Global partnership in space exploration and innovation** - Action Team with MS
2. **Legal regime of outer space and global space governance: current and future perspectives** - LSC WG on Treaties in coordination with WG on LTS
3. **Enhanced information exchange on space objects and events** – Mechanism TBD
4. **International framework for space weather services** - STSC EG on Space Weather
5. **Strengthened space cooperation for global health** - STSC EG on Space and Global Health
6. **International cooperation towards low-emission and resilient societies** - UNOOSA
7. **Capacity-building for the 21\textsuperscript{st} Century** - UNOOSA
TP2 “Legal regime of outer space and global governance: current and future perspectives”

- Complex set of objectives identified by COPUOS in 2016, including on assessing the state of affairs of the legal regime of outer space; identification of possible gaps; progressive development of international space law etc.

- LSC WG on Status of treaties in 2017 agreed to a multi-year working method 2017-2020 on the basis of 3 “clusters” (cluster 1: questionnaire of the WG as basis for analysing the effectiveness of the legal regime of outer space, and addressing the status and scope of, and assessing and, as appropriate, addressing possible gaps in, the legal regime of outer space; cluster 2: enhanced information exchange on space objects and event (TP3 and LTS): and cluster 3: promoting the universality of the five UN treaties on outer space, including by identifying approaches and possible criteria for developing a guidance document, as well as promoting the increase in membership of COPUOS. Progress and outcome of past WGs to be observed (launching State, registration practice, national legislation, international mechanisms). See A/AC.105/1122, annex I, paras. 6-8, and appendix I.
UNISPACE+50 process

Governance
Capacity-building
Resiliency
Interoperability
Space for sustainable development

UNISPACE+50 Thematic Priorities

Space Economy
Space Society
Space Accessibility
Space Diplomacy

SPACE 2030

People
Planet
Prosperity
Peace
Partnership
Disaster risk reduction
Mitigation and adaptation to climate change
Linkages to sustainable development and resiliency of space based systems

• Focus: building resilient societies and aligning efforts of the Office to contribute to the Sendai Framework through UN-SPIDER programme as well as to the adaptation efforts of the Paris agreement on climate change and towards the attainment of the SDGs

• The strategy, in a form of a report under this TP will be available for the 2018 cycle of the sessions of the Committee and its Subcommittees.

• Another flagship event: UN/Germany International Conference on International cooperation towards low-emission and resilient societies, to be held in Bonn, Germany, from 22 to 24 November 2017.

TP6: International cooperation towards low-emission and resilient societies

THANK YOU