UNISPACE+50 - High Level Forum (HLF):

Space as a Driver for Socio-Economic Sustainable Development

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Global Space Governance for Sustainable Development

Dr. Olga Stelmakh Postdoctoral Fellow in Space Governance McGill Institute of Air and Space Law





What is the **Global Space Governance** concept and where does it come from?



Why is it important for **Sustainable Development**?

50 years ago Principles & Agreements

• Governing the Activities of States in the Exploration and Use of Outer Space

2nd Manfred Lachs
International
Conference on
Global Space
Governance

Over 120 experts from 22 countries

McGill University, Montreal, Canada

Montreal Declaration

29-31 May 2014

The Montreal Declaration 2014

The concept of global space governance is comprehensive and includes:

- codes of conduct,
- confidence building measures,
- safety concepts,
- international institutions,
- international treaties and other agreements,
- regulations,
- procedures and standards

Concept of Global Space Governance

- Not yet defined at the intergovernmental level
- International action to, or the manner (process) of, governing and regulating space-related activities.

Encompasses

- 1) instruments, institutions and mechanisms
- 2)international cooperative mechanisms utilized in space cooperation,
- 3) guidelines and transparency and confidence-building measures,

all of which are aimed at ensuring a certain level of predictability and orderly conduct of space activities.

In Other Words

- Is a movement towards integration of space actors aimed at negotiating responses to space-related problems that affect more than one state
- May also be used to name the process of shaping space laws, rules, or regulations intended for a global scale
- Tends to involve institutionalization

Legal / regulatory dimension fragmentation

Institutional / organizational organizational dimension

legal regime of outer space - a pillar of global space governance

Legal Dimension

• 5 space law treaties

•5 sets of principles and declarations on outer space

codes of conduct, TCBMs, guidelines, instructions, regulations, standards, policies

Institutional Dimension

Space-related institutions that touch one or more aspects of space activities

UN / non-UN

General / specialized

Intergovernmental / non-governmental

Platforms for Dialogue

International / global

- COPUOS
- Council on Future of Space Technologies of the World Economic Forum
- Heads of Space Agencies Summits / Forums
- Space Generation Advisory Council
- ...

Regional

- Asia-Pacific Space Cooperation Organization
- Asia-Pacific Regional Space Agency Forum
- ESA Ministerial Council

Ad Hoc

International fora and Working Groups

Role of COPUOS

- Primary UN body for coordinating and facilitating international cooperation in space activities.
- It has the overall mandate to strengthen the international legal regime governing outer space and work towards improved conditions for expanding international cooperation in using outer space for peaceful purposes.
- Through their agendas the Committee and its subsidiary bodies promote international cooperation among spacefaring and emerging space nations and serve as an important platform for strengthening space capabilities in developing countries for their economic, social and scientific advancement.

Cross-cutting areas unique to the COPUOS and OOSA

- governance (development of the legal regime governing activities in outer space for peaceful purposes)
- capacity-building (mechanism for building and strengthening national space infrastructures and for increasing awareness among decision makers of the benefits of space science and technology and their applications in addressing societal needs for sustainable development)
- resiliency (building resilient societies through better coordination and forging of global partnerships, an integral part of the efforts to meet the commitments undertaken in the three global development agendas adopted by the international community in 2015: the Sendai Framework for Disaster Risk Reduction 2015-2030, the 2030 Agenda for Sustainable Development and the Paris Agreement on climate change)
- interoperability (possibility of spatial data to be combined, and for services to interact, without repetitive manual intervention, in such a way that the result is coherent and that the added value of the data sets and services is enhanced)
- * space for sustainable development (promote the wider application of space science and technology for sustainable development by creating closer links with the Commission on Sustainable Development, and working to raise awareness of the contributions space science and technology and their applications are making to the efforts of humankind to promote sustainable development in all countries and regions of the world)

Sustainable Development

"Our Common Future", known as the Brundtland Report

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

1. the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given



2. the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

GSG for the attainment of the Sustainable Development Goals



SUSTAINABLE CITIES AND COMMUNITIES

- directly, as enabler and driver for sustainable development,
- > indirectly, as an integral part of the indicators for monitoring the progress towards the implementation of the 2030 Agenda for Sustainable Development



- Goal 3 on ensuring healthy lives and promoting well-being for all at all ages (space for global health)
- Goal 9 on building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation
- Goal 11 on making cities and human settlements inclusive, safe, resilient and sustainable (space for resilient societies and infrastructures)



- Goal 13 on urgent action to combat climate change and its impacts (space for monitoring and mitigating climate change)
- Goal 14 on conserving and sustainably using the oceans, seas and marine resources for sustainable development (space for ocean monitoring)
- Goal 15 on protecting, restoring and promoting sustainable use of terrestrial ecosystems, sustainably managing forests, combating desertification and halting and reversing land degradation and halting biodiversity loss (space and biodiversity).







UNISPACE+50 is an opportunity to strengthen unified efforts at all levels and among all relevant stakeholders in shaping the global space governance

7 UNISPACE+50 thematic priorities endorsed by the COPUOS in 2016

Global partnership in space exploration and innovation

Legal regime of outer space and global space governance: current and future perspectives

Enhanced information exchange on space objects and events

International framework for space weather services

Strengthened space cooperation for global health

International cooperation towards low-emission and resilient societies

Capacity-building for the twenty-first century

Theme 1: Condition and knowledge of the space environment

Indicator 1.1: Orbital debris

Indicator 1.2: RF spectrum and orbital positions

Indicator 1.3: Natural hazards originating from space

Indicator 1.4: Space situational awareness

Theme 2: Access to and use of space by various actors

Indicator 2.1: Space-based global utilities

Indicator 2.2: Priorities and funding levels in civil space programs

Indicator 2.3: International cooperation in space activities

Indicator 2.4: Growth in commercial space industry

Indicator 2.5: Public-private collaboration on space activities

Indicator 2.6: Space-based military systems

Theme 3: Security of space systems

Indicator 3.1: Vulnerability of satellite communications, broadcast links, and ground stations

ndicator 3.2: Reconstitution and resilience of space systems

Indicator 3.3: Earth-based capabilities to attack satellites

Indicator 3.4: Space-based negationenabling capabilities

Theme 4: Outer space governance

Indicator 4.1: National space policies

Indicator 4.2: Multilateral forums for space governance

Indicator 4.3: Other initiatives

GSG and SD



Economic development should be conducted with due regard of environmental issues and social benefits

Space Governance

is not only about being "Global"



- Global Space Governance is not about taking a leadership but about interacting and involving all space actors
- We should not escape to Mars and colonize it because it is not possible anymore to live on Earth, but go to Mars for other reasons (e.g. "a journey towards developing space talents and capabilities")
- "GOOD" Global Space Governance and its criteria / indicators should be defined

How do we measure its efficiency?

Principles / Indicators of the GOOD Global Space Governance

- Responsible behavior
- Responsiveness
- Participation
- Inclusiveness
- Efficiency
- Transparency
- Rule of law
- Ethical conduct
- Capacity-building
- Innovation and openness for progressive development
- Sustainability and long-term orientation
- Accountability
- ...



Recommendations for Dubai Declaration

- ✓ To promote regional platforms for dialogue
- ✓ To ensure that ideas put forward at fora are not lost
- ✓ To let the non-governmental actors be heard
- ✓ To coordinate the parallel ongoing efforts on the same subject
- ✓ To focus on implementation and enforcement mechanisms
- ✓ To make dialogues more interdisciplinary
- ✓ To foster continuous participation of all key actors at all stages of the dialogue
- ✓ No country should be left behind campaign highlighting global efforts to assist States in capacity-building so that all States have access to the significant socio-economic benefits
- ✓ To focus on the GOOD Global Space Governance and to define its indicators

Thank you for your attention!

olga. stelmakh@mcgill.ca