

International Space Forum at Ministerial Level

Key Note Address

“Earth Protection”

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Your Excellences, Distinguished Participants,

I am honoured to address the 1st International Space Forum at Ministerial level.

The Forum addresses several critical issues in global governance of space activities where scientific research and technical development contribute to meeting challenges to the environment and to economy, society, accessibility and diplomacy.

Given the interlinkages between climate change, big data management and Earth protection, a holistic approach to the challenges to humanity is therefore needed. Strengthened governance processes and enhanced infrastructures at all levels are key factors for success, where institutional mechanisms to integrate all actors should be a priority.

In addition to governments and their authorities, such as national space agencies, IGOs and NGOs, academia, industry, private sector and civil society have an important role to play.

Distinguished Participants,

The Committee on the Peaceful Uses of Outer Space (COPUOS), established in 1959 and now with 84 States members, is the only intergovernmental platform where the complexity of the current and future space agenda is considered at the political level in a structured and comprehensive manner, covering all areas of international cooperation in the exploration and use of outer space for peaceful purposes.

The work of COPUOS and UNOOSA is closely connected to global efforts to protect our planet and the near-Earth space environment.

Distinguished Participants,

The increasing utilisation and the strategic value of space has resulted in a growing need to enhance the safety of space operations, the security of space assets and space systems, including critical infrastructures, and the sustainability of outer space activities.

COPUOS has played an important role in this work so far. The Space Debris Mitigation Guidelines of the Committee, endorsed by the General Assembly in 2007, summarize these efforts. Developed in close coordination with the Inter-Agency Debris Coordination Committee (IADC), those guidelines became an important political instrument.

Back in June this year, the Committee reached another multilateral milestone in the area of sustainability when it agreed on a first set of guidelines for the long-term sustainability of outer space activities. Work now continues to develop a second set of guidelines, with the aim of referring a full compendium of sustainability guidelines, including a preambular text, to the General Assembly in 2018.

Distinguished Participants,

The broader perspective of space security and transparency and confidence-building measures in outer space activities relies on more robust information exchange and notification procedures on space objects and events, including risk reduction measures.

Let me underline that we need to deal here in particular with several issues and concerns related to risks posed by man-made orbital debris, where collision avoidance, scheduled manoeuvres, re-entry risks, emergency situations, and intentional break-ups, have to be considered.

In this regard, UNOOSA plays a unique role by maintaining on behalf of the United Nations Secretary-General the United Nations Register on Objects Launched into Outer Space. The Register is the most important global treaty-based transparency and confidence-

building mechanism in the space arena, and has been maintained by the Office since 1962.

To date, over 92 per cent of the 7,200 satellites, probes, landers, manned spacecraft and space station flight elements launched into Earth orbit or beyond have been registered.

Distinguished Participants,

In the framework of Earth protection, we have to consider also the risks posed by natural hazards, such as near-Earth objects and space weather. In this regard, UNOOSA works together with States, international organizations and other relevant entities towards strengthening resiliency and the ability to depend on space systems to respond to the impact of such hazards.

In this area of planetary defence, COPUOS and the General Assembly in 2013 welcomed the finalization of recommendations that provide for an international response to an asteroid impact threat. Two entities, whose work is facilitated by the United Nations, were created in 2014: The Space Mission Planning Advisory Group (SMPAG) and the International Asteroid Warning Network (IAWN). The Office now serves as the permanent Secretariat to SMPAG.

Progress is being made under those mechanisms to lay out the framework for space mission response activities; to promote opportunities for international collaboration on research and techniques for NEO deflection; and to serve the global community with accurate and up-to-date information on near-Earth objects and asteroid impact risks.

Distinguished Participants,

In this overall context, the fiftieth anniversary of the first UNISPACE conference - UNISPACE+50 - to take place in 2018, will consider and assess the current status and chart the future role of COPUOS and UNOOSA as important players in the global governance of space activities.

UNISPACE+50 will build synergies between space activities and the outcomes of the 2030 Agenda for Sustainable Development (including the 17 Sustainable Development Goals); the Sendai

Framework for Disaster Risk Reduction 2015-2030; and the outcomes of the 2015 Paris Climate Summit (COP21).

COPUOS this year endorsed a set of seven thematic priorities, which together constitute the common road towards UNISPACE+50 and beyond. The seven thematic priorities, which I will briefly introduce, are selected based on the cross-cutting areas of governance, resiliency, interoperability, capacity-building and sustainable development.

Distinguished Participants,

The first thematic priority on **Global partnership in space exploration and innovation** is aimed at developing partnerships and capabilities that create new opportunities for emerging space nations to benefit from this fundamental area. Space exploration and innovation are essential drivers for opening up new domains in space science and technology, including in meeting global challenges. There is a strong aim at fostering dialogue with space industry and the private sector in this regard.

The second thematic priority on the **Legal regime of outer space and global space governance: current and future perspectives** aims to study the effectiveness of the legal regime of outer space. Promoting the universality of the five United Nations treaties on outer space and assessing the state of affairs of those treaties and their relationship with non-legally binding instruments, is a priority.

This work is closely linked with the third thematic priority on **Enhanced information exchange on space objects and events**, which will focus on the development of requirements for enhanced information exchange and notification procedures under the United Nations Register and within the notification mechanisms established under the treaties and principles on outer space, which I mentioned earlier.

The fourth thematic priority on **International framework for space weather services** is closely related to the need to strengthen the

reliability of space systems, and support their ability to respond to the impact of adverse space weather. A priority is international coordination and information exchange on space weather events and their mitigation.

There is growing interest in better understanding solar-terrestrial interactions, particularly patterns and trends in space weather. This is not only for scientific reasons, but also because the reliable operation of ground- and space-based assets and infrastructures is increasingly dependent on their robustness. In particular, extreme space weather could potentially cause damage to critical infrastructure, which underscores the importance of being prepared on a global scale.

COPUOS is already focusing attention on space weather through its consideration of the long-term sustainability of outer space activities, which I referred to earlier, and in a dedicated Expert Group under its Scientific and Technical Subcommittee.

The fifth thematic priority on **Strengthened space cooperation for global health**, involves making improved use of space technologies and space-based information and systems in the global health domain a priority, with the objective of promoting enhanced cooperation and sharing of information in emergencies, epidemics and early warning events.

Defining synergies between climate change mitigation efforts, disaster risk reduction and global development have been given strong attention in the context of UNISPACE+50. These issues are at the core of the sixth thematic priority on **International cooperation towards low-emission and resilient societies**, which is aimed at developing a road map for enhanced resiliency of space-based systems (Earth observation, global navigation satellite systems and telecommunication constellations) for disaster risk reduction and climate change monitoring and mitigation.

In this context, UNOOSA is, for example, working on regional and global initiatives in disaster management that build on 10 years of knowledge accumulated by UN-SPIDER, including on what are developing countries' needs in terms of data, services and know-how. The Office will support countries to apply this knowledge not only to disaster management but also to mitigating and adapting to the

impacts of a changing climate and to reaching the Sustainable Development Goals. Incorporating space-based data and information in the disaster risk reduction strategies under the Sendai Framework is a key effort.

The seventh and last thematic priority on **Capacity-building for the twenty-first century** aims to define new innovative and effective approaches to overall capacity-building and development needs as a fundamental pillar of global governance of space activities. It is important in this context to note the need for integrated initiatives in education and training in science, technology, law and policy, in particular for the benefit of developing countries and with specific attention to women.

Distinguished Participants,

In the period towards UNISPACE+50 in 2018, UNOOSA will organize a series of three high level fora. The first forum “Space as a driver for socio-economic sustainable development” is being organized by the Office in collaboration with the Government of the United Arab Emirates. The forum will be convened from 20 to 24 November 2016 in Dubai.

The series of high level fora will facilitate a constructive dialogue between policy-makers and key stakeholders in the broader space community, to address economic, environmental, social, policy and regulatory dimensions of space in attaining a global sustainable development.

A declaration will be formed with a set of recommendations to further shape and position space activities as drivers for innovations and socio-economic development in the framework of four thematic pillars, namely space economy, space society, space accessibility and space diplomacy.

Our long-term strategy agenda for “Space 2030”, to be developed towards UNISPACE+50 and beyond, will help us, the space community, to address the importance of space activities to ensure a sustainable and protected planet Earth for generations to come.

Thank you for your attention.
