Statement by Ms Ulpia-Elena Botezatu

Chair of the Scientific and Technical Subcommittee

of the Committee on the Peaceful Uses of Outer Space
Vienna, 26 June 2025

Distinguished Delegates and Representatives,

It gives me great pleasure to present to the Committee the outcomes of the sixty-second session of the Scientific and Technical Subcommittee.

I would like to thank once more the States members of the Committee for placing trust in me as the Chair of the Subcommittee for the period from 2024 to 2025. With the Vienna spirit of cooperation, we have advanced the work of the Subcommittee, as reflected in its report in document A/AC.105/1338, amidst this challenging and ever complex outer space environment. The decisions and recommendations of the Subcommittee are contained in paragraphs 5, 29, 45, 54, 55, 62, 69, 71, 115, 117, 129, 132, 135, 136, 153, 156, 167 and 169.

Agenda: Space for sustainable development: technology and its applications, including the United Nations Programme on Space Applications.

Distinguished Delegates,

Under the agenda item on space for sustainable development, the Subcommittee noted the value of space technology and its applications as well as space-derived data an information for sustainable development, including improving the formulation and subsequent implementation of policies and programmes of action relating to environmental protection, land and water management.

It further noted that the Committee and its subcommittees, with the support of the Office for Outer Space Affairs, had a fundamental role to play in promoting international cooperation and capacity-building in disseminating information and knowledge on space applications and in support of socioeconomic development. The Subcommittee noted that the United Nations Programme on Space Applications continued to implement the Access to Space for All initiative and various activities and programmes, with the focus on developing the capacity of Member States to access the benefits of space.

Among other things, the Subcommittee noted the activities of the regional centres for space science and technology education, affiliated to the United Nations. Through multiple degree programmes and short-term training activities, the regional centres had trained talented individuals in the space science and technology sector.

Agenda: Space Debris

Distinguished Delegates,

On the matter of space debris, the Subcommittee noted with satisfaction that many States and international organizations were implementing space debris mitigation measures consistent with the Space Debris Mitigation Guidelines and the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee as well as the Space Debris Mitigation Guidelines of IADC, the latter of which was updated in January 2025. The Subcommittee agreed that Member States and international organizations having permanent observer status with the Committee should continue to be invited to provide reports on research on space debris, the safety of space objects with nuclear power sources on board, problems relating to the collision of such space objects with space debris and the ways in which debris mitigation guidelines were being implemented. The Subcommittee also noted the importance of space situational awareness for space sustainability and recognized challenges and opportunities in addressing that matter.

Agenda: Space-System-Based Disaster Management Support

In the area of space-system-based disaster management support, the Subcommittee welcomed with appreciation the achievements of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response, UN-SPIDER, and their support for States to strengthen their resiliency and build capacity to respond to natural disasters. The Subcommittee also noted the commitment of States members to support UN-SPIDER, including through the network of regional support offices.

The Subcommittee noted the important role that access to space-based information played in enabling decision makers in States to effectively and efficiently mitigate the effects of natural disasters.

In this regard, States members were encouraged to continue providing space-based data to support States in critical times of need, such as directly after a natural disaster, when time is of the essence, as well as over the longer term, to support those negatively affected by climate change.

The Subcommittee expressed its satisfaction at the growing use of international mechanisms and the commitment of States to make their space assets freely available to support emergency operations so that States, in particular developing countries, would have the capacity to acquire and utilize space-based data when faced with the onset of natural disasters. The Subcommittee underscored that enhanced international cooperation, technical innovation and capacity building relating to space-system-based disaster management remained critical for all countries especially those most vulnerable to natural hazards.

Agenda: Recent developments in Global Navigation Satellite Systems

The Subcommittee noted with satisfaction the eighteenth meeting of the International Committee on Global Navigation Satellite Systems, the ICG, as well as the thirtieth meeting of the Providers' Forum had been jointly organized by Australia and New Zealand in October 2024. For the past 18 years, ICG has played a vital role in facilitating international cooperation among States to support the expanding use of positioning, navigation, and timing services through the interoperability of signals and receiver technology. This has cemented global satellite navigation systems, GNSS, into the lives of people around the world. More States are planning to develop their own systems, which could add strength to all systems.

The Subcommittee also noted that based on the work enabled by ICG, States continue to expand their cooperation to enhance interplanetary navigation and communication systems that would support future space exploration missions, including to the Moon and beyond.

Agenda: Space Weather

On the subject of space weather, the Subcommittee further noted that space weather, caused by solar variability, was a global concern that affected all Member States as it posed economic and societal risks owing to its potential threat to space systems, human space flight, ground- and space-based infrastructure and aviation activity, upon which society was increasingly reliant. The issue of space weather therefore needed to be urgently addressed in a global manner.

Through international cooperation and coordination, it should become possible to predict potentially severe space weather events and mitigate their impact in order to ensure the safety and sustainability of outer space activities. The Subcommittee noted a number of national, regional and international activities with the aim of strengthening space weather resilience and the important work done by UN entities, such as WMO, ITU and ICAO as well as COSPAR.

Agenda: Near-Earth Objects

Distinguished Delegates,

Regarding the near-Earth objects, the Subcommittee noted with appreciation the General Assembly's declaration of the year 2029 as the International Year of Asteroid Awareness and Planetary Defence. The importance of asteroid awareness was highlighted by status reports by the International Asteroid Warning Network (IAWN) and the Space the Space Mission Advisory Group (SMPAG), in particular, on the asteroid designated as "2024 YR4" that exceeded the 1 % impact probability for 2032, which according with the initially agreed criteria and thresholds by IAWN and SMPAG met the criteria for a notification to all Member States. The information provided by IAWN was then disseminated by the Office for Outer Space Affairs to States Members of the United Nations on 30 January 2025. The worldwide network of IAWN continued to observe asteroid 2024 YR4. Although the asteroid had reached a peak impact probability of 3.1%, continuous observations by the IAWN network through end of February determined that the impact probability for asteroid "2024 YR4" as of 21 February 2025 dropped below 1 per cent and IAWN continued to monitor the impact probability to confirm the drop below the notification threshold. As informed in the second information notification, disseminated by UNOOSA on 25 February, there is no significant potential for impact of asteroid "2024 YR4" with Earth for the next century.

Agenda: Long-term sustainability of outer space activities

Distinguished Delegates,

The Subcommittee was informed of a number of measures undertaken to implement the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee.

I would like to take this opportunity to express my sincerest appreciation to Mr Umamaheswaran of India for his untiring efforts to advance the work of the **Working Group on the Long-term Sustainability of Outer Space Activities,** which was reconvened under his able chairmanship. The Working Group is now at an important juncture in its work. It aims to finalize its report, including information and recommendations, to be supplemented by an annex.

I should also like to note that in response to a request from States, the Office for Outer Space Affairs, in February this year, launched the Long-term Sustainability of Outer Space Activities Information Repository. The Repository aims to build transparency, confidence and capacity in the area of space sustainability, and there is an open invitation to make submissions.

The Subcommittee also agreed on the importance of focused and dedicated work on space situational awareness and space traffic coordination The Subcommittee took note of the proposal, submitted by the United Arab Emirates to establish an expert group on space situational awareness. The Subcommittee was informed that the United Arab Emirates would hold further informal consultations on the proposal and report on the results of those exchanges to the Working Group on the Long-term Sustainability of Outer Space Activities.

Agenda: Space and global health

In the area of space and global health, the Subcommittee noted with appreciation that the long-term strategy on space and global health for the period 2025–2035 served as an effective framework for the implementation of recommendations contained in resolution 77/120. The Subcommittee heard a status report by the Coordinator of the Space and Global Health Network on its priorities for 2025 as follows: (a) Strengthening mechanisms and institutions at the national level; (b) Focusing on knowledge and awareness-raising; (c) Continuing to develop an interdisciplinary curriculum; (d) Developing a strategic road map and methodology of work to guide the identification and description of space-based essential health variables.

Agenda: Use of nuclear power sources in outer space

Concerning the use of nuclear power sources, the Subcommittee reconvened its **Working Group on the Use of Nuclear Power Sources in Outer Space**, under the skilful leadership of Mr Leopold Summerer of Austria as its Chair. In accordance with its five-year

work plan for the period from 2024 to 2028, the Working Group advanced its work by agreeing on a questionnaire to collect information to achieve the objectives of the work plan. It further agreed to hold an intersessional meeting during this session of the Committee to further discuss the modalities of a joint workshop with the International Atomic Energy Agency (IAEA) on potential future uses of nuclear power sources in outer space, to be held in 2026, possibly in conjunction with the 69th session of the Committee.

Agenda: Examination of the physical nature and technical attributes of GSO

The Subcommittee continued its examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including in the field of space communications, as well as other questions relating to developments in space communications. The Subcommittee took note with appreciation the information provided by the International Telecommunication Union, ITU, on the use of the geostationary satellite orbit and other orbits and invited ITU to submit reports to the Subcommittee.

Agenda: Dark and quiets skies, astronomy and large constellations: addressing emerging issues and challenges

Distinguished Delegates,

The Subcommittee began its consideration of the agenda item entitled “Dark and quiet skies, astronomy and large constellations: addressing emerging issues and challenges”. The Subcommittee noted that, while increasing numbers of satellites and constellations were bringing benefits to society, concerns had been raised about space objects that emitted radio signals and reflected sunlight into astronomical telescopes or crossed their fields of view, thereby degrading astronomical observation. The Subcommittee noted various national and international efforts for researching technologies to mitigate light pollution and monitoring the impact of satellite constellations on astronomy as well as for developing regulations and legal frameworks, technical standards and policy guidelines. The Subcommittee further noted that all stakeholders in large constellations needed to comply with the Outer Space Treacy and the fundamental principles of international space law.

Working Group of the Whole

Distinguished Delegates,

In order to have in-depth discussions under the agenda items on space for sustainable development as well as future role and method of work of the Committee and the draft provisional agenda of its sixty-third session next year, the Subcommittee reconvened the Working Group of the Whole under the able leadership of Mr Prakash Chauhan of India as Chair and Mr Anilkumar as Acting Chair.

Concerning the Subcommittee's programme of work for 2026, the Working Group noted that the Office for Outer Space Affairs would organize a symposium, which would address "Long-term sustainability of outer space activities" and "Space solutions for sustainable development".

Noting the large number of requests for scientific and technical presentations to be scheduled during the session, the Working Group embarked on discussions to better manage presentation by considering various measures to be undertaken. The Working Group recommended that the discussions on the matter be led intersessionally by the delegation of India at this year's session of the Legal Subcommittee.

The Working Group also provided a platform for advancing the work of the Action Team on Lunar Activities Consultations, ATLAC, and consultations led by Italy and Morocco on a proposal to hold a fourth United Nations Conference on the Exploration and Peaceful Uses of Outer Space, or UNISPACE IV in 2027.

As for ATLAC, I would like to express my deep appreciation to all the delegates for placing confidence in me as a co-chair to work together with Mr Hasan Abas of Pakistan in the bureau. An increasing number of States provided contributions to the work of ATLAC and appointed their representatives to participate in its work. The Subcommittee noted that ATLAC would meet during the intersessional period, the sixty-fourth session of the Legal Subcommittee and this session of the Committee to refine the draft workplan for submission to the Committee for its endorsement.

Regarding the proposal to hold UNISPACE IV, the Subcommittee noted that further consultations on the objectives, venue, organization and funding should be held during the sixty-fourth session of the Legal Subcommittee. The secretariat was requested to prepare a report on the possible organizational arrangements, funding and the logistical implications of holding such a conference.

Further progress made on these matters, on the management of technical presentations, ATLAC and UNISPACE IV, would be included in the report on the Legal Subcommittee, to be presented by its distinguished Chair, Prof Santiago Ripol of Spain.

Distinguished Delegates,

In my capacity as the Chair of the Scientific and Technical Subcommittee, I would like to thank all delegations for their constructive and cooperative spirit. The progress achieved this year lays a strong foundation for advancing our work in the coming months. I am confident that our collective efforts will bring tangible results, ensuring that the Committee becomes a dynamic platform for strengthening international cooperation to address critical matters for the benefit of all humankind.

Thank you.