UNITED NATIONS INTER-AGENCY MEETING ON OUTER SPACE ACTIVITIES (UN-Space)

Forty-third session 31 October 2024 (with a standalone training component on 28 October 2024), New York Location: S-1522/23 Meeting start: 9:30 a.m.

ANNOTATED AGENDA

- 1. Opening of the session
 - a. Welcome remarks and introduction of participants
- 2. Space sustainability update on Pact for the Future and activities within different organisations
- 3. Satellite imagery a fundamental tool for United Nations programs and activities
 - a. Presentation of the proposal by the Head of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER)
 - b. Requirements (rationale/ acquisition of data/ data-processing/ distribution)
 - c. Open discussion
- 4. Radio frequency spectrum issues a threat to Earth observation data
 - a. Understanding the challenge Director of the Office for Outer Space Affairs (UNOOSA) & International Telecommunications Union (ITU) expert to "set the scene"
 - b. Brainstorming on coordinated action
- 5. Showcase by the Capacity Development and Operational Training Service (CDOTS) of the Department of Operational Support (DOS)
- 6. UN-Space reports, publications and communication channels

Annotations

1. Opening of the session

This UN-Space session, held with the support of CDOTS, will start at 9:30 a.m. and be chaired by the UNOOSA Director.

2. Space sustainability

The topic of space sustainability has been a core part of previous UN-Space discussions. This is exemplified by the special report of UN-Space on the topic of space debris produced earlier in 2024. It has also now been clearly addressed in the Pact for the Future following the recommendation in the Secretary General's Policy Brief 7 "For All Humanity - The Future of Outer Space Governance". The long-term sustainability of outer space activities is defined as the ability to maintain the conduct of space activities indefinitely into the future in a manner that realizes the objectives of equitable access to the benefits of the exploration and use of outer space for peaceful purposes, in order to meet the needs of present generations while preserving the outer space environment for future generations. The proliferation of space debris, the increasing complexity of space operations, the emergence of large constellations and the increased risks of collision and interference with the operation of space objects continues to put space solutions that are essential to contribute to the achievement of multiple Sustainable Development Goals at risk. As such, the topic continues to be discussed in numerous international fora and can benefit from coordination among the different organisations concerned. In view of current needs and the impetus provided by the Pact of the Future, UNOOSA is spearheading capacity-building for Member States to support decision-making within the Committee on the Peaceful Uses of Outer Space (COPUOS).

Participants of the meeting are invited to share updates on relevant activities and explore, where appropriate, possible areas for future/ongoing collaboration.

3. Satellite imagery – a fundamental tool for United Nations programs and activities

At its last session in 2023, UN-Space, requested UNOOSA to work towards coordinating datasharing, building United Nations system capacity, and cooperating on the procurement of space-based information, to accelerate the application of space assets to achieve the Sustainable Development Goals, and to raise extrabudgetary funds for human resources and technical capacities in order to lead in those efforts.

This is further strengthened in resolution A/RES/7872 on International cooperation in the peaceful uses of outer space where the General Assembly "... encourages entities of the United Nations system to increase their collaboration, including through UN-Space, with a view to better coordinating their data-sharing, building United Nations system capacity and cooperating on the procurement of space-based information, to accelerate the application of space assets in order to achieve the Sustainable Development Goals ...". Currently, the United Nations system and Member States benefit significantly from Earth observation (EO) data for various applications, including socio-economic development, climate change mitigation, disaster management, healthcare, food security and beyond. However, the lack of a coordinated approach results in costly single-use licenses and duplicated efforts among United Nations system, and also from Member States, to enhance coordination and facilitate access to satellite imagery, thus driving cost-effectiveness and minimising duplication of efforts across United Nations entities.

UNOOSA is therefore proposing to Member States to support the creation of a small 2–3person secretariat within the Office, which would aggregate demand and coordinate the supply of EO imagery as well as enhanced capacity-building for developing countries. Additionally, the proposal seeks to mobilize United Nation system-wide resources for a pooled fund for joint procurement, for the benefit of multiple United Nations programs. A representative of UN-SPIDER will present the proposal and participants are invited to discuss.

4. Radio-frequency spectrum issues – a threat to Earth observation data

EO data plays a critical role in advancing global sustainable development. Its acquisition relies on continued and unfettered access to essential radio frequency spectrum. The frequencies used by EO satellites are however exposed to claims by the mobile terrestrial industry who seek access to more radio-frequency spectrum to support the roll-out of IMT (International Mobile Telecommunications)/5G/6G services.

The 10 GHz Synthetic Aperture Radar (SAR) band was recently considered during the ITU's World Radio Conference 2023 (WRC-23). In careful coordination with industry partners, UNOOSA informed national telecoms regulators at WRC-23 of the need to protect these frequencies for the acquisition of high-resolution imagery. Regulators were invited to consider the extent of reliance on these frequencies by multiple entities within the United Nations system to support, key applications such as environmental monitoring, disaster management and climate action.

The bid to protect the 10 GHz band was largely successful. Now however the '8 GHz band', which is the 'workhorse' of most EO satellite downlinks, is being considered for IMT/5G/6G services at WRC-27. Loss of this spectrum would jeopardize the United Nations' ability to deliver timely and accurate data, crucial for managing disasters, protecting biodiversity, and supporting sustainable agriculture, ultimately impacting human life and sustainable development efforts.

Participants are invited to discuss ways to work together to ensure the sustainability and continuity of EO data acquisition using the 8 GHz band.

5. Showcase by the Capacity Development and Operational Training Service (CDOTS) of the Department of Operational Support

As host entity for the 43rd session, CDOTS will share information on its work (e.g. Knowledge Gateway, UNTold and data analytics) and related opportunities for collaboration.

6. UN-Space reports, publications and communication channels

In 2017, UN-Space agreed that reports of the Secretary-General on the coordination of spacerelated activities within the United Nations system and special reports of UN-Space should continue to be issued biennially on an alternating basis.

The latest special report, considered COPUOS, in June 2024, focused on "Space debris" (see <u>A/AC.105/1317</u>). The latest report of the Secretary-General on the coordination of space-related activities within the UN system covered the 2022-2023 period and focused on capacity-building for an inclusive future (see <u>A/AC.105/1292</u>).

A new joint publication by the Food and Agriculture Organization (FAO) and UNOOSA (ST/SPACE/89) will be made available in 2024, on the topic of leveraging space technology for agricultural development and food security.

The UN-Space secretariat will also be launching platforms for the exchange of information on the activities of UN entities dealing with (a) space-derived information; (b) space applications and products and related to training and capacity-building; and (c) normative frameworks related to space activities.

Participants are invited to brainstorm to identify topics where future reports, publications and communications can contribute to the achievement of the Sustainable Development Goals, "Space 2030" and all relevant agendas.