

Statement by the Delegation of the Islamic Republic of Iran

The Sixty-second Session of the Scientific and Technical Subcommittee of COPUOS

Agenda Item 10: Long-term sustainability of outer space activities

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In the Name of Allah, the Most Compassionate, the Most Merciful

Madam Chair,

According to well-established principles of international space law, **outer space is the province of all humankind**, implying that no entity or power can restrict access to space or prevent the conduct of peaceful activities therein. Additionally, space is regarded as the **common heritage of humankind**, akin to any other precious natural resource, and must therefore be preserved for present and future generations in the spirit of awareness, accountability, and collective responsibility. In this regard, we firmly believe that many of the challenges in outer space governance today stem from unilateral and exclusive interests taking precedence over shared, global priorities.

A close examination of emerging challenges and current practices reveals that space **sustainability is a complex issue** encompassing technical, operational, governance, political, and financial dimensions. Addressing these interconnected challenges requires a multifaceted and balanced approach.

One of the most pressing concerns is that outer space is becoming increasingly congested with active satellites and mega-constellations, contaminated by space debris and increasingly and alarmingly becoming competitive among state and private and commercial actors.

Based on numerous analytical reports, the proliferation of **long-lived orbital debris** has been identified as one of the most critical threats to sustainable space activities, particularly in Low Earth Orbit (LEO).

Alarmingly, the emergence of **mega-constellations** which remain under-regulated, poses the risk of consuming most, if not all, of LEO's carrying capacity—a resource that should be equitably shared among all nations and actors.

Outer space is often recognized as a **global commons**, meaning it is a non-excludable and non-rivalrous resource. No single state or group of states should monopolize access to space. Preventing a "**tragedy of the commons**" requires a robust commitment to sustainable management of shared space resources. A particularly pressing concern is the **first-come, first-served approach** in orbital allocation, which risks allowing a small number of actors unrestricted access to finite, valuable orbital resources, leading to overuse and depletion. This inequitable practice must be addressed through coordinated international regulatory mechanisms.

The increasing involvement of **commercial entities** in critical space operations—such as on-orbit servicing, debris removal, and close proximity inspection—necessitates strong state oversight to ensure responsible conduct.

From a technical perspective, developing the necessary capabilities for space sustainability—including space object monitoring, collision avoidance, post-mission disposal, and satellite shielding—remains costly and challenging for emerging space-fairing nations. Therefore, **technical assistance and capacity-building** from **advanced spacefaring nations** are essential to ensuring equitable participation in space activities.

Another major concern is the growing geopolitical divide, that could destabilize space security, safety, and sustainability. Any such developments threaten the peaceful use of outer space and necessitate urgent **confidence-building measures** at the international level.

Madam Chair,

We firmly believe that sustainability objectives must not be limited to **Earth's orbit** but should also be extended to **exploration and resource utilization** on **celestial bodies**, including the **Moon and asteroids**. This underscores the need for responsible and cooperative frameworks to guide future space activities beyond Earth's vicinity.

To conclude my statement, the Islamic Republic of Iran calls upon all member states to uphold their collective responsibility to preserve outer space for the benefit of all humankind. In the same vein, we wish to stress on:

1. Recognizing the finite nature of **Earth's orbits and the electromagnetic spectrum**, it is imperative to ensure their equitable, efficient, and rational use. Considering the interests of developing countries, we must consider **orbital carrying capacity limits**.
2. Urgent action is required to prevent a **tragedy of the commons in space**. Constructive efforts should be made to promote the sustainability of outer space and prevent the over-exploitation of shared space resources.
3. emphasizing the importance of international cooperation that guarantees equitable, inclusive, and non-exclusive participation of all states in space sustainability. To prevent fragmentation in our space activities, we advocate for adherence to multilateral approaches under the auspices of the United Nations and COPUOS.

Thank you.