

**Statement by the Delegation of the Islamic Republic of Iran**

**The Sixty-First Session of the Scientific and Technical Subcommittee of COPUOS**

**Agenda Item 06: Space Debris**

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

**Madam Chair,**

Space debris presents a substantial peril to satellites, spacecraft, and even individuals venturing into space. These particles of debris, ranging from micro fragments to large satellites, have the potential to collide with space assets, resulting in damage or complete operational failure.

The ramifications of uncontrolled proliferation of space debris are deeply concerning. The Kessler Syndrome, a chain reaction phenomenon, could render a significant portion of low-Earth orbit unusable. This would jeopardize critical satellite services that serve as the foundation of the today's society, encompassing communication, navigation, environmental monitoring and scientific research.

The disruptive role of large constellations in generating space debris is a growing concern in the realm of space exploration. The deployment and operation of these types of constellations result in increased collision risks and the generation of non-functional or defunct satellites, rocket stages, and other debris.

It is imperative to take immediate actions and adopt a comprehensive approach to mitigate the impact of space debris, thereby ensuring the long-term viability and well-being of our collective space domain.

A key strategy lies in effectively deorbiting defunct satellites and rocket stages, thereby preventing them from becoming permanent fixtures in Earth's orbit. This can be accomplished through the utilization of propulsion systems or aerodynamic drag devices, facilitating the safe return of these objects to the atmosphere for controlled incineration.

Collision avoidance remains an indispensable tool in safeguarding active spacecraft from encounters with debris. The employment of advanced tracking systems, such as radar and optical telescopes, provides real-time data on the positioning of debris, empowering spacecraft to execute maneuvers to evade potential collisions.

**Madam Chair,**

In pursuit of these technological advancements, it is imperative that we foster international cooperation and extend support to developing countries. Spacefaring nations, working in conjunction with the United Nations Office for Outer Space Affairs (UNOOSA), possess a pivotal role in facilitating the exchange of knowledge and transfer of technology, capacity building, and policy support.

Indeed, leading countries have played a significant role in the creation of space debris, and it is essential for these players to assume greater responsibility in addressing this issue. By taking proactive measures to mitigate space debris and by building capacity in this area, these countries can contribute to the preservation and sustainability of our space.

Technology transfer serves to empower developing countries, enabling them to access and harness advanced space debris mitigation technologies. This encompasses ADR capabilities, collision avoidance, tracking systems and satellite deorbiting operation for end-of-life disposal.

It should be noted that unilateral economic, financial and trade measures imposed and/or maintained in contravention with international law by certain countries hamper international cooperation in outer space and compromise the sustainable development of developing countries. Such an approach continues to have a severe impact on the ability of targeted states to access necessary technologies and equipment in the space sector.

International cooperation and capacity building serves to enhance the technical expertise of developing countries in addressing the challenges posed by space debris. Through training programs, workshops, and collaborative initiatives, individuals and institutions can acquire the necessary skills and knowledge to effectively manage and mitigate the risks associated with debris.

We should make collective efforts to address the ever-increasing challenge of space debris and safeguard the future of our space exploration. Through collaborative efforts, it is possible to ensure the sustainable use of outer space, thereby enabling the equitable distribution of the benefits of space technology for all humankind.

**Thank you, Madam Chair.**