

Scientific and Technical Subcommittee

of

COPUOS

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Item 15 of the provisional agenda

**Item 15 - Dark and Quiet Skies, Astronomy and Large Constellations: Addressing
Emerging Issues and Challenges Dark and Quiet Skies, Astronomy and Large
Constellations: Addressing Emerging Issues and Challenges**

Statement of the Islamic Republic of Iran

Madam Chair,

We commend the inclusion of this issue as a dedicated agenda item within STSC, providing a valuable opportunity for COPUOS to collaborate in addressing the multifaceted challenges posed by large satellite constellations.

Given the increasing congestion of satellites, particularly at low altitudes, the need for regulatory measures governing the deployment and operation of large constellations has become increasingly evident. All space activities, including those related to large constellations, must adhere to the UN Charter, international space regulations, and the national laws of the country where the service is established while ensuring that the principle of national sovereignty is upheld.

The rapid expansion of satellite constellations has intensified competition for orbital slots and frequency allocations. Countries operating these constellations play a significant role in the overcrowding of low Earth orbit. Functioning under minimal restrictions, these actors have practically monopolized these orbits, complicating safe operations for other states. This contradicts the spirit of international space treaties, such as the Outer Space Treaty (OST), which affirms the right of all nations to engage in peaceful space activities. COPUOS must address this issue to ensure the safe, sustainable, and equitable use of space for all.

Madam Chair,

The Islamic Republic of Iran firmly believes that the commercial interests of private companies should not dictate the regulatory framework for space activities. The deployment of large constellations is creating a complex network in LEO, leading to significant technical, legal, security, safety, economic, and cultural challenges for many nations. Among the most pressing concerns are the violation of national sovereignty and the obstruction of fair and equitable access to space.

Another critical consequence of the unchecked expansion of mega-constellations is light pollution. Despite ongoing appeals from astronomers for reductions in the number and brightness of these satellites, no satisfactory measures have been taken. Reports indicate that astronomical observations have already been impacted by the increased light pollution caused by large constellations. Additionally, radio signals reflected and emitted from these satellites have disrupted radio astronomy, transforming once-dark and quiet skies into polluted and bright environments. It is therefore imperative to regulate the radiation and signals of large constellations to prevent unauthorized service provision in other countries.

Furthermore, large constellations contribute significantly to space debris, posing severe risks to the sustainable use of LEO. Approximately 3% of Starlink satellites launched to date are now decommissioned and non-maneuverable, effectively adding to the growing space debris problem. This figure surpasses the total number of satellites launched by many countries. The increasing accumulation of space debris from mega constellations exacerbates numerous challenges, including heightened collision risks, difficulties in orbital maneuvering, restricted launch windows, increased launch risks for other states, and the saturation of orbital and frequency resources.

Madam Chair,

The international community has only a limited window of opportunity to proactively address the challenges posed by large constellations before their negative consequences become irreversible. Among the most concerning issues is the violation of national sovereignty, as exemplified by the unauthorized and illegal operations of the Starlink constellation within the territory of the Islamic Republic of Iran. Iran has presented comprehensive documentation and evidence at the 94th to 97th RRB meetings, demonstrating that Starlink continues to provide unauthorized services within

its jurisdiction. According to the RRB's decision, these activities directly violate Article 18 of the Radio Regulations, as well as Resolutions 22 (WRC-19) and 25 (WRC-03). Despite the RRB's ruling, Starlink continues unlawfully to provide services without my country's consent.

Iran firmly believes that preventing unauthorized activities of large constellations within national territories, integrating debris mitigation programs, and enhancing the technical infrastructure of emerging space nations are essential steps toward safeguarding equitable access to outer space.

In light of these considerations, we propose that the STSC prioritize discussions on this issue. We believe it is important for this committee to explore ways to actively engage with and contribute to efforts aimed at substantively addressing the challenges posed by large constellations, particularly about dark and quiet skies and their impact on astronomy including by considering various initiatives such as the potential establishment of a dedicated working group.

Thank you.