

**Statement of the Pakistan Delegation at the  
64th Session of the Legal Subcommittee (STSC) of the United Nations  
Committee on the Peaceful Uses of Outer Space  
05 - 16 May 2025**

**Agenda Item 12. General exchange of views on the application of  
international law to small satellite activities**

**Thank you Chair,**

Space traffic management is a crucial aspect for safe and secure space operations. The rapid launching of small satellite constellations necessitate effective management of small satellite launches and management of low earth orbit to avoid collisions and ensure safe space operations. Developing a robust mechanism for small satellite launching frameworks is essential to protect global investments in space infrastructure, and foster international collaboration. The increasing deployment of small satellite constellations, particularly in LEO is raising multifaceted legal, environmental and operational concerns and warrants thorough deliberation.

**Chair,**

As the number of small satellites multiplies, the resulting light pollution from these constellations threatens the integrity of dark skies which is vital not only to astronomical observation but also to cultural heritage and the ecological balance of nocturnal environments. The preservation of dark skies intersects with international obligations under the Outer Space Treaty to avoid harmful interference with the activities of other states.

The proliferation of small satellite constellations has downstream impacts on Earth's biosphere. Artificially brightened skies affect migratory species, disrupt nocturnal wildlife patterns, and may interfere with human circadian rhythms. These ecological effects warrant consideration under international environmental law to ensure that space activities remain consistent with global commitments to environmental protection.

**Chair,**

The congestion of LEO raises complex questions concerning equitable access to orbits, long-term sustainability, and the responsibilities of actors under international law.

LSC is the most appropriate forum to consider whether current legal instruments sufficiently address the challenges posed by mass deployment, especially regarding the prevention of collisions, debris generation, and obligations for post-mission disposal.

**Chair,**

As satellite constellations expand, designing safe and cost efficient orbital paths becomes more difficult while avoiding interference with existing space assets. While technical solutions are being developed for collision avoidance and traffic coordination, these efforts need to be supported by coherent legal norms and institutional mechanisms to ensure predictability and accountability among operators.

**Chair,**

The pace and frequency of new satellite launches, driven by innovation and economic incentives, may also be harmonized with collective responsibilities. While the principle of free exploration and use of outer space remains foundational, it may be interpreted alongside some guiding frameworks to prevent harmful contamination and to promote the sustainable use of the space environment.

**I thank you.**

-----**End of Statement**-----