



# General Assembly

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**Committee on the Peaceful  
Uses of Outer Space  
Scientific and Technical Subcommittee  
Sixty-second session  
Vienna, 3–14 February 2025**

## Draft report

### Addendum

### **XIII. Dark and quiet skies, astronomy and large constellations: addressing emerging issues and challenges**

1. In accordance with General Assembly resolution [79/87](#), the Subcommittee considered agenda item 15, entitled “Dark and quiet skies, astronomy and large constellations: addressing emerging issues and challenges” as a single issue/item for discussion.
2. The representatives of Australia, Brazil, Canada, Chile, China, Colombia, France, Germany, Indonesia, Iran (Islamic Republic of), Italy, Mexico, New Zealand, Peru, the Republic of Korea, the Russian Federation, South Africa, Spain, the United Kingdom, the United States and Ukraine made statements under agenda item 15. The observers for the African Astronomical Society, EAS, IAU, OSI, SGAC and SKAO also made statements under the item. During the general exchange of views, statements relating to the item were made by representatives of other member States.
3. The Subcommittee had before it the following:
  - (a) Conference room paper submitted by SKAO (A/AC.105/C.1/2025/CRP.13);
  - (b) Conference room paper on the protection of dark and quiet skies for science and society submitted by Belgium, Bulgaria, Chile, Colombia, Germany, Mexico, Peru, Spain, Switzerland, the United Kingdom, the African Astronomical Society, COSPAR, EAS, ESO, IAA, IAU and SKAO (A/AC.105/C.1/2025/CRP.22/Rev.3);
  - (c) Working paper on large constellations of small satellites submitted by the Russian Federation (A/AC.105/C.1/2025/CRP.27);
  - (d) Conference room paper submitted by NSS (A/AC.105/C.1/2025/CRP.32).
4. The Subcommittee heard the following scientific and technical presentations:
  - (a) “VGOS – the very-long-baseline interferometry (VLBI) global observing system”, by the representative of Germany;
  - (b) “Morocco’s contribution to the dark and quiet sky initiative for peaceful space uses”, by the representative of Morocco;



(c) “Dark and quiet skies: the perspective of a satellite operator”, by the representative of the United Kingdom;

(d) “Towards an intergenerational pact for space sustainability: what does it mean for dark and quiet skies?”, by the observer for SGAC;

(e) “Dark and quiet skies: thoughts on the Committee on the Peaceful Uses of Outer Space – ITU collaboration”, by the observer for SKAO.

5. The Subcommittee welcomed the inclusion of the item for the next five years in the agenda of the Subcommittee.

6. The Subcommittee noted that, while increasing numbers of satellites and constellations were bringing benefits to society, concerns had been raised about space objects that emitted radio signals and reflected sunlight into astronomical telescopes or crossed their fields of view, thereby degrading astronomical observation. A balanced approach was thus important for safeguarding astronomy while maintaining the benefits offered by satellites and constellations.

7. The Subcommittee noted various national and international efforts for researching technologies to mitigate light pollution and monitoring the impact of satellite constellations on astronomy, as well as for developing regulations and legal frameworks, technical standards and policy guidelines, which included the regulation of lighting, making coordination with the scientific community prior to launch a licensing requirement, the establishment of dark sky conservation areas and radio quiet zones.

8. Some delegations expressed the view that sharing experiences and information on technical solutions, such as the recommendations made by the Group of Friends for Dark and Quiet Skies for Science and Society contained in the annex of the conference room paper on the protection of dark and quiet skies for science and society (A/AC.105/C.1/2025/CRP.22/Rev.3), would be beneficial.

9. Some delegations expressed the view that coordination between ITU and the Committee on mitigation efforts addressing radio wave emissions should be strengthened.

10. The Subcommittee noted that all stakeholders of large constellations needed to comply with the Outer Space Treaty and the fundamental principles of international space law.

11. Some delegations expressed the view that the rapid expansion of satellite constellations brought a series of challenges, such as the safe operation of space objects, equitable access to the radio frequency spectrum and equitable access to space. In that connection, a constructive dialogue was necessary.

12. The view was expressed that it was a violation of article IX of the Outer Space Treaty not to hold a consultation prior to the launch of large constellations.

13. The view was expressed that the use of commercial satellites and related ground-based infrastructure to support military operations posed a risk to the safety of space operations.

14. The view was expressed that discussions related to the use of satellite technology in armed conflict should take place in the United Nations disarmament forums.

15. The view was expressed that the use of large constellations to provide unauthorized services within national territories was a pressing concern.

16. The view was expressed that the Subcommittee could establish a working group to explore ways to address the challenges posed by large constellations.

17. Some delegations expressed the view that the preservation of dark and quiet skies needed to be made part of the ongoing discussion of the Working Group on the Long-term Sustainability of Outer Space Activities.

18. The view was expressed that discussions on the governance of large constellations should be kept separate from other agenda items of the Committee and its subcommittees.

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