

COPUOS Main Committee 2025

**Leveraging the Expertise of both Subcommittees
to Address Urgent Questions related to Space Traffic***Non-Paper by Germany and the United Arab Emirates***I. Introduction**

1. Over the past decade, the number of satellites launched has increased exponentially, bringing the number of objects in orbit to over 15,000.¹ Space traffic, referring to the movement of all space objects including parts thereof and debris during all phases of spaceflight, has therefore increased significantly, especially in Earth's orbit. This is inherently linked to the fact that the potential and benefits of space activities for humanity have never been greater.

2. Awareness of the necessity to ensure the safety and long-term sustainability of outer space is increasingly being raised by states, international organisations, private operators and academia alike. This is in response to the risks posed to the space environment by uncoordinated increasing space traffic, which could jeopardise the benefits of space activities for all. This issue has already been discussed and addressed by the Committee on the Peaceful Uses of Outer Space (COPUOS). In 2007, the then Chair of the Committee proposed to discuss "rules of the road" within the Scientific and Technical Subcommittee (STSC),² which eventually led to the creation of the first Working Group on the Long-term Sustainability of Outer Space Activities. Based on the Working Group's highly successful work, COPUOS adopted 21 Guidelines on the Long-term Sustainability of Outer Space Activities in 2019.³ They have also informed the "General Exchange of Views on Legal Aspects of Space Traffic Management" under the respective agenda item at the Legal Subcommittee (LSC).

3. However, further international collaboration and action are warranted. In particular, reliability and availability of space situational awareness (SSA) information is a requirement for efficient space traffic coordination, as a means of sustaining outer space for exploration and use by all, as set out in article I of the Outer Space Treaty. Adopting standards and best practices for data and information sharing is an important step in facilitating international coordination and ensuring clear and efficient services for spacecraft operations. This must build on the experiences, knowledge and existing efforts of governmental and non-governmental space operators and SSA providers. At the 62nd STSC session in 2025, it was therefore proposed to establish a working mechanism to further international cooperation on SSA information, which would also contribute to the Subcommittee's agenda item "Long-term sustainability of outer space activities".

4. Given the increase in space traffic, SSA is an important aspect of ensuring that outer space can be used safely and sustainably by all. Additionally, a number of regulatory measures and policy tools to maintain a safe space environment are already in place at the national or regional level. Studying these through a working mechanism at LSC would be an important complementary contribution towards establishing a robust international governance framework for safe and sustainable space activities.

¹ A Year of Transition, UNOOSA ANNUAL REPORT 2023 and OOSA Online Index of Space Objects.

² UN Doc. A/AC.105/L.268, Chapter II, section D

³ UN Doc A/74/20, Annex II.

5. The importance of strengthened global governance of space activities was emphasized in the Secretary-General's Policy Brief "For all Humanity: The Future of Outer Space Governance"⁴ and by world leaders at the Summit of the Future in Action 56 of the Pact for the Future.⁵ They also encourage COPUOS to consult further on the proposal to hold a fourth United Nations Conference on the Peaceful Exploration of Outer Space (UNISPACE IV) in 2027.

6. To prepare tangible outcomes of UNISPACE IV, the 68th session of COPUOS in 2025 is an opportune time for the international space community to initiate meaningful discussions on the scientific, technical, legal and policy aspects of space traffic. In order to address this urgent issue, COPUOS must rely on the expertise and capacity of both Subcommittees.

7. The States submitting this paper therefore are of the view that establishing work streams in both Subcommittees in a timely manner is essential. This paper summarises the development of the two initiatives and outlines their complementarity.

II. The two initiatives in retrospect

8. At the 62nd STSC session this year, the United Arab Emirates proposed the establishment of an Expert Group on Space Situational Awareness. Informal consultations were held during the session, at the 64th session of the LSC and virtual meetings were conducted in preparation of the 68th session of COPUOS.

9. The proposed mandate of the Expert Group is to: (a) Promote and foster greater awareness and cooperation on exchange of relevant information on space objects and events ("space traffic information ") and information sharing among Member States; (b) Review existing and/or propose new measures, and best practices to achieve consistency in understanding and use of SSA information-sharing practices to aid operational coordination; (c) Develop recommendations for global STC principles and frameworks, including the use of international standards and formats for representing information to enable the interoperability of information shared on a voluntary basis; and (d) Identify areas for future work.

10. At the 63rd LSC session in 2024, Germany proposed the establishment of a Study Group to produce a research report on legal and policy aspects of space traffic. The proposal was re-submitted at the 64th LSC session this year and received co-sponsorship from 22 States, including the United Arab Emirates. Informal consultations have been held at the 63rd and 64th sessions of the LSC as well as at the 67th COPUOS session in 2024.

11. The Study Group would identify, within two years, legal and policy aspects related to space traffic, taking into account regulations, policies, best practices and requirements at the national and regional levels as well as the international legal framework governing outer space activities, with the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, at its core. It would deliver a research report to the LSC to present existing approaches and elements to be considered by States members when discussing legal and policy aspects of space traffic, including the interests of developing countries and emerging spacefaring nations.

12. Since their introduction, Germany and the United Arab Emirates have emphasized the complementary nature of the proposals and have worked closely together. During the 64th session of the LSC, the two countries jointly held informal consultations to demonstrate their

⁴ UN Doc. A/77/CRP.1/Add.6.

⁵ UN Doc. A/RES/79/1.

close collaboration and allow delegations to discuss the proposals' complementary nature and identify as well as reply to concerns about duplication of work.

III. Outline of the Complementary and Comprehensive Approach

13. In order to foster a common understanding among the States Members of this Committee regarding a multilateral approach to identify and cope with the different dimensions of increasing space traffic, it is crucial to address technical and legal issues. Both are two sides of the same coin. The legal discussion must be informed by the scientific background and technical possibilities of space utilization. At the same time, technical findings and approaches to ensuring the safety and long-term sustainability of space activities must be embedded in a legal framework, at the national, regional, or eventually multilateral levels to ensure legal certainty.

14. The SSA Expert Group and the Study Group on Legal and Policy Aspects of Space Traffic do not duplicate work. They approach the subject matter from different angles to facilitate the most comprehensive discussion possible of the relevant issues at COPUOS:

- The Expert Group on SSA at STSC will facilitate expert-level exchanges to identify challenges, develop targeted recommendations, and enhance international cooperation and interoperability in SSA. These exchanges build on the experience and practices of governmental and non-governmental space operators and SSA providers. Many states have begun developing capacities and operations in SSA to address the growing amount of space traffic and have developed their own solutions and approaches, which can differ significantly from state to state. An Expert Group on SSA will facilitate the sharing of perspectives on these different approaches and how states deal with challenges in SSA operations. This will help build a common understanding of these issues and facilitate operations involving multiple states.
- The Study Group on Legal and Policy Aspects of Space Traffic at LSC will focus on collecting information on the measures States or regional organisations take to ensure the safety and long-term sustainability of space activities, given the increase in space traffic. Therefore, the scope is broader, also focusing on States' policies and regulatory activities rather than the activities of private stakeholders/operators.

15. To efficiently manage resources and realise the benefits of a holistic approach, the two groups must communicate continuously. This could include sharing working documents and having representatives from each group participate in each other's meetings. These representatives could then report on the progress of their group. The groups will inform each other of the status of their work through chair's/co-facilitators' summaries, which could also include questions for consideration by the other group. The two groups could also hold joint meetings during the 69th and 70th session of the Committee.

16. To ensure optimal integration and coordination, both groups, once established, will actively engage with other relevant working groups, notably the Working Group on the Long-term Sustainability of Outer Space Activities and other specialized working groups under COPUOS.

17. Both groups will ensure their outcomes complement and support broader COPUOS efforts, clearly identifying unique areas where its expertise and operational focus add significant value.

IV. Conclusion

18. COPUOS can only address the urgent needs of all space actors, including established and emerging space-faring nations, governmental and non-governmental actors, by taking a comprehensive approach that builds on the expertise and work of both of its two Subcommittees.

19. COPUOS is the competent multilateral forum to address questions of the long-term sustainability and safety of space operations. Therefore, the submitting states propose that, at the present session, COPUOS takes action and establishes the two groups as outlined here and in the additional supporting documents, so that substantive work of both groups can begin with a view to delivering tangible outcomes of UNISPACE IV.

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