Committee on the Peaceful Uses of Outer Space Sixty-eighth session

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Report of the Scientific and Technical Subcommittee on its sixty-second session

Proposal for the Establishment of an Expert Group on Space Situational Awareness

Non-paper submitted by the United Arab Emirates

I. Introduction and Background

- 1. The increasing number of space actors and objects in orbit, combined with the growing complexity of space operations, has elevated Space Situational Awareness (SSA) and Space Traffic Coordination (STC) as critical priorities. Ensuring the safety and sustainability of space activities requires addressing several key areas, including information sharing on space activities, operational coordination, interoperability between systems, safety measures, debris mitigation and remediation, and the protection of operational assets and critical infrastructure in orbit. These efforts are essential not only for safeguarding current space missions but also for ensuring the freedom of exploration and use of space for all States and maintaining the long-term sustainability of orbital environments.
- 2. Space Situational Awareness (SSA) capabilities play an essential role in ensuring safe and sustainable space operations, and in mitigating the risks associated with the increased number of space objects, thereby supporting better global coordination of space traffic, which is needed to make informed decisions and enhance operational safety for all space actors.
- 3. While there are ongoing national, regional, and international efforts to address SSA and STC challenges, no dedicated mechanism exists to discuss data formats and coordination of global SSA information sharing.
- 4. In light of the above, the United Arab Emirates proposes the establishment of an Expert Group on Space Situational Awareness with the objective of facilitating discussions to improve information sharing and development of best practices within the framework of the Scientific and Technical Sub-Committee (STSC) of COPUOS, the Committee on the Peaceful Uses of Outer Space.
- 5. This paper outlines the mandate, terms of reference, and methods of work for the proposed Expert Group. It aims to support focused discussions at the upcoming sessions of the Committee and to further advance a collaborative, and effective global approach to Space Situational Awareness
- 6. The Expert Group on Space Situational Awareness (SSA), will directly support Member States in advancing global SSA coordination and cooperation. Its establishment under the Scientific and Technical Subcommittee (STSC) ensures focused, actionable outcomes that complement existing international frameworks, including the LTS guidelines, without administrative overlap. Regular reporting to the STSC under the LTS WG will ensure transparency, alignment,

II. Mandate and Terms of Reference

- 7. The mandate of this 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 of data formats and in understanding and use of Space Situational Awareness (SSA) information-sharing practices to aid operational coordination; (c) Identify areas for future work.
- 8. The United Arab Emirates believes that for the Expert Group to achieve successful outcomes, it should include representatives from Member States and permanent observers, in addition to relevant non-governmental and private sector experts, nominated by their respective Member States. This approach ensures a balanced perspective, enhancing both the effectiveness and relevance of the group's recommendations. UNOOSA shall invite all Member States interested in participating in the Expert Group to appoint a maximum of three experts.
- 9. The Expert Group may invite recognized technical, policy, and legal experts, and any further entity to its meetings, either on a regular or *ad hoc* basis as deemed appropriate. Representatives from all external invited entities shall be limited to one.
- 10. The Expert Group will provide focused inputs, with the ultimate objective of creating a technical basis of understanding that can support actionable recommendations and voluntary standards aimed at enhancing global operational coordination and safety in space activities. A comprehensive final report will be presented for consideration with a view to UNISPACE IV in 2027.
- 11. Discussions will be precisely limited to those necessary for fulfilling the group's mandate, avoiding duplication with ongoing COPUOS efforts.
- 12. The work of the Expert Group shall complement and support ongoing consultations within COPUOS and its subcommittees. It will promote informal collaboration and exchange of information among existing SSA frameworks or ongoing initiatives.

III. Method of Work

- 13. While maintaining independent administrative status, the Expert Group shall be established under the LTS Working Group, and works on the basis of consensus of its member States.
- 14. The Expert Group will directly contribute to and complement the ongoing efforts and objectives of the Working Group on the Long-term Sustainability of Outer Space Activities by fostering effective implementation of relevant LTS Guidelines.
- 15. The Expert Group shall meet as needed to advance its work, both on the margins of the sessions of the Committee and the STSC and during the intersessional period. All meetings of the Expert Group shall be organized in a hybrid format to allow for the inclusive participation of its members and maximize the use of time.
- 16. The Office for Outer Space Affairs shall facilitate the work of the Expert Group by providing support in convening and facilitating meetings.
- 17. Upon its establishment, the Expert Group shall elect its co-chairs, and the Office for Outer Space Affairs shall appoint a rapporteur and a secretary to support its work.
- 18. The Expert Group's scope specifically covers areas not comprehensively addressed by current LTS discussions (e.g., detailed operational coordination, SSA information standardization, technical interoperability).
- 19. The Expert Group will provide updates on its progress to the Scientific and Technical Sub Committee (STSC) under the LTS item. These updates will detail the progress of the expert group, in conjunction with the reporting of the LTS WG.

IV. Potential Topics

Objectives	Potential Topics	
(A) Promoting Greater Awareness and Cooperation	 Enhanced global operational coordination on SSA, specifically interoperability of SSA data systems and harmonization of data formats across global SSA systems. Establishment of forums to enable regular communication and exchange of SSA topics among Member States. 	
	Assessment of current international SSA information sharing practices.	
(B) Reviewing Existing and Proposing New Measures	Global framework and potential development of information-sharing platforms, inter alia national or regional existing SSA platforms or a unified platform, to align and enhance coordination on SSA among Member States.	
	Unified global standards and formats for SSA information exchange.	
	Operational Coordination among satellite operators including notification to enable collision avoidance maneuvers.	
	Knowledge sharing activities between Member States.	
(C) Identifying Areas for Future Work	International cooperation on SSA with a view to support capacity building for Member States with emerging space programs / capabilities.	
	Policy Recommendations	
	International information sharing and coordination mechanism for SSA as an outcome for UNISPACE IV.	

I. Work Plan for 2025-2028

Year	Duration	Aims and	Frequency of Meetings
2025	Intersessional	Start discussion on topics related to objectives (A) and (B). Engage experts, as required (based on voluntary nomination from Member States).	2
2026	Scientific (STSC)	Focus on technical aspects of topics under objectives (A) and (B). Begin developing draft recommendations.	3
	Intersessional	Present initial recommendations on Objectives (A) and (B) for preliminary feedback. Continue discussions and initiate	2

		engagement on Objective (C).	
	COPUOS Plenary	Present initial recommendations on Objectives (A) and (B) for preliminary feedback. Continue discussions and initiate engagement on Objective (C).	3
	Intersessional	Further refinement of recommendations (Objectives A and B). Continue detailed discussions on Objective (C). Prepare an interim report	2
2027	Scientific (STSC)	Finalize recommendations for Objectives (A) and (B). Detailed discussions on Objective (C).	3
	Intersessional	Refine and consolidate recommendations across Objectives (A), (B), and (C).	2
	UNISPACE IV + COPUOS Plenary	Comprehensive presentation of consolidated recommendations for Objectives (A), (B), and (C).	3
	Intersessional	Address COPUOS feedback on consolidated recommendations.	2
2028	Scientific (STSC) Intersessional COPUOS Plenary	Finalize outstanding recommendations across all Objectives (A), (B), and (C)	TBD

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