



**Committee on the Peaceful
Uses of Outer Space
Legal Subcommittee
Fifty-eighth session
Vienna, 1–12 April 2019****Draft report****IV. Status and application of the five United Nations treaties on outer space**

1. Pursuant to General Assembly resolution [73/91](#), the Subcommittee considered agenda item 5, entitled “Status and application of the five United Nations treaties on outer space”, as a regular item on its agenda.
2. The representatives of Brazil, Germany, Indonesia, Mexico, the Russian Federation and the United States made statements under agenda item 5. Statements were made by the representative of Egypt on behalf of the Group of 77 and China, and by the representative of Costa Rica on behalf of Argentina, Bolivia (Plurinational State of), Brazil, Chile, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Paraguay, Uruguay and Venezuela (Bolivarian Republic of). During the general exchange of views, statements relating to the item were also made by representatives of other member States.
3. At its 976th meeting, on 1 April, the Subcommittee reconvened its Working Group on the Status and Application of the Five United Nations Treaties on Outer Space, with Bernhard Schmidt-Tedd (Germany) as Chair.
4. At its [...] meeting, on [...] April, the Subcommittee endorsed the report of the Chair of the Working Group, contained in annex [...] to the present report.
5. The Subcommittee had before it the following:
 - (a) Working paper submitted by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space entitled “Draft guidance document under UNISPACE+50 thematic priority 2. ‘Legal regime of outer space and global governance: current and future perspectives’” ([A/AC.105/C.2/L.310](#));
 - (b) Conference room paper on the status of international agreements relating to activities in outer space as at 1 January 2019 ([A/AC.105/C.2/2019/CRP.3](#));
 - (c) Conference room paper containing responses to the set of questions provided by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space received from Pakistan, the United Arab Emirates and the Secure World Foundation ([A/AC.105/C.2/2019/CRP.11](#));



(d) Conference room paper containing responses to the set of questions provided by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space received from Armenia (A/AC.105/C.2/2019/CRP.18).

6. The Subcommittee noted that, as at 1 January 2019, the status of the five United Nations treaties on outer space was as follows:

(a) The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty), had 109 States parties and had been signed by 23 additional States;

(b) The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (Rescue Agreement) had 98 States parties and had been signed by 23 additional States; three international intergovernmental organizations had declared their acceptance of the rights and obligations established under the Agreement;

(c) The Convention on International Liability for Damage Caused by Space Objects (Liability Convention) had 96 States parties and had been signed by 19 additional States; four international intergovernmental organizations had declared their acceptance of the rights and obligations established under the Convention;

(d) The Convention on Registration of Objects Launched into Outer Space (Registration Convention) had 69 States parties and had been signed by three additional States; four international intergovernmental organizations had declared their acceptance of the rights and obligations established under the Convention;

(e) The Agreement Governing the Activities of States on the Moon and other Celestial Bodies (Moon Agreement) had 18 States parties and had been signed by four additional States.

7. The Subcommittee commended the Secretariat for updating, on an annual basis, the status of international agreements relating to activities in outer space; the current update had been made available to the Subcommittee in conference room paper A/AC.105/C.2/2019/CRP.3.

8. The Subcommittee noted that the Intersputnik International Organization of Space Communications had made declarations stating its acceptance of the rights and obligations provided for in the Rescue Agreement, the Liability Convention and the Registration Convention, and had also declared its acceptance of the obligation to comply with the Outer Space Treaty, and the responsibility thereof.

9. Some delegations expressed the view that wide adherence to the United Nations treaties on outer space contributed to creating a safe, secure and sustainable environment for the development of outer space activities and enhanced the effectiveness of the Legal Subcommittee as the main body for discussing and negotiating international space law.

10. Some delegations welcomed with appreciation the growing number of States parties to the United Nations treaties on outer space and encouraged those States that had not yet become parties to the treaties to consider doing so.

11. Some delegations expressed the view that, as the five United Nations treaties on outer space formed the cornerstone of international space law, the Legal Subcommittee had a mandate to review its contents in the light of scientific and technical developments, and with a view towards addressing the current challenges presented by the diversification of space actors and the increasing privatization and commercialization of space activities.

12. Some delegations expressed the view that the Registration Convention represented a key facilitator of transparency and confidence-building measures in outer space activities, and that parties to that Convention should provide complete and timely information on the objects they launch and maintain their national registers. Those delegations also expressed the view that training and

capacity-building focused on registration practices was of vital relevance for new space actors.

13. Some delegations expressed the view that, in the light of the growing number of new space actors, including States and intergovernmental and non-governmental entities, efforts should be made to ensure that the conduct of such actors conformed with applicable international space law.

14. The view was expressed that the five United Nations treaties on outer space continued to form the universal legal basis for present and future space exploration and use, and that the principles enshrined therein were equally valid both for countries with long-standing space programmes and emerging space actors. The delegation expressing that view also expressed the view that the five United Nations treaties on outer space contributed to the safe and peaceful conduct of space activities and were for the benefit and in the interests of all countries.

15. The view was expressed that the provisions of the five United Nations treaties on outer space had been clearly and unequivocally formulated, and that it was counterproductive to state that there were gaps in international space law, or to attempt to fill those purported gaps by enacting national space legislation.

16. The view was expressed that the likely reasons for the low adherence of States to the Moon Agreement was that the Agreement contained the pronouncement that the Moon and its natural resources are the common heritage of humankind, as a way of defining the status of the natural resources found on the Moon and other celestial bodies, and that the Agreement proposed a regime to ensure that exploitation of the Moon's natural resources was carried out for the benefit and in the interests of all countries.

17. The view was expressed that, although the status of the five United Nations treaties on outer space as cornerstones of international space law remained unchallenged, it had been clear to the drafters at the time of drafting the treaties that there would be future scientific innovations and technological developments that would call for improvements to the treaties. The delegation expressing that view also expressed the view that, for the five United Nations treaties on outer space to remain relevant, the Subcommittee must consider the need for amendments and updates, or even additional treaties, as well as promote even broader adherence to the legal regime governing outer space activities.

18. The view was expressed that the questionnaire presented by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space was a valuable tool that helped the Subcommittee assess the effectiveness of the legal regime governing outer space activities. The delegation expressing that view also expressed the view that the answers to the questionnaire provided by States members of the Committee enabled the sharing of views on important legal issues and provided a valuable basis for addressing the status and scope of, and possible gaps in, the legal regime governing outer space activities.

XI. General exchange of views on the legal aspects of space traffic management

19. Pursuant to General Assembly resolution [73/91](#), the Subcommittee considered agenda item 12, entitled "General exchange of views on the legal aspects of space traffic management" as a single issue/item for discussion.

20. The representatives of Austria, Brazil, China, Egypt, Germany, Japan, Mexico, the Netherlands, the Russian Federation and the United States made statements under agenda item 12. During the general exchange of views, statements relating to the item were made by representatives of other member States.

21. The Subcommittee heard the following presentations:
 - (a) “Space traffic management”, by the representative of the United Arab Emirates;
 - (b) “Japan Aerospace Exploration Agency activities on ensuring stable use of outer space”, by the representative of Japan.
22. The Subcommittee noted that the space environment was becoming increasingly complex and congested, owing to the growing number of objects in outer space, the diversification of actors in outer space and the increase in space activities, and that the issue of space traffic management could be considered in that context.
23. The Subcommittee took note of a number of measures that were being undertaken at both the national and international levels to improve the safety and sustainability of spaceflight, including the implementation of a national space traffic management policy, international coordination efforts to manage radiofrequency and geostationary orbits through the International Telecommunication Union, efforts to enhance capabilities and share information related to space situational awareness, the reporting of annual launch plans and the submission of pre-launch notifications on space launch vehicles.
24. Some delegations expressed the view that a multilateral, comprehensive approach to space traffic management would meet the needs of the growing global space economy in terms of safety, predictability and sustainability.
25. The view was expressed that space traffic management, which entailed developing and implementing a set of technical and regulatory provisions to promote safe access to and return from outer space, and to maintain operations in space, secure and free from physical or radio interference, was of utmost importance for ensuring the safety, stability and sustainability of the outer space environment.
26. The view was expressed that a comprehensive international space traffic management system could enhance the safe and sustainable conduct of space activities and could include the following: improved multilateral sharing of information on space situational awareness; enhanced international registration procedures; international mechanisms for the notification and coordination of launches, in-orbit manoeuvres and re-entry of space objects; and safety and environmental provisions.
27. The view was expressed that, although existing international space law already contained provisions that were of relevance to space traffic management, for such management to be effective, the gaps in the international regulatory frameworks and initiatives would need to be filled.
28. The view was expressed that internationally agreed guidelines and technical standards had proved to be the most suitable tools for managing international traffic-related matters efficiently and sustainably, that both the Air Navigation Commission of the International Civil Aviation Organization and the Maritime Safety Committee of the International Maritime Organization were examples of institutional mechanisms useful for developing the technical aspects of such guidelines and standards while at the same time giving due consideration to the specific national interests of Member States, and that it was time to consider how the development of guidelines and standards specifically applicable to the management of traffic in outer space could be achieved.
29. The view was expressed that space traffic management involved not only the development of appropriate rules and procedures for conducting space operations, but also mechanisms for related international cooperation. The delegation expressing this view was also of the view that from a practical point of view, space traffic management entailed an entire range of technical, operational and administrative tasks, some of which required international cooperation, that facilitated the technological tasks of each individual spacecraft, as well as of the mission overall.

30. The view was expressed that the discussions on space traffic management held during the meetings of the Subcommittee were complemented by academic research and interactions between practitioners and decision makers, as well as by contributions from international institutions such as the International Academy of Astronautics, and that together those efforts should guide consideration of an international regime for space traffic management.
31. The view was expressed that the Subcommittee should avoid rushing into any premature theoretical discussions on space traffic management and that it should instead prioritize discussions on the most pressing matters that could jeopardize space activities.
32. The view was expressed that space traffic management was not an end in itself, and that any space traffic management rules put in place would need to be feasible for implementation.
33. The view was expressed that it was imperative to promote the broad participation of developing countries and emerging spacefaring nations in substantive discussions on space traffic management.
34. The view was expressed that the agenda item on space traffic management provided an opportunity for States with advanced space traffic management capabilities to disseminate their expertise and experiences and thus raise awareness of the importance of the issue.
35. The view was expressed that the development by member States of an internationally agreed model for space traffic management would represent a major step towards the preservation of space for peaceful uses, as the exchange of information on space objects constituted a concrete transparency and confidence-building measure.
36. The view was expressed that certain existing agenda items were highly relevant to space traffic management, such as those relating to the long-term sustainability of outer space activities, and that conflicting or duplicative efforts should be avoided. The delegation expressing that view was also of the view that a productive working method could be to continue related discussions within a working group devoted to the topic of the long-term sustainability of outer space activities.
37. The view was expressed that substantive elements of the guidelines for the long-term sustainability of outer space activities represented robust first building blocks for a space traffic management structure, including elements of guidelines B.1 (Provide updated contact information and share information on space objects and orbital events) and B.2 (Improve accuracy of orbital data on space objects and enhance the practice and utility of sharing orbital information on space objects) ([A/AC.105/C.1/L.366](#)). The delegation expressing that view was also of the view that, as work continued on the long-term sustainability of outer space activities, additional building blocks for a comprehensive international space traffic management regime would certainly emerge.
38. The view was expressed that, in order for an operator's decisions on the operation and control of a spacecraft to be as relevant and timely as possible to the current situation, information on the operational environment and data on objects and events in outer space must be timely, reliable, precise and accurate. The delegation expressing that view was also of the view that the more accurate and reliable the data were, and the faster they became available, the more likely it was that correct and responsible decisions would be taken.
39. The view was expressed that it was impossible to ignore the question of responsibility for the deliberate provision of inaccurate information on space objects and events, especially when its use by another participant in outer space activities led to negative consequences.
40. The view was expressed that States should analyse proposals made to establish, under the auspices of the United Nations, an international platform for the exchange of information on objects and events in outer space, as well as the guidelines for the long-term sustainability of outer space activities relating to the safety of space

operations, as those proposals and guidelines could inform a responsible and systematic approach to space traffic management.

41. The view was expressed that one State's forthcoming transfer of responsibilities for providing government-derived, basic space situational awareness data and basic space traffic management services for most users from its department of defence to its department of commerce would enable civilian government agencies, international organizations and the private sector to access a new open-architecture data repository that would improve the interoperability of space situational awareness data and enhance the sharing of space situational awareness data.
