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Committee on the Peaceful Uses of Outer Space Legal Subcommittee Fifty-seventh session Vienna, 9–20 April 2018

## **Draft report**

## IV. Status and application of the five United Nations treaties on outer space

- 1. Pursuant to General Assembly resolution 72/77, the Subcommittee considered agenda item 6, entitled "Status and application of the five United Nations treaties on outer space", as a regular item on its agenda.
- 2. The representatives of Germany, Indonesia, Pakistan, Saudi Arabia, the Russian Federation and the United States made statements under agenda item 6. Statements were made by the representative of Ecuador on behalf of the Group of 77 and China, and by the representative of the Plurinational State of Bolivia on behalf of the Group of Latin American and Caribbean States. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
- 3. At its 957th meeting, on 9 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 [...]th meeting, on [...] April, the Subcommittee endorsed the report of the Chair of the Working Group, contained in annex I to the present report.
- 5. The Subcommittee had before it the following:
- (a) Note by the Secretariat on UNISPACE+50 thematic priority 2, entitled "Legal regime of outer space and global governance: current and future perspectives", (A/AC.105/1169);
- (b) Working paper submitted by Canada containing the draft resolution entitled "Fiftieth anniversary of the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space: space as a driver of sustainable development" (A/AC.105/C.2/L.305);
- (c) Conference room paper on the status of international agreements relating to activities in outer space as at 1 January 2018 (A/AC.105/C.2/2018/CRP.3);
- (d) 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 Czechia (A/AC.105/C.2/2018/CRP.12);







- (e) Conference room paper submitted by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space containing a proposed outline of the key points for the guidance document under cluster 3 of UNISPACE+50 thematic priority 2, entitled "Legal regime of outer space and global space governance: current and future perspectives" (A/AC.105/C.2/2018/CRP.14);
- (f) 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 Indonesia (A/AC.105/C.2/2018/CRP.16).
- 6. The Subcommittee noted that, as at 1 January 2018, 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, had 107 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 had 96 States parties and had been signed by 23 additional States; two 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 had 95 States parties and had been signed by 19 additional States; three 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 had 67 States parties and had been signed by three additional States; three 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 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.2/2018/CRP.3.
- 8. The Subcommittee expressed its appreciation to Canada for its efforts during the intersessional period to productively lead the informal meeting to draft the resolution entitled "Fiftieth anniversary of the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space: space as a driver of sustainable development".
- 9. Some delegations expressed the view that the United Nations treaties on outer space formed the primary legal framework for creating a safe, secure and sustainable environment for the development of outer space activities and enhancing the effectiveness of the Legal Subcommittee as the main body for discussing and negotiating international space law. Those delegations welcomed with appreciation the growing number of 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.
- 10. Some delegations expressed the view that, in the light of the growing number of space actors, including States and intergovernmental and non-governmental entities, efforts should be made to ensure that the conduct of space actors conformed with applicable international space law.
- 11. Some delegations expressed the view that promoting the universality of the United Nations treaties on outer space was essential to strengthening the work of the Committee and its subcommittees, and that the work of those bodies should be

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complementary and closely coordinated to ensure their greater efficiency and effectiveness.

- 12. Some delegations expressed the view that the issuance of a guidance document by the Committee under UNISPACE+50 thematic priority 2 was welcome. It was also expressed that the Committee should provide an assessment of the status of the five United Nations treaties on outer space and present an analysis of the effectiveness of the legal regime governing outer space activities. The delegations expressing that view also expressed the view that a guidance document containing such an analysis could serve as a valuable resource for States wishing to become parties to the treaties.
- 13. The view was expressed that registration practices needed to be enhanced, in particular in the light of the continuing increase of space activities and the emergence of new actors in space, and that a corresponding strengthening of the capacity of the Office for Outer Space Affairs to fulfil its mandated tasks with respect to satellite registration was necessary.
- 14. 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 for exchanging views on the current status of international space law. The view was further expressed that the answers provided by States members of the Committee played an important role in assessing the need to further develop the international framework for outer space activities.

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

- 15. Pursuant to General Assembly resolution 72/77, the Subcommittee considered agenda item 13, entitled "General exchange of views on the legal aspects of space traffic management" as a single issue/item for discussion.
- 16. The representatives of Austria, Germany, Indonesia, Japan, Pakistan, the Russian Federation and the United States made statements under agenda item 13. During the general exchange of views, statements relating to the item were made by representatives of other member States.
- 17. 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.
- 18. 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 exchange of information and services related to space situational awareness, international coordination efforts to manage radiofrequency and geostationary orbits, the reporting of annual launch plans and the submission of pre-launch notifications on space launch vehicles.
- 19. The Subcommittee took note with appreciation of "Space traffic management: towards a roadmap for implementation", published by the International Academy of Astronautics in 2018, which had been distributed to all delegations during the session.
- 20. The view was expressed that, in order to safeguard unimpeded access to and exploration of space, as well as the free use of space by all States without discrimination, the development of a comprehensive international space traffic management regime was needed. The same delegation was also of the view that it would, in line with the *Cosmic Study on Space Traffic Management* of the International Academy of Astronautics, interpret space traffic management as a set of technical and regulatory provisions for promoting safe access into outer space, secure operations in outer space and return from outer space to Earth, free from physical or radiofrequency interference.

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- 21. The view was expressed that only an international approach to space traffic management would be able to properly address the underlying challenges of increased space activities and the emergence of new actors, and that an international space traffic management regime would provide orientation for national procedures to authorize and supervise the space activities of non-governmental entities.
- 22. The view was expressed that a comprehensive space traffic management system could enhance the safe and sustainable conduct of space activities and could include the following: improved information-sharing on space situational awareness; enhanced registration procedures; notification mechanisms for launches, in-orbit manoeuvres and re-entry of space objects; safety provisions; regulations with regard to space debris; and environmental provisions.
- 23. The view was expressed that developing rules, especially for on-orbit activities, was an urgent priority, as was establishing an integrated, harmonized and comprehensive space traffic management system for future space activities.
- 24. The view was expressed that the five United Nations treaties on outer space could, on a long-term basis, be complemented by further international agreements containing basic space traffic management rules, and that a second level of international administrative rules and regulations could comprise dynamic standards for the management of space traffic that would need to be easily amendable and would take into account ongoing technological developments.
- 25. The view was expressed that the prerequisites for a space traffic management regime did not exist, because a fairly high degree of uncertainty characterized the conceptualization of space traffic management, and no multidimensional understanding had yet been achieved. The view was also expressed that, as a result, there was no clear view of the factors that could facilitate the shaping of the concept of space traffic management.
- 26. The view was expressed that the agenda item on space traffic management had come before the Legal Subcommittee prior to any discussion having been held in the Scientific and Technical Subcommittee and that, as a result, in terms of analytical work on the topic, there was neither an understanding of the point of departure, nor an understanding of the destination.
- 27. The view was expressed that space situational awareness information and services were critical to avoiding collisions in outer space that could degrade the space environment for all spacefaring States. The view was also expressed that spaceflight safety was a global challenge and that safe and responsible behaviour in space should be continually encouraged.
- 28. The view was expressed that established space actors with the capacity for conjunction assessment should be encouraged to assist through data-sharing, information-sharing, capacity-building and technical assistance emerging spacefaring States that had not yet developed their own conjunction-assessment capacities.
- 29. The view was expressed that there should be a United Nations-based information-sharing mechanism, comprising a database on space objects and events, as well as their functions and operations.
- 30. The view was expressed that it was necessary to think about the model and order of the functioning of decision-making on the wide spectrum of space operations, which were to form the basis of space traffic management, and that many related ideas had been put forward in working papers to the Committee and its subcommittees.
- 31. The view was expressed that a space traffic regime was a prerequisite for a fault-based liability regime in outer space and the allocation of responsibilities.
- 32. The view was expressed that a system of space traffic management rules could facilitate the practical application of the fault-based liability regime set out in the United Nations treaties on outer space by defining a standard of care and due diligence

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for activities in outer space against which the behaviour of space actors could be assessed to establish fault.

- 33. The view was expressed that the compendium of guidelines for the long-term sustainability of outer space activities represented a unique opportunity to address safety and security in outer space and that a positive correlation existed between the development of a full-fledged document on the long-term sustainability of outer space activities and productive discussions on the topic of space traffic management. The delegation expressing that view was also of the view that the seven guidelines for the long-term sustainability of outer space activities on which consensus had not yet been reached dealt with the most important aspects of safety and security in outer space.
- 34. The view was expressed that, with the pending adoption of the guidelines for the long-term sustainability of outer space activities, the topics on which consensus could not be reached but which were nevertheless important for the sustainability, safety and security of outer space activities could be addressed in further negotiations for the benefit of an international space traffic management regime.

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