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**Committee on the Peaceful  
Uses of Outer Space  
Legal Subcommittee  
Fifty-eighth session  
Vienna, 1–12 April 2019**

## Draft report

### VI. National legislation relevant to the peaceful exploration and use of outer space

1. Pursuant to General Assembly resolution [73/91](#), the Subcommittee considered agenda item 7, entitled “National legislation relevant to the peaceful exploration and use of outer space”, as a regular item on its agenda.
2. The representatives of Armenia, Australia, Chile, Finland, India, Indonesia, Japan, Mexico, the United Arab Emirates, the United Kingdom and the United States made statements under agenda item 7. During the general exchange of views, statements relating to the item were made by the representatives of other member States.
3. The Subcommittee heard the following presentations:
  - (a) “Space legislation in Japan”, by the representative of Japan;
  - (b) “Update on the United Arab Emirates national regulatory framework: overview of the regulation of registration of space objects”, by the representative of the United Arab Emirates;
  - (c) “Update on the United Arab Emirates national regulatory framework: overview of the regulation of human space flight”, by the representative of the United Arab Emirates.
4. The Subcommittee reiterated that it was important to take into account the emerging trend of non-governmental entities engaging in outer space activities. In that connection, States needed to ensure, through their national legal frameworks, that the outer space activities of those entities were in compliance with the United Nations treaties on outer space, in order to ensure the safety and security of those activities.
5. The Subcommittee noted that the development of national space policies, and their implementation through national space regulations, was increasingly aimed at addressing issues raised by the rising number of non-governmental entities conducting space activities.
6. The view was expressed that striking a balance between ensuring the sustainability, safety and stability of the outer space environment and supporting innovation and entrepreneurship was crucial to the future growth of space industries.



7. The Subcommittee noted various activities of member States to review, strengthen, develop or draft national space laws and policies, as well as reform or establish the governance of national space activities. The Subcommittee also noted that those activities were aimed at improving the management and regulation of space activities; reorganizing national space agencies; increasing the competitiveness of governmental and non-governmental organizations in their space activities; increasing the involvement of academia in policy formulation; improving responses to challenges posed by the development of space activities, in particular those relating to the management of the space environment; and improving the implementation of international obligations.
8. The view was expressed that, when drafting national space law, international regulatory frameworks, including the United Nations treaties and principles on outer space, the ITU Constitution and Convention and the ITU Radio Regulations, and certain non-binding instruments, including the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space, should be taken into consideration in order to guarantee the safety and sustainability of outer space activities.
9. The Subcommittee agreed that the discussions under the present agenda item were important and that they enabled States to gain an understanding of existing national regulatory frameworks, share experiences on national practices and exchange information on national legal frameworks.
10. The Subcommittee agreed that it was important to continue to regularly exchange information on developments in the area of national space-related regulatory frameworks. In that regard, the Subcommittee encouraged member States to continue to submit to the Secretariat texts of their national space laws and regulations and to provide updates and inputs for the schematic overview of national regulatory frameworks for space activities.

## VII. Capacity-building in space law

11. Pursuant to General Assembly resolution [73/91](#), the Subcommittee considered agenda item 8, entitled “Capacity-building in space law”, as a regular item on its agenda.
12. The representatives of Austria, Chile, China, Finland, France, Germany, Greece, India, Israel, Japan, Mexico, the Russian Federation, South Africa, Spain and the United Arab Emirates made statements under agenda item 8. The representative of Egypt made a statement on behalf of the Group of 77 and China. The representative of Costa Rica made a statement 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, further statements relating to the item were made by representatives of other member States.
13. The Subcommittee had before it the following:
  - (a) Conference room paper containing the directory of education opportunities in space law (A/AC.105/C.2/2019/CRP.9);
  - (b) Conference room paper containing information submitted by Austria, Japan, Pakistan, Tunisia and the United Arab Emirates on actions and initiatives to build capacity in space law (A/AC.105/C.2/2019/CRP.13).
14. The Subcommittee heard the following presentations:
  - (a) “Japan’s capacity-building in space law: recent progress”, by the representative of Japan;
  - (b) “United Nations/Turkey/APSCO Conference on Space Law and Policy”, by the representative of Turkey;

(c) “Legal advisory project on space law for new space actors: fostering responsible national space activities”, by representatives of the Office for Outer Space Affairs.

15. The Subcommittee agreed that capacity-building, training and education in space law were of paramount importance to national, regional and international efforts to further develop the practical aspects of space science and technology, in particular in developing countries, and to increasing knowledge of the legal framework within which space activities were carried out. Through such capacity-building, training and education efforts, States would be encouraged to ratify the five United Nations treaties on outer space and to support the implementation of those treaties and the establishment of national institutions, thereby making international space law more accessible to and better known by all sectors of civil society. It was emphasized that the Subcommittee and the Office for Outer Space Affairs had an important role to play in that regard.

16. The Subcommittee noted with appreciation that a number of national, regional and international efforts to build capacity in space law were being undertaken by governmental and non-governmental entities. Those efforts included encouraging universities to offer modules and seminars on space law; providing fellowships for graduate and postgraduate education in space law; providing financial and technical support for legal research; preparing dedicated studies, papers, textbooks and publications on space law; organizing workshops, seminars and other specialized activities to promote greater understanding of space law; supporting space law moot court competitions; supporting the participation of young professionals in regional and international meetings relating to space law; providing training and other opportunities to build experience, in particular through internships with space agencies; and supporting entities dedicated to the study of space law in order to assist in the development of national space policies and legislative frameworks.

17. The Subcommittee noted that some member States had provided financial assistance to enable students to attend the Manfred Lachs Space Law Moot Court Competition, held each year during the International Astronautical Congress.

18. The Subcommittee noted with appreciation that the United Nations/Russian Federation Conference on Space Law and Policy had been held in Moscow from 11 to 13 September 2018, and that the United Nations/Germany High-level Forum: The way forward after UNISPACE+50 and on “Space2030”, had been held in Bonn, Germany, from 13 to 16 November 2018, and noted that those events had contributed to capacity-building in space law by connecting space law experts, practitioners, and representatives of government, industry and civil society.

19. The Subcommittee welcomed the new project on legal advisory services launched by the Office of Outer Space Affairs. In that context, some delegations expressed their interest in supporting the new project.

20. Some delegations expressed the view that the Office for Outer Space Affairs should conduct targeted capacity-building, education and training activities in space law and policy, building upon the programme of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER), with the objective of establishing a capacity-building platform.

21. Some delegations expressed the view that the development of the “Space2030” agenda might serve as an opportunity to consider creating special programmes on capacity-building and knowledge management for developing countries.

22. Some delegations expressed the view that, were the Office for Outer Space Affairs to organize a basic space law training activity for officials of Vienna-based permanent missions, it would be very useful.

23. The view was expressed that capacity-building efforts of the Office for Outer Space Affairs could focus on matters that had not been sufficiently debated, such as those relating to the character and utilization of the geostationary orbit and ways and

means of ensuring the rational and equitable use of the geostationary orbit without prejudice to the role of ITU.

24. The view was expressed that the Office for Outer Space Affairs could organize a capacity-building event, in particular for developing countries, in order to raise awareness of the emerging challenges related to the new and growing uses of airspace and orbital and suborbital activities.

25. The view was expressed that, in order to enhance understanding of space law and effectively build related capacity, knowledge of the scientific and technical matters related to outer space activities was essential and, in that regard, cross-sectoral capacity-building was of importance.

26. The Subcommittee noted with appreciation the forthcoming United Nations/Turkey/APSCO Conference on Space Law and Policy, which was being organized in collaboration with Turkey and was to be hosted by the Space Technologies Research Institute of Turkey (TUBITAK) in Istanbul from 23 to 26 September 2019.

27. The Subcommittee noted that the Office for Outer Space Affairs had updated the directory of educational opportunities in space law (A/AC.105/C.2/2019/CRP.9), including the information on available fellowships and scholarships, and agreed that the Office should continue to update the directory. In that connection, the Subcommittee invited member States to encourage contributions at the national level for the future updating of the directory.

28. The Subcommittee recommended that States members and permanent observers of the Committee inform the Subcommittee, at its fifty-ninth session, of any action taken or planned at the national, regional or international levels to build capacity in space law.

## **IX. General exchange of information and views on legal mechanisms relating to space debris mitigation and remediation measures, taking into account the work of the Scientific and Technical Subcommittee**

29. Pursuant to General Assembly resolution 73/91, the Subcommittee considered agenda item 10, entitled “General exchange of information and views on legal mechanisms relating to space debris mitigation and remediation measures, taking into account the work of the Scientific and Technical Subcommittee”, as a single issue/item for discussion.

30. The representatives of Austria, Brazil, Canada, Chile, Finland, France, Germany, India, Iran (Islamic Republic of), Japan, Mexico, the Netherlands, New Zealand, Pakistan, the Russian Federation and the United States made statements under agenda item 10. A statement was made by the representative of Egypt on behalf of the Group of 77 and China. The representative of Costa Rica made a statement 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). The observer for the European Union made a statement on behalf of the European Union and its member States. During the general exchange of views, statements relating to the item were also made by representatives of other member States.

31. The Subcommittee had before it a conference room paper entitled “Compendium of space debris mitigation standards adopted by States and international organizations” (A/AC.105/C.2/2019/CRP.14).

32. The Subcommittee expressed concern at the increasing amount of space debris and noted that the endorsement by the General Assembly, in its resolution 62/217, of

the Space Debris Mitigation Guidelines of the Committee had been an important step in providing all spacefaring nations with guidance on how to mitigate the problem.

33. The Subcommittee noted with satisfaction that some States were implementing space debris mitigation measures consistent with the Space Debris Mitigation Guidelines of the Committee, the Space Debris Mitigation Guidelines of the Inter-Agency Space Debris Coordination Committee (IADC), International Organization for Standardization (ISO) standard ISO 24113:2011 (Space systems: space debris mitigation requirements) and/or ITU recommendation ITU-R S.1003 (Environmental protection of the geostationary-satellite orbit).

34. The Subcommittee noted with satisfaction that some States had taken measures to incorporate internationally recognized guidelines and standards related to space debris into the relevant provisions of their national legislation. The Subcommittee also noted that some States had strengthened their national mechanisms governing space debris mitigation by nominating governmental supervisory authorities, involving academia and industry and developing new legislative norms, instructions, standards and frameworks.

35. The Subcommittee further noted that IADC, whose initial work had served as the basis for the Space Debris Mitigation Guidelines of the Committee, continued its work to characterize the space debris environment and evaluate improvements to its own Space Debris Mitigation Guidelines. The Subcommittee noted that the thirty-sixth meeting of IADC had been hosted in Tsukuba, Japan, in June 2018 by the Japan Aerospace Exploration Agency (JAXA) and that the thirty-seventh meeting of IADC would be hosted in Rome from 7 to 10 May 2019 by the Italian Space Agency.

36. The Subcommittee noted with satisfaction that the compendium of space debris mitigation standards adopted by States and international organizations, developed at the initiative of Canada, Czechia and Germany, enabled all interested stakeholders to benefit from access to a comprehensive and structured set of current instruments and measures on space debris mitigation. The Subcommittee expressed its appreciation to the Secretariat for updating and maintaining the compendium and keeping the latest version available on a dedicated web page.

37. Some delegations expressed the view that it was necessary to update and amend the Space Debris Mitigation Guidelines of the Committee, taking into account the current practice of States and international organizations with relevant expertise.

38. Some delegations expressed the view that transparency and confidence-building measures in outer space activities provided an important contribution to the security, safety and sustainability of activities in outer space.

39. Some delegations expressed the view that the outcome of the work of the Working Group on the Long-term Sustainability of Outer Space Activities, which included guidelines directly applicable to issues of space debris, represented a significant step forward in preserving outer space for future generations, and called on Member States to fully implement those guidelines.

40. The view was expressed that it was the responsibility of all States to enforce the internationally agreed standards at the national level by making them mandatory for all space activities within their national purview, in particular those carried out by private operators.

41. The view was expressed that, since spacefaring States had an interest in preserving the safety and long-term sustainability of space activities, they took sound approaches to mitigating the problem of space debris. The delegation expressing that view also expressed its view that, since those approaches were linked to evolving technologies, and given the cost-benefit trade-offs of using them, it was not necessary to develop legally binding space debris mitigation standards at present.

42. The view was expressed that the Legal Subcommittee should expand its review of the Space Debris Mitigation Guidelines of the Committee, taking into account that space debris may be generated by space platforms with nuclear power sources on

board and that such platforms may collide with space debris. The delegation expressing that view also expressed concern over the atmospheric re-entry of such debris in the southern hemisphere, in particular in the South Pacific region, and called upon launching States to adopt measures to avoid the generation of space debris.

43. The view was expressed that, while the current non-legally binding guidelines and standards were the best way forward at present, a rules-based system and binding guidance for the sustainable conduct of space activities, to be developed at the international level, could bring predictability, create conditions for tackling global problems in a coherent manner, and ensure that space law was developed uniformly.

44. Some delegations expressed the view that mitigation of the problem of space debris, as well as its remediation in the form of removal of debris appeared to be a good method to prevent accidental collisions with space objects and avoid the contamination of outer space. The delegations expressing that view also recognized that there were a number of contentious issues regarding that matter.

45. Some delegations expressed the view that there was a need to develop an international legal regime for the active removal of space debris.

46. Some delegations expressed the view that the Subcommittee should discuss legal issues relating to space debris and space debris removal, including: the legal definition of space debris; the legal status of space debris fragments; the role of the State of registry; jurisdiction and control over the space objects to be declared as space debris; and responsibility and liability for active removal activities, including liability for damage caused as a result of debris remediation operations.

47. Some delegations expressed the view that the definition of space debris needed to be arrived at in a consultative process involving all States members of the Committee.

48. The view was expressed that the Subcommittee could discuss the application of legal concepts established in the United Nations treaties on outer space, in particular the concepts of jurisdiction and control, and responsibility and liability in relation to space debris remediation activities, without redefining or reinterpreting those concepts.

49. The view was expressed that the Subcommittee should explore whether inter-agency cooperation was possible with the International Institute for the Unification of Private Law (Unidroit) on the subject of international registration and protection of international interests in space assets.

50. Some delegations expressed the view that it was important that all States register all space objects they launched into outer space and that no object should be removed from its orbit without the prior authorization of the State of registry.

51. The view was expressed that there was a need for a transparent international mechanism enabling States to exchange reliable and regularly updated information about objects and events in outer space, and that such a mechanism needed to be accessible on an equal and non-discriminatory basis to all States and competent international organizations. In that regard, it was necessary to enhance the existing system of registering space objects; to develop unified international rules and standards for identifying, monitoring, cataloguing and tracking fragments of space debris with the use of modern technology; and to set uniform criteria for assessing and processing data regarding space debris and their use for operational decision-making.

52. The view was expressed that all actors needed to coordinate and share information at all levels to overcome issues that were causing uncertainty, as well as cope with any fragmentation in the regulation of space activities at the national and international levels.

53. The view was expressed that, in order to keep the available information on space debris up to date, it was necessary that all States took internal measures to ensure that all space objects were registered with the United Nations as soon as those objects had been launched into outer space, that the United Nations was notified whenever a space

object reached the end of its useful life, and that the status of a space object was catalogued before the responsible State lost control over it, regardless of the object's size or its applications.

54. Some delegations expressed the view that, in decongesting outer space through space debris remediation, States should act in line with the principle of common but differentiated responsibilities, which was based on the recognition that the actors that were largely responsible for creating space debris should be most involved in space debris removal activities and should make their scientific and legal expertise available to countries with a lower level of space development by concluding cooperation agreements with them.

55. Some delegations expressed the view that the actors that were largely responsible for creating space debris should be most involved in space debris removal activities and that those actors should make their scientific and legal expertise available to countries with a lower level of space development by concluding cooperation agreements with them in order to ensure that the necessary measures were implemented with regard to the design of spacecraft and end-of-life disposal.

56. Some delegations expressed the view that, since much of the orbital space debris was the result of their past operations, major spacefaring countries had a moral responsibility to assist emerging spacefaring countries in the implementation of space debris mitigation guidelines. The delegations expressing that view also expressed the view that, to enable emerging spacefaring countries to absorb the additional costs of implementing those guidelines, such assistance should be both technical and financial in nature.

57. Some delegations expressed the view that the increase in small-satellite activity and the predicted growth in the number of megaconstellations in the low-Earth orbits were increasing the risk of collisions between space objects.

58. The view was expressed that space debris could be viewed as a space resource, in particular in the context of the ongoing discussion of the Subcommittee on that subject.

59. Some delegations expressed the view that under the internationally accepted standards, including, in particular, guideline 4 of the Space Debris Mitigation Guidelines of the Committee, responsible space actors were urged to avoid intentional destruction and other harmful activities.

60. The view was expressed that States should be mindful of their obligation under article IX of the Outer Space Treaty to undertake appropriate international consultations before proceeding with any planned activity if they have reason to believe that it would cause potentially harmful interference with activities of other States parties in the peaceful exploration and use of outer space.

61. The view was expressed that any intentional destruction of spacecraft contrary to the Space Debris Mitigation Guidelines of the Committee could be an indicator of fault for the purpose of determining the liability of the launching State for damage caused by space debris created by that intentional destruction, and that, in that context, the definition of the term "damage" contained in article I, paragraph (a), of the Liability Convention applied.

62. The view was expressed that the energy converted at the impact of anti-satellite weapons, even in low-Earth orbits, would render any resulting space debris uncontrollable and would increase the risk of collision, including in higher orbits. The delegation expressing that view was also of the view that the intentional destruction of space objects resulting in long-lasting debris should be prohibited, including in situations of armed conflict, and that such a prohibition should be legally binding.

63. The Subcommittee agreed that States members of the Committee and international intergovernmental organizations having permanent observer status with the Committee should be invited to further contribute to the compendium of space debris mitigation standards adopted by States and international organizations by providing or updating the information on any legislation or standards adopted with

regard to space debris mitigation, using the template provided for that purpose. The Subcommittee also agreed that all other States Members of the United Nations should be invited to contribute to the compendium and encouraged States with such regulations or standards to provide information on them.

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