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

## Draft report

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

1. Pursuant to General Assembly resolution 72/77, the Subcommittee considered agenda item 8, entitled "National legislation relevant to the peaceful exploration and use of outer space", as a regular item on its agenda.

2. The representatives of Australia, Brazil, Greece, Indonesia, Japan, Mexico, Pakistan, Saudi Arabia and the United Arab Emirates made statements under agenda item 8. 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) "The United Kingdom Space Industry Bill", by the representative of the United Kingdom;

(b) "Satellite servicing and private sector habitats: a review of United States laws and regulations surrounding non-traditional commercial space activities", by the representative of the United States.

4. The Subcommittee reiterated that it was important to take into account the increased level of commercial and private activities in outer space. To that end, States needed to ensure that those activities were in compliance with the United Nations treaties on outer space and should establish national legal frameworks in order to ensure the safety and security of their activities.

5. The Subcommittee noted that the development and reformation 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 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. In that connection, the Subcommittee also noted that those activities were aimed at the improvement of the management and regulation of space activities; the reorganization of national space agencies; an increase in competitiveness of governmental and non-governmental organizations in their space activities; greater involvement of academia in policy





formulation; better responses to challenges posed by the development of space activities, in particular those relating to the management of the space environment; and better implementation of international obligations.

7. The Subcommittee agreed that the discussions under agenda item 8 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.

8. 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

9. Pursuant to General Assembly resolution 72/77, the Subcommittee considered agenda item 9, entitled "Capacity-building in space law", as a regular item on its agenda.

10. The representatives of Chile, China, France, Germany, Indonesia, Japan, Mexico, Pakistan, the Russian Federation, South Africa, Ukraine, the United Arab Emirates and the United States made statements under agenda item 9. The representative of Argentina made a statement on behalf of the Group of Latin American and Caribbean States, and the representative of Nigeria made a statement on behalf of the Group of 77 and China. The observer for CRTEAN also made a statement under the item. During the general exchange of views, further statements relating to the item were made by representatives of other member States.

11. The Subcommittee had before it the following:

(a) Conference room paper containing a directory of educational opportunities in space law (A/AC.105/C.2/2018/CRP.11);

(b) Conference room paper containing information submitted by Japan on its actions and initiatives to build capacity in space law (A/AC.105/C.2/2018/CRP.15).

12. 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, especially in developing countries, and to increasing knowledge of the legal framework within which space activities were carried out, which would encourage States to ratify the five United Nations treaties on outer space and support the implementation of those treaties and the establishment of national institutions. It was emphasized that the Subcommittee and the Office for Outer Space Affairs had an important role to play in that regard.

13. The Subcommittee agreed that capacity-building played a major role in the UNISPACE+50 process, and could be an opportunity to consider space programmes in terms of capacity-building and knowledge enhancement.

14. 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 for training and other opportunities to build experience, in particular through internships with space agencies; and supporting entities dedicated to the study of and research relating to space law in order to assist in the development of national space policies and legislative frameworks.

15. 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.

16. The Subcommittee noted with appreciation the United Nations/South Africa Symposium on Basic Space Technology on the theme "Small satellite mission for scientific and technological advancement" held in Stellenbosch, South Africa, from 11 to 15 December 2017, which had included a session on regulatory and legal issues and the long-term sustainability of outer space activities.

17. The Subcommittee noted with appreciation that the tenth United Nations workshop on space law, entitled "Contribution of space law and policy to space governance and space security in the twenty-first century", had been held in Vienna from 5 to 8 September 2016, and that it provided an opportunity for representatives of the permanent missions to the United Nations in Vienna to participate in a capacity-building event.

18. In that connection, some delegations expressed the view that they supported the recommendation emanating from the workshop with regard to encouraging the Office for Outer Space Affairs to conduct targeted capacity-building, education and training 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.

19. Some delegations expressed the view that, in their region, there was growing interest in space law, and that the Office for Outer Space Affairs should provide support to the region through the organization of training activities on space law.

20. The view was expressed that capacity-building could focus on agenda items that had not been extensively debated in the Subcommittee, including agenda items 7 (a) (Matters relating to the definition and delimitation of outer space) and 7 (b) (Matters relating to the character and utilization of the geostationary orbit, including consideration of ways and means to ensure the rational and equitable use of the geostationary orbit without prejudice to the role of the International Telecommunication Union).

21. The view was expressed that the Office for Outer Space Affairs and ICAO should build capacity in relation to and increase awareness of emerging challenges in suborbital activities.

22. The view was expressed that the efforts of the Office for Outer Space Affairs to engage in capacity-building activities to achieve gender equality and the empowerment of women and youth were appreciated.

23. The view was expressed that, in order to achieve the maximum benefit from and increase access by developing countries to critical existing programmes, a concerted effort towards the establishment of affordable and accessible educational opportunities through online and distance-learning platforms should be prioritized by States, and should include the incorporation of tools allowing for virtual participation in conferences.

24. The Subcommittee welcomed with appreciation the first United Nations Conference on Space Law and Policy, organized with the Russian Federation and to be hosted by the State Space Cooperation "Roscosmos" in Moscow from 11 to 13 September 2018. The Subcommittee noted that that Conference was a follow-up activity to the long-standing series of dedicated workshops that had been held for more than a decade, in cooperation with member States.

25. The Subcommittee noted that the Office for Outer Space Affairs had updated the directory of educational opportunities in space law (A/AC.105/C.2/2018/CRP.11),

including 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.

26. The Subcommittee recommended that States members and permanent observers of the Committee inform the Subcommittee, at its fifty-eighth 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

27. Pursuant to General Assembly resolution 72/77, the Subcommittee considered agenda item 11, 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.

28. The representatives of Austria, Canada, Chile, France, Germany, Japan, Pakistan, the Russian Federation, Ukraine, the United Arab Emirates and the United States made statements under agenda item 11. Statements were made by the representative of Nigeria on behalf of the Group of 77 and China and 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.

29. The Subcommittee heard a presentation entitled "A pragmatic, evolutionary path to orbital debris removal via customary international law", by the observer for the National Space Society.

30. The Subcommittee noted with satisfaction that the endorsement by the General Assembly, in its resolution 62/217, of the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space had been an important step in providing all spacefaring nations with guidance on how to mitigate the problem of space debris.

31. The Subcommittee noted with satisfaction that some States were implementing space debris mitigation measures consistent with the Space Debris Mitigation Guidelines of the Committee and/or the Space Debris Mitigation Guidelines of the Inter-Agency Space Debris Coordination Committee and that other States had developed their own space debris mitigation standards based on those guidelines.

32. The Subcommittee also noted that some States were using the space debris mitigation guidelines, the European Code of Conduct for Space Debris Mitigation, International Organization for Standardization standard 24113:2011 (Space systems: space debris mitigation requirements) and ITU recommendation ITU-R S.1003 ("Environmental protection of the geostationary-satellite orbit") as references in their regulatory frameworks for national space activities.

33. 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.

34. The Subcommittee noted that some States had strengthened their national mechanisms governing space debris mitigation through the nomination of governmental supervisory authorities, the involvement of academia and industry and the development of new legislative norms, instructions, standards and frameworks.

35. 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. In that context, the Subcommittee expressed its appreciation to the Secretariat for updating and maintaining the compendium on a dedicated web page.

36. The view was expressed that it was necessary to enhance the structure of the compendium to make it easier to see progress in the field.

37. Some delegations welcomed the progress of the Working Group on the Long-term Sustainability of Outer Space Activities of the Scientific and Technical Subcommittee in achieving consensus on additional guidelines for the long-term sustainability of outer space activities, including with regard to space debris.

38. Some delegations expressed the view that the guidelines for the long-term sustainability of outer space activities complemented the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space, and that it was necessary to review and update the Space Debris Mitigation Guidelines without prejudice to the work of the Working Group on the Long-term Sustainability of Outer Space Activities.

39. The view was expressed that the Space Debris Mitigation Guidelines of the Committee should be aligned with the guidelines for the long-term sustainability of outer space activities.

40. 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 expertise in that area.

41. Some delegations expressed the view that it was necessary to update and amend the Space Debris Mitigation Guidelines of the Committee, taking into account current technological developments, the increase in small-satellite activities and the emergence of megaconstellations.

42. Some delegations expressed the view that the transformation of technical debris mitigation guidelines into a legally binding instrument was not necessary, because spacefaring States were motivated to reduce space debris by their own interest in preserving the safety and sustainability of space activities.

43. Some delegations expressed the view that, since approaches to mitigating debris were linked to evolving technologies, it was not necessary to develop legally binding space debris mitigation standards at present.

44. The view was expressed that a non-binding approach could be effective and benefit all States if implemented domestically through policies, regulations and standards.

45. The view was expressed that the Legal Subcommittee should expand its review of the space debris mitigation guidelines, taking into account the possible generation of space debris from space platforms with nuclear power sources on board and the collision of such objects with space debris. The delegation expressing that view also expressed its concern over the atmospheric re-entry of such debris in the southern hemisphere, in particular in the South Pacific, and called upon launching States to adopt measures to control and avoid the generation of space debris.

46. The view was expressed that the guidelines for the long-term sustainability of outer space activities should be adopted in their entirety, which would allow for progress to be made in the substantive consideration of issues related to space debris mitigation and remediation. The view was also expressed that the Legal Subcommittee should develop a list of such issues, in close coordination with the Scientific and Technical Subcommittee, under the agenda item on the long-term sustainability of outer space activities.

47. The view was expressed that the implementation of the recommendations of the Group of Governmental Experts on Transparency and Confidence-building Measures

in Outer Space Activities and the guidelines for the long-term sustainability of outer space activities would contribute to the surveillance and mitigation of space debris and enhance the safety and sustainability of space operations.

48. Some delegations expressed the view that the Subcommittee should set out 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.

49. The view was expressed that it would be necessary to: (a) establish a uniform understanding of the term "space debris" and how it related to the term "space object"; (b) ensure the observance of the sovereign rights of launching States with regard to dormant space objects or their parts located in near-Earth orbits; (c) develop unified international rules and standards for cataloguing and tracking space debris using modern technological capabilities; and (d) ensure that operational information was available to all interested States.

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

51. Some delegations expressed the view that there should be a consultative process on the definition of space debris, involving all States members of the Committee, and that the Committee was the proper forum for that process.

52. The view was expressed that a questionnaire on the legal problems related to active space debris removal should be developed.

53. With regard to the issue of the removal of an object without prior consent or authorization of the State of registry, some delegations expressed the view that it was important for all States to register all space objects launched into outer space.

54. Some delegations expressed the view that there was a need to register, catalogue and track space debris at the international level.

55. The view was expressed that a single international information-exchange centre on space objects and events should be established under the auspices of the United Nations, and that such a centre could become a reliable platform for multilateral cooperation in addressing space debris.

56. The view was expressed that it was imperative that the Legal Subcommittee address the lack of efficient legal mechanisms for implementing space debris mitigation in a timely and efficient manner and using a coherent and common international approach.

57. Some delegations expressed the view that States should take differentiated responsibilities for decongesting outer space, with the spacefaring actors taking the lead.

58. 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 available their scientific and legal expertise through cooperation agreements to countries with a lower level of space development in order to ensure that the necessary measures were implemented with regard to the design of spacecraft and end-of-life disposal.

59. The view was expressed that the high cost of implementation of the Space Debris Mitigation Guidelines of the Committee prevented access by emerging spacefaring States to outer space, and since much of the orbital debris was a result of past operations of major spacefaring States, it was the responsibility of those spacefaring States to remove and mitigate the debris impact as well as to assist emerging spacefaring States, both technically and financially, in mitigating space debris.

60. The view was expressed that an international fund for the removal of space debris should be established to support coordinated efforts on space debris removal by providing means to address technological and financial aspects of such operations, and that financial participation of States in the fund should depend on the role of those States in the creation of space debris.

61. 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.