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Committee on the Peaceful Uses of Outer Space
Legal Subcommittee
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Draft report

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

1. Pursuant to General Assembly resolution 75/92, 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.

2. The representatives of Austria, Brazil, China, Finland, France, Germany, India, Indonesia, Japan, Mexico, the Netherlands, the Russian Federation, Ukraine, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 10. A statement was made by the representative of Costa Rica on behalf of the Group of 77 and China. During the general exchange of views, statements relating to the item were also made by representatives of other member States.

3. 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.2/2021/CRP.19).

4. The Subcommittee heard the following presentations:

(a) "Mapping space governance in the new space era: insights from a novel data set", by the representatives of Canada;

(b) "Catalyzing space debris removal, salvage and use via maritime lessons and a space salvage entity", by the observer for the National Space Society.

5. 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 ways to mitigate the problem.

6. 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 Guidelines for the Long-term Sustainability of

Outer Space Activities of the Committee, the Space Debris Mitigation Guidelines of the Inter-Agency Space Debris Coordination Committee (IADC), International Organization for Standardization 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).

7. The Subcommittee also 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.

8. The Subcommittee noted that IADC, whose initial work had served as the basis for the Space Debris Mitigation Guidelines of the Committee, had updated its own Space Debris Mitigation Guidelines in 2020 to reflect the evolving understanding of the space debris situation.

9. 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.

10. The view was expressed that there was a need for a rules-based international system for addressing the space debris problem and that having binding guidance at the international level would bring predictability, create conditions for tackling global problems in a coherent manner and ensure the uniform development of space law.

11. The view was also expressed that the international standard-setting effort must be continuously pursued and deepened and that international efforts must be complemented with national efforts by States adopting binding national technical regulations applicable to all of their national space activities, in particular those carried out by private operators.

12. Some delegations expressed the view that national policy and regulatory frameworks for space activities offered a key solution for limiting the generation of space debris.

13. The view was expressed that, if non-legally binding guidelines and best practices were not sufficient to ensure effective end-of-mission disposal and safe re-entry, further legally binding instruments might have to be developed.

14. The view was also expressed that, in the interest of the long-term sustainability of space activities, technical mitigation and remediation activities should be complemented by effective legal and policy approaches.

15. The view was expressed that, since approaches to mitigating the problem of space debris 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.

16. Some delegations expressed the view that the Legal Subcommittee should increase its interaction with the Scientific and Technical Subcommittee with the aim of promoting the development of binding international standards addressing issues relating to space debris.

17. Some delegations expressed the view that the concept of mitigation and remediation of space debris through the removal of debris appeared to be a good method of preventing collisions in space. The delegations expressing that view were also of the view that it was important for all States to register all objects launched

into outer space and that no object should be removed without the prior consent or authorization of the State of registry.

18. 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 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 lower levels of space development.

19. The view was expressed that the Legal Subcommittee should focus on the issues of space debris remediation and on-orbit servicing and on the risks of the generation of space debris in connection with large satellite constellations, with the aim of developing a set of more detailed guidelines, which could include technical and safety standards and legal aspects.

20. The view was also expressed that there was a need for international discussions to support the development of the norms contained in the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee from the legal and regulatory perspectives.

21. The view was expressed that international guidelines and standards in the area of space debris mitigation and remediation also included the “Best practices for the sustainability of space operations” of the Space Safety Coalition and the “Guiding principles for commercial rendezvous and proximity operations and on-orbit servicing” and the “Recommended design and operational practices” of the Consortium for Execution of Rendezvous and Servicing Operations.

22. Some delegations expressed the view that the Subcommittee should discuss the 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.

23. The view was expressed that additional rules to complement existing international law were desirable on the following issues: procedures in the case of unregistered debris objects; modalities for the identification, tracking and characterization of space debris objects, as well as for sharing relevant information; modalities for assessing the risk posed by space debris objects, as well as space debris mitigation, remediation or servicing activities; clear obligations for space debris mitigation, remediation and on-orbit maintenance activities; conditions and modalities under which disposal and maintenance operations may be lawfully carried out; and technical standards for carrying out remediation or maintenance work.

24. The view was also expressed that the Subcommittee should develop a legal definition of space debris as a subcategory of space objects, determine the legal status of space debris fragments not registered in any national register or in the Register of Objects Launched into Outer Space, harmonize international and national law on the regulation of property rights in relation to space objects, not only spacecraft, and coordinate international procedures for identifying space debris objects and their trajectory characteristics and for assessing the safety of removing such objects from orbit.

25. The view was expressed that, in line with the guidelines on promoting the collection, sharing and dissemination of space debris monitoring information, States and international intergovernmental organizations should encourage the development and use of relevant technology to measure, monitor and characterize the orbital and physical properties of space debris.

26. The view was also expressed that it was important to create mechanisms that facilitated the sharing of information on space situational awareness and space traffic management and the issuing of alerts to countries with limited debris-tracking

capabilities, and that an international information clearing house for space objects and space debris could be set up in that regard.

27. The view was expressed that there should be international collaboration on data-sharing and data-processing systems, as well as an awareness of obligations with regard to notification and mitigation procedures.

28. The view was also expressed that the identification of space objects was required for the purposes of space traffic management and active debris removal, which could be achieved through improved registration procedures and information exchange mechanisms.

29. Some delegations called upon States members of the Committee and private entities to ban, suspend or refrain from the intentional destruction of space objects of any kind, which posed a danger to the long-term sustainability of outer space activities.

30. The view was expressed that incidental, but preventable, loss of control over a space object also constituted a threat to the safe and sustainable use of outer space.

31. 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.