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Committee on the Peaceful Uses of Outer Space Legal Subcommittee Fifty-sixth session Vienna, 27 March-7 April 2017

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

- 1. Pursuant to General Assembly resolution 71/90, 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 Japan, Mexico and Viet Nam 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 had before it the following:
- (a) Conference room paper containing information submitted by Thailand and Turkey on their national space legislation (A/AC.105/C.2/2017/CRP.13);
- (b) Conference room paper containing information submitted by Greece on the promotion of national space legislation (A/AC.105/C.2/2017/CRP.18).
- 4. The Subcommittee heard the following presentations:
- (a) "Leveraging private sector input for public sector regulations: an overview of United States commercial space law and policy developments", by the representative of the United States of America;
- (b) "United Arab Emirates regulatory approach", by the representative of the United Arab Emirates:
- (c) "Current status of Japan's space policy and development of legal frameworks", by the representative of Japan.
- 5. The Subcommittee noted various activities of member States in reviewing, strengthening, developing or drafting their national space laws and policies, as well as in reforming or establishing 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.







- 6. The Subcommittee reiterated that it was important to take into account the increased level of commercial and private activities in outer space in the context of developing a national space-related regulatory framework, in particular with respect to the responsibilities of States regarding the authorization and supervision of non-governmental entities conducting space activities.
- 7. The Subcommittee noted that the development and reformulation of national space policies and their implementation through national space regulation was increasingly aimed at addressing issues raised by the rising number of non-governmental entities conducting space activities.
- 8. The view was expressed that constant updates of national law were necessary to keep up with the emerging development of space activities, given the speed of that development.
- 9. The Subcommittee agreed that the discussions under this 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 exchange information regularly 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.

VIII. Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space

- 11. Pursuant to General Assembly resolution 71/90, the Subcommittee considered agenda item 9, entitled "Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space", as a single issue/item for discussion.
- 12. The representatives of France, Indonesia, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 9. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
- 13. The Subcommittee recalled that the Safety Framework for Nuclear Power Source Applications in Outer Space (A/AC.105/934), adopted by the Scientific and Technical Subcommittee at its forty-sixth session, in 2009, and endorsed by the Committee at its fifty-second session, also in 2009, had considerably advanced international cooperation in ensuring the safe use of nuclear power sources in outer space and had facilitated the development of international space law.
- 14. The Legal Subcommittee noted the successful completion of the multi-year workplan of the Working Group on the Use of Nuclear Power Sources in Outer Space of the Scientific and Technical Subcommittee, for the period 2014-2017 (A/AC.105/1065, annex II, para. 9), and noted with satisfaction the endorsement by the Scientific and Technical Subcommittee of the new multi-year workplan of the Working Group for the period 2017-2021 (A/AC.105/1138, para. 237, and annex II, para. 9).
- 15. The Legal Subcommittee took note of the fact that the Scientific and Technical Subcommittee agreed that, in order to encourage the sharing of best practices and substantiate national commitments to safety, it was important to continue to share experiences in implementing the guidance contained in the Safety Framework and in satisfying the intent of the Principles, and for Member States and intergovernmental organizations with experience with missions using nuclear power sources to engage in discussions about advances in knowledge and practices and their potential for

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enhancing the technical content and scope of the Principles (see A/AC.105/1138, para. 227).

- 16. Some delegations expressed the view that the Principles should be reviewed with a view to developing binding international standards.
- 17. Some delegations expressed the view that the Principles should be revised in view of the following: (a) such revision was envisaged in the Principles; (b) developments such as ion, electric or direct nuclear propulsion and other technological advances should be taken into account; and (c) reference frameworks for radiological protection had evolved.
- 18. The view was expressed that the focused work of the Working Group under its completed workplan has demonstrated that the Safety Framework provided a comprehensive and sufficient foundation of guidance for Member States and international intergovernmental space organizations to develop and operate their own space applications using nuclear power sources in a safe manner.
- 19. Some delegations expressed the view that it was necessary to study in depth the use of satellite platforms with nuclear power sources and to analyse related practices and regulations. Those delegations were also of the view that more attention should be paid to the legal issues associated with the use of such platforms in Earth orbits, including the geostationary orbit, in the light of potential accidental re-entry of nuclear power sources into the Earth's atmosphere, reported failures and collisions, which posed a high risk to humanity, the Earth's biosphere and the environment.
- 20. Some delegations expressed the view that the use of nuclear power sources in outer space should be allowed only in the case of deep space missions and only when other power sources had been considered and rejected.
- 21. Some delegations expressed the view that research should be conducted to find alternative power sources to replace the use of nuclear power sources in outer space.
- 22. The view was expressed that the use of applications using nuclear power sources should be in conformity with international law, the Charter of the United Nations and United Nations treaties and principles on outer space.
- 23. The view was expressed that it was important to monitor the effectiveness of the implementation of the Safety Framework.

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

- 24. Pursuant to General Assembly resolution 71/90, the Subcommittee considered agenda item 10, entitled "General exchange of information and views on legal mechanisms relating to space debris mitigation measures, taking into account the work of the Scientific and Technical Subcommittee", as a single issue/item for discussion.
- 25. The representatives of Belgium, Germany, Indonesia, Japan, Mexico, Pakistan, the Russian Federation, Venezuela (Bolivarian Republic of) and Viet Nam made statements under agenda item 10. The representative of Argentina made a statement 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.
- 26. 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

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providing all spacefaring nations with guidance on how to mitigate the problem of space debris.

- 27. 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 (IADC) and that other States had developed their own space debris mitigation standards based on those guidelines.
- 28. 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.
- 29. 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.
- 30. 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.
- 31. 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 this context, the Subcommittee expressed its appreciation to the Secretariat for maintaining the compendium on a dedicated web page.
- 32. Some delegations expressed the view that it was necessary to review and update the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space, taking into account the current practice of States and international organizations with expertise in this area and the guidelines for the long-term sustainability of outer space activities developed by the Working Group on the Long-term Sustainability of Outer Space Activities of the Scientific and Technical Subcommittee, in particular guidelines 13, 21 and 28.
- 33. The view was expressed that the Subcommittee should increase its interaction with the Scientific and Technical Subcommittee, with a view to promoting the development of binding international standards to address issues relating to space debris, bearing in mind that one of the main responsibilities of the United Nations in the legal sphere is to promote the progressive development of international law and its regulation, in this case regarding outer space.
- 34. Some delegations expressed the view that, in line with the recommendations of the Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities, the revised Space Debris Mitigation Guidelines should contain a guideline on the dissemination of information on national technical and legal measures for the detection, prevention, reduction, deorbitation and mitigation of space debris from present and past space missions.
- 35. The view was expressed that it was important to establish transparency and confidence-building measures in outer space activities in light of the growing use of outer space by governmental and non-governmental entities, taking into account that space debris would affect the sustainable use of outer space, constituted a hazard to outer space activities and could limit the effective deployment and utilization of associated outer space capabilities.

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- 36. Some delegations expressed the view that the States that were largely responsible for creating space debris should be most involved in space debris removal activities and that those States should make available their scientific and legal expertise to countries with a lower level of space development in order to ensure that necessary measures were implemented with regard to design of spacecraft and its end-of-life disposal.
- 37. Some delegations expressed the view that the issue of space debris should not be treated in a way that limited access to outer space or impaired the development of space capabilities by the least developed or developing countries, and that it was necessary to take into account the principle of proportional responsibility for space debris removal.
- 38. The view was expressed that in addressing space debris issues, States should act based on their common but differentiated responsibilities and their respective capabilities.
- 39. Some delegations expressed the view that the scope of the agenda item should be expanded to elaborate legal issues relating to space debris and space debris removal, such as jurisdiction over the space objects to be declared as space debris, legal status of space debris fragments and the legal definition of space debris.
- 40. The view was expressed that the Subcommittee should develop an international legal framework to address legal issues associated with active debris removal and could start by developing a list of pertinent questions, including the following:
- (a) Would the launching State relinquish its ownership rights over a space object declared as space debris, while retaining responsibility for any damage caused by its incorrect disposal?;
 - (b) Can space actors use objects declared as space debris at their discretion?;
 - (c) How could the protection of technology be ensured?;
- (d) What should be done in cases in which data are not sufficient to determine the ownership of a space object?
- 41. Some delegations expressed the view that the Subcommittee should further develop the international legal framework by elaborating principles of liability and responsibility in relation to space debris, including on legal aspects of matters relating to limiting creation of space debris or consequences of damage caused by space debris, as the existing international legal mechanisms are not adapted to the current situation.
- 42. The view was expressed that, in relation to space debris, the notion of "fault" used in the Liability Convention should be replaced with a more objective notion based on internationally accepted standards and that such legal terms could be discussed either under this agenda item or the item on the status and application of the five United Nations treaties on outer space.
- 43. The view was expressed that space debris mitigation should be effectively implemented, regardless of the size and constellation of space objects, and that special attention should be given to the potential threat to access to outer space posed by megaconstellations.
- 44. The view was expressed that it was important to mitigate re-entry of space debris into the Earth's atmosphere and to minimize its detrimental impact on the Earth, people and the ecosystem.
- 45. The view was expressed that a unified centre for information on near-Earth space monitoring under the auspices of the United Nations could be established.
- 46. 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

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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.

X. General exchange of information on non-legally binding United Nations instruments on outer space

- 47. Pursuant to General Assembly resolution 71/90, the Subcommittee considered agenda item 11, entitled "General exchange of information on non-legally binding United Nations instruments on outer space", as a single issue/item for discussion.
- 48. The representatives of Belgium, Japan and Venezuela (Bolivarian Republic of) made statements under agenda item 11. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
- 49. The Subcommittee had before it a conference room paper entitled "Information on an updated compendium on mechanisms adopted by States and international organizations in relation to non-legally binding United Nations instruments on outer space" (A/AC.105/C.2/2017/CRP.21).
- 50. The Subcommittee noted that an updated compendium on mechanisms adopted by States and international organizations in relation to non-legally binding United Nations instruments on outer space, containing an additional submission by Austria, was made available at the fifty-sixth session of the Subcommittee on a dedicated web page of the Office for Outer Space Affairs, together with other relevant documents under this agenda item.
- 51. The Subcommittee welcomed the compendium as a valuable contribution to facilitate the exchange of views and the sharing of information on the implementation of non-legally binding United Nations instruments. The Subcommittee encouraged States members of the Committee and international intergovernmental organizations having permanent observer status with the Committee to share information on their practices related to non-legally binding United Nations instruments on outer space and submit their responses to the Secretariat for the purpose of updating the compendium.
- 52. The Subcommittee noted that non-legally binding United Nations instruments related to space activities had played an important role by complementing and supporting the United Nations treaties on outer space and that it was relevant to gain a better understanding of non-legally binding instruments and related practices thereto, as they served as an important basis for ensuring the safe and sustainable use of outer space.
- 53. The view was expressed that a number of States increasingly relied on non-legally binding agreements in relation to space activities and that such practice had consolidated itself because a large number of substantive concerns could not be satisfactorily addressed in the current institutional framework. Nor could they be settled, at least in the short term, by binding rules. The delegation expressing that view was also of the view that non-legally binding agreements could respond to a broad range of regulatory concerns while still committing the participating States to act responsibly, and the delegation encouraged the use of such instruments, which could also help shape the legal system of the future.
- 54. Some delegations commended the efforts by the Working Group on the Long-Term Sustainability of Outer Space Activities of the Scientific and Technical Subcommittee, under the chairmanship of Peter Martinez (South Africa), and expressed the view that the outcomes of its work should be followed up by the Legal

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Subcommittee from a legal perspective, in order to contribute collectively to make space activities safer and more secure for all space actors and at the same time ensure that all countries were able to have equitable access to the limited natural resources of outer space.

- 55. The view was expressed that the United Nations Workshop on Space Law entitled "Contribution of space law and policy to space governance and space security in the twenty-first century" held in Vienna from 5 to 8 September 2016, and organized by the Office for Outer Space Affairs in cooperation with the Office for Disarmament Affairs and co-sponsored by the United Nations Institute for Disarmament Research and the Secure World Foundation had shown that space law needed to be addressed in a holistic manner and that all aspects of space safety and security required a profound understanding of space law as the indispensable framework for the long-term sustainability of outer space activities.
- 56. The view was expressed that transparency and confidence-building measures in outer space activities contributed to enhancing the sustainability of outer space activities, the safety of space operations and the security of space systems, and that joint efforts by the First and Fourth Committee of the General Assembly in that regard were welcomed.

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