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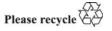
## **Draft report**

## 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

- 1. Pursuant to General Assembly resolution 70/82, the Subcommittee considered agenda item 11, 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.
- 2. The representatives of Brazil, Chile, Germany, Iran (Islamic Republic of), Japan, the Netherlands, the Russian Federation and the United States made statements under agenda item 11. The representative of Chile 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.
- 3. The Subcommittee had before it a conference room paper on the updates made to the compendium of space debris mitigation standards adopted by States and international organizations (A/AC.105/C.2/2016/CRP.16).
- 4. The Subcommittee recalled 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.
- 5. The Subcommittee noted with satisfaction that some States were implementing space debris mitigation measures consistent with the Space Debris Mitigation

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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. The Subcommittee also noted that some States were using the IADC Space Debris Mitigation Guidelines, the European Code of Conduct for Space Debris Mitigation and International Organization for Standardization (ISO) standard 24113:2011 (Space systems: space debris mitigation requirements) as references in their regulatory frameworks for national space activities.

- 6. 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.
- 7. 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.
- 8. The Subcommittee expressed its satisfaction with the compendium of space debris mitigation standards adopted by States and international organizations, which had been developed by Canada, the Czech Republic and Germany and were being maintained on a dedicated web page of the website of the Office for Outer Space Affairs. The Subcommittee noted with appreciation that making the information on the compendium available to the Scientific and Technical Subcommittee for consideration at its fifty-second and fifty-third sessions had contributed to increased coordination in the work of the Subcommittees.
- 9. Some delegations expressed satisfaction over increasing cooperation between the Legal Subcommittee and the Scientific and Technical Subcommittee.
- 10. Some delegations expressed the view that the Legal Subcommittee should undertake a legal analysis of the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space.
- 11. The view was expressed that additional guidance on practices that would minimize debris production and promote the sustainability of outer space activities should be developed without delay.
- 12. Some delegations expressed the view that it was necessary to examine the compendium of space debris mitigation standards adopted by States and international organizations in order to determine whether and how the information contained in the compendium could be used to update the Space Debris Mitigation Guidelines of the Committee.
- 13. Some delegations expressed the view that the Legal Subcommittee should develop legally binding rules for space debris mitigation.
- 14. The view was expressed that the transformation of technical debris mitigation guidelines into a legally binding instrument was not necessary, as spacefaring nations were motivated to reduce space debris by their self-interest in preserving the safety and sustainability of space activities.
- 15. The view was expressed that non-binding international principles and guidelines on space debris mitigation should be flexible and easily adaptable to new

technological and situational circumstances and that it was not necessary to establish debris mitigation standards in international law at present.

- 16. The view was expressed that a non-binding approach could be effective and could benefit all nations if implemented domestically through policies, regulations and standards.
- 17. The view was expressed that the voluntary instruments were not sufficient for space debris mitigation.
- 18. 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.
- 19. Some delegations expressed the view that active removal of space debris was needed to ensure the long-term sustainability of outer space activities.
- 20. Some delegations expressed the view that addressing the issue of active removal required the clarification of a number of legal questions.
- 21. Some delegations expressed the view that a legally binding agreement regulating the active removal of space debris should be developed.
- 22. The view was expressed that the status of space objects should be considered before any physical action was taken with regard to those objects. The delegation expressing that view underscored the need to develop a legally binding agreement regulating the active removal of space objects or their fragments, and that such regulation should be acceptable to all parties concerned.
- 23. The view was expressed that possible alternatives to active removal should be presented to and discussed in the Subcommittee and that technology transfer agreements should be promoted. The delegation expressing that view stressed that the legal aspects of such technologies, including jurisdiction of the space objects to be removed, legal mechanisms to address the most relevant aspects of third-party removal initiatives, liability and associated costs, should be discussed.
- 24. The view was expressed that the issue of active space debris removal should be considered, taking into account the fact that space vehicles were predominantly the property of States and could be subject to intellectual property rights.
- 25. Some delegations expressed the view that the removal of large pieces of debris was necessary to prevent the proliferation of space debris and that such removal should be carried out by the space actors that were responsible for space debris generation.
- 26. The view was expressed that an international space debris voluntary fund could be established under the auspices of the Office for Outer Space Affairs in order to support activities to remove or mitigate current space debris, prevent the creation of future space debris and reduce the impacts of space debris. The delegation expressing that view was also of the view that Member States, in particular spacefaring nations, could consider allocating a percentage of their budget to that voluntary fund.

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- 27. Some delegations expressed the view that information on actions to reduce the creation of space debris should be made available to the Legal Subcommittee, in particular by those States that were largely responsible for creating space debris and by the States that had the capacity to take action with regard to space debris mitigation.
- 28. The view was expressed that reporting on the status of implementation of the Space Debris Mitigation Guidelines of the Committee would contribute to improving transparency and developing confidence-building measures among States.
- 29. Some delegations expressed the view that the Subcommittee should consider the issue of space debris in connection with the growing number of deployments of small satellites.
- 30. 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 new concept of megaconstellations.
- 31. Some delegations expressed the view that the Subcommittee should pay greater attention to space debris derived from space platforms with nuclear power sources on board and from the collision of such platforms with space debris, and to technology for monitoring space debris.
- 32. Some delegations expressed the view that the Subcommittee should pay greater attention to space debris in the geostationary orbit.
- 33. 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.

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

- 34. Pursuant to General Assembly resolution 70/82, the Subcommittee considered agenda item 12, entitled "General exchange of information on non-legally binding United Nations instruments on outer space", as a single issue/item for discussion.
- 35. The representatives of Chile, the Czech Republic, France, Germany, Japan, and the United States made statements under agenda item 12. During the general exchange of views, statements relating to the item were also made by representatives of other member States.

- 36. The Subcommittee had before it the following documents:
- (a) Conference room paper prepared by Japan entitled "Updated questionnaire on the general exchange of information on non-legally binding United Nations instruments on outer space" (A/AC.105/C.2/2016/CRP.12);
- (b) Conference room paper prepared by Japan entitled "Compendium: mechanisms adopted by States and international organizations in relation to non-legally binding United Nations instruments on outer space" (A/AC.105/C.2/2016/CRP.13).
- 37. The Subcommittee noted that the exchange of information under the agenda item had become more important in view of new challenges, namely the rapid development of space activities and the diversification of space actors. Non-legally binding United Nations instruments related to space activities addressed those challenges and played an important role by complementing and supporting the United Nations treaties on outer space and serving as a basis for ensuring the safe and sustainable use of outer space.
- 38. The Subcommittee took note with appreciation of two documents that the delegation of Japan had made available to the Subcommittee, at its current session: a compendium containing responses from States on mechanisms adopted in relation to non-legally binding United Nations instruments on outer space (A/AC.105/C.2/2016/CRP.13) and an updated questionnaire on the general exchange of information on non-legally binding United Nations instruments on outer space, which contained two templates for collecting information on the mechanisms adopted to implement the non-legally binding United Nations instruments, one for States members of the Committee and the other for international intergovernmental organizations (see A/AC.105/C.2/2016/CRP.12).
- 39. The Subcommittee welcomed the compendium as a valuable document that facilitated the exchange of views and the sharing of information on the implementation of non-legally binding United Nations instruments.
- 40. The Subcommittee requested the Secretariat to make the compendium available on a dedicated page of the website of the Office for Outer Space Affairs and to invite States members of the Committee and international intergovernmental organizations having permanent observer status with the Committee to submit their responses to the Secretariat for inclusion in the compendium.
- 41. The view was expressed that resolutions and principles adopted by the General Assembly and its subsidiary bodies were essential for demonstrating best practices and interpretation of general legal terms, and as such represented a strong political commitment and a method for developing best practices. The delegation expressing that view also stated that amidst the rapid advancement of space technology, the expertise of the Legal Subcommittee had to be taken into account in order to ensure that there was consistency in the enhancement of space law. The same delegation further expressed the view that consideration of non-legally binding best practices and methods might eventually lead to legally binding instruments.
- 42. The view was expressed that the exchange of information on non-legally binding United Nations instruments related to space activities was especially welcome in view of the recommendation of the Group of Governmental Experts on Transparency and Confidence-building Measures in Outer Space Activities,

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expressed in its report of 2013 that Member States take measures to implement, to the greatest extent practicable, principles and guidelines endorsed on the basis of consensus by the Committee on the Peaceful Uses of Outer Space and the General Assembly (see A/68/189).

- 43. Some delegations expressed the view that the Principles Relating to Remote Sensing of the Earth from Outer Space served as an important example of a non-legally binding United Nations instrument on outer space, since in spite of their non-legally binding character they were widely credited with fostering a successful international regime in remote sensing to the benefit of all States.
- 44. The view was expressed that the International Charter on Space and Major Disasters served as another excellent example of an even less formal non-legally binding mechanism that demonstrated the importance of such mechanisms for furthering international cooperation in the peaceful exploration and use of outer space.
- 45. The view was expressed that it was necessary to make better use of non-legally binding instruments. Those instruments complemented the existing legally binding international legal framework governing the peaceful use of outer space. The delegation expressing that view was also of the view that States and international intergovernmental organizations should be encouraged to contribute more to the exchange of information on non-legally binding instruments.
- 46. The view was expressed that one of the most important roles international lawyers could play in facilitating successful international cooperation was that of identifying the optimal cooperative mechanism for any given case, including when a non-legally binding mechanism might facilitate the objectives of cooperation better than a treaty.
- 47. The view was expressed that, regardless of legal instruments, whether binding or non-binding, spacefaring nations should demonstrate their responsible attitude and approach by voluntarily declaring their intention to keep using outer space exclusively for peaceful purposes.
- 48. The Subcommittee agreed that the item entitled "General exchange of information on non-legally binding United Nations instruments on outer space" should be retained on the agenda of the Subcommittee at its fifty-sixth session, to be held in 2017.

## XIII. Review of international mechanisms for cooperation in the peaceful exploration and use of outer space

- 49. Pursuant to General Assembly resolution 70/82, the Subcommittee considered agenda item 15, entitled "Review of international mechanisms for cooperation in the peaceful exploration and use of outer space", as an item under its five-year workplan (A/AC.105/1003, para. 179). In accordance with the workplan for 2016, the Subcommittee continued to examine responses received from member States.
- 50. The representatives of Algeria, China, France, Germany, Japan, the Netherlands and the United States made statements under agenda item 15. During the general exchange of views, statements relating to the item were also made by representatives of other member States.

- 51. At its 917th meeting, on 4 April 2016, the Subcommittee reconvened its Working Group on the Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space, under the chairmanship of Setsuko Aoki (Japan). At its [...] meeting, on [...] April 2016, the Subcommittee endorsed the report of the Chair of the Working Group, contained in annex III to the present report.
- 52. The Subcommittee had before it the following:
- (a) Note by the Secretariat on the review of international mechanisms for cooperation in the peaceful exploration and use of outer space, containing information received from Belgium, Poland, Thailand and Turkey, as well as the World Meteorological Organization (A/AC.105/C.2/109);
- (b) Conference room paper containing the draft report of the Working Group on the Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space (A/AC.105/C.2/2016/CRP.14);
- (c) Conference room paper on responses by Member States to the set of questions provided by the Chair of the Working Group on International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space, containing information received from Japan and France (A/AC.105/C.2/2016/CRP.18).
- 53. The Subcommittee noted the breadth and diversity of the mechanisms utilized in space cooperation and the important elements they contained. Those mechanisms included legally binding multilateral and bilateral agreements; memorandums of understanding; non-legally binding arrangements, principles and technical guidelines; multilateral coordination mechanisms through which space-system operators coordinated the development of applications of space systems for the benefit of the environment, human security and welfare, and development; international intergovernmental organizations, such as APSCO and ESA; and a variety of international and regional forums, including the African Leadership Conference on Space Science and Technology for Sustainable Development, the Asia-Pacific Regional Space Agency Forum and the Space Conference of the Americas.
- 54. The view was expressed that the Subcommittee should play a positive role in fostering international cooperation so as to strengthen the design of the system of international cooperation and develop an effective and practical cooperative mechanism to safeguard peace, security and the rule of law in outer space.
- 55. The view was expressed that the International Space Station programme was an example of a successful multilateral cooperation effort among many stakeholders. Its success was based upon its solid legal foundation (the International Space Station Intergovernmental Agreement) and its effective management structure, set out in the memorandums of understanding.
- 56. The view was expressed that a summary of the lessons learned over the 50 years of international cooperation in outer space should be integrated into the report of the Working Group in order to explain why certain mechanisms were preferable in certain circumstances. The delegation expressing that view also encouraged member States to share the lessons they had learned from their experiences in international cooperation in the peaceful uses of outer space.

- 57. The view was expressed that the Group on Earth Observations, a voluntary, intergovernmental framework, was an example of multilateral cooperation that functioned without a specific legally binding framework. It had been designed for the purpose of developing a comprehensive and sustainable global Earth observation system of systems (GEOSS), with the support of the Committee on Earth Observation Satellites (CEOS). The delegation expressing that view also stated that the Asia-Pacific Regional Space Agency Forum was another example of a non-legally binding platform that was open and flexible and that enabled the participation of diverse stakeholders in establishing cooperation projects to address regional issues through concrete actions.
- 58. The view was expressed that Earth observation projects impacting climate change should be carried out in accordance with the Paris Agreement, signed on 12 December 2015 at the twenty-first session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, which would be opened for signature on 22 April 2016 in New York.
- 59. Some delegations expressed the view that both ESA and the ExoMars 2016 mission, a joint project between ESA and the Russian Federal Space Agency (Roscosmos), were examples of successful international cooperation. The Agency and its mission with Roscosmos demonstrated a willingness to understand and take into account the motivations and interests of all partners in order to ensure solidarity and foster the long-term partnerships essential for successful international cooperation.
- 60. The view was expressed that international cooperation in joint space projects enabled the development of capabilities at the national level and fostered the transfer of knowledge and the promotion of technology and its applications for the purpose of socioeconomic development.
- 61. The view was expressed that international space cooperation should be based on the concepts of equality, mutual benefit and inclusive development, which would enable all States, irrespective of the level of their economic development, to enjoy the benefits derived from the use of space applications.
- 62. The view was expressed that mechanisms for international space cooperation and the enhancement of the rule of law in outer space had been shown, in practice, to be complementary in nature: international cooperation served as an important means for advancing the rule of law in outer space, while the rule of law provided an effective institutional guarantee of international cooperation.
- 63. The Subcommittee agreed that the review of the mechanisms for cooperation in space activities would continue to assist States in understanding the different approaches to cooperation in space activities and would contribute to the further strengthening of international cooperation in the exploration and peaceful uses of outer space. In that regard, the Subcommittee reiterated that 2017, which, under its workplan, was the final year of consideration of the agenda item, would coincide with the fiftieth anniversary of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies.