C. Report of the Legal Subcommittee on its fifty-fifth session

1. The Committee took note with appreciation of the report of the Legal Subcommittee on its fifty-fifth session (A/AC.105/1113), which contained the results of its deliberations on the items considered by the Subcommittee in accordance with General Assembly resolution 70/82.

2. The Committee expressed its appreciation to Hellmut Lagos Koller (Chile) for his able leadership during the fifty-fifth session of the Subcommittee.

3. The representatives of Austria, Canada, China, Germany, Indonesia, Japan, Mexico, Pakistan, the United States and Venezuela (Bolivarian Republic of) made statements under the item. Statements were also made by the representative of Argentina on behalf of the Group of 77 and China and the representative of the Dominican Republic on behalf of the Group of Latin American and Caribbean States. The observer for ITU also made a statement under the item. During the general exchange of views, statements relating to the item were also made by other member States.

4. Some delegations reiterated the need to strengthen interaction between the Scientific and Technical Subcommittee and the Legal Subcommittee in order to synchronize the progressive development of space law with key scientific and technical developments in that area. They also expressed the view that the results attained by the working groups established under the Scientific and Technical
Subcommittee should be submitted officially to the Legal Subcommittee for analysis.

1. **Information on the activities of international intergovernmental and non-governmental organizations relating to space law**

   5. The Committee took note of the discussion of the Subcommittee under the item on information on the activities of international intergovernmental and non-governmental organizations relating to space law, as reflected in the report of the Subcommittee (A/AC.105/1113, paras. 41-53).

   6. The Committee noted with appreciation the important role of international intergovernmental and non-governmental organizations relating to space law in the development, strengthening and furtherance of understanding of international space law through, among others, the organization of conferences, symposiums and training seminars for practitioners and students and the issuance of publications and reports.

   7. The Committee noted that it was important to continue to exchange information among the Subcommittee and international intergovernmental and non-governmental organizations on recent developments in the area of space law and endorsed the recommendation of the Subcommittee that such organizations should again be invited to report on their activities relating to space law to the Subcommittee at its fifty-sixth session.

2. **Status and application of the five United Nations treaties on outer space**

   8. The Committee took note of the discussion of the Subcommittee under the item on the status and application of the five United Nations treaties on outer space, as reflected in the report of the Subcommittee (A/AC.105/1113, paras. 54-83).

   9. The Committee endorsed the decisions and recommendations of the Subcommittee and its Working Group on the Status and Application of the Five United Nations Treaties on Outer Space, which had been reconvened under the chairmanship of Bernhard Schmidt-Tedd (Germany) (A/AC.105/1113, para. 57, and annex I, paras. 17, 19, 21 and 22).

   10. Some delegations expressed the view that the United Nations treaties on outer space formed a solid legal basis for supporting the increasing scale of space activities and for strengthening international cooperation on the peaceful uses of outer space. Those delegations welcomed the growing adherence to the treaties and encouraged those States that had not yet become parties to the treaties to consider doing so.

   11. Some delegations expressed the view that the rule of law served as a fundamental guarantee for preserving outer space for peaceful purposes and ensuring the long-term sustainability of outer space activities. In carrying out their space activities, all States should act in accordance with the United Nations treaties on outer space and relevant principles and declarations.

   12. Some delegations expressed the view that the Committee should review, update and modify the five treaties for the purpose of strengthening the guiding principles of outer space activities, in particular those principles protecting its peaceful use, establish the responsibility of States in space activities carried out by
both governmental and non-governmental entities and encourage international cooperation.

13. The view was expressed that, in view of recent scientific and technological developments, efforts should be made to deliberate on new legally binding instruments, with the aim of addressing legal issues arising as a result of emerging space activities.

3. Matters relating to the definition and delimitation of outer space and 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

14. The Committee took note of the discussion of the Subcommittee under the agenda item on matters relating to the definition and delimitation of outer space and 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 ITU, as reflected in the report of the Subcommittee (A/AC.105/1113, paras. 84-111).

15. The Committee endorsed the recommendations of the Subcommittee and its Working Group on the Definition and Delimitation of Outer Space, reconvened under the chairmanship of José Monserrat Filho (Brazil) (A/AC.105/1113, para. 86, and annex II, para. 20).

16. Some delegations expressed the view that it was necessary to define and delimit outer space, given that there was a serious legal gap in that regard in both space law and air law. The delegations expressing that view considered that scientific and technological progress, the commercialization of outer space, the participation of the private sector, emerging legal questions and the increasing use of outer space in general had made it necessary for the Subcommittee to consider the question of the definition and delimitation of outer space. The delegations expressing that view were also of the view that the definition and delimitation of outer space would help to establish a single legal regime regulating the movement of an aerospace object and to bring about legal clarity in the implementation of space law and air law, as well as clarify the issues of the sovereignty and international responsibility of States and the boundary between airspace and outer space.

17. Some delegations expressed the view that there was no evidence to suggest that the lack of a definition or delimitation of outer space had hindered or restricted the growth of aviation or outer space exploration, and that no specific cases of a practical nature had been reported to the Subcommittee that could confirm that the lack of a definition of airspace or outer space had compromised aviation safety.

18. Some delegations expressed the view that the geostationary orbit was a limited natural resource with great potential for the implementation of a wide array of programmes for the benefit of all States, and that it was at risk of becoming saturated, thereby threatening the sustainability of space activities in it; that its exploitation should be rationalized; and that it should be made available to all States, under equitable conditions, taking into account in particular the needs of developing countries. Those delegations were also of the view that it was important to use the geostationary orbit in compliance with international law, in accordance
with the decisions of ITU and within the legal framework established in the relevant United Nations treaties, while giving consideration to the contributions of space activities to sustainable development and the achievement of the 2030 Agenda for Sustainable Development.

19. Some delegations expressed the view that the utilization by States of the geostationary orbit on the basis of “first come, first served” was unacceptable and that the Subcommittee should therefore develop a legal regime guaranteeing equitable access to orbital positions for States in accordance with the principles of the peaceful use and non-appropriation of outer space.

20. The Committee noted the statement of the observer for ITU about the outcome of the fifteenth World Radiocommunication Conference. The Committee also noted that the final acts of the Conference were available to download, free of charge, from the ITU website (www.itu.int/pub/R-ACT-WRC.12-2015/en).

21. Some delegations expressed the view that, in order to ensure the sustainability of the geostationary orbit, it was necessary to keep that issue on the agenda of the Subcommittee and to explore it further, through the creation of appropriate working groups and legal and technical intergovernmental panels, as necessary. Those delegations were also of the view that working groups or intergovernmental panels with technical and legal expertise should be established to promote equal access to the geostationary orbit, and called for the greater participation of ITU in the work of the Subcommittee on those matters.

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

22. The Committee took note of the discussion of the Legal Subcommittee under the item on national legislation relevant to the peaceful exploration and use of outer space, as reflected in the report of the Subcommittee (A/AC.105/1113, paras. 112-121).

23. The Committee agreed that the general exchange of information on national legislation relevant to the peaceful exploration and use of outer space provided States with a comprehensive overview of the current status of national space laws and regulations and assisted States in understanding the different approaches taken at the national level with regard to the development of national space-related regulatory frameworks. In that regard, the Committee greatly appreciated the continuously updated schematic overview of national regulatory frameworks available on the website of the Office for Outer Space Affairs.

24. Some delegations expressed the view that all States should ensure that their national legislation on the exploration and use of outer space was closely aligned with the relevant international treaties. Those delegations were also of the view that the promotion of laws and regulations relating to the commercialization of outer space should be avoided.

25. Some delegations expressed the view that, in the light of the growing interest among spacefaring nations in new missions aimed at exploring and using the Moon and other celestial bodies, there was a strong need to further develop a common understanding of the principles set forth in the Outer Space Treaty, in particular the principles regarding the freedom of exploration and use of outer space, the principle
of non-appropriation of outer space and the principle that the exploration and use of outer space should be for the benefit and interests of all humanity.

26. The view was expressed that national legislation intending to regulate commercial activities in outer space, the Moon or other celestial bodies must be interpreted and executed within the meaning and spirit of States’ obligations under international law.

5. **Capacity-building in space law**

27. The Committee took note of the discussion of the Subcommittee under the item on capacity-building in space law, as reflected in the report of the Subcommittee (A/AC.105/1113, paras. 122-137).

28. The Committee endorsed the recommendation of the Subcommittee on the agenda item (A/AC.105/1113, para. 137).

29. The Committee agreed that international cooperation in research, training and education in space law was essential to build the capacity necessary at the national level to ensure that the ever-increasing number and type of players in space activities remained in compliance with international space law.

30. The Committee reaffirmed that the regional centres for space science and technology education, affiliated to the United Nations, played an important role in providing teaching and training opportunities in space law. The Committee noted that greater use of the regional centres could be made in order to provide more opportunities for academic linkages.

31. Some delegations expressed the view that more effective and proactive efforts were needed to increase awareness of the importance of complying with international space law when carrying out space activities and programmes. Those delegations were also of the view that capacity-building in space law was a fundamental tool that should be enhanced through greater international cooperation among States and an increased number of workshops, seminars and events to promote space law, especially in developing countries.

32. The Committee noted with appreciation that the tenth United Nations workshop on space law would be held in Vienna from 5 to 8 September 2016, organized by the Office for Outer Space Affairs.

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

33. The Committee took note of the discussion of the Subcommittee under the item on the review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, as reflected in the report of the Subcommittee (A/AC.105/1113, paras. 138-154).

34. Some delegations expressed the view that it was exclusively States, irrespective of their level of social, economic, scientific or technical development, that had an obligation to engage in regulatory activity associated with the use of nuclear power sources in outer space and to adapt national legislation to relevant international standards. Those delegations were also of the view that Governments bore international responsibility for national activities involving the use of nuclear
power sources in outer space conducted by governmental and non-governmental organizations and that such activities must be beneficial, not detrimental, to humanity.

35. Some delegations called on the Legal Subcommittee to undertake a legal review of the Safety Framework for Nuclear Power Source Applications in Outer Space and to promote binding standards, with a view to ensuring the responsible use of nuclear power sources.

36. Some delegations expressed the view that there should be greater coordination and interaction between the Scientific and Technical Subcommittee and the Legal Subcommittee in order to promote greater understanding, acceptance and implementation of the legal instruments and the development of new legal instruments related to the use of nuclear power sources in outer space.

37. Some delegations expressed the view that more consideration should be given to the use of nuclear power sources in outer space, specifically in the geostationary orbit and low-Earth atmosphere, in order to address the legal aspects of the problems of potential collisions of nuclear-powered space objects in orbit and of the incidents or emergencies that could be created by the accidental re-entry of such objects into the Earth’s atmosphere, as well as the impact of such a re-entry on the Earth’s surface, human life and health and the ecosystem.

38. The view was expressed that the Principles should be reviewed, taking into account the latest developments in technology. The delegation expressing that view was also of the view that the use of nuclear energy as a source of fuel was permissible if environmental protection had been ensured in space and on the ground.

7. 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

39. The Committee took note of the discussion of the Legal Subcommittee under the item on the 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 reflected in the report of the Legal Subcommittee (A/AC.105/1113, paras. 155-187).

40. The Committee endorsed the decisions of the Subcommittee as contained in its report (A/AC.105/1113, para. 187).

41. The Committee noted the increasing amount of space debris, 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 was a key step in providing all spacefaring nations with guidance on how to mitigate the problem of space debris, and encouraged Member States to consider voluntary implementation of the Guidelines.

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42. The Committee noted with satisfaction that some States had taken measures to enforce the implementation of internationally recognized guidelines and standards relating to space debris through relevant provisions in their national legislation.

43. The Committee expressed its satisfaction with the compendium of space debris mitigation standards being maintained on a dedicated web page of the website of the Office for Outer Space Affairs and 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 such legislation or standards adopted, using the template provided for that purpose. The Committee 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.

44. Some delegations expressed the view that it was necessary to strengthen the interaction between the Scientific and Technical Subcommittee and the Legal Subcommittee in order to synchronize the progressive development of space law with major progress in space science and technology, and that outcomes of the work of the working groups of the Scientific and Technical Subcommittee, in particular the Space Debris Mitigation Guidelines of the Committee, should be officially presented to the Legal Subcommittee for legal analysis regarding compliance with principles on outer space.

45. Some delegations expressed the view that interaction and coordination between the Scientific and Technical Subcommittee and the Legal Subcommittee were essential for ensuring a comprehensive discussion of different aspects related to space debris, and that those aspects should be considered to be complementary.

46. The view was expressed that the Legal Subcommittee could work with the Scientific and Technical Subcommittee to consider existing regulations relating to space debris in order to ensure their consistency and completeness. The delegation expressing that view was also of the view that the development of the Space Debris Mitigation Guidelines of the Committee into a legally binding instrument or the development of guidelines for active space debris removal would be premature at that time because the technology was not at an advanced enough stage.

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

47. The Committee took note of the discussion of the Subcommittee under the item on the general exchange of information on non-legally binding United Nations instruments on outer space, as reflected in the report of the Subcommittee (A/AC.105/1113, paras. 188-202).

48. The Committee noted with appreciation that the Subcommittee, at its fifty-fifth session, had had before it 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 (A/AC.105/C.2/2016/CRP.12), 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 organizations. Both the compendium and the questionnaire had been prepared by the delegation of Japan.

49. The Committee noted that the compendium was a valuable document that had facilitated the exchange of views and the sharing of information on the implementation of non-legally binding United Nations instruments.

50. The Committee endorsed the request by the Subcommittee that the Secretariat make the compendium available on a dedicated page of the website of the Office for Outer Space Affairs and 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.

51. Some delegations expressed the view that non-legally binding United Nations instruments related to space activities were important instruments that provided guidance to States and other relevant actors on conducting their activities in a safe and secure manner. Those delegations were of the view that, although such instruments played an important role in complementing and supporting the United Nations treaties on outer space, they could not serve as a substitute for existing legally binding instruments, nor should they hinder the progressive development of international space law.

9. General exchange of views on the legal aspects of space traffic management

52. The Committee took note of the discussion of the Subcommittee under the item on general exchange of views on the legal aspects of space traffic management, as reflected in the report of the Subcommittee (A/AC.105/1113, paras. 203-216).

53. The Committee noted that consideration of the concept of space traffic management was of growing importance for all nations and that discussion on space traffic management should be continued in a multilateral setting, in the framework of the Committee and its Subcommittees.

54. The view was expressed that consideration of space traffic management was of growing importance because of a number of factors, including the increase in space activities, the diversification of space actors and the increasing congestion of space, as well as new industrial initiatives, such as the planned satellite megacconstellations.

55. The view was expressed that some regulations relevant to space traffic management already existed in international space law; however, many areas indispensable for the effective management of space traffic were not covered by the existing international regulatory framework and ought to be addressed, in order to enhance the safe and sustainable conduct of activities in outer space.

10. General exchange of views on the application of international law to small satellite activities

56. The Committee took note of the discussion of the Legal Subcommittee under the item on the general exchange of views on the application of international law to small satellite activities, as reflected in the report of the Subcommittee (A/AC.105/1113, paras. 217-231).
57. The Committee noted with satisfaction the inclusion of the new item on its agenda and agreed that it would provide valuable opportunities for addressing a number of topical issues relating to international and national policy and regulation measures regarding the use of small satellites by various actors.

58. Some delegations expressed the view that, in order to ensure the safe and responsible use of outer space in the future, it was important to include small satellite missions, as appropriate, in the scope of application of international and national regulatory frameworks.

59. The Committee noted that the Secretariat was continuing to prepare a questionnaire, to be addressed to States members and permanent observers of the Committee, containing a set of questions addressing the practice of the development and use of small satellites, as well as policy and legal aspects of their use. The Committee noted that the draft questionnaire would be presented to the Subcommittee at its fifty-sixth session, in 2017.

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

60. The Committee took note of the discussion of the Legal Subcommittee under the item on the review of international mechanisms for cooperation in the peaceful exploration and use of outer space, in accordance with its five-year workplan, as reflected in the report of the Subcommittee (A/AC.105/1113, paras. 232-246).

61. The Committee endorsed the decisions and recommendations of the Subcommittee and its Working Group on the Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space, which had been reconvened by the Subcommittee at its fifty-fifth session, under the chairmanship of Setsuko Aoki (Japan) (A/AC.105/1113, para. 234, and annex III, paras. 9 and 10).

62. The Committee noted the many examples of international mechanisms for cooperation that had been discussed, ranging from bilateral and multilateral binding agreements to regional and interregional cooperation and coordination mechanisms. The Committee also noted that States had presented lessons learned in the form of case studies reflecting various reasons for selecting cooperative mechanisms to reach intended goals. The Committee was of the opinion that the case studies would lead to a better understanding of the different approaches taken by States and international organizations to cooperation in space activities.

12. Draft provisional agenda for the fifty-sixth session of the Legal Subcommittee

63. The Committee took note of the discussion of the Subcommittee under the item on proposals to the Committee for new items to be considered by the Legal Subcommittee at its fifty-sixth session, as reflected in the report of the Subcommittee (A/AC.105/1113, paras. 249-251 and 253).
64. On the basis of the deliberations of the Legal Subcommittee at its fifty-fifth session, the Committee agreed that the following substantive items should be considered by the Subcommittee at its fifty-sixth session:

Regular items
1. Adoption of the agenda.
2. Statement by the Chair.
3. General exchange of views.
4. Information on the activities of international intergovernmental and non-governmental organizations relating to space law.
5. Status and application of the five United Nations treaties on outer space.
6. Matters relating to:
   (a) The definition and delimitation of outer space;
   (b) 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.
7. National legislation relevant to the peaceful exploration and use of outer space.
8. Capacity-building in space law.

Single issues/items for discussion
9. Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space.
10. 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.
11. General exchange of information on non-legally binding United Nations instruments on outer space.
12. General exchange of views on the legal aspects of space traffic management.
13. General exchange of views on the application of international law to small satellite activities.
Items considered under workplans

15. Review of international mechanisms for cooperation in the peaceful exploration and use of outer space.
   
   (Work for 2017 as reflected in the multi-year workplan in the report of the Legal Subcommittee on its fifty-first session (A/AC.105/1003, para. 179))

New items

16. Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-seventh session.

65. The Committee agreed that the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space, the Working Group on the Definition and Delimitation of Outer Space and the Working Group on the Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space should be reconvened at the fifty-sixth session of the Legal Subcommittee.

66. The Committee endorsed the agreement reached by the Subcommittee that IISL and ECSL should again be invited to organize a symposium, to be held during the fifty-sixth session of the Subcommittee, taking into account the need for equitable geographical and gender representation in the symposium, and that the symposium should be dedicated to the fiftieth anniversary of the Outer Space Treaty (A/AC.105/1113, annex I, para. 19 (a)).

D. Space and sustainable development

67. The Committee considered the agenda item entitled “Space and sustainable development”, in accordance with General Assembly resolution 70/82.

68. The representatives of Brazil, Chile, Egypt, El Salvador, Germany, India, Indonesia, Japan, Mexico, Pakistan and the United States made statements under the item. During the general exchange of views, statements relating to the item were also made by representatives of other member States.

69. The Committee heard the following presentations under the item:

   (a) “The progress of the BeiDou Navigation Satellite System”, by the representative of China;

   (b) “Sustainable development in Egypt”, by the representative of Egypt;

   (c) “Supporting disaster management and enhancing cooperation through APRSAF: Sentinel Asia”, by the representative of Japan;

   (d) “NavIC Indian Regional Navigation Satellite System”, by the representative of India;

   (e) “Space for sustainable development”, by the observer for ESPI.

71. The Committee noted the adoption of the African Space Policy and Strategy by the African Union Heads of State and Government during the twenty-sixth ordinary session of the African Union, which had laid the first steps towards the realization of an African outer space programme, within the framework of the African Union’s Agenda 2063.

72. The Committee noted the significant role that space science and technology applications could play in the implementation of internationally agreed frameworks. The Committee also noted the value of space technology and applications and space-derived data and information in contributing to sustainable development, including by improving the formulation and subsequent implementation of policies and programmes of action in connection with environmental protection, land and water management, marine and coastal ecosystems, health care, climate change, disaster risk reduction and emergency response, energy, navigation, seismic monitoring, natural resources management, glaciers, biodiversity, agriculture and food security.

73. The Committee took note of the information provided by States on their actions and programmes aimed at increasing awareness and understanding in society of the applications of space science and technology for meeting development needs.

74. The Committee noted the continued role played by the International Space Station in education and outreach to educational communities worldwide.

75. The Committee noted with satisfaction the large number of outreach activities carried out at the regional level for building capacity through education and training in using space science and technology applications for sustainable development. The Committee also noted with appreciation the role played in space-related education by the regional centres for space science and technology education, affiliated to the United Nations.

76. Some delegations expressed the view that it was essential to promote international cooperation and strengthen intraregional cooperation, exchange expertise and best practices and build capacity at the national and regional levels, as international and regional cooperation in the field of space activities could generate synergies and create awareness of the benefits that space science and technology provided for sustainable development.

77. Some delegations expressed the view that it was important to increase the equality of access to the benefits of space technology and its application to help achieve the 2030 Agenda.

78. Some delegations expressed the view that it was necessary to promote equal, non-discriminatory access to outer space, irrespective of levels of social, economic or scientific development.
79. The view was expressed that it was important to consider how the Committee could further contribute to accomplishing the Sustainable Development Goals and their targets through its expertise in space applications.

80. The view was expressed that it was important to build human resource capacities to exploit the potential of Earth observation data for sustainable development.

81. The view was expressed that the international community should enhance mutual partnerships and continue to provide technical assistance to Member States, in particular developing countries, including by providing adequate resources for, transferring knowledge about and building capacity in space technology.