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Report of the Legal Subcommittee on its sixtieth session, held in Vienna from 31 May to 11 June 2021

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I. Introduction

A. Opening of the session

1. The Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space held its sixtieth session at the United Nations Office at Vienna from 31 May to 11 June 2021, in a hybrid format (in person and online). The session was chaired by Aoki Setsuko (Japan).
2. The Subcommittee held 19 meetings.

B. Adoption of the agenda

3. At its 995th meeting, on 31 May, the Subcommittee adopted the following agenda:
 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.
 9. Future role and method of work of the Committee.
 10. 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.
 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.
 14. General exchange of views on potential legal models for activities in exploration, exploitation and utilization of space resources.
 15. Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its sixty-first session.
 16. Report to the Committee on the Peaceful Uses of Outer Space.

C. Attendance

4. Representatives of the following 80 States members of the Committee attended the session: Algeria, Argentina, Armenia, Australia, Austria, Azerbaijan, Belarus, Belgium, Bolivia (Plurinational State of), Brazil, Bulgaria, Canada, Chile, China, Colombia, Costa Rica, Cuba, Cyprus, Czechia, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Ethiopia, Finland, France, Germany, Ghana, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Italy, Japan, Jordan, Kenya, Lebanon, Libya, Luxembourg, Malaysia, Mexico, Morocco, Netherlands, New Zealand, Nicaragua, Norway, Oman, Pakistan, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Romania, Russian Federation, Saudi Arabia, Singapore, Slovakia, South Africa, Spain, Sudan, Sweden, Switzerland, Syrian Arab Republic, Thailand, Tunisia, Turkey, Ukraine, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, Venezuela (Bolivarian Republic of) and Viet Nam.

5. At its 995th and 1000th meetings, on 31 May and 2 June, the Subcommittee decided to invite, at their request, observers for Angola and the Lao People's Democratic Republic to attend the session and to address it, as appropriate, on the understanding that it would be without prejudice to further requests of that nature and that doing so would not involve any decision of the Committee concerning status.

6. Also at its 995th meeting, the Subcommittee decided to invite, at their request, observers for the International Institute for the Unification of Private Law (UNIDROIT), the Open Lunar Foundation and the Square Kilometre Array Observatory to attend the session and to address it, as appropriate, on the understanding that it would be without prejudice to further requests of that nature and that doing so would not involve any decision of the Committee concerning status.

7. Observers for the Food and Agriculture Organization of the United Nations, the International Civil Aviation Organization (ICAO) and the International Telecommunication Union (ITU) attended the session.

8. The session was attended by representatives of the European Union, in its capacity as permanent observer of the Committee and in accordance with General Assembly resolutions 65/276 and 73/91.

9. The session was attended by observers for the following intergovernmental organizations having permanent observer status with the Committee: Asia-Pacific Space Cooperation Organization (APSCO), European Southern Observatory, European Space Agency (ESA), Inter-Islamic Network on Space Sciences and Technology, International Mobile Satellite Organization, International Organization of Space Communications (Intersputnik) and Regional Centre for Remote Sensing of the North African States.

10. The session was also attended by observers for the following non-governmental organizations having permanent observer status with the Committee: European Space Policy Institute, For All Moonkind, Ibero-American Institute of Aeronautic and Space Law and Commercial Aviation, International Institute of Space Law (IISL), International Space University, Moon Village Association, National Space Society, Secure World Foundation, Space Generation Advisory Council (SGAC), University Space Engineering Consortium-Global (UNISEC-Global) and World Space Week Association.

11. A list of the representatives of States, as well as of United Nations entities and other international organizations, attending the session is contained in document A/AC.105/C.2/2021/INF/53.

12. The Subcommittee was informed by the Secretariat of the applications for membership in the Committee submitted by Angola (A/AC.105/C.2/2021/CRP.3), Bangladesh (A/AC.105/C.2/2021/CRP.16), Panama (A/AC.105/C.2/2021/CRP.4) and Slovenia (A/AC.105/C.2/2021/CRP.17), which were to be considered by the Committee at its sixty-fourth session, in 2021.

13. The Subcommittee was also informed by the Secretariat of the applications for permanent observer status with the Committee submitted by UNIDROIT (A/AC.105/C.2/2021/CRP.14), the Open Lunar Foundation (A/AC.105/C.2/2021/CRP.9) and the Square Kilometre Array Observatory (A/AC.105/C.2/2021/CRP.15), to be considered by the Committee at its sixty-fourth session, in 2021.

D. Summary of the work of the Working Group on the “Space2030” Agenda of the Committee on the Peaceful Uses of Outer Space

14. Pursuant to the decisions and actions by the Committee on the Peaceful Uses of Outer Space and its Legal Subcommittee taken by written procedure, by which the Committee extended the workplan of the Working Group on the “Space2030” Agenda for one year in order to enable the Working Group to consider a final consolidated draft of the “Space2030” agenda and implementation plan and submit it to the Committee at its sixty-fourth session, in 2021 (A/75/20, paras. 30–32), the Working Group held meetings during the sixtieth session of the Subcommittee, with interpretation services at its disposal. A summary of those meetings is contained in annex III to the present report.

E. Symposium

15. On 8 June, IISL and the European Centre for Space Law (ECSL) held a symposium on the theme “Space law for the global space economy”, co-chaired by Kai-Uwe Schrogl of IISL and Sergio Marchisio of ECSL. The symposium was opened with welcoming remarks by the Co-Chairs of the symposium and the Chair of the Subcommittee, after which the following presentations were made to the Subcommittee: “Cooperation and competition in space – the economic landscape”, by Tare Brisibe; “Space and international trade law”, by Lesley Jane Smith; “Economic aspects of national space legislation”, by Jairo Becerra; “Economic aspects of long-term sustainability of outer space activities and space traffic management”, by Olga Stelmakh-Drescher; and “Status of and way forward for the UNIDROIT Space Protocol”, by Bernhard Schmidt-Tedd and Ignacio Tirado. The presentations were made available on the website of the Office for Outer Space Affairs of the Secretariat.¹ Following the presentations, concluding remarks were made by the Co-Chairs of the symposium and the Chair of the Subcommittee.

16. The Subcommittee noted with appreciation that the symposium had made a valuable contribution to its work.

F. Adoption of the report of the Legal Subcommittee

17. At its 1013th meeting, on 11 June, the Subcommittee adopted the present report and concluded the work of its sixtieth session.

II. General exchange of views

18. Statements were made by representatives of the following States members of the Committee during the general exchange of views: Algeria, Australia, Austria, Azerbaijan, Belgium, Brazil, Canada, Chile, China, Colombia, Costa Rica, Cuba, Czechia, Egypt, Finland, France, Germany, Greece, India, Indonesia, Iran (Islamic Republic of), Israel, Italy, Japan, Kenya, Luxembourg, Mexico, Netherlands, New Zealand, Pakistan, Paraguay, Philippines, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, Ukraine, United Arab Emirates, United Kingdom,

¹ www.unoosa.org/oosa/en/ourwork/copuos/lsc/2021/symposium.html.

United States and Venezuela (Bolivarian Republic of). A statement was made by the representative of Costa Rica on behalf of the Group of 77 and China. The representative of the European Union, in its capacity as observer, made a statement on behalf of the European Union and its member States. The observers for ESA, For All Moonkind, the Moon Village Association, the National Space Society, the Open Lunar Foundation, SGAC, the Square Kilometre Array Observatory, UNIDROIT and UNISEC-Global also made statements.

19. The Subcommittee heard a presentation entitled “Moon Village Association contribution to peaceful and sustainable lunar activities”, by the observer for the Moon Village Association.

20. At the 995th meeting, on 31 May, the Chair made a statement in which she referred to the programme of work and the organizational matters pertaining to the current session of the Subcommittee. She highlighted the sixtieth anniversary of the first human space flight, by Yuri Gagarin, and the celebration on 12 April 2021 of the International Day of Human Space Flight, as declared by the General Assembly. The Chair noted that, given the increasing role of space activities for all nations, there would be an ongoing expectation to coordinate, within the United Nations, activities of a legislative nature to strengthen international cooperation in space activities. She also noted the importance of international cooperation to promote the enhanced use of space technologies for socioeconomic development and to address global challenges.

21. At the same meeting, the Subcommittee heard a statement prepared by the Director of the Office for Outer Space Affairs, in which she reviewed the role of the Office in discharging the responsibilities of the Secretary-General under the United Nations treaties on outer space, including the maintenance of the Register of Objects Launched into Outer Space. In particular, the Subcommittee was informed that, in 2020, the Office had registered, on behalf of the Secretary-General, 1,260 functional and 34 non-functional space objects and had received 132 notifications of re-entries and 19 notifications of a change in status of space objects. Since the beginning of 2021, the Office had received registration submissions for 1,024 functional and 26 non-functional objects. That was a substantial increase in the number of space objects registered in a single year: nearly 4 times the number registered in 2019 and almost 10 times the number registered in 2011.

22. The Subcommittee reaffirmed the importance of implementing, at the national level, the principles enshrined in the United Nations treaties governing space activities and called upon all States operating in outer space and States with operators conducting activities in outer space to develop and implement, to the extent that they had not already done so, national laws and regulations to govern those activities and operations.

23. Some delegations reiterated the view that the Committee and its subsidiary bodies continued to be the only forum within the United Nations for comprehensive discussions of matters related to the peaceful uses of outer space, including the Moon and other celestial bodies, and that there should be more interaction between the Scientific and Technical Subcommittee and the Legal Subcommittee in order to promote advances in space law and keep space law aligned with major scientific and technical advances. In the view of those delegations, coordinating the work of the Subcommittees and using the synergies between them would also promote understanding and acceptance and would further the implementation of existing United Nations legal instruments.

24. The view was expressed that the only way to ensure the sustainability of space activities was to develop space technology and space applications on the basis of the principle of fair and mutual benefit, as well as full respect for territorial integrity and the sovereignty of States. The delegation expressing that view was also of the view that the transfer of space technology through, inter alia, technical assistance and the provision of adequate resources remained important as a way to build national

capacity, as it contributed to the capabilities of, in particular, developing countries to enhance their activities in outer space and their efforts to become spacefaring nations.

25. Some delegations expressed the view that discussions held within the Legal Subcommittee should not lead to norms, guidelines, standards or other measures that would limit the access of nations with emerging space capabilities, in particular developing countries, to outer space. The delegations expressing that view were also of the view that the international legal framework should be developed in a manner that addressed the concerns of all States and that, with assistance from the Office for Outer Space Affairs, the Committee therefore needed to devote more effort to legal capacity-building and making the required expertise available to developing countries.

26. The view was expressed that, in the light of the growing number of objects launched into outer space and the anticipated growth in the volume of registrations, it was increasingly challenging for the Office for Outer Space Affairs to maintain the Register of Objects Launched into Outer Space. The allocation of adequate resources from within the United Nations system was therefore required in order to support the Office in that core function.

27. Some delegations reaffirmed their strict adherence to the principles governing the activities of States in the exploration and use of outer space, including those outlined in General Assembly resolutions 1884 (XVIII) and 1962 (XVIII), specifically: (a) universal and equal access to outer space for all countries without discrimination, regardless of their level of scientific, technical and economic development, as well as the equitable and rational use of outer space for the benefit and in the interests of all humankind; (b) the principle of non-appropriation of outer space, including the Moon and other celestial bodies, which could not be appropriated by any State, by claim of sovereignty, by means of use or occupation or by any other means; (c) the non-militarization of outer space, which was never to be used for the placement and/or deployment of weapons of any kind, and, as the province of humankind, its strict use for the improvement of living conditions and peace among peoples; and (d) international cooperation in the development of space activities, in particular those referred to in the Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries.

28. Some delegations expressed the view that it was important to prevent an arms race and the placement of weapons of any kind in outer space, and called upon all States, in particular those with major space capabilities, to contribute actively and commit to preserving outer space as a peaceful environment. The delegations expressing that view were also of the view that the sustainability of outer space activities, in both the short and the long term, required that the international community ensure that no weapons were ever placed or used there.

29. Some delegations expressed the view that, bearing in mind upcoming planetary missions, more complicated joint operations required a common framework among the Artemis programme partners. The Artemis Accords on the Principles for Cooperation in the Civil Exploration and Use of the Moon, Mars, Comets, and Asteroids for Peaceful Purposes, a non-legally binding set of principles, signalled an understanding between the participating space agencies of the signatory States to adhere to a set of principles to ensure safe and sustainable space activities in full compliance with the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies. The delegations expressing that view were also of the view that the Artemis Accords were not an end but rather a foundation to begin the discussion of a framework for deep-space missions.

30. The view was expressed that the Committee served as a useful platform to discuss in situ space resources and that it should not discuss issues that were within the remit of other bodies, such as spectrum and geostationary orbit slot allocation, which was a subject within the remit of ITU.

31. Some delegations expressed the view that unilateral approaches and other initiatives with limited participation were counterproductive and ran the risk of making outer space an area of international controversy, with the risk of fragmenting international space law. The delegations expressing that view were also of the view that the Artemis Accords were an attempt to develop rules for the exploration and exploitation of space resources that bypassed the United Nations and the Committee on the Peaceful Uses of Outer Space.

32. The view was expressed that there was a growing discrepancy between international and country-specific sources of space law. Such initiatives must not contravene what was permissible under general international law as exemplified in the principles laid down in the Outer Space Treaty, which was not subject to interpretation by only one State party or certain States parties.

33. Some delegations expressed the view that space technology was changing rapidly, space activities were becoming increasingly diversified, commercial space flight was flourishing and the governance of outer space activities had therefore entered a new phase. In that regard, it was important to recognize the Committee as a unique platform for coordinating international cooperation in the peaceful uses of outer space and the Subcommittee as the main body at the international level dealing with legal issues related to outer space activities, and as such a fundamental pillar for multilateralism.

34. The Subcommittee expressed its gratitude to the organizers of the following side events, held on the margins of its sixtieth session:

(a) “The role of the national space legislation in advancing the rule of law in outer space: efforts and challenges in the Asia-Pacific region”, organized by the delegation of Japan, the Office for Outer Space Affairs and the Asia-Pacific Regional Space Agency Forum, with the support of Australia, India, Indonesia, Malaysia, the Philippines, the Republic of Korea, Thailand and Viet Nam;

(b) “Artemis Accords: safe and sustainable space exploration”, organized by the signatories of the Artemis Accords;

(c) “The role of private actors in shaping national space law and policy: dynamics and stumbling blocks”, organized by the delegation of Austria and the ECSL National Point of Contact for Space Law of Austria;

(d) “Signing ceremony of the memorandum of understanding between the Philippine Space Agency and the Office for Outer Space Affairs”, organized by the delegation of the Philippines and the Office for Outer Space Affairs.

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

35. Pursuant to General Assembly resolution [75/92](#), the Subcommittee considered agenda item 4, entitled “Information on the activities of international intergovernmental and non-governmental organizations relating to space law”, as a regular item on its agenda.

36. The representative of Ukraine made a statement under agenda item 4. Statements were also made under the item by the observers for APSCO, IISL, Intersputnik and the Secure World Foundation. During the general exchange of views, statements relating to the item were made by observers for other international intergovernmental and non-governmental organizations.

37. For its consideration of the item, the Subcommittee had before it the following:

(a) Note by the Secretariat containing information on the activities of international intergovernmental and non-governmental organizations relating to space law received from Intersputnik and For All Moonkind ([A/AC.105/C.2/115](#));

(b) Note by the Secretariat containing information on the activities of international intergovernmental and non-governmental organizations relating to space law received from APSCO and IISL ([A/AC.105/C.2/116](#));

(c) Conference room paper containing information on the activities of international intergovernmental and non-governmental organizations relating to space law received from Intersputnik ([A/AC.105/C.2/2021/CRP.5](#)).

38. The Subcommittee heard the following presentations:

(a) “Effective and Adaptive Governance for a Lunar Ecosystem (EAGLE): a proposal for a lunar governance charter from the young generations at the United Nations”, by the observer for SGAC;

(b) “Cultural heritage in outer space: identifying international legal principles that define and promote its safeguarding within a space law framework”, by the observer for For All Moonkind.

39. The Subcommittee noted with appreciation the activities of international intergovernmental and non-governmental organizations relating to space law, and that those organizations had continued to hold conferences and symposiums, prepare publications and reports and hold training seminars for practitioners and students in order to broaden and advance knowledge of space law.

40. The Subcommittee also noted with appreciation the role of international intergovernmental and non-governmental organizations in the development, strengthening and furtherance of the understanding of international space law.

41. The Subcommittee welcomed the information provided by the observer for APSCO (see [A/AC.105/C.2/116](#)), including the information on the new development plan for APSCO activities for the period 2021–2030, approved by the APSCO Council in 2020. In that regard, the Subcommittee noted that a comprehensive vision for space law and policy for the new decade had been developed, referred to as the “Strategy for space law and policy of APSCO (2021–2030)”, which was focused on enhancing the role of APSCO in the field of space law and policy, with a view to providing more practical benefits to its member States and strengthening its contribution to the international community in the field of space law and policy. Furthermore, the Subcommittee noted the signing of an agreement between APSCO and the Office for Outer Space Affairs on capacity-building in national space legislation for APSCO member States, the organization’s engagement with ESA in the field of space law and policy under the joint protocol and its becoming a member of IISL as of 2021.

42. The Subcommittee welcomed the information provided by the observer for IISL (see [A/AC.105/C.2/116](#)), which had celebrated its sixtieth anniversary in 2020, including the information on the following: the sixty-third IISL Colloquium on the Law of Outer Space, held online as part of the seventy-first International Astronautical Congress in October 2020; the International Symposium on Maintaining the Rule of Law in Outer Space in an Age of Rapid Innovation, organized in partnership with the Chinese Society of Astronautics, the China Institute of Space Law and the Space Law Centre of the China National Space Administration on 20 September 2020; and the fifteenth Eilene M. Galloway Symposium on Critical Issues in Space Law, held online in December 2020. The Subcommittee noted that, in 2021, the IISL/ECSL space law symposium, on the topic “Space law for the global space economy”, had been held during the current session of the Subcommittee, and that the sixty-fourth IISL Colloquium would be held in conjunction with the seventy-second International Astronautical Congress in Dubai, United Arab Emirates, and would include the thirtieth Manfred Lachs Space Law Moot Court Competition.

43. The Subcommittee welcomed the information provided by the observer for Intersputnik (see [A/AC.105/C.2/115](#) and [A/AC.105/C.2/2021/CRP.5](#)), which was celebrating its fiftieth anniversary in 2021, including the information on the growing membership of the organization, which had grown from nine founding countries to its current worldwide membership of 26 member countries. The organization was aimed

at promoting cooperation in the field of space communications and, at the same time, served as a satellite operator, carrying out the commercial exploitation of its space systems. In addition, the Subcommittee noted the Programme for the Development of Business in the Field of Space Communications, launched by Intersputnik to support private space activities in its member States, including through interest-free financial support for local companies on the basis of tenders.

44. The Subcommittee welcomed the information provided by the observer for the Secure World Foundation, including on its events and conferences focused on the three core activities of the Foundation: ensuring the long-term sustainability of outer space activities; fostering the development of sound space policy and law; and enhancing the use of space technology and international cooperation to support human and environmental security on Earth. The Subcommittee noted that the second Summit for Space Sustainability had been held online in September 2020 and that the third Summit would be held online from 22 to 24 June 2021. The Subcommittee also noted that the *Handbook for New Actors in Space*, which had first been published in 2016, had been published in Spanish, in partnership with the Mexican Space Agency, and that the French and Chinese versions would be released in 2021, with electronic versions of all editions to be made available on the website of the Foundation (<http://swfound.org/handbook>).

45. The Subcommittee agreed that it was important to continue to exchange information on recent developments in the area of space law with international intergovernmental and non-governmental organizations, and that such organizations should once again be invited to report to the Subcommittee, at its sixty-first session, on their activities relating to space law.

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

46. Pursuant to General Assembly resolution 75/92, the Subcommittee considered agenda item 5, entitled “Status and application of the five United Nations treaties on outer space”, as a regular item on its agenda.

47. The representatives of Germany, Indonesia, Mexico, the Philippines, the Russian Federation and Venezuela (Bolivarian Republic of) made statements under agenda item 5. 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.

48. At its 995th meeting, on 31 May, the Subcommittee reconvened its Working Group on the Status and Application of the Five United Nations Treaties on Outer Space, with Bernhard Schmidt-Tedd (Germany) as Chair.

49. At its 1009th meeting, on 9 June, the Subcommittee endorsed the report of the Chair of the Working Group, contained in annex I to the present report.

50. The Subcommittee had before it the following:

(a) Working paper submitted by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space entitled “Revised draft guidance document under UNISPACE+50 thematic priority 2. ‘Legal regime of outer space and global governance: current and future perspectives’” (A/AC.105/C.2/L.313);

(b) Conference room paper on the status of international agreements relating to activities in outer space as at 1 January 2021 (A/AC.105/C.2/2021/CRP.10);

(c) Conference room paper containing responses to the set of questions provided by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space and to the questionnaire on the application of international law to small-satellite activities received from Chile, Finland, Germany,

Morocco, Nicaragua and the Philippines, and from the European Southern Observatory (A/AC.105/C.2/2021/CRP.23);

(d) Conference room paper containing responses to the questionnaire on the application of international law to small-satellite activities received from SGAC (A/AC.105/C.2/2021/CRP.6);

(e) Conference room paper containing responses to the questionnaire on the application of international law to small-satellite activities received from Chile, Morocco, Nicaragua and the Philippines (A/AC.105/C.2/2021/CRP.24).

51. The Subcommittee heard a presentation entitled “2020 report of the Space Mission Planning Advisory Group Ad Hoc Working Group on Legal Issues”, by the representatives of Austria.

52. The Subcommittee noted that, as at 1 January 2021, the status of the five United Nations treaties on outer space was as follows:

(a) The Outer Space Treaty had 111 States parties and had been signed by 23 additional States;

(b) The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space had 98 States parties and had been signed by 23 additional States; three international intergovernmental organizations had declared their acceptance of the rights and obligations established under the Agreement;

(c) The Convention on International Liability for Damage Caused by Space Objects had 98 States parties and had been signed by 19 additional States; four international intergovernmental organizations had declared their acceptance of the rights and obligations established under the Convention;

(d) The Convention on Registration of Objects Launched into Outer Space had 70 States parties and had been signed by three additional States; four international intergovernmental organizations had declared their acceptance of the rights and obligations established under the Convention;

(e) The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies had 18 States parties and had been signed by four additional States.

53. The Subcommittee commended the Secretariat for updating, on an annual basis, the status of international agreements relating to activities in outer space; the most recent update had been made available to the Subcommittee in conference room paper A/AC.105/C.2/2021/CRP.10.

54. Some delegations welcomed with appreciation the growing number of States parties to the five United Nations treaties on outer space and encouraged those States that had not yet become parties to the treaties to consider doing so.

55. Some delegations expressed the view that the five United Nations treaties on outer space constituted a reliable international legal foundation for space activities that had proved its effectiveness over more than six decades of space development.

56. Some delegations expressed the view that, as the five United Nations treaties on outer space formed the cornerstone of international space law, the Subcommittee had a mandate to review their contents in the light of scientific and technical developments and with a view to addressing the current challenges presented by the diversification of space actors and the increasing privatization and commercialization of space activities. The delegations expressing that view also expressed the view that, if the United Nations treaties on outer space were to remain relevant, the Subcommittee, as the main body for deliberating on and negotiating provisions of international space law, must consider the need to incorporate modifications and updates to the treaties, or even to make other treaties, and to promote even broader adherence to the legal regime governing outer space activities.

57. The view was expressed that the five United Nations treaties on outer space continued to form the universal legal basis for present and future space exploration and use and that the principles enshrined therein were equally valid for both countries with long-standing space programmes and emerging space actors. The delegation expressing that view also expressed the view that the five treaties contributed to the safe and peaceful conduct of space activities and were for the benefit and in the interests of all countries.

58. Some delegations expressed the view that, as a consequence of technological progress in the space field and the expansion of activities carried out in outer space, it was necessary to have clear regulations on important aspects such as space debris, the collision of space objects, especially those with nuclear power sources on board, with space debris, the equitable and rational use of the geostationary orbit and the use of outer space resources.

V. 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

59. Pursuant to General Assembly resolution [75/92](#), the Subcommittee considered, as a regular item on its agenda, agenda item 6, which read as follows:

“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.”

60. The representatives of Canada, Cuba, Indonesia, Iran (Islamic Republic of), Israel, Mexico, Pakistan, the Russian Federation, South Africa and Venezuela (Bolivarian Republic of) made statements under agenda item 6. 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 made by representatives of other member States.

61. At its 995th meeting, on 31 May, the Subcommittee reconvened its Working Group on the Definition and Delimitation of Outer Space, with André João Ryppl (Brazil) as Acting Chair in the absence of the Chair, José Monserrat Filho (Brazil). Pursuant to the agreement reached by the Subcommittee at its thirty-ninth session and endorsed by the Committee at its forty-third session, both held in 2000, and pursuant to General Assembly resolution [75/92](#), the Working Group was convened to consider only matters relating to the definition and delimitation of outer space.

62. The Working Group held three meetings. The Subcommittee, at its 1009th meeting, on 9 June, endorsed the report of the Acting Chair of the Working Group, contained in annex II to the present report.

63. For its consideration of the item, the Subcommittee had before it the following:

(a) Note by the Secretariat containing information received from States members of the Committee on national legislation and practice relating to the definition and delimitation of outer space ([A/AC.105/865/Add.23](#), [A/AC.105/865/Add.24](#), [A/AC.105/865/Add.25](#) and [A/AC.105/865/Add.26](#));

(b) Note by the Secretariat containing replies from States Members of the United Nations and permanent observers of the Committee to questions on suborbital

flights for scientific missions and/or for human transportation (A/AC.105/1039/Add.13, A/AC.105/1039/Add.14, A/AC.105/1039/Add.15, A/AC.105/1039/Add.16 and A/AC.105/1039/Add.17);

(c) Note by the Secretariat containing views of States members and permanent observers of the Committee on the definition and delimitation of outer space (A/AC.105/1112/Add.7, A/AC.105/1112/Add.8, A/AC.105/1112/Add.9 and A/AC.105/1112/Add.10);

(d) Note by the Secretariat containing information received from States Members of the United Nations and permanent observers of the Committee relating to any practical case known that would warrant the definition and delimitation of outer space (A/AC.105/1226 and A/AC.105/1226/Add.1);

(e) Addendum to the report of the Secretariat containing a historical summary on the consideration of the question on the definition and delimitation of outer space (A/AC.105/769/Add.1);

(f) Conference room paper on the issue of equitable access of developing Member States to the geostationary orbit, submitted by the Islamic Republic of Iran under agenda item 6 (b) of the Legal Subcommittee (A/AC.105/C.2/2021/CRP.21).

64. The view was expressed that the absence of a definition and delimitation of outer space might create legal uncertainty that could affect the application of outer space law and air law, and that the matters concerning State sovereignty over airspace and the scope of application of the legal regimes governing airspace and outer space needed to be clarified to reduce the possibility of disputes among States. The delegation expressing that view also expressed the view that the Committee should facilitate deliberations among member States on the issue of the definition and delimitation of outer space as a legal basis for States in exercising sovereignty over airspace and in conducting activities in outer space.

65. The view was expressed that the definition and delimitation of outer space was important for addressing the increased activities in outer space, including commercial activities.

66. The view was expressed that the definition and delimitation of outer space was closely linked to matters of safety and security.

67. The view was expressed that considerations in determining the delimitation of outer space at between 100 and 110 km above sea level were based on comprehensive aspects, including scientific, technical and physical characteristics, namely, atmospheric layers, the altitude capacity of aircraft, the perigee of spacecraft and the Karman line.

68. The view was expressed that there was a need to continue to analyse the topic of the definition and delimitation of outer space in order to make progress, avoid a lack of legal certainty and have legislation that would apply to acts relating to the law of outer space and air law, the exercise of sovereignty and the principle of freedom of exploration and use of outer space.

69. The view was expressed that suborbital flights, drones and other results of technological development should be among the subjects addressed in discussions on the definition and delimitation of outer space.

70. The view was expressed that the issues regarding the definition and delimitation of outer space had a direct impact not only on the work of the Subcommittee, but also on the work of the other space-related bodies, such as ICAO and ITU, and that discussions on the topic should be undertaken in close cooperation with ICAO. The delegation expressing that view also expressed support for the establishment of a coordination mechanism comprising the Office for Outer Space Affairs and the ICAO secretariat.

71. The view was expressed that proclaiming the definition and delimitation of outer space should no longer be delayed, as commercial space operators were ready to

undertake human space flights for commercial purposes and there had been an increase in scientific and technological advancements, including suborbital flights, related to space tourism, and that such flights had a tendency to operate in both airspace and outer space, thereby potentially creating ambiguity with regard to applicable law.

72. The view was expressed that the need for legal regulation in relation to the delimitation of outer space and airspace, in respect of which fundamentally different international legal regimes applied, was increasing measurably, including in the context of establishing the spatial limits of the territory over which States exercised sovereignty, ensuring the national security of States and creating conditions for the long-term sustainability of operations in outer space and the safety of aircraft operations.

73. The view was expressed that no “grey zone” between airspace and outer space, including for the benefit of suborbital flights, should be established.

74. The view was expressed that proposals that had been made and discussed in the past regarding the establishment of a boundary between outer space and airspace at an altitude not exceeding 110 km above sea level and based on the assumption that a space object of any State would retain the right to fly at altitudes below the agreed boundary in order to enter orbit and return to Earth were still of relevance to the ongoing work under the agenda item.

75. The view was expressed that, given the increasing use and commercialization of outer space, the question of the definition and delimitation of outer space continued to increase in significance and was a vital legal matter with practical implications for airspace and suborbital flights, as well as for activities in outer space.

76. The view was expressed that the development of an integrated regime of aerospace law, without prejudice to the national security and sovereignty of States, could help to enhance transparency and predictability and thus ensure the safety and sustainability of outer space and aerospace operations. The delegation expressing that view also expressed the view that an agreement establishing a clear definition and delimitation of outer space and airspace would allow the Subcommittee to concentrate on developing and improving legal instruments that applied to activities that were not restricted to a single realm of space and that would provide commercial operators with the needed legal certainty and assurances.

77. Some delegations expressed the view that the definition and delimitation of outer space was an important topic that should be kept on the agenda of the Legal Subcommittee and that more work should be done in that regard, as the legal regimes governing airspace and outer space were different.

78. Some delegations expressed the view that the geostationary orbit was a limited natural resource and was not to be subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.

79. Some delegations expressed the view that the geostationary orbit should be used rationally and should be made available to all States, irrespective of their current technical capacities. That would give States access to the geostationary orbit under equitable conditions, bearing in mind, in particular, the needs and interests of developing countries and the geographical position of certain countries, and taking into account the processes of ITU and relevant norms and decisions of the United Nations.

80. Some delegations expressed the view that the utilization of the geostationary orbit should be governed by applicable international law and in accordance with the principle of non-appropriation of outer space, in order to ensure guaranteed and equitable access to orbital positions in the geostationary orbit according to the needs of all countries, in particular developing countries and countries in certain geographical positions.

81. Some delegations expressed the view that the utilization by States of the geostationary orbit on a “first come, first served” basis was detrimental to developing countries’ access to space frequencies and satellite orbits.

82. Some delegations expressed the view that it was the prerogative of ITU to ensure the rational, equitable, efficient and economical use of the radio frequency spectrum and satellite orbit resources.

83. Some delegations expressed the view that it was necessary to adjust, in close coordination with ITU, the existing practices and technical regulations of ITU in order to develop a regime guaranteeing fairer and more equitable access to the geostationary orbit for emerging and aspiring spacefaring nations.

84. The view was expressed that the geostationary orbit should be viewed as a specific and unique area of outer space needing specific technical and legal governance and thus should be regulated by a sui generis regime. The delegation expressing that view was also of the view that, for such a sui generis regime, certain legal principles should be elaborated concerning the utilization of the geostationary orbit, such as equitable access, freedom of use, non-appropriation and exclusively peaceful uses, and that the development of those principles should lay the foundation for a comprehensive legal regime that would be implemented in the form of technical regulations within the framework of ITU. In that regard, such legal principles were complementary to and supported the work of ITU.

85. The view was expressed that there was close coordination between the Committee and ITU, owing to the participation of ITU as an observer in the work of the Committee and its Subcommittees.

86. Some delegations expressed the view that the Legal Subcommittee should officially invite the Radiocommunication Sector of ITU, specifically ITU-R Study Group 4 and ITU-R Working Party 4A, to cooperate on the studies related to the issue of the rational and equitable use of the geostationary orbit, and also to comment on the effectiveness and feasibility of the solutions proposed in that regard. The delegations expressing that view also expressed the view that a subtopic should be established under the corresponding agenda item of the Scientific and Technical Subcommittee, to be entitled “Review of the current utilization of the geostationary orbit from the perspective of equitable access in order to assess the capability of the current regime regulating its use to provide equitable access to it, and to propose possible solutions for observed deficiencies”. The same delegations were also of the view that the Legal Subcommittee should establish a working group under item 6 (b) of its agenda in order to better direct its efforts and activities, and that such a working group could be established as a joint initiative of both Subcommittees of the Committee, with a view to enabling them to address legal and technical aspects of the issue, as proposed in conference room paper A/AC.105/C.2/2021/CRP.21.

87. Some delegations expressed the view that it was necessary to keep the issue on the agenda of the Legal Subcommittee in order to develop adequate mechanisms to ensure the sustainability of and equitable access to the geostationary orbit.

88. The view was expressed that the discussion on the matter had been exhausted, as all concerns had been reflected in the paper entitled “Some aspects concerning the use of the geostationary orbit” (A/AC.105/738, annex III), adopted by the Legal Subcommittee at its thirty-ninth session, in 2000.

89. The view was expressed that a subtopic should be established under the current agenda item focusing on the analysis of equitable access to the use of the geostationary orbit and on the identification of deficiencies in the current regime.

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

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

91. The representatives of Brazil, Finland, India, Indonesia, Japan, Luxembourg, Mexico, the Philippines, Ukraine and Venezuela (Bolivarian Republic of) 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.

92. The Subcommittee had before it the following:

(a) Working paper submitted by Australia, India, Indonesia, Japan, Malaysia, the Philippines, the Republic of Korea, Thailand and Viet Nam containing a report on the status of the national space legislation of countries of the Asia-Pacific Regional Space Agency Forum National Space Legislation Initiative (A/AC.105/C.2/L.318);

(b) Conference room paper on the membership of the Asia-Pacific Regional Space Agency Forum National Space Legislation Initiative (A/AC.105/C.2/2021/CRP.7).

93. The Subcommittee heard the following presentations:

(a) “Portugal and space: legal and regulatory overview”, by the representative of Portugal;

(b) “APRSAF’s initiatives for enhancing space policy and law capacity in the Asia-Pacific region”, by the representative of Japan.

94. The Subcommittee reiterated that it was important to take into account the emerging trend of non-governmental entities engaging in outer space activities and the growing commercialization and democratization of space activities. To ensure the safety and security of those activities, States needed to ensure that they were in compliance with the United Nations treaties on outer space through their national legal frameworks.

95. The Subcommittee noted that the development and reformation of national space policies, and their implementation through national space regulations, were increasingly aimed at addressing issues raised by the rising number of non-governmental entities conducting space activities.

96. The Subcommittee noted various activities of member States to review, strengthen, develop or draft national space laws and policies, as well as reform or establish the governance of national space activities. In that connection, the Subcommittee also noted that those activities were aimed at improving the management and regulation of space activities, reorganizing national space agencies, increasing the incentives for governmental and non-governmental organizations in their space activities, increasing the involvement of academia in policy formulation, improving responses to challenges posed by the development of space activities, in particular those relating to the management of the space environment, ensuring robust and resilient communications infrastructure during emergencies, such as natural disasters, and improving the implementation of international obligations.

97. The view was expressed that national legislation had a bridging role between international law and domestic law, and between legal obligations and soft law. In particular, norms of a non-legally binding character were incorporated into national regulatory frameworks as requirements for authorization.

98. Some delegations expressed the view that the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee on the Peaceful Uses of Outer Space provided valuable and important recommendations to all States and that

voluntary implementation of the Guidelines through various national legal instruments and space policies was important.

99. The view was expressed that the five United Nations treaties on outer space and the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water referred to ways and means by which States should govern, register, authorize and, above all, regulate various outer space activities.

100. Some delegations expressed the view that it was important to share and learn from the practices contained in national space legislation. In that connection, the Subcommittee took note of the working paper on the status of the national space legislation of countries of the Asia-Pacific Regional Space Agency Forum National Space Legislation Initiative (A/AC.105/C.2/L.318) and expressed appreciation for the efforts by the study group.

101. The Subcommittee agreed that the discussions under the agenda 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.

102. The Subcommittee also agreed that it was important to continue to regularly exchange information on developments in the area of national space-related regulatory frameworks. In that regard, the Subcommittee encouraged member States to continue to submit to the Secretariat texts of their national space laws and regulations and to provide updates and inputs for the schematic overview of national regulatory frameworks for space activities.

VII. Capacity-building in space law

103. Pursuant to General Assembly resolution 75/92, the Subcommittee considered agenda item 8, entitled “Capacity-building in space law”, as a regular item on its agenda.

104. The representatives of Brazil, China, Colombia, France, Germany, Greece, India, Indonesia, Iran (Islamic Republic of), Japan, Luxembourg, Mexico, the Philippines, South Africa and Turkey made statements under agenda item 8. The representative of Costa Rica made a statement on behalf of the Group of 77 and China. A statement was also made under the item by the observer for APSCO. During the general exchange of views, further statements relating to the item were made by representatives of other member States.

105. The Subcommittee had before it the following:

(a) Report on the United Nations/Turkey/APSCO Conference on Space Law and Policy held in Istanbul, Turkey, from 23 to 26 September 2019 (A/AC.105/1222);

(b) Report on the United Nations/Economic Commission for Africa Conference on Space Law and Policy held online from 8 to 10 December 2020 (A/AC.105/1242);

(c) Conference room paper containing the directory of educational opportunities in space law (A/AC.105/C.2/2021/CRP.11);

(d) Conference room paper containing information submitted by Albania, Algeria, Jordan, Morocco, Pakistan, the Philippines, Spain, Tunisia and the United Nations Environment Programme on actions and initiatives to build capacity in space law (A/AC.105/C.2/2021/CRP.25).

106. The Subcommittee heard the following presentations:

(a) “Chilean collaboration program for new actors in the national space system”, by the representative of Chile;

(b) “Update on the Space Law for New Space Actors project of the Office for Outer Space Affairs”, by representatives of the Office for Outer Space Affairs.

107. The Subcommittee agreed that capacity-building, training and education in space law were of paramount importance to national, regional and international efforts to further develop the practical aspects of space science and technology, especially in developing countries, and to increasing knowledge of the legal framework within which space activities were carried out. That would encourage States to ratify the five United Nations treaties on outer space and support the implementation of those treaties and the establishment of national institutions and would make international space law more accessible and better known by all sectors of civil society. It was emphasized that the Subcommittee and the Office for Outer Space Affairs had an important role to play in that regard.

108. The Subcommittee noted with appreciation that a number of national, regional and international efforts to build capacity in space law were being undertaken by governmental and non-governmental entities. Those efforts included the following: encouraging universities to offer modules and seminars on space law; providing fellowships for graduate and postgraduate education in space law; providing financial and technical support for legal research; preparing dedicated studies, papers, textbooks and publications on space law; organizing workshops, seminars and other specialized activities to promote greater understanding of space law; supporting space law moot court competitions; supporting the participation of women, students and young professionals in regional and international activities relating to space law; providing for training and other opportunities to build experience, in particular through internships with space agencies; and supporting entities dedicated to the study of and research relating to space law in order to assist in the development of national space policies and legislative frameworks.

109. The Subcommittee noted that some member States had provided financial assistance to enable students to attend the Manfred Lachs Space Law Moot Court Competition, held each year during the International Astronautical Congress.

110. The Subcommittee noted with appreciation the United Nations/Turkey/APSCO Conference on Space Law and Policy held in Istanbul, Turkey, from 23 to 26 September 2019 and the United Nations/Economic Commission for Africa Conference on Space Law and Policy held online from 8 to 10 December 2020. It noted that those events had contributed to capacity-building in space law by connecting space law experts, practitioners and representatives from Governments, industry and civil society.

111. The Subcommittee welcomed the Space Law for New Space Actors project of the Office for Outer Space Affairs. The project was aimed at providing support to enhance capacity in drafting national space law and policy. In that context, the Chilean technical advisory mission held online from 13 to 16 October 2020 and the introductory technical advisory mission focusing on Africa and space, held online on 7 December 2020, were welcomed.

112. Some delegations expressed the view that the project represented an important contribution of the Office in terms of capacity-building among emerging spacefaring nations and would ultimately help to promote a more stable, sustainable and safe space environment.

113. Some delegations expressed the view that the Office for Outer Space Affairs should conduct targeted capacity-building, education and training in space law and policy, building upon the programme of the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER), with the objective of establishing a capacity-building platform.

114. Some delegations expressed the view that the development of the “Space2030” agenda might serve as an opportunity to consider special programmes on capacity-building and knowledge management for developing countries.

115. Some delegations expressed the view that international cooperation was important in that regard so that all actors, in particular developing countries, could benefit from sufficient training and capacity-building opportunities.

116. The Subcommittee noted that the APSCO/ESA/China Institute of Space Law workshop on regional cooperation schemes on space law and policy would be held from 6 to 8 September 2021 in Hainan Province, China.

117. The Subcommittee noted that the Office for Outer Space Affairs had updated its directory of educational opportunities in space law (A/AC.105/C.2/2021/CRP.11), including information on available fellowships and scholarships, and agreed that the Office should continue to update the directory. In that connection, the Subcommittee invited member States to encourage contributions at the national level for the future updating of the directory.

118. The Subcommittee recommended that States members and permanent observers of the Committee inform the Subcommittee, at its sixty-first session, of any action taken or planned at the national, regional or international levels to build capacity in space law.

VIII. Future role and method of work of the Committee

119. In accordance with General Assembly resolution 75/92, the Subcommittee considered agenda item 9, entitled “Future role and method of work of the Committee”.

120. The representatives of Austria, Canada, China, France, Indonesia, Israel, Mexico, the Russian Federation and the United States made statements under agenda item 9. During the general exchange of views, statements relating to the item were made by representatives of other member States.

121. The Subcommittee had before it a note by the Secretariat on the governance and method of work of the Committee and its subsidiary bodies (A/AC.105/C.1/L.384).

122. The Subcommittee recalled that, at its sixty-second session, the Committee had decided to introduce a regular item entitled “Future role and method of work of the Committee” on the agendas of both Subcommittees to allow for discussion of cross-cutting issues (A/74/20, para. 321 (h)).

123. The Subcommittee welcomed document A/AC.105/C.1/L.384 as an important basis for further consideration under the multi-year workplan on the governance and method of work of the Committee and its subsidiary bodies.

124. Some delegations expressed the view that the principle of consensus applied by the Committee allowed it to make universally applicable decisions aimed at addressing a broad range of emerging issues in the area of international cooperation in the peaceful uses of outer space.

125. Some delegations expressed the view that the mandates of working groups should be reviewed every five years.

126. The view was expressed that the number of working groups should remain manageable in order to ensure participation by all States, especially those with smaller delegations, and in view of the limited resources of the Secretariat.

127. The view was expressed that technical presentations should be held during lunchtime for no more than one hour; that, in the last hour of interpretation time each day, time should be allocated to presentations requiring interpretation; and that the duration of technical presentations should be limited to 10 minutes.

128. The view was expressed that the traditional half-day symposium should be extended to one full day, or be supplemented with an additional symposium, panel discussion or session of presentations on a specific agenda item.

129. Some delegations expressed the view that increased coordination, interaction and synergies between the Subcommittees on cross-cutting issues would increase the efficiency of their work.

130. The view was expressed that cooperation between the Subcommittees could be improved if they reported to each other regularly.

131. The view was expressed that the intergovernmental status of the Committee should be preserved and that any interference by non-governmental entities in the work of the Committee should be avoided.

132. Some delegations expressed the view that reporting by various non-governmental entities, including from industry, the private sector and the scientific and academic communities, to the Committee would enhance its overall work.

133. The view was expressed that attempts to transfer the discussion of important topics on the space agenda to parallel platforms with limited membership would undermine the international authority of the Committee.

134. The view was expressed that the work of United Nations entities with regard to space-related issues should be closely coordinated with the work of the Committee.

135. The view was expressed that the adoption by the General Assembly of resolutions that addressed issues under the purview of the Committee, such as the long-term sustainability of outer space activities and space debris, without any involvement of the Committee, might erode the responsibilities of the Committee and distort the division of responsibilities and the coordination and cooperation among different entities within the United Nations system.

136. The view was expressed that the Committee was not the appropriate forum to discuss questions specifically related to the prevention of an arms race in outer space or to the use of outer space for military and other national security purposes. The delegation expressing that view was also of the view that issues associated with both the prevention of an arms race in outer space and the use of outer space for national security activities were more appropriately discussed in forums with mandates specifically focused on those issues, such as the Conference on Disarmament, the Disarmament Commission and the Disarmament and International Security Committee (First Committee) of the General Assembly.

137. The view was expressed that the principles contained in the Outer Space Treaty, as well as other applicable international obligations, guided the full range of governmental and private sector space activities.

138. The view was expressed that consideration of the legal aspects of the practical implementation of the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee should be included in the agenda of the Legal Subcommittee to ensure the involvement of legal experts of States.

139. The view was expressed that the Committee on the Peaceful Uses of Outer Space should focus its work on the development of complex solutions for ensuring the long-term sustainability of outer space activities, including in the areas of space debris mitigation and remediation, space traffic management, small satellites, and the prevention and resolution of conflicts arising from outer space activities.

140. Some delegations expressed the view that the hybrid format of the current session, which had included live webcasting of plenary sessions with interpretation into the six official languages of the United Nations, had allowed greater participation of countries in the work of the Subcommittees, and that such a hybrid format could be maintained for the future sessions of the Committee and its Subcommittees.

141. The view was expressed that a procedure to follow in cases of force majeure should be established to ensure the continuity of the work of the Committee in crisis situations, such as the coronavirus disease (COVID-19) pandemic.

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

142. Pursuant to General Assembly resolution [75/92](#), the Legal 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.

143. 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.

144. 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).

145. 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.

146. 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 on the Peaceful Uses of Outer Space had been an important step in providing all spacefaring nations with guidance on ways to mitigate the problem.

147. 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, 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).

148. 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.

149. The Subcommittee noted that the Inter-Agency Space Debris Coordination Committee, whose initial work had served as the basis for the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space, had updated its own Space Debris Mitigation Guidelines in 2020 to reflect the evolving understanding of the space debris situation.

150. 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.

151. 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.

152. 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.

153. 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.

154. 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.

155. 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.

156. 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.

157. The view was expressed that spacefaring nations must minimize the risks to people and property on Earth caused by re-entries of space objects and maximize transparency regarding those operations, and that failure by any State to minimize those foreseeable risks and maximize transparency exposed the entire international community to unnecessary risk.

158. The view was expressed that the active removal of space debris already present in outer space would be required to ensure the long-term sustainability of the outer space environment.

159. 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.

160. 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.

161. 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.

162. 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.

163. 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.

164. The view was expressed that international guidelines and standards in the area of space debris mitigation and remediation were included in documents such as 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.

165. 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.

166. 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 by 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.

167. 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.

168. The view was expressed that, in line with the guideline 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.

169. 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.

170. 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.

171. 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.

172. 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.

173. 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.

174. The Subcommittee agreed that States members of the Committee and international intergovernmental organizations having permanent observer status with the Committee should be invited to contribute further 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

175. Pursuant to General Assembly resolution [75/92](#), 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.

176. The representatives of Colombia, Iran (Islamic Republic of), Israel, Japan, Mexico and Venezuela (Bolivarian Republic of) made statements under agenda item 11. A statement was made by the representative of Costa Rica on behalf of the Group of 77 and China. A statement was also made by the Chair of the Working Group on the Long-term Sustainability of Outer Space Activities of the Scientific and Technical Subcommittee. During the general exchange of views, statements relating to the item were made by representatives of other member States.

177. The Legal Subcommittee heard a presentation entitled “SGAC report on the LTS Guidelines national implementation”, by the observer for SGAC.

178. The Subcommittee took note of the compendium on mechanisms adopted by States and international organizations in relation to non-legally binding United Nations instruments on outer space, which was available on a dedicated page on the website of the Office for Outer Space Affairs, encouraged States members of the Committee and international intergovernmental organizations having permanent observer status with the Committee to continue to share information on their practices related to non-legally binding United Nations instruments on outer space, and in that regard noted that the Office had been requested to assist them in related capacity-building efforts.

179. The Subcommittee noted that non-legally binding United Nations instruments related to outer space activities complemented and supported the existing United Nations treaties on outer space.

180. The Subcommittee noted that some States were implementing non-legally binding United Nations instruments on outer space through their national legislation.

181. The view was expressed that all non-legally binding United Nations instruments on outer space were welcome as flexible and effective mechanisms to respond to the challenges of the exploration and use of outer space.

182. The view was also expressed that the Committee and its subsidiary bodies played an important role in the consolidation of best practices through non-legally binding United Nations instruments on outer space.

183. The view was expressed that the ability of States to implement non-legally binding instruments, such as guidelines, was subject to a State’s level of development and that knowledge transfer and capacity-building were of the utmost importance in that regard.

184. The view was also expressed that there should not be any regulations promoting the commercialization of outer space, which was the common heritage of all humankind and belonged to all States on equal terms.

185. The view was expressed that the current legal regime on outer space did not adequately guarantee the prevention of an arms race in outer space and that adequate and effective measures that would make it possible to prevent conflict in outer space should be developed and adopted.

186. The view was also expressed that it was necessary to gain a better understanding of non-legally binding instruments and related practices in order to address contemporary challenges in the peaceful exploration and use of outer space.

187. Some delegations, in connection with the agenda item, recalled General Assembly resolutions 1721 A and B (XVI), on international cooperation in the peaceful uses of outer space, and Assembly resolution 1962 (XVIII), on the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, and encouraged States launching objects into orbit to furnish information on those objects to the Secretary-General and to consider establishing a national registry for the purpose of exchanging information on space objects, as appropriate.

188. Some delegations recalled the Principles Relating to Remote Sensing of the Earth from Outer Space, in connection with the agenda item, and highlighted the importance of promoting the availability of remote sensing data on a non-discriminatory basis, as such data were essential for sustainable development and promoted transparency and confidence among States.

189. Some delegations recalled the Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries, in connection with the agenda item, and expressed the view that it was an important instrument for the further promotion of international cooperation with a view to maximizing the benefits of space applications for all States, highlighting that, in the Declaration, all spacefaring nations were called upon to contribute to promoting and fostering international cooperation on an equitable basis.

190. The Subcommittee was informed by the Chair of the Working Group on the Long-term Sustainability of Outer Space Activities of recent developments relating to the Working Group. The Chair recalled the decision by the Committee on the framework by which the Working Group would be guided (A/74/20, para. 167) and welcomed forthcoming multilateral cooperation on the Working Group's terms of reference, methods of work and workplan.

191. The view was expressed that the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee were a valuable source of guidance on how to conduct space activities, that the non-legally binding nature of the Guidelines allowed for flexibility and enabled potential adjustments, and that upcoming discussions within the Working Group on the practical implementation of the Guidelines should take into consideration the need for flexibility in the constantly changing circumstances of the new space era.

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

192. Pursuant to General Assembly resolution 75/92, the Subcommittee considered agenda item 12, entitled "General exchange of views on the legal aspects of space traffic management" as a single issue/item for discussion.

193. The representatives of Austria, Brazil, China, France, Germany, Indonesia, Japan, Mexico, the Netherlands, the Russian Federation, South Africa, Spain, Ukraine and the United States made statements under agenda item 12. During the general

exchange of views, statements relating to the item were made by representatives of other member States.

194. The Subcommittee noted that the outer space environment was becoming increasingly complex and congested, owing to the growing number of objects in outer space, the diversification of actors in outer space and the increase in space activities, and that space traffic management could be considered in that context.

195. The Subcommittee was informed of a number of measures that had been, were currently being, or were envisioned to be undertaken at the national and international levels to improve the safety and sustainability of space flight. The measures included, inter alia, the provision of spacecraft collision avoidance, re-entry and fragmentation services through the development and operation of space surveillance and tracking capabilities; the issuance of conjunction warnings as a public service; the registration of space objects; pre-launch notifications; the reporting of annual launch plans; space debris removal techniques; international coordination efforts through ITU to manage radio frequencies and geostationary orbits; the transfer of responsibilities for space flight safety support between government departments to enable access to a broader range of data and analyses through an open-architecture data repository; a policy on space traffic management rule-making; a report on requirements for on-orbit servicing; an international symposium on ensuring the stable use of outer space that focused on space traffic management and on-orbit servicing; and a space traffic management conference at the European level.

196. The view was expressed that space traffic management, which entailed developing and implementing a set of technical and regulatory provisions to promote safe access to outer space, the safety of operations in outer space and the safe return from outer space, free from physical or radio frequency interference, was of the utmost importance for maintaining outer space as a safe, stable and sustainable environment.

197. The view was expressed that the issue of space traffic management was closely connected with the notion of the sustainable use of outer space, and that without the development of an effective system of space traffic management, through regulation and monitoring, the use of outer space by future generations could not be ensured.

198. The view was expressed that, in order to safeguard the unimpeded access to outer space and its free use by everyone, there was a need for an international system of space traffic management, understood as a coherent set of technical and regulatory provisions ensuring safe access to outer space, the safety of operations in outer space and the safe return to Earth from outer space. The delegation expressing that view was also of the view that having an efficient and functional space traffic management system was relevant for everyone because it would contribute to the protection of operational space systems and ensure the viability of private and public investments in space.

199. The view was expressed that, by implementing a space traffic management system, the international community could make efficient use of the different orbital regions as limited natural resources, promote international standards for the safety of space activities, provide for efficient communication channels and collision avoidance procedures, limit the amount of space debris and enhance the long-term, sustainable use of outer space.

200. The view was expressed that, in developing an international space traffic management framework, the following elements should be taken into account: increased requirements for information-sharing, in particular through space situational awareness programmes; incentives for international cooperation and capacity-building; common operating rules and safety standards; notification mechanisms, in particular for launches, orbital manoeuvres and re-entries; right-of-way rules; specific safety-related provisions aimed at increasing transparency and trust between States; provisions for the mitigation and disposal of space debris; and environmental regulations.

201. Some delegations expressed the view that regulatory developments must go hand in hand with technical, operational and coordination developments in outer space activities, and that only parallel and complete development in all those areas would allow space congestion and space traffic management to be addressed optimally and effectively.

202. The view was expressed that the initial challenge associated with space traffic management was in establishing a clear and uniform definition of the term, and that it was essential to agree on a definition and have a common understanding of what constituted space traffic management before being able to consider the possible establishment of a space traffic management mechanism.

203. The view was expressed that, in terms of the rules applicable to space traffic management, at the current stage, a pragmatic approach should be pursued, based on the timely adoption of guidelines, standards and transparency and confidence-building measures, and that the development of such guidelines, standards and measures must be done gradually and incrementally at the international level and exclude, for the time being, the development of any binding rules.

204. The view was expressed that, given the serious asymmetry of information and capabilities in relation to space traffic management, the first step should be to comprehensively collect and analyse information on the practices of States and the international rules involved, and that, in particular, countries with well-developed practices should strengthen transparency and information-sharing, rather than rushing to carry out theoretical, premature discussions on complex and far-reaching issues.

205. The view was expressed that, in order to show respect for the equal rights of developing countries and emerging spacefaring countries, workshops and other forms of capacity-building should be utilized to promote understanding of space traffic management so that all States members of the Committee could participate in discussions on the topic more extensively and substantively on a more equal basis.

206. The view was expressed that, as many complicated and sensitive policy, technical and legal issues were involved in space traffic management, dialogue and communication were needed to promote friendly cooperation and mutual trust among States, and that discussions on space traffic regimes should be carried out in the spirit of multilateralism.

207. The view was expressed that, given that the malfunctioning of space infrastructure could result in significant societal and economic damage, the topic of space traffic management could be, and in some jurisdictions already was, included in legal frameworks on critical infrastructure.

208. The view was expressed that, as objects operating in outer space must first transit through airspace, there was ongoing concern regarding the handling of space traffic in airspace, in particular because there was no agreed definition or delimitation of outer space.

209. The view was expressed that the rules on responsibility related to space traffic management were not clear and that that had resulted in a worrying absence of rules on priority.

210. The view was expressed that the impact of large satellite constellations on radioastronomy and optical astronomy was a topic of relevance to space traffic management that required the attention of the Legal Subcommittee, with a view to providing guidance on legal models that would generate mutual benefits. In that connection, the delegation expressing that view recalled the recommendations to keep dark and quiet skies for science and society that had been submitted to the Scientific and Technical Subcommittee at its fifty-eighth session (see A/AC.105/C.1/2021/CRP.17), in particular the recommendations regarding non-geostationary orbit satellites.

211. The view was expressed that, in acknowledgment of both its importance for dealing with the global space economy and its cross-cutting nature, delegations

should reflect on whether the consideration of space traffic management by both the Scientific and Technical Subcommittee and the Legal Subcommittee would enable a more comprehensive approach to addressing the topic.

212. The view was expressed that the first building blocks of international space traffic management had been agreed in the context of the work of the Scientific and Technical Subcommittee on the long-term sustainability of outer space activities.

213. The view was expressed that the implementation of the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee should be supported in the context of discussions on space traffic management, accompanied by an emphasis on efforts to share information and coordinate among space actors internationally to increase space situational awareness on a global scale.

214. The view was expressed that the Legal Subcommittee, together with the Scientific and Technical Subcommittee, should consider approaches that would lead to the creation of an international system or mechanism to harmonize practices and approaches relating to space situational awareness and space traffic management, as the lack of internationally agreed standards and approaches was a matter of serious concern, not only because of the possibility of collisions or interference between space objects, but also because, in the absence of information, the interpretation of incidents would be left to perception, and therefore the creation of an international mechanism could play an important role in promoting transparency and building confidence among space actors.

215. The view was expressed that, along with an international legal framework for space traffic management, a United Nations-based information-sharing mechanism comprising a database on space objects and events should be established.

216. The view was expressed that, if there was a serious desire to address the existing problems within the framework of space traffic management, the proposal to create a United Nations information platform (see A/AC.105/2016/CRP.13) should be revisited, as the information platform had been proposed as a mechanism for integrating the efforts of States, international intergovernmental organizations, spacecraft operators and specialized national and international non-governmental organizations in collecting, systematizing and providing for the general use and analysis of information on objects and events in outer space.

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

217. Pursuant to General Assembly resolution [75/92](#), the Legal Subcommittee considered agenda item 13, entitled “General exchange of views on the application of international law to small-satellite activities”, as a single issue/item for discussion on its agenda.

218. The representatives of India, Indonesia, Iran (Islamic Republic of), Japan, Mexico and the Russian Federation made statements under agenda item 13. The representative of Costa Rica also made a statement on behalf of the Group of 77 and China. During the general exchange of views, statements relating to the item were made by the representatives of other member States.

219. The Subcommittee agreed that the continuation of its work under the item would provide valuable opportunities to address a number of topical issues relating to international and national policy and regulatory measures regarding the use of small satellites by various actors.

220. The Subcommittee took note with appreciation of the questionnaire on the application of international law to small-satellite activities ([A/AC.105/1203](#), annex I, appendix II), considered by the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space. The Subcommittee noted that both the questionnaire and the replies received from member States and a permanent observer,

which were contained in two conference room papers (A/AC.105/C.2/2021/CRP.6 and A/AC.105/C.2/2021/CRP.24), enhanced the discussion of the legal issues raised with regard to small-satellite activities at the international level.

221. The Subcommittee reaffirmed that small-satellite activities had provided opportunities and benefits for accessing space, in particular to developing States and related governmental and non-governmental organizations, including universities, educational and research institutes, and private industries with limited resources available to join in the exploration and peaceful uses of outer space and become developers of space technology.

222. The Subcommittee recognized that technological progress had made the development, launch and operation of small satellites increasingly affordable and that such satellites could provide substantial assistance in various areas, including education, telecommunications, Earth observation and disaster mitigation.

223. The Subcommittee noted with appreciation the programmes of the Office for Outer Space Affairs, including the United Nations/Japan Cooperation Programme on CubeSat Deployment from the International Space Station Japanese Experiment Module (Kibo), known as “KiboCUBE”, which provided opportunities to educational and research institutions in developing countries that were States members of the Committee, as well as the “KiboCUBE Academy”, a series of webinars providing technical insights to aid KiboCUBE programme applicants in developing better project plans.

224. The Subcommittee was informed about existing and emerging practices and regulatory frameworks applicable to the development and use of small satellites, and about the programmes of States and international organizations in that field.

225. The Subcommittee noted that the activities of small satellites, regardless of their size, should be carried out within existing international frameworks, including the United Nations treaties and principles on outer space, the ITU Constitution and Convention and the ITU Radio Regulations, and certain non-binding instruments, including the Space Debris Mitigation Guidelines of the Committee, in order to guarantee the safety and sustainability of outer space activities.

226. Some delegations expressed the view that the evolving nature of space technologies and the growing number of space actors required clarity in the application of existing space law and administrative procedures.

227. Some delegations expressed the view that the elaboration of provisions on small satellites, including the possibility of an ad hoc legal regime, could be considered. Such provisions could address the operations of small satellites, including the consideration of ways and means of ensuring the rational and equitable use of the low Earth orbit and frequency spectrum.

228. The view was expressed that small-satellite systems were a source of potentially harmful interference in terms of the implementation of space activities. The delegation expressing that view was also of the view that international space law was fully applicable with regard to such space objects.

229. Some delegations expressed the view that an ad hoc legal regime or any other mechanism that could impose limitations on the design, building, launch or use of space objects should not be created.

230. Some delegations expressed the view that small satellites usually lacked the specific capability of post-mission disposal and relied on natural perturbation-induced decay to remove themselves from their operational orbits. Consequently, they posed a significant short-term debris hazard, in particular in the near-Earth orbit. Those delegations were of the view that, considering the uniqueness of small satellites, they should be given further consideration in the Subcommittee, in particular with regard to debris mitigation.

231. Some delegations expressed the view that small satellites posed potential risks of physical accidents and interference owing to their lack of a propulsion system for orbital manoeuvres.

232. The view was expressed that, under the agenda item, further consideration should be given to how to register satellites in megaconstellations and small satellites.

XIII. General exchange of views on potential legal models for activities in exploration, exploitation and utilization of space resources

233. Pursuant to General Assembly resolution [75/92](#), the Subcommittee considered agenda item 14, entitled “General exchange of views on potential legal models for activities in exploration, exploitation and utilization of space resources”, as a single issue/item for discussion.

234. The representatives of Australia, Belgium, Brazil, Canada, China, Finland, France, Germany, Greece, Indonesia, Iran (Islamic Republic of), Israel, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, the Russian Federation, Ukraine, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 14. The representative of Costa Rica also made a statement 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.

235. The Subcommittee had before it the following:

(a) Working paper submitted by Luxembourg and the Netherlands entitled “Building blocks for the development of an international framework on space resource activities” ([A/AC.105/C.2/L.315](#));

(b) Proposal submitted by Austria, Belgium, Czechia, Finland, Germany, Greece, Poland, Portugal, Romania, Slovakia and Spain for the establishment of a working group on potential legal models for activities in the exploration, exploitation and utilization of space resources ([A/AC.105/C.2/2021/CRP.22](#));

(c) Proposal submitted by China for the establishment of a working group on potential legal models for activities in the exploration, exploitation and utilization of space resources ([A/AC.105/C.2/2021/CRP.18](#));

(d) Proposal submitted by the Russian Federation for the establishment of a working group on potential legal models for activities in the exploration, exploitation and utilization of space resources ([A/AC.105/C.2/2021/CRP.26](#));

(e) Note by the Secretariat containing responses to the set of questions provided by the Moderator and Vice-Moderator of the scheduled informal consultations on space resources ([A/AC.105/C.2/2021/CRP.8](#));

(f) Paper submitted by the Moon Village Association containing the report of the Moon Village Association on the Global Expert Group on Sustainable Lunar Activities ([A/AC.105/C.2/2021/CRP.12](#));

(g) Paper submitted by SGAC on the Effective and Adaptive Governance for a Lunar Ecosystem Lunar Governance Report ([A/AC.105/C.2/2021/CRP.13](#)).

236. The Subcommittee welcomed the various proposals of member States to establish a working group under the current agenda item to develop a framework for activities in the exploration, exploitation and utilization of space resources.

237. Some delegations expressed the view that, because the Subcommittee was the forum in which States had created the existing international legal framework consisting of the five United Nations treaties on outer space, it was the most appropriate venue for developing a framework for activities in the exploration, exploitation and utilization of outer space. The delegations expressing that view also

expressed the view that activities related to space resources must be conducted in accordance with those treaties and that the legal framework for such activities must be in accordance with international law.

238. Some delegations expressed the view that scientific and technical aspects related to the exploration, exploitation and utilization of space resources should be taken into account when developing an international legal framework governing such activities. The delegations expressing that view also expressed the view that greater coordination between the Legal Subcommittee and the Scientific and Technical Subcommittee with regard to space resource activities could facilitate the development of a practical legal framework that was responsive to the operational needs of space actors. Those delegations were also of the view that input on the scientific and technical aspects of space resource activities and related exploration activities might be obtained through appropriate engagement with external stakeholders, such as civil society, non-governmental organizations, academia and the private sector.

239. Some delegations expressed the view that, while a potential legal framework for activities in the exploration, exploitation and utilization of space resources might be inspired by various sources, including States members of the Committee, permanent observers to the Committee, non-governmental organizations, industry and the private sector, the framework must be developed in accordance with the rules of procedure, methods of work and established practice of the Committee. The delegations expressing that view also expressed the view that any discussion of a future legal framework on exploration, exploitation and utilization should be led by the States members of the Committee as a multilateral intergovernmental process and remain consistent with existing international space law, in particular the basic principles thereof.

240. Some delegations expressed the view that the exploration, exploitation and utilization of space resources, including commercial utilization, was consistent with the United Nations treaties on outer space. The delegations expressing that view also expressed the view that the Outer Space Treaty set the standards under which space resource utilization activities could be carried out and that such activities remained permissible in accordance with the principle allowing for the free exploration and use of outer space. Those delegations were also of the view that space resource utilization activities were not precluded by the equally important principle set out in the Outer Space Treaty that neither outer space nor celestial bodies are subject to national appropriation.

241. The view was expressed that any international legal regime governing the exploration, exploitation and utilization of space resources should recognize the efforts of States contributing to and undertaking those activities, while also ensuring that all countries, irrespective of their degree of economic or scientific development, could benefit in ways that did not have a negative impact on investment incentives for public and private engagement and participation in such activities.

242. Some delegations expressed the view that the exploration, exploitation and utilization of space resources should be based on principles of equitable access and collaboration in order to include all countries, both developing countries and developed, spacefaring nations.

243. The view was expressed that an incremental approach should be taken during the discussions on the development of rules concerning the exploration, exploitation and utilization of space resources. The delegation expressing that view also expressed the view that such discussions should be based on a clarification of the applicability of existing rules, including the principles established by the Outer Space Treaty, such as non-appropriation of outer space, including the Moon and other celestial bodies, national responsibility for activities by non-governmental entities, freedom of scientific investigation and the promotion of international cooperation in such investigation.

244. Some delegations expressed the view that “space resources”, as an object of legal regulation, did not exist separately from “outer space”; rather, they were an integral part of it.

245. The view was expressed that an international legal regime for space resource activities was needed in order to ensure that those activities were developed in an orderly and safe manner, that space resources were managed rationally and sustainably and that the expansion of opportunities in the use of space resources was promoted by providing legal certainty and predictability.

246. The view was expressed that the most articulate mandate for the regulation on space resource activities was not found in article I of the Outer Space Treaty, but rather in the Moon Agreement. The delegation expressing that view also expressed the view that the creation of an international regime to govern the exploitation of space resources should contain appropriate adaptive governance procedures for addressing new and changing technological and scientific circumstances.

247. The view was expressed that the further development of norms consistent with the Moon Agreement could serve as a basis for rational and sustainable management of the natural resources of the Moon and other celestial bodies, with emphasis on the applicability of article 6, on the freedom of scientific exploration, and article 11, regarding the establishment of an international regime to govern the exploitation of the natural resources of the Moon, as such exploitation was about to become feasible.

248. Some delegations expressed the view that discussions on a legal framework governing space resource activities should take into account relevant work already undertaken, such as the building blocks for the development of an international framework on space resource activities contained in the working paper submitted by Luxembourg and the Netherlands ([A/AC.105/C.2/L.315](#)).

249. Some delegations expressed the view that the legal governance of activities in the exploration, exploitation and utilization of space resources must also take into account environmental aspects, specifically avoiding harmful contamination and adverse changes to the environment on the Moon and other celestial bodies, as well as avoiding adverse changes in the environment of the Earth from the introduction of extraterrestrial matter. The delegations expressing that view also expressed the view that, in the creation of a potential working group, scientific and technical assistance and information coordination should address the relationship between the long-term sustainability of outer space activities with respect to space resource utilization and international space law.

250. The view was expressed that the exploration, exploitation and utilization of space resources should promote the long-term sustainability of future space exploration and be encouraged by all stakeholders, including private actors, while being carried out within the existing principles of international space law. The delegation expressing that view also expressed the view that the discussions on developing a framework for space resources should reflect the economic reality, current technology and the needs of industry and national space exploration programmes.

251. The Subcommittee noted that, at its fifty-eighth session, in 2019, it had agreed that, under the item on its agenda entitled “General exchange of views on potential legal models for activities in exploration, exploitation and utilization of space resources”, scheduled informal consultations were to be held at the fifty-ninth session of the Subcommittee, in 2020 ([A/AC.105/1203](#), para. 278).

252. The Subcommittee also noted that the Committee, at its sixty-second session, in 2019, had endorsed the nomination by Belgium and Greece of Andrzej Misztal (Poland) as Moderator and Steven Freeland (Australia) as Vice-Moderator to lead those scheduled informal consultations ([A/74/20](#), para. 258).

253. The Subcommittee further noted that, owing to the COVID-19 pandemic, its fifty-ninth session had been cancelled, and that, in accordance with the decisions and

actions by the Committee on the Peaceful Uses of Outer Space and its Legal Subcommittee taken by written procedure (A/75/20, paras. 6–7 and 26), those scheduled informal consultations had been held during the plenary meetings of the present session of the Subcommittee.

254. At the present session of the Subcommittee, the Moderator and Vice-Moderator held eight rounds of scheduled informal consultations during the plenary meetings of the Subcommittee, with interpretation services, with the aim of reaching consensus on the establishment of a working group under agenda item 14.

255. At its 1010th meeting, on 9 June, the Subcommittee decided, on the basis of the reports provided by the Moderator and Vice-Moderator of the scheduled informal consultations on the progress made in those consultations, to establish, under a five-year workplan, a working group under the agenda item on the general exchange of views on potential legal models for activities in exploration, exploitation and utilization of space resources, with Mr. Misztal as Chair and Mr. Freeland as Vice-Chair of the working group.

256. The Subcommittee welcomed the consolidated proposal of the Moderator and Vice-Moderator of the scheduled informal consultations for the establishment of a working group, which had brought together numerous views advanced by delegations in the deliberations on the mandate, terms of reference and method of work of the working group. The Subcommittee noted that the current draft of the consolidated proposal of the Moderator and Vice-Moderator, available on the dedicated web page for the scheduled informal consultations on the website of the Office for Outer Space Affairs, would be made available in all official languages of the United Nations at the sixty-fourth session of the Committee in order to facilitate further discussions on those matters.

257. The Subcommittee requested the newly elected Chair and Vice-Chair of the working group to continue consultations, in the intersessional period, on the mandate, terms of reference and method of work of the working group, and to consult with the Chair of the Committee and with the Secretariat regarding the scheduling of the sixty-fourth session of the Committee, so as to enable the working group to meet during that session and benefit from interpretation services. In that regard, the Subcommittee recommended that the Committee also consider the matter further at its sixty-fourth session.

258. The Subcommittee expressed its gratitude to the Moderator and Vice-Moderator for their work and efforts in conducting the scheduled informal consultations and congratulated them on their new appointments as Chair and Vice-Chair of the working group.

XIV. Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its sixty-first session

259. Pursuant to General Assembly resolution 75/92, the Subcommittee considered agenda item 15, entitled “Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its sixty-first session”, as a regular item on the agenda.

260. The representatives of Brazil, Canada, China, Egypt, Greece, Iran (Islamic Republic of), Israel, Mexico, Morocco, New Zealand, Ukraine 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.

261. The Subcommittee agreed that the following items would be proposed to the Committee for inclusion in the agenda of the Subcommittee at its sixty-first session:

Regular items

1. Adoption of the agenda.
2. Election of the Chair.
3. Statement by the Chair.
4. General exchange of views.
5. Information on the activities of international intergovernmental and non-governmental organizations relating to space law.
6. Status and application of the five United Nations treaties on outer space.
7. 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.
8. National legislation relevant to the peaceful exploration and use of outer space.
9. Capacity-building in space law.
10. Future role and method of work of the Committee.

Items under workplans

11. General exchange of views on potential legal models for activities in the exploration, exploitation and utilization of space resources.
(see paras. 255 to 257 of the present report)

Single issues/items for discussion

12. 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.
13. General exchange of information on non-legally binding United Nations instruments on outer space.
14. General exchange of views on the legal aspects of space traffic management.
15. General exchange of views on the application of international law to small-satellite activities.

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 sixty-second session.

262. The Subcommittee took note of a proposal by the delegation of Egypt to add a new item to the agenda of the Subcommittee, to be entitled "Space culture: a new era for human civilization" (A/AC.105/C.2/2021/CRP.20/Rev.1), which had been submitted pursuant to the request of the Subcommittee at its fifty-eighth session (A/AC.105/1203, para. 281). Under such an item, views could be exchanged on ways and means to ensure that any future civilization that humanity might establish in space would be founded on a culture of ethics and moral principles and that the negative

traits of human civilization as it currently existed on Earth would not be passed on to the new space civilization.

263. The Subcommittee took note of a proposal by the delegation of the Islamic Republic of Iran on the issue of equitable access of developing Member States to the geostationary orbit (A/AC.105/C.2/2021/CRP.21).

264. The Subcommittee took note of a proposal by the delegation of Ukraine to add a new item to the agenda of the Subcommittee, to be entitled “Cybersecurity of space activities” (A/AC.105/C.2/2021/CRP.27).

265. Some delegations expressed the view that the delegation of Egypt should continue to develop its proposal, including the terms of reference and relevant modalities, for further consideration by the Subcommittee.

266. Some delegations expressed views in support of the proposal of Egypt and noted the merit thereof. Those delegations also noted the pertinence of the proposal of the delegation of Egypt to previous discussions in the Subcommittee.

267. Some delegations expressed the view that the scope of issues contained in the proposals by the delegations of Egypt, Iran (Islamic Republic of) and Ukraine were either beyond the scope of work of the Subcommittee or fell under the competence of other existing international platforms.

268. Some delegations expressed the view that the proposal by Egypt fell within the scope of the Subcommittee and that no reservations had been raised about the mandate of the Subcommittee in terms of addressing the proposal when it had first been submitted, during the fifty-eighth session of the Subcommittee.

269. Some delegations expressed the view that the proposal of the Islamic Republic of Iran, as contained in conference room paper A/AC.105/C.2/2021/CRP.21, fell within the mandate and scope of the Committee, and suggested methods for continuing the discussion.

270. Some delegations expressed the view that, in view of the already full agenda of the Subcommittee, no additional items should be added to its agenda, unless a decision was made to reduce the number of existing items.

271. The view was expressed that there remained sufficient time on the agenda of the Subcommittee for the addition of agenda items for its upcoming sessions.

272. The Subcommittee noted that Egypt, Iran (Islamic Republic of) and Ukraine intended to retain their respective proposals for further consideration at the sixty-first session of the Subcommittee.

273. The Subcommittee agreed that IISL and ECSL should again be invited to organize a symposium, to be held during the sixty-first session of the Subcommittee, with due account to be taken of equitable geographical and gender representation among the participants in order to reflect a broad range of opinions, and that the organizers should seek the cooperation of interested academic entities for that purpose.

274. The Subcommittee noted that its sixty-first session had been tentatively scheduled to be held from 28 March to 8 April 2022.

Annex I

Report of the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space

1. At its 995th meeting, on 31 May 2021, the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space reconvened its Working Group on the Status and Application of the Five United Nations Treaties on Outer Space, with Bernhard Schmidt-Tedd (Germany) as Chair.
2. From 1 to 9 June 2021, the Working Group held three meetings. The Working Group considered the following items:
 - (a) The status of the five United Nations treaties on outer space;
 - (b) UNISPACE+50 thematic priority 2, entitled “Legal regime of outer space and global space governance: current and future perspectives”;
 - (c) The set of questions of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space;
 - (d) The questionnaire on the application of international law to small-satellite activities.
3. The Working Group had before it the documents listed in paragraph 50 of the report of the Subcommittee on its sixtieth session.
4. At its 3rd meeting, on 9 June, the Working Group adopted the present report.
5. The Working Group considered UNISPACE+50 thematic priority 2 (work for 2020 as reflected in the multi-year workplan contained in [A/AC.105/1122](#), annex I, para. 8), owing to the cancellation of the fifty-ninth session of the Subcommittee, in 2020, as a result of the situation brought about by the coronavirus disease (COVID-19) pandemic, and noted that it was the final year under that multi-year workplan.
6. The Working Group welcomed with appreciation the working paper submitted by the Chair of the Working Group, entitled “Revised draft guidance document under UNISPACE+50 thematic priority 2. ‘Legal regime of outer space and global governance: current and future perspectives’” ([A/AC.105/C.2/L.313](#)), and commended the Chair of the Working Group and the Secretariat for having incorporated all the comments received from States members of the Committee since the fifty-eighth session of the Subcommittee, in 2019.
7. The Working Group agreed to amend the chapeau to paragraph 69 of document [A/AC.105/C.2/L.313](#) to read “In order to ensure safety of space activity, States are encouraged to:”. With that additional substantive amendment to the guidance document, the Working Group noted that paragraphs 1 and 2 would be updated to reflect the status of the document as a final report of the Working Group under the multi-year workplan.
8. The Working Group noted that the finalized guidance document would constitute a useful tool for guidance and capacity-building in space law and policy and would increase awareness among decision makers and policymakers at the national level. In that sense, the Working Group agreed that the title of the document should be “Bringing the benefits of space to all countries: a guidance document on the legal framework for space activities”.
9. The Working Group noted in that regard that, with the finalization of the guidance document, the Secretariat would proceed with the development of a dedicated page on the website of the Office for Outer Space Affairs, with background documentation and sources in support of the finalized guidance document.

10. The Working Group noted that the set of questions provided by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space, taking into account the UNISPACE+50 process, contained in appendix I to the present report, provided for the continued exchange of views on a broad range of topics related to the status and application of the treaties, and that continued discussions in the Working Group would benefit from more contributions being made to the questions by States members and permanent observers of the Committee. The Working Group agreed that States members and permanent observers of the Committee should continue to be invited to contribute to the questions. Any replies received would be made available in conference room papers.

11. The Working Group agreed that States members and permanent observers of the Committee should continue to be invited to provide comments and responses to the questionnaire on the application of international law to small-satellite activities, as contained in appendix II to the present report. Any replies received would be made available in conference room papers.

12. The Working Group agreed that the Chair of the Working Group, in close consultation with the Secretariat, should present a summary of responses received over the years to the sets of questions as contained in appendices I and II to the present report, to be presented in a conference room paper to the Subcommittee at its sixty-first session, in 2022.

13. In relation to the sets of questions as contained in appendices I and II to the present report, the Working Group reaffirmed that the issue of large constellations and megaconstellations should continue to receive specific consideration in the responses to both sets of questions.

14. In that regard, the Working Group agreed that it should discuss, during the sixty-first session of the Subcommittee, potential recommendations on the registration of large constellations and megaconstellations, on which the Secretariat would prepare a document in all the official languages of the United Nations containing statistics and information on registration practices.

Appendix I

Set of questions provided by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space, taking into account the UNISPACE+50 process

1. The legal regime of outer space and global space governance

1.1 What is the main impact on the application and implementation of the five United Nations treaties on outer space of additional principles, resolutions and guidelines governing outer space activities?

1.2 Are such non-legally binding instruments sufficiently complementing the legally binding treaties for the application and implementation of rights and obligations under the legal regime of outer space? Is there a need for additional actions to be taken?

1.3 What are the perspectives for the further development of the five United Nations treaties on outer space?

2. United Nations treaties on outer space and provisions related to the Moon and other celestial bodies

2.1 Do the provisions 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 (Outer Space Treaty) constitute a sufficient legal framework for the use and exploration of the Moon and other celestial bodies or are there legal gaps in the treaties (the Outer Space Treaty and the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Moon Agreement))?

2.2 What are the benefits of being a party to the Moon Agreement?

2.3 Which principles or provisions of the Moon Agreement should be clarified or amended in order to allow for wider adherence to it by States?

3. International responsibility and liability

3.1 Could the notion of “fault”, as featured in articles III and IV of the Convention on International Liability for Damage Caused by Space Objects (Liability Convention), be used for sanctioning non-compliance by a State with the resolutions related to space activities adopted by the General Assembly or its subsidiary bodies, such as Assembly resolution [47/68](#), on the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, and the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space? In other words, could non-compliance with resolutions adopted by the General Assembly or with instruments adopted by its subsidiary bodies related to space activities be considered to constitute “fault” within the meaning of articles III and IV of the Liability Convention?

3.2 Could the notion of “damage”, as featured in article I of the Liability Convention, be used to cover loss resulting from a manoeuvre performed by an operational space object in order to avoid collision with a space object or space debris not complying with the Space Debris Mitigation Guidelines of the Committee?

3.3 Are there specific aspects related to the implementation of international responsibility, as provided for in article VI of the Outer Space Treaty, in connection with General Assembly resolution [41/65](#), on the Principles Relating to Remote Sensing of the Earth from Outer Space?

3.4 Is there a need for traffic rules in outer space as a prerequisite to a fault-based liability regime?

4. Registration of space objects

4.1 Is there a legal basis to be found in the existing international legal framework applicable to space activities and space objects, in particular the provisions of the Outer Space Treaty and the Convention on Registration of Objects Launched into Outer Space (Registration Convention), which would allow the transfer of the registration of a space object from one State to another during its operation in orbit?

4.2 How could a transfer of activities or ownership involving a space object during its operation in orbit from a company of the State of registry to a company of a foreign State be handled in compliance with the existing international legal framework applicable to space activities and space objects?

4.3 What jurisdiction and control are exercised, as provided for in article VIII of the Outer Space Treaty, over a space object registered by an international intergovernmental organization in accordance with the provisions of the Registration Convention?

4.4 Does the concept of megaconstellations raise legal and/or practical questions, and is there a need to react with an adapted form of registration?

4.5 Is there a possibility, in compliance with the existing international legal framework, based on the existing registration practices, of introducing a registration “on behalf” of a State of a launch service customer, based on its prior consent? Would this be an alternative tool to react to megaconstellations and other challenges in registration?

5. International customary law in outer space

5. Are there any provisions in the five United Nations treaties on outer space that could be considered to form part of international customary law and, if yes, which ones? Could you explain the legal and/or factual elements on which your answer is based?

6. Proposal for other questions

6. Please suggest additional questions that could be inserted into the set of questions above to meet the objective of the UNISPACE+50 thematic priority on the legal regime of outer space and global space governance.

Appendix II

Questionnaire on the application of international law to small-satellite activities

1. Overview of small-satellite activities

1.1 Are small satellites serving the needs of your society? Has your country determined whether small satellites could serve an identified technological or development need?

1.2 Is your country involved in small-satellite activities such as designing, manufacturing, launching and operating? If so, please list projects, as appropriate. If not, are there future plans to do so?

1.3 Which kind of entity in your country is carrying out small-satellite activities?

1.4 Is there a focal point in your country responsible for coordinating small-satellite activities as part of your national space activities?

1.5 Are small-satellite activities carried out in the framework of international cooperation agreements? If so, what type of provisions specific to small-satellite activities are included in such cooperation agreements?

2. Licensing and authorization

2. Do you have a legal or regulatory framework to supervise any aspect of small-satellite activities in your country? If so, are they general acts or specific rules?

3. Responsibility and liability

3.1 Are there new challenges for responsibility and liability in view of small-satellite activities?

3.2 How are liability and insurance requirements enforced on an operator in your country, for a small satellite under your country's responsibility, in the event that "damage" occurs on the surface of Earth, to aircraft in flight or to another space object in orbit?

4. Launching State and liability

4.1 Since small satellites are not always deployed into orbit with dedicated rockets as in the case of larger satellites, there is a need for clarification in the understanding of the definition of "launch". When a launch of a small satellite requires two steps – first, launching from a site to an orbit and, second, deploying the small satellite to another orbit – in your view, would the first step be regarded as the "launch" within the meaning of the United Nations treaties on outer space?

4.2 Do you think that the current international regulatory regime is sufficient to regulate operators of small satellites or that there should be a new or different international regulatory approach to address operations of small satellites?

5. Registration

5. Does your country have a practice of registering small satellites? If so, does your country have a practice of updating the status of small satellites? Is there any legislation or regulation in your country that requires non-governmental entities to submit to the Government information for the purpose of registration, including updating of the status of small satellites they operate?

6. Space debris mitigation in the context of small-satellite activities

6. How has your country incorporated specific requirements or guidelines into its national regulatory framework to take into account space debris mitigation?

Annex II

Report of the Acting Chair of the Working Group on the Definition and Delimitation of Outer Space

1. At its 995th meeting, on 31 May 2021, the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space reconvened its Working Group on the Definition and Delimitation of Outer Space, with André João Rypl (Brazil) as Acting Chair in the absence of the Chair, José Monserrat Filho (Brazil).
2. The Acting Chair drew the attention of the Working Group to the fact that, pursuant to the agreement reached by the Subcommittee at its thirty-ninth session and endorsed by the Committee at its forty-third session, both in 2000, and pursuant to General Assembly resolution [75/92](#), the Working Group had been convened to consider only matters relating to the definition and delimitation of outer space.
3. The Working Group had before it the documents listed in paragraph 63 of the report of the Subcommittee on its sixtieth session.
4. The Acting Chair of the Working Group welcomed the large number of responses to the sets of questions of the Working Group since the fifty-eighth session of the Subcommittee, in 2019, and noted that those responses had been made available to the Subcommittee at its present session owing to the cancellation of the fifty-ninth session as a result of the situation arising from the coronavirus disease (COVID-19) pandemic.
5. The Working Group welcomed the addendum to the report of the Secretariat containing a historical summary on the consideration of the question on the definition and delimitation of outer space (A/AC.105/769/Add.1) and requested the Secretariat to continue updating the dedicated web page of the Working Group on the website of the Office for Outer Space Affairs.
6. The Working Group agreed that it would be reconvened only every second year, which meant that it would not be reconvened at the sixty-first session of the Subcommittee, in 2022, but at the sixty-second session of the Subcommittee, in 2023, and on a biennial basis thereafter. It was noted that the Subcommittee could revise the pattern of meetings of the Working Group at any time, as deemed appropriate.
7. The Working Group agreed that the information and the responses to the questions set out in paragraph 9 below would still be requested on an annual basis, and that the Working Group, when reconvened every second year, would consider all responses received since its previous meeting.
8. The Working Group invited the regional groups to voluntarily study the positions of their respective members and to identify any shared opinions on the definition and delimitation of outer space.
9. On the basis of its deliberations, the Working Group agreed:
 - (a) To continue to invite States members of the Committee to submit information on national legislation or any national practices that may exist or were being developed that related directly or indirectly to the definition and/or delimitation of outer space and airspace;
 - (b) To continue to invite States members and permanent observers of the Committee to submit concrete and detailed proposals regarding the need to define and delimit outer space, or justifying the absence of such a need, or to provide the Working Group with specific cases of a practical nature relating to the definition and delimitation of outer space and the safety of aerospace operations. Such structured, consistent and grounded contributions would be considered by the Working Group at its future meetings;
 - (c) To continue to invite States Members of the United Nations and permanent observers of the Committee to provide their replies to the following questions:

- (i) Is there a relationship between plans to establish a system of space traffic management and the definition and delimitation of outer space?
 - (ii) Is there a relationship between suborbital flights for scientific missions and/or for human transportation and the definition and delimitation of outer space?
 - (iii) Will the legal definition of suborbital flights for scientific missions and/or for human transportation be practically useful for States and other actors with regard to space activities?
 - (iv) How could suborbital flights for scientific missions and/or for human transportation be defined?
 - (v) Which legislation applies or could be applied to suborbital flights for scientific missions and/or for human transportation?
 - (vi) How will the legal definition of suborbital flights for scientific missions and/or for human transportation impact the progressive development of space law?
 - (vii) Please propose other questions to be considered in the framework of the legal definition of suborbital flights for scientific missions and/or for human transportation;
- (d) To continue to invite States Members of the United Nations and permanent observers of the Committee to provide information relating to any practical case known to them that would warrant the definition and delimitation of outer space.

Annex III

Summary report of the Working Group on the “Space2030” Agenda of the Committee on the Peaceful Uses of Outer Space

1. The Working Group on the “Space2030” Agenda of the Committee on the Peaceful Uses of Outer Space met during the sixtieth session of the Legal Subcommittee, during the plenary meetings and in informal consultations.
 2. At its 1st meeting, the Working Group recalled its extended workplan ([A/75/20](#), paras. 30–32), according to which the Working Group would, in 2021, continue to consider and consolidate the draft “Space2030” agenda and implementation plan during the session of the Legal Subcommittee and present a final consolidated draft of the agenda and implementation plan to the Committee at its sixty-fourth session, in 2021, for its consideration and for submission to the General Assembly at its seventy-sixth session, in 2021.
 3. The Working Group was chaired by the members of the Bureau, comprising the Chair, Mu’ammarr Kamel Haddadin (Jordan), and the two Vice-Chairs, Alessandro Cortese (Italy) and Dumitru-Dorin Prunariu (Romania).
 4. The Working Group had before it a working paper by the Bureau of the Working Group entitled “Revised draft ‘Space2030’ agenda and implementation plan” ([A/AC.105/C.2/L.316](#)).
 5. The Working Group welcomed the progress made on the text of the revised draft “Space2030” agenda and implementation plan and agreed that, on the basis of the work of the Working Group during the current session of the Legal Subcommittee and in accordance with its extended workplan, a consolidated draft of the “Space2030” agenda and implementation plan would be submitted to the Committee at its sixty-fourth session, to be made available as document A/AC.105/L.321, for its consideration and for submission to the General Assembly at its seventy-sixth session, in 2021.
 6. The Working Group expressed its appreciation to the Bureau for its work, assisted by the Secretariat, in conducting the meetings of the Working Group during the session of the Legal Subcommittee.
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