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Draft report

Addendum

Chapter II

Recommendations and decisions

B. Report of the Scientific and Technical Subcommittee on its sixtieth session

1. The Committee took note with appreciation of the report of the Scientific and Technical Subcommittee on its sixtieth session (A/AC.105/1279), which contained the results of its deliberations on the items considered by the Subcommittee in accordance with General Assembly resolution 77/121.

2. The Committee expressed its appreciation to Juan Francisco Facetti (Paraguay) for his able leadership as Chair during the sixtieth session of the Subcommittee.

3. The representatives of Australia, Austria, Brazil, Bulgaria, Canada, Chile, China, France, Germany, Indonesia, Italy, Japan, Pakistan, the Republic of Korea, the Russian Federation, South Africa, Spain, Switzerland, the United Kingdom, the United States and Venezuela (Bolivarian Republic of) made statements under the item. The representative of Pakistan made a statement on behalf of the Group of 77 and China and the representative of Ghana made a statement on behalf of the Group of African States. The observer for Square Kilometre Array Observatory also made a statement. During the general exchange of views, statements relating to the item were also made by other member States.

4. The Committee heard the following presentations:

(a) “Introduction to the KASI infrastructure and its activities”, by the representative of the Republic of Korea;

(b) “Summary of the first Access to Space for All expert meeting”, by the representative of the Office for Outer Space Affairs.

1. United Nations Programme on Space Applications

(a) Activities of the United Nations Programme on Space Applications

5. The Committee had before it a conference room paper containing the report on the first expert meeting of the Access to Space for All initiative (A/AC.105/2023/CRP.5).

6. The Committee took note of the discussion of the Subcommittee under the item on the activities of the United Nations Programme on Space Applications, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 47–59).

7. The Committee noted that the priority areas of the Programme were environmental monitoring, natural resource management, satellite communications, disaster risk reduction, the use of global navigation satellite systems (GNSS), the Basic Space Science Initiative, climate change, the Basic Space Technology Initiative, the Human Space Technology Initiative, and biodiversity and ecosystems.

8. The Committee took note of the activities of the Programme carried out in 2022 and those planned for 2023, as presented in the report of the Subcommittee (A/AC.105/1279, paras. 57 and 58).

9. The Committee expressed its appreciation to the Office for Outer Space Affairs for the manner in which the activities of the Programme had been implemented with the limited funds available, in particular in 2022. The Committee also expressed its appreciation to the Governments and intergovernmental and non-governmental organizations that had sponsored the activities. The Committee noted with satisfaction that further progress was being made in the implementation of the activities of the Programme for 2023.

10. The Committee expressed its concern that the financial resources available to the United Nations Programme on Space Applications remained limited and emphasized that it was important that the Office be equipped with the necessary resources, including sufficient funding, to help ensure that the greatest number of countries had access to the benefits of space science and technology and its applications in line with the spirit of the Outer Space Treaty as well as the “Space2030” Agenda.

11. The Committee noted that the United Nations Programme on Space Applications continued to implement the Access to Space for All initiative, which was focused on developing the capacity of Member States to access the benefits of space. In that regard, the Committee noted the announcement of the extension to the end of December 2030 of the successful KiboCUBE programme, which supported the development of technologies needed to send hardware into space. The Committee also noted the ongoing activities of the Access to Space for All initiative conducted with a number of partners, which offered selected entities opportunities to gain access to unique ground-based and orbital facilities for experiments in microgravity and hypergravity, and access to space data and training on the use of such data, as well as the use of astronomical data.

12. The Committee requested the Office for Outer Space Affairs to continue to work with the Scientific and Technical Subcommittee on defining the priorities of the Programme.

13. The Committee noted with satisfaction that the United Nations Programme on Space Applications had continued to emphasize, promote and foster cooperation with Member States at the regional and global levels to support the regional centres for space science and technology education, affiliated to the United Nations.

14. The Committee noted that the Office for Outer Space Affairs continued to closely collaborate with the regional centres for space science and technology education, affiliated to the United Nations, namely the African Regional Centre for Space Science and Technology Education – in English Language, the African Regional Centre for Space Science and Technology – in French Language; the Centre

for Space Science and Technology Education in Asia and the Pacific, the Regional Centre for Space Science and Technology Education for Latin America and the Caribbean, the Regional Centre for Space Science and Technology Education for Western Asia and the Regional Centre for Space Science and Technology Education in Asia and the Pacific (China). In that connection, the Committee noted with appreciation that the host countries of the regional centres for space science and technology education, affiliated to the United Nations, were providing significant financial and in-kind support to the centres.

(b) International Satellite System for Search and Rescue

15. The Committee noted with satisfaction that the International Satellite System for Search and Rescue (COSPAS-SARSAT), which provided worldwide coverage of emergency beacons, carried on vessels and aircraft and by individual users around the world, currently had 45 member States, and two organizations were formally associated with it. The Committee also noted that, since the start of the programme, COSPAS-SARSAT had supported more than 50,000 rescues worldwide.

2. Space technology for sustainable socioeconomic development

16. The Committee took note of the discussion of the Subcommittee under the item on space technology for sustainable socioeconomic development, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 65–79, and annex I).

17. The Committee endorsed the decisions and recommendations of the Subcommittee on the item (A/AC.105/1279, para. 79).

18. The Committee took note of the report of the Working Group of the Whole of the Scientific and Technical Subcommittee, reconvened under the chairmanship of Prakash Chauhan (India) as Chair (A/AC.105/1279, annex I).

19. Some delegations expressed the view that space science and technology and their applications were essential to effectively addressing current and future challenges to social and economic development and sustainability, such as natural disasters, food security, climate change and natural resource security, and noted that space activities were crucial to realizing the Sustainable Development Goals and the “Space2030” Agenda, in particular as part of efforts to support sustainable economic growth, improve the quality of life and manage the global environment. The delegations expressing that view were also of the view that it was important to ensure that the Office was equipped with the necessary resources, including sufficient funding, to assist a greater number of countries in gaining access to the benefits of space science and technology and their applications.

20. The Committee welcomed the inclusion and recognition of space as a driver of sustainable development in the ministerial declaration of the high-level political forum on sustainable development, which was convened, under the auspices of the Economic and Social Council, in July 2022.

3. Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth’s environment

21. The Committee took note of the discussion of the Subcommittee under the item on matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth’s environment, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 80–88).

22. The Committee noted that international and regional initiatives of States used remote sensing data to support sustainable socioeconomic development, in particular for the benefit of developing countries.

23. In the course of the discussions, delegations reviewed national, bilateral, regional and international programmes on remote sensing, in particular in the following areas: monitoring the broader impacts of climate change; land use and land

cover monitoring; natural resource management; monitoring of forests and wildfires; detection of illegal fishing; monitoring of oil pipelines and the illegal tapping of oil pipelines; monitoring of protected marine areas and marine species; environmental monitoring; monitoring of the atmosphere, greenhouse gases and air pollution; urban planning; disaster management support; telehealth and epidemiology; watershed monitoring and development planning; irrigation infrastructure assessment; agriculture, horticulture and crop production forecasting; monitoring of desertification; snow and glacier monitoring; and monitoring of oceans, glacial lakes and other water bodies.

4. Space debris

24. The Committee took note of the discussion of the Subcommittee under the item on space debris, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 89–114).

25. The Committee noted with satisfaction that the endorsement by the General Assembly, in its resolution 62/217, of the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space had proved vital in controlling the space debris problem for the safety of future space missions.

26. The Committee also noted with satisfaction that many States and international intergovernmental organizations were implementing space debris mitigation measures consistent with the Space Debris Mitigation Guidelines and the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee (A/74/20, annex II) and/or the Space Debris Mitigation Guidelines of the Inter-Agency Space Debris Coordination Committee (IADC), and that a number of States had harmonized their national space debris mitigation standards with those guidelines.

27. In addition, the Committee noted that some States were using the Space Debris Mitigation Guidelines and the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee, the Space Debris Mitigation Guidelines of IADC and ISO standards as reference points in their regulatory frameworks for national space activities.

28. The Committee also noted that, in the area of space debris, some States were cooperating under the space surveillance and tracking support framework funded by the European Union, integrating data, on-ground sensors and services in order to monitor space debris.

29. The Committee agreed that Member States and international organizations having permanent observer status with the Committee should continue to be invited to provide reports on research on space debris, the safety of space objects with nuclear power sources on board, problems relating to the collision of such space objects with space debris and the ways in which debris mitigation guidelines were being implemented.

30. The Committee noted with appreciation that States had undertaken a number of actions to mitigate space debris, such as improving the design of launch vehicles, engines and spacecraft and developing special software and passivation, life extension, end-of-life operations and disposal techniques.

31. The Committee noted the development and application of new technologies and ongoing research related to space debris mitigation; protecting space systems from space debris; limiting the creation of additional space debris; re-entry and collision avoidance techniques; measuring, characterizing, continuous monitoring and modelling of space debris; prediction, early warning and notification of space debris re-entry and collision; and space debris orbit evolution and fragmentation.

32. Some delegations expressed concerns about the proliferation of space debris and the potential for unintended harm. Entities conducting space activities were therefore encouraged to address concerns and challenges caused by megaconstellations in lower

Earth orbit, including those related to collision risks and the sustainable use of orbits and frequencies, through the implementation of the voluntary measures contained in the Space Debris Mitigation Guidelines and the Guidelines for the Long-term Sustainability of Outer Space Activities.

33. Some delegations expressed the view that the major contributors to space debris must assume their historical responsibility for the mitigation and removal of that debris, and, in that context, stressed the importance of not causing new space actors to be overburdened by the consequences of the historical activities of established space actors.

34. The view was expressed that research on and the development of technologies related to debris mitigation and remediation were important, as was training on related tools. The same delegation also expressed the view that research on active debris removal was being carried out in cooperation with industry, and that guidelines for on-orbit servicing had been developed.

5. Space-system-based disaster management support

35. The Committee took note of the discussion of the Subcommittee under the item on space-system-based disaster management support, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 115–128).

36. The Committee noted the importance of space-based information for disaster management and emergency response, utilizing remote sensing data and Earth observation satellites for developing multi-hazard early warning systems and disaster impact analysis for all types of natural disasters, including for continued monitoring of the coronavirus disease (COVID-19) pandemic.

37. The Committee welcomed the activities organized by the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER), which supported the development of the capacity to use all types of space-based information in support of the full disaster management cycle. In that regard, the Committee took note of the UN-SPIDER activities and capacity-strengthening efforts, including the generation of tailored space-based information for countries in need in 2022 (see A/AC.105/1270), which were carried out with the continued support of its network of partners, as well as the benefits of the UN-SPIDER knowledge portal (www.un-spider.org), a web-based platform for information, communication and process support that fostered the exchange of information, the sharing of experiences, capacity-building and technical advisory support and services.

38. Some delegations expressed the view that in order to strengthen disaster preparedness and emergency response at the national level, the Office for Outer Space Affairs should increase the capacity-building activities of UN-SPIDER by offering more technical advisory missions and training programmes, in particular to developing countries.

39. The Committee also noted the support that States had been providing to the Working Group on Disasters of CEOS and the international COSPAS-SARSAT programme.

40. The Committee noted with appreciation the financial and staff resource contributions made by China, France and Germany to UN-SPIDER and the in-kind contributions, including the provision of experts, made by some States members of the Committee and by the regional support offices in 2022 in support of the activities conducted by the Office for Outer Space Affairs through UN-SPIDER, as well as their efforts to share experience with other interested countries. In that regard, the Committee encouraged other member States and permanent observers to provide to the activities and programmes of the Office, including UN-SPIDER, all necessary support on a voluntary basis, including increased financial support, to enable it to better respond to Member States' requests for assistance and to fully carry out its workplan in the coming years.

6. Recent developments in global navigation satellite systems

41. The Committee took note of the discussion of the Subcommittee under the item on recent developments in global navigation satellite systems, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 129–151).

42. The Committee had before it the note by the Secretariat on the sixteenth meeting of the International Committee on Global Navigation Satellite Systems (A/AC.105/1276).

43. The Committee noted the work of International Committee on Global Navigation Satellite Systems (ICG) aimed at creating an interoperable, multi-GNSS space service volume, which would enable improved navigation for space operations beyond geostationary Earth orbit and that GNSS services were expected to be employed in cislunar space.

44. The Committee noted that the sixteenth meeting of ICG and the twenty-sixth meeting of the Providers' Forum, organized and hosted by the United Arab Emirates Space Agency on behalf of the Government of the United Arab Emirates, were held in Abu Dhabi from 9 to 14 October 2022 (see A/AC.105/1276) and that the seventeenth meeting of ICG would be hosted by the European Union and be held in Madrid from 15 to 20 October 2023.

45. The Committee noted the efforts by the Office for Outer Space Affairs in promoting the use of GNSS through its capacity-building and information dissemination initiatives, as well as the role of the Office as the executive secretariat of ICG in coordinating the annual meetings of ICG, its Providers' Forum and the ICG working groups.

7. Space weather

46. The Committee took note of the discussion of the Subcommittee under the item on space weather, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 152–164).

47. The Committee had before it the report on the United Nations/Azerbaijan workshop on the International Space Weather Initiative: the Sun, Space Weather and Geosphere (A/AC.105/1275).

48. The Subcommittee noted that space weather, affected by solar variability, was an international concern, owing to its potential threat to space systems, human space flight, ground- and space-based infrastructure and aviation activity, upon which society increasingly relied. As such, it needed to be addressed in a global manner, through international cooperation and coordination, in order to be able to predict potentially severe space weather events and mitigate their impact in order to guarantee safety and sustainability of outer space activities.

49. The Committee noted a number of national and international activities undertaken in the fields of research, training and education to improve the scientific and technical understanding of the adverse effects of space weather and thus strengthen global resilience to its threat, with the goal of facilitating the implementation of the space weather-related guidelines B.6 and B.7 of the Guidelines for the Long-term Sustainability of Outer Space Activities.

50. The Committee expressed its appreciation to the Expert Group on Space Weather for its work and for its final report (A/AC.105/C.1/122) and the recommendations contained therein.

8. Near-Earth objects

51. The Committee took note of the discussion of the Subcommittee under the item on near-Earth objects, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 165–183).

52. The Committee noted with appreciation the work done by the International Asteroid Warning Network (IAWN) and the Space Mission Planning Advisory Group (SMPAG) to share information with regard to discovering, monitoring and physically characterizing potentially hazardous near-Earth objects in order to ensure that all nations, in particular developing countries with limited capacity to predict and mitigate the impact of a near-Earth object, were aware of the potential hazard of impact by an asteroid.

53. The Committee noted the importance of national efforts and action plans aimed at developing capabilities in the discovery, observation, early warning and mitigation of potentially hazardous near-Earth objects that contributed to strengthening international collaboration and information-sharing, and in that regard highlighted the importance of contributing to the work of IAWN and SMPAG.

54. The Committee noted that, should a credible threat of impact be discovered by the Network, available information would be provided by IAWN and disseminated to all Member States through the Office for Outer Space Affairs.

55. The Committee took note of the first planetary defence technology demonstration mission that altered an asteroid's orbit, the NASA Double Asteroid Redirection Test (DART). In that regard, the Committee noted that the mission had involved international collaboration, including the contribution made by the Italian Space Agency (ASI) through its LICIACube, and was completed with the support of a worldwide observation campaign. It also noted that as a follow-up, the Hera mission of ESA, was planned in 2026, with a view to providing a valuable assessment of the deflection technique test of the DART mission.

56. The Committee noted that further information on the meetings of IAWN and SMPAG, to which the Office for Outer Space Affairs served as the permanent secretariat, had been made available on their websites (http://iawn.net and http://smpag.net).

57. The Committee noted that the eighth IAA Planetary Defense Conference was held from 2 to 7 April 2023 in Vienna, at the Austrian Academy of Sciences and at the Vienna International Centre. The Conference had been hosted by the Office for Outer Space Affairs, in cooperation with ESA and the Commission for Geosciences of the Austrian Academy of Sciences.

58. The Committee also noted that a revised publication entitled "Near-Earth Objects and Planetary Defence" (ST/SPACE/73) containing latest information on that subject matter had been made available by the Office for Outer Space Affairs, with the support of ESA, IAWN and SMPAG.

9. Long-term sustainability of outer space activities

59. The Committee took note of the discussion by the Subcommittee under the item on the long-term sustainability of outer space activities as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 184–208) and endorsed the decisions of the Subcommittee and of the Working Group on the Long-term Sustainability of Outer Space Activities, reconvened under the chairmanship of Umamaheswaran R. (India) (A/AC.105/1279, para. 208, and annex II, paras. 7–21).

60. The Committee had before it the following:

(a) Note by the Secretariat containing information and views for consideration by the Working Group on the Long-term Sustainability of Outer Space Activities (CANEUS International, Hague Institute for Global Justice and National Space Society) (A/AC.105/C.1/L.409/Add.5);

(b) Conference room paper submitted by the Chair of the Working Group entitled "Working Group on the Long-term Sustainability of Outer Space Activities: ideas for the workshop in 2024" (A/AC.105/2023/CRP.4);

(c) Conference room paper submitted by Canada, France, Germany, Italy, Japan, Luxembourg, New Zealand, United Kingdom and United States entitled “A practical and inclusive approach to identifying and studying challenges and considering possible new guidelines” (A/AC.105/2023/CRP.15/Rev.1);

(d) Non-paper submitted by the Chair of the Working Group entitled “Working Group on the Long-term Sustainability of Outer Space Activities: possible report language”.

61. The Committee noted that the Working Group on the Long-term Sustainability of Outer Space Activities had met both formally, with the benefit of interpretation services, and informally during the present session.

62. The Committee was informed of a number of national, regional and international scientific, technical, legal and policy measures and initiatives that had been, or were currently being undertaken, to implement the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee (A/74/20, annex II).

63. The Committee recalled the importance of the Working Group on the Long-term Sustainability of Outer Space Activities structuring its work, giving equal importance and an equitable amount of time to each of the elements of its terms of reference (A/AC.105/1258, annex II, appendix, paras. 4, 6 and 13).

64. Some delegations expressed the view that the Working Group had begun a robust dialogue among States regarding their experiences with implementation of the Guidelines for the Long-term Sustainability of Outer Space Activities.

65. Some delegations expressed the view that the membership of Working Group included representatives from a diverse array of States, that there was power in that diversity, and that all States members were encouraged to actively participate and share their views to advance the discussions. The delegations expressing that view were also of the view that it was through that type of dialogue, and the sharing of knowledge and experiences, that Working Group members could identify shared challenges and learn about possible solutions.

66. Some delegations expressed view that that the open-source information repository that the Office for Outer Space Affairs had been requested to develop and host (see A/AC.105/1279, annex II, paras. 17–21) would be an important tool to build transparency, confidence and capacity.

67. Some delegations expressed the view that it was important to ensure that the consideration of possible areas for new guidelines did not disrupt the balanced dialogue on all three elements of the Working Group’s method of work and the consensus-based workplan.

68. The view was expressed that while the adoption of the Guidelines for the Long-term Sustainability of Outer Space Activities in 2019 was an important step, the adopted Guidelines ignored significant issues related to the safety of space operations. The delegation expressing this view referred to conference room paper A/AC.105/2022/CRP.11, the content of which had first been made available in June 2022, and the views contained therein, which could provide a thematic basis for new draft guidelines.

69. The view was expressed that it was hoped that exchanges in the Working Group would help to identify emerging challenges and possible missing elements in the Guidelines and to form a consensus on the topics to be studied in more detail through a phased, step-by-step approach.

70. The view was expressed that as the work of the Working Group became progressively more significant and specialized, the inputs on capacity-building, science, technology and innovation should be addressed so that the Working Group would be better positioned to understand how all countries, irrespective of their state of development, were using their resources in innovative ways to leverage their abilities and talents and contribute to the debate on space sustainability.

71. The view was expressed that the long-term sustainability of outer space activities should be retained as a regular item on the agenda of the Subcommittee to ensure that the discussion of the technical aspects, on which progress had been made within the Working Group, received greater attention from all delegations.

72. The view was expressed that States should pay attention to a proposal that had the potential to completely transform the treaty-based regime on outer space: that of using the voluntary Guidelines for the Long-term Sustainability of Outer Space Activities to develop a new binding space treaty on the long-term sustainability of outer space activities.

73. The view was expressed that the topic of long-term sustainability of outer space activities had both scientific and legal aspects and that there should be related interaction and coordination between the two subcommittees.

74. The Committee recalled that, in accordance with the Working Group's multi-year workplan (A/AC.105/1258, annex II, appendix), information and views on the topics in paragraphs 4 and 6 of the Working Group's terms of reference, methods of work and workplan were to continue to be submitted. Inputs of up to three pages received by the secretariat by 20 October 2023 would be made available in the six official languages of the United Nations before the sixty-first session of the Scientific and Technical Subcommittee, in 2024.

75. The Committee noted that the Working Group had requested that the Chair of the Working Group draw on the inputs received since the start of the work of the Working Group to compile concise summaries of Member States' implementation experiences, opportunities for capacity-building for implementation of the Guidelines, and overarching themes on challenges to the long-term sustainability of outer space activities. Those summaries would be made available in the six official languages of the United Nations for consideration at the sixty-first session of the Scientific and Technical Subcommittee, in 2024. They were to be distinct from the report of the workshop and the draft report, which were to be produced following the session of the Scientific and Technical Subcommittee in 2024.

76. The Committee recalled that the workshop, planned for 2024, would be aimed at raising awareness of the long-term sustainability of outer space activities and supporting capacity-building.

77. The Committee noted that the Working Group had agreed that the following three topics would form the basis of the agenda of the workshop to take place in 2024:

(a) Regulatory and policy aspects (possible subtopics of specific presentations could include, inter alia, licensing and supervision, space object registration, the role of guidelines in enhancing the utilization of space and the perspectives of developing countries and Indigenous/tribal communities);

(b) Safety of space operations (possible subtopics of specific presentations could include, inter alia, space situational awareness, large constellations and the sustainability and resilience of space systems);

(c) Scientific and technical research (possible subtopics of specific presentations could include, inter alia, space debris monitoring, mitigation and remediation, sustainable human presence in outer space and the role of academic and higher education institutions).

78. The Committee noted that the Working Group agreed that United Nations entities would also be invited to provide written contributions to support the workshop.

79. The Committee noted that the Working Group had agreed that speakers/panellists for the workshop would need to be formally accredited to the sixty-first session of the Scientific and Technical Subcommittee as part of a delegation.

10. Future role and method of work of the Committee

80. The Committee took note of the discussion of the Subcommittee under the item on the future role and method of work of the Committee, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 209–232).

81. The Committee recalled its decision, made at its sixty-second session, 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)).

11. Use of nuclear power sources in outer space

82. The Committee took note of the discussion of the Subcommittee under the item on the use of nuclear power sources in outer space, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 246–263).

83. The Committee had before it the final report on the implementation of the Safety Framework for Nuclear Power Source Applications in Outer Space and recommendations for potential enhancements of the technical content and scope of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, prepared by the Working Group on the Use of Nuclear Power Sources in Outer Space (A/AC.105/C.1/124). The Committee endorsed the final report of the Working Group.

84. The Committee endorsed the recommendations of the Subcommittee and the Working Group on the Use of Nuclear Power Sources in Outer Space, reconvened under the chairmanship of Sam A. Harbison (United Kingdom) for a new five-year workplan of the Working Group, including the recommendation that the Working Group could hold intersessional meetings, facilitated by the secretariat, to further the objectives of the workplan (A/AC.105/1279, annex III, paras. 8 and 9).

85. The Committee endorsed the nomination of Leopold Summerer (Austria) for the position of incoming Chair of the Working Group on the Use of Nuclear Power Sources in Outer Space.

86. The Committee expressed its sincere appreciation to Sam A. Harbison (United Kingdom), who concluded his tenure as the Chair of the Working Group on the Use of Nuclear Power Sources in Outer Space, for his invaluable commitment to the work of the Working Group over more than 20 years.

87. The view was expressed that while recognizing the need to use nuclear power sources in outer space to make interplanetary missions viable, the proliferation of such power sources should be restricted as their use could pose a potential danger to human life and the environment. The delegation expressing that view was also of the view that the current Safety Framework for Nuclear Power Source Applications in Outer Space was insufficient and that States should be encouraged to develop additional legally binding instruments that regulated in more detail the use of nuclear power sources in outer space, taking into account that any activity carried out in outer space must be governed by the principles of the protection of human life and the maintenance of peace.

12. Space and global health

88. The Committee took note of the discussion of the Subcommittee under the item on space and global health, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 233–245).

89. The Committee welcomed the adoption of General Assembly resolution 77/120, entitled “Space and global health”, and the establishment of the Space and Global Health Platform and the Space and Global Health Network.

90. The Committee expressed appreciation to the delegation of Switzerland for facilitating informal consultations on the text of the draft resolution on space and

global health, as contained in A/AC.105/L.328, during the current session of the Committee.

91. The Committee noted the broad array of activities relevant to space and global health and acknowledged the contribution of space science, space technology and space applications to the prevention and control of diseases, the promotion of human health and welfare, the addressing of global health issues, the advancement of medical research, the advancement of health practices and the provision of health-care services to individuals and communities, including in rural areas with limited access to health care.

92. The Committee noted the vital role of space science, space technology and space applications in addressing the COVID-19 pandemic, and their critical role in support of contact tracing, the identification of affected areas, modelling the spread of the disease and monitoring its transmission, connectivity for remote working, telehealth and communication, as well as methods of coping with social isolation.

93. The Committee took note of the launch of the Space and Global Health Network and the signing of the statement of intent by the Office for Outer Space Affairs and the University of Geneva, and noted that Member States had been invited to identify experts and encourage them to participate in the Space and Global Health Network.

13. Examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including in the field of space communications, as well as other questions relating to developments in space communications, taking particular account of the needs and interests of developing countries, without prejudice to the role of the International Telecommunication Union

94. The Committee took note of the discussion of the Subcommittee under the item on the examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including in the field of space communications, as well as other questions relating to developments in space communications, taking particular account of the needs and interests of developing countries, without prejudice to the role of ITU, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 264–274).

95. Some delegations expressed the view that the geostationary orbit, as a limited natural resource clearly in danger of saturation, needed to be used in a way that ensured that countries had equitable access to those orbits and frequencies, taking into account the special needs of the developing countries and the geographical situation of particular countries.

96. Some delegations expressed the view that the geostationary orbit should be utilized in a rational, balanced, efficient and equitable manner and that the exploitation of the geostationary orbit without taking those principles into consideration would risk saturation.

97. The view was expressed that the geostationary orbit should be considered a specific area and special part of outer space that required specific technical and legal governance.

14. General exchange of views on dark and quiet skies for science and society

98. The Committee took note of the discussion of the Subcommittee under the item entitled “General exchange of views on dark and quiet skies for science and society”, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 275–295).

99. The Committee noted that because an ever-increasing number of stakeholders, including private entities, were launching spacecraft into orbit, concerns had been raised about spacecraft that emitted radio signals and reflected sunlight into astronomical telescopes or crossed their field of view, thereby degrading astronomical

observations. Thus, the importance of implementing measures to mitigate factors that could hinder scientific discoveries was highlighted.

100. The Committee took note of various national and international efforts to balance the provision of satellite services with astronomical observation activities, including the hosting of events to foster dialogue among stakeholders, the development of regulations and legal frameworks, the establishment of dark sky conservation areas and radio quiet zones, research on technologies to mitigate light pollution and the monitoring of the impact of satellite constellations on astronomy.

101. Some delegations expressed the view that dark skies must be preserved and protected as the common cultural and natural heritage of the world.

102. Some delegations expressed their support for the establishment of an expert group for a duration of three years and for keeping the agenda item on dark and quiet skies for science and society on the agenda of the Subcommittee for the same period.

103. Some delegations expressed the view that such an expert group should include interested member States and a balanced representation of private satellite operators and the scientific and academic community to evaluate the challenges and the means to address the matters before them in an adequate manner.

104. The view was expressed that the agenda item could be beneficial if it were to be reformatted.

15. Draft provisional agenda for the sixty-first session of the Scientific and Technical Subcommittee

105. The Committee took note of the discussion of the Subcommittee under the item on the draft provisional agenda for its sixty-first session, as reflected in the report of the Subcommittee (A/AC.105/1279, paras. 296–309).

106. The Committee endorsed the recommendations and decisions on the item made by the Subcommittee (A/AC.105/1279, para. 309).

107. The Committee noted that the Secretariat had scheduled the sixty-first session of the Subcommittee to be held from 29 January to 9 February 2024.

108. On the basis of the deliberations of the Subcommittee at its sixtieth session, the Committee agreed that the following items should be considered by the Subcommittee at its sixty-first session:

1. Adoption of the agenda.
2. Election of the Chair.
3. Statement by the Chair.
4. General exchange of views and introduction of reports submitted on national activities.
5. Space for sustainable development: technology and its applications, including the United Nations Programme on Space Applications.
6. Space debris.
7. Space-system-based disaster management support.
8. Recent developments in global navigation satellite systems.
9. Space weather.
10. Near-Earth objects.

11. Long-term sustainability of outer space activities.

    (Work for 2024 as reflected in the multi-year workplan of the Working Group on the Long-term Sustainability of Outer Space Activities (A/AC.105/1258, para. 209 and para. 18 of the appendix to annex II))

12. Future role and method of work of the Committee.

13. Space and global health.

14. Use of nuclear power sources in outer space.

    (Work for 2024 as reflected in the new five-year workplan of the Working Group on the Use of Nuclear Power Sources in Outer Space (A/AC.105/1279, annex III, para. 8))

15. Examination of the physical nature and technical attributes of the geostationary orbit and its utilization and applications, including in the field of space communications, as well as other questions relating to developments in space communications, taking particular account of the needs and interests of developing countries, without prejudice to the role of the International Telecommunication Union.

    (Single issue/item for discussion)

16. Draft provisional agenda for the sixty-second session of the Scientific and Technical Subcommittee.

17. Report to the Committee on the Peaceful Uses of Outer Space.

109. The Committee agreed that the Working Group of the Whole, the Working Group on the Use of Nuclear Power Sources in Outer Space, and the Working Group on the Long-term Sustainability of Outer Space Activities should be reconvened at the sixty-first session of the Scientific and Technical Subcommittee.

110. The Committee agreed to merge the items on “United Nations Programme on Space Applications”, “Space technology for sustainable socioeconomic development” and “Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth’s environment” into an item entitled “Space for sustainable development: technology and its applications, including the United Nations Programme on Space Applications”, and, recalling that the item on “Space technology for sustainable socioeconomic development” was an item considered by the Working Group of the Whole, noted that the new merged item would also be considered by the Working Group.

111. The Committee requested the Scientific and Technical Subcommittee to consider at its sixty-first session, in 2024, under the item entitled “Future role and method of work of the Committee”, the scope, duration and title of an agenda item related to dark and quiet skies and large constellations, with a view to recommending the item to the Committee, at its sixty-seventh session, for inclusion on the agenda of the Subcommittee.

112. The Committee agreed that the full duration of the slot normally allocated for the holding of an industry symposium during the sessions of the Scientific and Technical Subcommittee would be allocated, at the sixty-first session of the Subcommittee, in 2024, to the holding of the workshop of the Working Group on the Long-term Sustainability of Outer Space Activities, upon its request, and as mandated in the Working Group’s multi-year workplan (A/AC.105/1258, annex II, appendix).