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Held at Headquarters, New York, on Wednesday, 30 October 2019, at 10 a.m.

Chair: Mr. Bahr Aluloom (Iraq)
later: Mr. Pindják (Vice-Chair) (Slovakia)

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The meeting was called to order at 10.05 a.m.

Agenda item 49: International cooperation in the peaceful uses of outer space (A/74/20)

(a) International cooperation in the peaceful uses of outer space (A/C.4/74/L.7)

1. **The Chair** said that space science, technology, law and policy were becoming increasingly important in the implementation of the 2030 Agenda for Sustainable Development. Space-based applications played a critical role in areas such as poverty eradication, food security, health, education, energy, climate change, marine resources, biodiversity and disaster management. In order to safeguard the future use of space assets, it was necessary to promote the safety of space operations and the long-term sustainability of outer space activities. The Committee on the Peaceful Uses of Outer Space (COPUOS) was the central platform for fostering international cooperation in the peaceful uses of outer space, in particular for the benefit of developing countries, and for the multilateral consideration of space as a driver of sustainable development and the betterment of humanity.

2. **Mr. Rypl** (Brazil), speaking as Chair of COPUOS and introducing the report on its sixty-second session (A/74/20), said that the Committee had adopted the preamble and 21 guidelines for the long-term sustainability of outer space activities and had taken important decisions on further work. With the addition of Cyprus, Ethiopia, Finland, Mauritius and Paraguay, COPUOS now had 92 members. The European Union, the International Organization for Standardization, CANEUS International and For All Moonkind had also become permanent observers.

3. Since the launch in 2015 of the process relating to the fiftieth anniversary of the United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE+50), the total membership of COPUOS had grown from 77 to 92 and the number of observers from 34 to 41. In addition, there was increased interest in the deliberations of COPUOS and its Subcommittees, which now covered a broad range of topics. COPUOS was currently advancing the development of a new “Space2030” agenda. As reaffirmed by the General Assembly in its resolution 73/6, COPUOS and its Subcommittees, supported by the Office for Outer Space Affairs, served as unique platforms for international cooperation in the exploration and uses of outer space for peaceful purposes.

4. The year 2019 marked the fiftieth anniversary of the Apollo 11 mission to the Moon, an iconic event that

attested to the power that space exploration and innovation had over the imagination. Outer space activities were thriving, with new technologies and new actors emerging at an unprecedented rate. Most of the States represented in COPUOS were now engaged in space activities in one way or another. It was the duty of the international community to work cooperatively to foster developments in space exploration, science and technology and preserve the outer space environment.

5. **Mr. Koba** (Indonesia), speaking on behalf of the Association of Southeast Asian Nations (ASEAN), said that the Association welcomed the applications for membership of COPUOS submitted by Singapore, Rwanda and the Dominican Republic. Outer space must be used and explored for exclusively peaceful purposes for the benefit of all countries, irrespective of the degree of their economic or scientific development, and in accordance with international law and the principle of non-appropriation of outer space.

6. ASEAN supported the deliberations on the “Space2030” agenda, which should be implemented through concrete measures aimed at narrowing gaps in space technology between spacefaring and emerging spacefaring nations, on favourable terms and on a non-discriminatory basis. It encouraged closer partnership between spacefaring and emerging spacefaring nations, as well as relevant international organizations and agencies, to build capacity in space science and technology in a sustainable manner. It also encouraged the Office for Outer Space Affairs to continue to conduct capacity-building and outreach activities, in particular for developing countries, and attached particular importance to the development of the legal framework to strengthen international cooperation in space, in an inclusive manner and on the basis of full respect for the principles of sovereignty, territorial integrity and equitable access for all States to space science and its applications.

7. ASEAN continued to attach great importance to the use of space-based technologies to enhance capacity for disaster risk reduction, preparedness, response and mitigation, including through the Sendai Framework for Disaster Risk Reduction 2015–2030. Space technology also played an important role in meeting the objectives of the Paris Agreement on climate change. The ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management had incorporated space technologies in its disaster management and response system. The United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) should be reinforced as well.

8. The safety, security and sustainability of outer space were of the utmost importance, and the proliferation of space debris continued to be a source of concern. ASEAN urged the Scientific and Technical Subcommittee of COPUOS to continue its deliberations on space debris mitigation measures.

9. ASEAN would continue to forge closer regional cooperation through, inter alia, the ASEAN Research and Training Centre for Space Technology and Applications, which served as a regional resource hub for capacity and research development and academic study. The ASEAN Regional Forum space security workshops continued to be focused on exploring critical issues, including space security threats and transparency and confidence-building measures. ASEAN supported the activities of the Office for Outer Space Affairs aimed at promoting gender equality and the increased role of women in space activities.

10. Speaking as the representative of Indonesia, he said that international cooperation in space activities was crucial to ensure the peaceful use of outer space for the benefit of all humanity. Such cooperation should be inclusive and take into account levels of technological development, especially of non-spacefaring nations. Indonesia looked forward to the joint panel discussion of the First and Fourth Committees on possible challenges to space security and sustainability, and called on COPUOS to stand clearly for enabling the use of outer space solely for peaceful purposes. The boundary between airspace and outer space must be established in order to achieve legal certainty in the implementation of air and space law respectively. Indonesia welcomed the 21 guidelines for the long-term sustainability of outer space activities. COPUOS should continue its deliberations on unresolved issues in that regard and on the implementation of the guidelines. Lastly, equitable access to the geostationary orbit should be guaranteed to all States, taking account of the needs and interests of developing countries and the geographical position of certain countries.

11. **Ms. Claeys** (Observer for the European Union), speaking also on behalf of the candidate countries Albania, Montenegro and North Macedonia; the stabilization and association process country Bosnia and Herzegovina; and, in addition, Georgia, the Republic of Moldova and Ukraine, said that, together, the European Union, its Member States and the European Space Agency had developed strong and unique space capabilities. The European Union had a large budget for space. Its Horizon 2020 programme, which was open to international cooperation, supported space research and innovation with a view to tackling major global challenges such as climate change, disaster

management, food security, environmental protection, efficient management of resources, transport development, marine protection and maritime awareness, migration and the protection of cultural heritage. In that connection, the European Union supported the work on the “Space2030” agenda.

12. The European Union’s flagship space programmes were an illustration of European and international cooperation: they were funded and owned by the European Union, but the European Space Agency was responsible for the deployment, design and further development of the relevant systems and infrastructure. Galileo, a global navigation satellite system, was autonomous but also interoperable with existing satellite navigation systems. When fully operational in 2020, it would improve services and provide new business opportunities in many sectors of the economy worldwide. Independent studies showed that it was expected to deliver around 90 billion euros to the European Union’s economy over the first 20 years of operation. Copernicus, a user-driven Earth observation and monitoring programme, had proved extremely useful in the context of recent natural disasters by providing accurate maps that allowed for rapid assessment of damage and the planning of rescue operations.

13. The Charter of the United Nations, the five United Nations treaties on outer space, and other related documents and resolutions adopted by the General Assembly constituted the cornerstone of international space law. The European Union was exploring the possibility of accepting the rights and obligations established under the United Nations treaties on outer space.

14. The European Union and its member States continued to promote the preservation of a safe, secure and sustainable space environment and the peaceful use of outer space on an equitable and mutually acceptable basis. They also attached great importance to responsible behaviour in outer space within the United Nations framework and welcomed the adoption by COPUOS of the preamble and 21 guidelines for the long-term sustainability of outer space activities, which were an important contribution to transparency and confidence-building measures in outer space. The establishment, under a five-year work plan, of a working group under the agenda item on the long-term sustainability of outer space activities of the Scientific and Technical Subcommittee was also a positive step.

15. Increased international cooperation was needed in order to avoid potentially harmful interference with the peaceful exploration and use of outer space, to facilitate

equitable access to outer space, and to increase the transparency of outer space activities. A voluntary instrument should be agreed upon in order to establish standards of responsible behaviour for the full range of space activities, including space debris mitigation and remediation and collision avoidance. It should complement the COPUOS guidelines on long-term sustainability of outer space activities by adding a political commitment and establishing a more structured cooperative framework. In addition, it should ensure compliance with existing international law and with transparency and confidence-building measures developed within the United Nations framework.

16. **Mr. Lim** (Singapore) said that outer space should be preserved as a peaceful global commons. Like many other countries, Singapore depended on outer space to support essential civilian and government functions, such as urban planning, weather monitoring, telecommunications, and peace support and disaster relief operations. Challenges such as the increasing amount of space debris and orbital congestion needed to be addressed.

17. Singapore supported efforts to enhance cooperation and consensus on international norms relating to space. In that connection, it had applied to become a member of COPUOS and welcomed the adoption of the guidelines for the long-term sustainability of outer space activities. It looked forward to further collective efforts by the international community to strengthen and maintain the relevance of the global space governance framework so as to keep pace with the latest technological advances.

18. Small States could play a part in promoting the peaceful uses of outer space. His Government had established the Office for Space Technology and Industry in 2013 to support the burgeoning demand for space-based solutions and to work with the relevant stakeholders to better coordinate the country's space activities and nurture space innovation.

19. Singapore also had a vibrant scientific community engaged in space-related research. The Satellite Research Centre of Nanyang Technological University and the Satellite Technology and Research Centre of the National University of Singapore had collaborated closely with research institutes and space agencies in Japan, India and the United Kingdom. Singapore sought to forge stronger cooperation with partners in the region and beyond, and to encourage the responsible use and exploration of outer space for the benefit of humankind.

20. **Mr. Devahastin Na Ayuthai** (Thailand) said that as an active member of COPUOS, his delegation was committed to ensuring that outer space was used

peacefully for the benefit of all. It also attached great importance to the transparent and inclusive development of international frameworks concerning the use outer space. The international community had a collective responsibility to address the problems of space debris and space traffic management. His Government was currently drafting a national law that would allow it to pursue its outer space-related aspirations in a systematic, coherent and responsible manner.

21. His Government was harnessing space technology to promote the achievement of the Sustainable Development Goals. For that purpose, it was planning to launch an Earth observation satellite in 2020 to enhance the country's security, resource management, disaster management and urban development. It remained committed to providing data from its existing Earth observation satellite to the Regional Space Applications Programme for Sustainable Development established by the Economic and Social Commission for Asia and the Pacific in order to assist in disaster responses across the region.

22. Technology transfer and knowledge-sharing on space-related matters must remain a priority so that no one was left behind. Regional cooperation could play a vital role in closing the considerable gaps in financial, technical and institutional capacity that currently prevented the full utilization of space applications. Thailand had played an important role in the development of the Commission's Action Plan on Space Applications for Sustainable Development in Asia and the Pacific. It was also home to the ASEAN Research and Training Centre for Space Technology and Applications.

23. The public and private sectors in Thailand were engaging in innovative and collaborative space research. The Thai space agency had recently partnered with its Japanese counterpart to conduct, on the International Space Station, an experiment aimed at developing a new anti-malarial medication. His delegation welcomed the Access to Space for All initiative of the Office for Outer Space Affairs, which was focused on a holistic, modern and strategic approach to help connect established and emerging space actors.

24. The recent launch of the first entirely Thai-built satellite was a reminder that outer space was not beyond the reach of any State with sufficient ambition. Outer space offered a constellation of opportunities to help States tackle global challenges and advance their societies. Nevertheless, States had a joint responsibility

to ensure that outer space was used exclusively for peaceful and meaningful purposes.

25. **Ms. Jáquez Huacuja** (Mexico) said that the growing membership of COPUOS reflected the increasing importance being attached to international cooperation in peaceful outer space activities. Worryingly, however, outer space was now being considered by some to be a legitimate arena for the deployment of weapons of all types. Accusations had been made regarding the possible militarization of space, and certain States had stated openly that they were seeking to establish offensive capabilities in outer space to protect their national security. Codes of conduct and bilateral and multilateral commitments were necessary as an interim measure; in the long term, however, legally binding instruments would be required to prevent such activities. The ultimate objective should be a ban on the placement of weapons in outer space and the total prohibition of the use of outer space for military purposes, in order to avoid jeopardizing the telecommunications, navigational, meteorological and observational systems that were crucial for sustainable development and daily activities on Earth.

26. International cooperation on the peaceful uses of outer space was a tool for peace, well-being and sustainable development. Space agencies and experts had a crucial role to play in the search for means of mitigating the effects of climate change and reducing the risks of natural disasters. It was crucial to ensure the long-term sustainability of outer space activities and the space environment itself, and to use outer space activities to further the implementation of the 2030 Agenda, the Sendai Framework and the Paris Agreement.

27. Efforts must be made to overcome the persistent obstacles to gender equality and the empowerment of women in outer space activities. The full and equal participation of women in leadership roles in space economy, space society, space accessibility and space diplomacy would contribute to international efforts to promote the peaceful uses of outer space. Dialogue between the major spacefaring nations and emerging space nations was needed in order to enhance the security and sustainability of outer space activities.

28. **Mr. García Moritán** (Argentina) said that his Government recognized the sovereign right of all States to participate in the exploration and use of outer space for exclusively peaceful purposes in the interest of all humanity. The 1967 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) had a fundamental role to play in

ensuring that outer space was used only for peaceful purposes and in promoting the purposes and principles of the Charter of the United Nations. While the Treaty was the cornerstone of the international legal framework governing activities in outer space, the international community needed to develop common solutions to address new challenges. His delegation therefore welcomed the adoption by COPUOS of the guidelines for the long-term sustainability of outer space activities. International cooperation would be essential for the implementation of the Guidelines. His delegation was in favour of the negotiation, within the Conference on Disarmament, of a legally binding instrument to prevent an arms race in outer space. In the meantime, international measures to ensure transparency and promote trust with regard to outer space activities should be adopted.

29. His country's space programme was entirely peaceful. Argentina had launched its first mission satellite in 2018 and would launch of a second satellite in early 2020. The purpose of the mission was to use Earth-observation technology to prevent, monitor, mitigate and assess natural and human-made disasters. It could also be applied to other areas of strategic interest, including agriculture, for the benefit countries in the region. Argentina had recently made images from the satellite available to users around the world. The successful mission was not only a milestone for Argentina but also demonstrated how outer space could be used to promote development.

30. **Mr. Gutiérrez Plata** (Colombia) said that COPUOS was the appropriate forum for the consideration of sustainability and security matters related to outer space, as it had the necessary expertise, institutional capacity and transparency and a sufficiently large membership. Discussions concerning the Outer Space Treaty and related agreements, and their implications in the current geopolitical context, should therefore take place within the framework of COPUOS. Moreover, COPUOS should continue to engage in dialogue and the exchange of information with other relevant multilateral forums. An inclusive multilateral framework should be developed to govern private sector activities and the exploitation of natural resources in outer space, taking into account the interests of all States, with a view to upholding minimum standards of transparency and competence.

31. His delegation supported the proposal in the draft resolution (A/C.4/74/L.7) that the Fourth Committee welcome the adoption by COPUOS of the guidelines for the long-term sustainability of outer space activities. His delegation encouraged the Office for Outer Space Affairs to assist Member States in the implementation

of the guidelines. It also appreciated that the draft resolution emphasized that regional and interregional cooperation in the field of space activities was essential to strengthen the peaceful uses of outer space and contribute to the implementation of the 2030 Agenda and highlighted the central role of the Office in promoting international cooperation in the exploration and peaceful uses of outer space for economic, social and scientific development, in particular for the benefit of developing countries.

32. *Mr. Pindják (Slovakia), Vice-Chair, took the Chair.*

33. **Mr. Alfawzan** (Saudi Arabia) said that concerted international efforts were needed in order to ensure that outer space was used for scientific and peaceful purposes. Since the 1970s, with that end in mind, Saudi Arabia had worked with other States and ratified relevant United Nations treaties and sets of principles. In 1976, Saudi Arabia had helped to establish the Arab Satellite Communications Organization, whose mission was to provide satellite communications and direct broadcasting services to all members of the League of Arab States. In 1985, it had launched its first satellite and sent the first Arab and Muslim astronaut into space. His Government had then established the National Centre for Remote Sensing Technology and the Space and Aeronautics Research Institute, which had launched 16 satellites and worked to ensure that aerospace technology was used at the local level for telecommunications purposes.

34. In 2018, his Government had taken action to regulate its broadcasting satellite systems, develop spacecraft launching technologies, train national staff and create the necessary conditions for developing aerospace infrastructure, ground stations and sub-orbital flights. It had also worked to strengthen aerospace security by developing monitoring and follow-up mechanisms, monitoring space debris, maintaining early warning systems and strengthening cooperation with relevant international agencies. In December 2018, Saudi Arabia had launched two Earth-observation satellites, followed in 2019 by a geostationary orbit satellite to provide broadband services. In late 2018, it had established the Saudi Space Commission, which had entered into an agreement with its counterpart in the Russian Federation in order to support scientific research and human spaceflight. Saudi Arabia had also entered into numerous cooperation agreements with other States and maintained effective relationships with United States and European space programmes. His delegation called on the United Nations to garner efforts to ensure that outer space was used for peaceful purposes and to confront the threat posed by space

debris. It urged States to carry out their aerospace activities in a responsible and transparent manner.

35. **Mr. Kim In Chol** (Democratic People's Republic of Korea) said that, because the peaceful uses of outer space had applications that could help implement the Sustainable Development Goals, it was essential to promote enhanced international cooperation in outer space exploration on the basis of relevant treaties. Under the Outer Space Treaty, outer space was the wealth of all humanity and all States had an equal right to explore it. The Treaty also encouraged close cooperation between States in the exploration and use of outer space. However, certain countries were obstructing the efforts of COPUOS and the Office for Outer Space Affairs to strengthen such cooperation, including by objecting to the participation of the Democratic People's Republic of Korea and several other States as observers in COPUOS meetings, in a display of politically motivated selectivity and double standards. There was no reason why his country should not participate in COPUOS meetings; it had become a full-fledged spacefaring nation through self-reliance and self-development, was a satellite producer, and had ratified a number of space-related treaties. Manoeuvres designed to prevent international cooperation and the development of certain States should not be tolerated, especially at a time when the monopolies held by certain States were collapsing. His Government would continue to exercise proudly its right as a sovereign State to peacefully explore outer space and to further strengthen cooperation and exchanges with other States for that purpose.

36. **Mr. Mabongo** (South Africa) said that his delegation welcomed the adoption by COPUOS of the preamble and guidelines for the long-term sustainability of outer space activities, which should strengthen the multilateral approach to sustainability, safety and cooperation with regard to the uses of outer space. It also welcomed the decision by COPUOS to establish a working group under the agenda item on the long-term sustainability of outer space activities of the Scientific and Technical Subcommittee, which would work to ensure that space continued to be safe for all spacefaring nations. The benefits of outer space must be accessible to all countries, not just those with a space programme. The use of outer space would be essential to implementing the 2030 Agenda and addressing the triple challenges facing many developing countries in Africa: poverty, inequality and unemployment. South Africa welcomed the decision by the African Union to establish the African Space Agency and would do its part to ensure that the Agency contributed to the advancement of African space policy and strategy and to the

implementation of the Agenda 2063 of the African Union.

37. International cooperation was the cornerstone of his country's space programme. The African economy as a whole was increasingly becoming space-dependent, and the continent had one of the highest demands for space products and services in areas such as communications technology, electronic economic and financial transactions, navigation, disaster management, climate change, agriculture, education and health.

38. As outgoing Chair of the Scientific and Technical Subcommittee, his delegation was aware of the numerous challenges in the way of safe access to space and the exploitation of space resources for the benefit of all, particularly with regard to space debris, space traffic management and the application of space science. It would therefore continue encouraging COPUOS to reform global space governance in order to take into account the increasing number of new space actors, especially from developing nations, and the increasing importance of commercial space actors in the international space environment. His country's national development plan recognized the central role of space science and technology in improving quality of life and promoting sustainable economic growth.

39. **Ms. Almuhairi** (United Arab Emirates) said that, in September 2019, for the first time, an astronaut from the United Arab Emirates had visited the International Space Station and helped conduct scientific experiments. That mission was an integral part of a comprehensive national strategy to build a strong and sustainable space sector. Her Government was developing a range of space programmes and had drafted a new law regulating the space sector, the first of its kind in the Middle East. The satellite KhalifaSat, which had been designed entirely by engineers from the United Arab Emirates, had been operational for one year. Action was being taken to build the capacities of several national space research centres. Of the more than 1,500 employees of the emerging aerospace sector, 47 per cent were women. In July 2020, the United Arab Emirates was planning to launch the "Hope probe", which would provide vital data on the atmosphere of Mars to more than 200 scientific institutions.

40. In order to foster international cooperation in staff training and the exchange of best practices, the United Arab Emirates had signed cooperation agreements with a number of States, including the Russian Federation, and with leading aerospace corporations. The United Arab Emirates had also joined global space organizations, including the Committee on Space Research and COPUOS and, along with several other

States, had recently formed the Arab Space Coordination Group. The Group's first project was to develop a satellite to monitor climate change and the environment throughout the Arab region. The satellite would be funded by the United Arab Emirates Space Agency and designed and built by a team of Arab engineers.

41. Her delegation welcomed the consensus reached during the 2019 session of COPUOS with respect to the preamble and guidelines for the long-term sustainability of outer space activities. Her delegation had been involved in drafting the guidelines and looked forward to participating in the relevant working group. Her Government looked forward to hosting the seventy-first International Astronautical Congress in 2020.

42. **Mr. Hoeseb** (Namibia) said that his delegation agreed with the view, which had been expressed at the sixty-second session of COPUOS, that it was the duty of States members of COPUOS to effectively enhance the role and importance of COPUOS in addressing all issues related to the peaceful uses of outer space, and that all rules governing space activities should be adopted within the framework of COPUOS, and not within the framework of other informal platforms or alternative mechanisms. Outer space and other celestial bodies must continue to be regarded as the common heritage of humankind and used for the benefit of all, and no weapons of any kind must be placed in outer space. The "Space2030" agenda was essential to the implementation of the 2030 Agenda, the Paris Agreement and the Sendai Framework.

43. Namibia had partnered with various other States to study the effects of space phenomena on the Earth. It was critical that such crucial information be shared among States. In that connection, Namibia was proud to host the High Energy Stereoscopic System, a multi-telescope system used by 40 institutions in 13 countries.

44. His delegation called on COPUOS to continue to deliver on the common goals of all nations, taking into account the needs of developing countries, and to play a larger role in enhancing transparency and confidence-building measures among Member States in order to prevent an arms race in outer space. Through participation in Southern African Development Community projects, Namibia was building its institutional and human capabilities in relation to high-performance computing, big data analytics and artificial intelligence. The World Meteorological Organization, in collaboration with the International Environmental Data Rescue Organization and the National Oceanic and Atmospheric Administration of the United States, had provided the Namibian meteorological service with

tools and training to improve its response to natural disasters.

45. The international community should come together to use space technologies to address challenges in such areas as climate change, health and cybercrime, and to promote strategic partnerships and free flow of knowledge and skills. His delegation urged all Member States to comply with the COPUOS Space Debris Mitigation Guidelines.

46. **Mr. Wisam** (Iraq) said that, as a member of COPUOS, his delegation had participated in the meetings of the Scientific and Technical Subcommittee and Legal Subcommittee. It commended the efforts made by the Subcommittees and the Office for Outer Space Affairs to strengthen environmental safety in space and develop a legal foundation for sustainable development; it was important to ensure that outer space activities were safe, secure, sustainable and consistent with the principles of justice and equality.

47. Iraq had received support from the Korean Aerospace Research Institute and the National Oceanic and Atmospheric Administration in the United States. Despite facing such challenges as the fight against Islamic State in Iraq and the Levant (ISIL), it had been able to develop its first satellite with assistance from the Government of Italy and the United Nations Industrial Development Organization. It had also worked to train its citizens in advanced aerospace and telecommunications technology. Aerospace data available for free on the websites of various institutions had been used to determine the location and environmental effects of sulphur field and oil field fires caused by sabotage. Satellite data had also been used to measure the concentration of gases such as methane and carbon dioxide in the atmosphere, and to evaluate the effects of war in areas liberated from ISIL. During the previous winter, digital elevation models had been used to identify low-lying areas that could collect flood water to mitigate the effects of later droughts.

48. His delegation rejected any attempts to militarize outer space or to use it to the detriment of humanity or the environment. The international legal framework should be strengthened in order to foster purely peaceful uses of outer space, prevent any one State or group of States from exercising hegemony over outer space, and make it possible to determine international responsibility for any harm resulting from the misuse of space.

49. **Mr. Kaneto** (Japan) said that COPUOS was an effective forum for the development of norms to ensure the safety, stability and sustainability of activities in outer space. His delegation encouraged all Member

States to implement the newly adopted guidelines for the long-term sustainability of outer space, which were particularly important in the light of the increasing complexity of outer space operations, the emergence of large constellations of satellites and the increased risks of collisions. Through the new working group under the agenda item on the long-term sustainability of outer space activities, his delegation would share its best practices and help address new challenges.

50. His Government had taken specific policy, legislative, regulatory and research actions at the national level to combat the serious threat posed by space debris, but international efforts were needed to fully address the problem. Japan was currently developing a large-scale debris-removal system. His Government had recently decided to begin lunar exploration activities, in cooperation with international partners.

51. To broaden access to outer space, Japan had been participating in a capacity-building initiative designed to give developing countries the opportunity to deploy cube satellites from the Japanese Experiment Module on the International Space Station, thereby lowering the satellite development threshold for those countries. Kenya had successfully deployed the first satellite through the programme in 2018. Along with Singapore, Japan had co-hosted the annual Asia-Pacific Regional Space Agency Forum, which aimed to enhance space cooperation activities and identify means of using space technology to address regional challenges such as disaster management.

52. **Mr. Misra** (India) said that his country's long-running space programme was focused on using space technology to help achieve national development goals. The Indian space agency was currently working with 60 government ministries and departments. Its recent achievements included a second exploratory mission to the Moon, and it was currently working on a human space flight programme. International cooperation had been an important element of the Indian space programme since its inception. India was currently sharing its vast experience in peaceful outer space activities through cooperation agreements with approximately 55 countries and five multinational bodies. In the past year, it had signed cooperation agreements with Bahrain, the Plurinational State of Bolivia, Finland, Tajikistan, Tunisia and Uzbekistan. It was preparing to conduct joint satellite missions with the United States and France and was considering undertaking a joint lunar mission with Japan. It continued to share its facilities and expertise through the Centre for Space Science and Technology Education in Asia and the Pacific, which was based in Dehradun,

India. His country was also active in various regional and international space forums.

53. The India Space Research Organisation (ISRO) was implementing a capacity-building programme named UNISPACE Nano-satellite Assembly and Training by ISRO (UNNATI), which was intended to help developing countries assemble, integrate and test small satellites. Officials from 17 countries had already completed the training and 30 more were currently enrolled in the programme. His delegation encouraged the international scientific community to make the most of his Government's offer to make its sounding rockets and the spent fourth stage of its Polar Satellite Launch Vehicle available for the conduct of experiments.

54. India was a party to the major international instruments concerning the use of outer space and was implementing their provisions, including the Space Debris Mitigation Guidelines. His Government was currently developing national legislation to facilitate the growth of space activities through the enhanced participation of non-governmental stakeholders. It was also helping build capacity in relation to space law through national and international workshops and seminars. In view of emerging challenges, compliance with United Nations space treaties was more relevant than ever, and, the international legal framework should be strengthened to enhance the safety and security of space assets.

55. **Mr. Shaddad** (Jordan) said that his Government was committed to fostering aerospace science and research and engaging in scientific and technological exchange at the regional and international levels. The Regional Centre for Outer Space for Science and Technology Education, which had been officially inaugurated in Jordan in 2012, was one of six regional centres established for the purpose of harnessing science and technology to benefit humankind and contribute to sustainable development. Its activities were focused on remote sensing, geographic information systems, satellite meteorology, satellite telecommunications, space and atmospheric sciences and space law and its applications. It offered academic programmes at the Bachelor's and other higher education levels, as well as shorter educational training courses lasting up to nine months. The Jordanian Government had made the necessary academic infrastructure available to the Centre and had signed agreements with Arab States, the Office for Outer Space Affairs and domestic and international institutions.

56. In 2018, Jordan had launched its first CubeSat satellite, which had been designed by local engineers and was being used to promote tourism in Jordan. The

satellite had been created by a team comprising 19 Jordanian engineering students trained at the United States National Aeronautics and Space Administration, and five Jordanian academics and consultants. The project had received support from the United Arab Emirates Space Agency, the renewable energy company FRV, and several domestic stakeholders. It was part of an initiative to provide Jordanian youth with opportunities to demonstrate their talent for innovation.

The meeting rose at noon.