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Summary record of the joint ad hoc meeting of the First and Fourth Committees on possible challenges to space security and sustainability
Held at Headquarters, New York, on Thursday, 27 October 2022, at 10 a.m.

Co-Chair: Mr. Pieris (Chair, First Committee) . . . . . (Sri Lanka)
Co-Chair: Mr. Al Hassan (Chair, Fourth Committee) . . . . . (Oman)

Contents

* Verbatim records were issued for meetings of the First Committee prior to and subsequent to the 23rd meeting and constitute the official records of those meetings.

22-24215 (E)

The meeting was called to order at 10.15 a.m.

Agenda item 45: International cooperation in the peaceful uses of outer space (*continued*)

Agenda item 99: General and complete disarmament

(jj) Joint panel discussion of the First and Fourth Committees on possible challenges to space security and sustainability

1. **Mr. Pieris** (Co-Chair) said that he was chairing the meeting jointly with the Chair of the Fourth Committee, who would guide the second part of the proceedings. Over the years, both the First and the Fourth Committees had been considering the question of how best to preserve outer space exclusively for peaceful purposes. The First Committee had been addressing the subject under its agenda item on prevention of an arms race in outer space, as well as the agenda item on general and complete disarmament and its subitem entitled "Transparency and confidence-building measures in outer space activities", which was item 99 (cc) for the current session. The Fourth Committee had been considering the matter under the agenda item entitled "International cooperation in the peaceful uses of outer space", which was item 45 for the current session. The joint meetings provided a forum for the members of the two Committees to consider the issue together. The topic of the current joint meeting was "Possible challenges to space security and sustainability".

Introductory statements

2. **Mr. Ebo** (Director and Deputy to the High Representative for Disarmament Affairs) said that the meeting was being held at a time of multiplying conflicts among the major military powers which risked spilling over into active hostilities in new domains, including outer space. In his report entitled "Our common agenda" (A/75/982), the Secretary-General had observed that "outer space has traditionally been acknowledged as a global common, beyond the jurisdiction of any one State. The potential for its peaceful, secure and sustainable use would benefit all humanity today and into the future. Governance arrangements for outer space, including the Committee on the Peaceful Uses of Outer Space (COPUOS), were established in an era of exclusively State-based activity and provide only general guidance on managing traffic in outer space, the permanent settlement of celestial bodies and responsibilities for resource management. […] Space assets have transformed the way we live and outer space systems are vital for understanding and solving global problems, such as implementation of the Sustainable Development Goals and climate action. Many of these developments are driven by actors in the private sector. They also pose new risks to security, safety and sustainability. Increasing congestion and competition in outer space could imperil access and use by succeeding generations. Our governance and regulatory regimes require updating in line with this new era to preserve outer space as a global common."

3. Preserving outer space as a realm free of conflict and weaponization remained an urgent priority, which was why the Secretary-General intended to convene a multi-stakeholder dialogue on outer space as part of the Summit of the Future in 2024. The dialogue was not intended to replace the decision-making role of States in the future of international governance, but rather to elevate the political level of international agreements and instil a sense of urgency into existing workstreams. The joint meetings of the First and Fourth Committees had demonstrated the importance of bringing all members of the space policy community together to share experiences and coordinate efforts, in addition to facilitating multi-stakeholder dialogue and engagement with the private and non-governmental sectors. The current meeting should enable wide-ranging discussion among Member States on the preparations for and desired outcomes of the 2024 Summit, as well as on the role to be played by the relevant United Nations bodies. Specifically, he hoped that the interactive dialogue would result in guidance on the first phase of preparations for the Summit.

4. **Mr. Vorontsov** (Russian Federation) said that the First and Fourth Committees were, first and foremost, platforms for intergovernmental exchange; accordingly, their joint meeting should be focused on a discussion between States. It was appropriate for non-governmental entities to have the opportunity to propose approaches – but only after delegations had exchanged views. Furthermore, it was of serious concern that the Secretariat, whose role should be strictly advisory, had submitted the draft agenda to Member States, but not consulted them at the preparatory phase.

5. His delegation had earlier raised various issues related to the meeting, including the unclear criteria used to select the panellists speaking on behalf of industry and academia and the imbalance among the representatives of non-State bodies, particularly in terms of geographical representation. For instance, there were no panellists from developing countries, although Member States would be interested in hearing their views. Moreover, some of the panellists had already spoken in other forums, including in the open-ended

working group on reducing space threats through norms, rules and principles of responsible behaviours of COPUOS.

6. His delegation could not see any value in hearing reports from non-governmental entities at the current meeting, especially given the insufficient time available, including for intergovernmental talks. It wished to see a balanced discussion of the issues related to the security of outer space activities. In view of the time constraints, it was prepared to be flexible – but it would like the Secretariat and the Co-Chairs to address its concerns. Moreover, the Secretariat should take those concerns into account in its preparations for the next joint meeting, to be held in 2024. If the situation was repeated, the Russian Federation would have to take decisive measures to disallow the holding of briefings or the presentation of reports that were imbalanced, as that risked making the ensuing discussions imbalanced, as well.

7. **Ms. Carral Castelo** (Cuba) said that her delegation shared the concerns of the Russian Federation regarding the way in which the panellists had been selected. Consultations among Member States should have been held prior to their selection. Equitable geographical representation had not been taken into account in the selection process, which had not been transparent. The exact source of the mandate establishing who was to present at the current meeting was also unclear.

8. **Mr. Al Ashkar** (Syrian Arab Republic) said that his delegation echoed the concerns raised by the representatives of the Russian Federation and Cuba. Respect for diversity and equitable geographical representation in relation to the subjects under consideration was imperative.

9. **Mr. Pieris** (Co-Chair) said that the observations were well taken; things might always be done better. Any decisions taken had been in the best interest of the First Committee and were not an abdication of the authority of States. In fact, the matters raised by delegations had been raised and considered at the Bureau level, and a via media had been put in place: the Bureau had written to the regional groups requesting nominations for panellists, hoping that additional perspectives would be added to those of the experts already inscribed. Knowing that having panellists representing the different regions would be preferable, the Bureau had been accommodating, even offering the option of virtual participation. However, it had received no nominations, possibly due to time constraints. There was no hidden agenda. The Bureau had approached the subject with an open mind and its members had all agreed that the invitation should be opened to a much greater number of speakers. Unfortunately, the Bureau had not met with success. He thanked delegations for expressing their views in no uncertain terms. Their concerns would inform the preparations for future meetings.

10. **Mr. Al Hassan** (Co-Chair), echoing the position expressed by the other Co-Chair, said that delegations had indeed been given the opportunity to submit nominations, but that none had been put forward. However, he was in full agreement with the delegates of the Russian Federation, Cuba and the Syrian Arab Republic that discussions on outer space were indeed State-driven. He thanked delegations for demonstrating flexibility and assured them that the Co-Chairs took their comments seriously and that the points made would be taken into account in future.

11. **Mr. Hedman** (Acting Director, Office for Outer Space Affairs) said that, in its role as a secretariat, the Office for Outer Space Affairs had been assisting States members of COPUOS in the global governance of outer space activities. The Office had established a robust capacity-building programme, which covered space science, technology, law and policy as the means to bridge the capability gap between countries. Under the Convention on Registration of Objects Launched into Outer Space, the Office for Outer Space Affairs had been mandated to maintain the central Register of such objects for four decades. The Register functioned as the core mechanism for treaty-based transparency and confidence-building and included information on status changes, de-orbiting and re-entry events of space objects in orbit and similar information deemed appropriate to enhance the safety of space operations.

12. Action taken to address space security and sustainability concerns should be based on the fundamental development needs of all nations and people. Indeed, in the 2030 Agenda for Sustainable Development, space exploration, science and technology were described as indispensable tools in the efforts to address global challenges. Ensuring that they served sustainable development was central to the work of both COPUOS and the Office. There was a need to bridge existing gaps in terms of both access to space and the benefits of solutions derived from activities in orbit.

13. In 2021, the General Assembly had adopted the “Space2030” Agenda, setting out its vision for space as a driver of sustainable development. The Sustainable Development Goals Summit would be held in 2023 and the Summit of the Future would be held in 2024. Those milestones should assist the international community to pursue its common interest in maintaining outer space

for peaceful purposes, which must be the overarching objective underpinning space activities.

Panel discussion

14. **Mr. Sharaf** (Chair, Committee on the Peaceful Uses of Outer Space) said that the United Nations had been at the centre of international cooperation in space activities since the beginning of the space age. The General Assembly had established COPUOS in its resolution 1348 (XIII), in recognition of the importance of using outer space for peaceful purposes and of the need to promote international cooperation in the conduct of space activities. COPUOS had played a major role in the organization of the three United Nations Conferences on the Exploration and Peaceful Uses of Outer Space (UNISPACE conferences) held to date. Although the continuous growth of space activities, their diversification and the emergence of new space actors meant that each conference had been held in a different context, the flexible mandate of COPUOS had allowed it to ensure that progress was made in the implementation of the resulting recommendations.

15. COPUOS and its subcommittees were global platforms for international cooperation and dialogue between major spacefaring nations and emerging space nations – a status reaffirmed by the increase in the number of States members of COPUOS, from an initial 24 to its current membership of 100. COPUOS was responsible for the establishment and further development of the United Nations legal instruments governing outer space activities. In that regard, it had helped develop the five United Nations treaties on outer space, along with a number of non-legally binding instruments, including the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space – the precursor to the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies. It had also helped develop a number of guidelines and resolutions covering issues such as the concept of "launching State", registration practice and national space legislation which supported States in the fulfilment of their rights and obligations under outer space treaties.

16. After more than 60 years of governance and diplomacy in the peaceful uses of outer space, the space activities of States, intergovernmental organizations and non-governmental entities had increased, and space science and technology and their applications were contributing immeasurably to sustainable development. COPUOS constantly monitored the space agenda and advances in space technology with a view to developing new mechanisms that reflected the complexity of space activities. It also continued to foster multilateralism and common ground in various areas, including the long-term sustainability of outer space activities, space debris mitigation and remediation measures, space exploration, utilization of space resources, space traffic management and a range of items relating to the use of space science and technology applications to meet the Sustainable Development Goals.

17. Several working groups were engaged in ongoing deliberations, under multi-year work plans, on various topics, including the use of nuclear power sources in outer space, the long-term sustainability of outer space activities, the status and application of the United Nations treaties on outer space, the definition and delimitation of outer space, and the legal aspects of space resources activities. Thanks to the work of one such working group, and after years of in-depth negotiations, in 2019, COPUOS had been able to adopt the Guidelines for the Long-Term Sustainability of Outer Space Activities. The Guidelines were a compendium of relevant internationally recognized commitments and measures and, while non-binding, they represented a political consensus. A new working group on the topic was tasked with identifying and studying new challenges and considering possible new guidelines; sharing experiences learned from the voluntary implementation of the Guidelines; and building awareness and capacity.

18. In 2021, through resolution 76/3, the General Assembly had adopted the "Space2030" Agenda, a strategy for strengthening the contribution of space activities and tools to the implementation of global sustainable development agendas. The Agenda also contributed significantly to charting the future contribution of COPUOS to the framework for the global governance of outer space activities. In the document, Member States addressed changes in the way such activities were taking place at a time when many more actors, representing both governmental agencies and non-governmental entities, were becoming involved in space ventures.

19. **Mr. Lagos** (Chair, Open-ended working group on reducing space threats through norms, rules and principles of responsible behaviours), presenting an update on the work of the working group, said that at its first session, the working group, which had been established pursuant to General Assembly resolution 76/231 of 24 December 2021, had focused on taking stock of the existing international legal and other normative frameworks concerning threats arising from State behaviours with respect to outer space. Despite the adverse international context, all delegations had

participated actively in the session, an indicator of the recognition of humanity's growing dependence on outer space.

20. Delegations had emphasized the importance of preserving outer space for peaceful exploration and use and of preventing an arms race. States had indicated that it was essential to strengthen the existing international framework applicable to outer space in order to effectively address concerns about space security and the rapid pace of technological advances. The working group had also addressed actions, activities and omissions that could be considered irresponsible. There had been support for enhanced development and implementation of transparency and confidence-building measures. Various delegations had also referred to the draft treaty on the prevention of the weaponization of outer space. Delegations had expressed their hope that the norms, rules and principles agreed on could be incorporated into a legally binding instrument, and agreed that non-binding measures could form the basis for legally binding instruments.

21. At its second session, the working group had addressed threats to space through norms, rules and principles of responsible behaviour, considering current and future threats by States to space systems, and actions, activities and omissions that could be considered irresponsible. States had expressed their concerns with respect to the development and testing of anti-satellite systems and the generation of long-lived space debris. The recent announcement by the United States of its decision to establish a moratorium on anti-satellite tests and its call on other States to follow suit had been well received by many delegations, some of which had committed to ceasing such tests. Other delegations had said that, although the moratorium was a step forward, it was insufficient. Concerns had also been raised about the potential weaponization of outer space, and about interference and malicious cyberactivity targeting navigation and communication satellites. Support for enhanced development and implementation of transparency and confidence-building measures had been expressed.

22. He was convinced that the new approach, based more on behaviour than on capacity, represented a real opportunity, as it enabled all stakeholders to participate in the discussions without the risk of duplication of the well-known talking points on the topic. The working group's mandate obliged it to make every effort to produce a consensual report containing recommendations for the General Assembly and allowed it to initiate a wide-ranging discussion that covered all perceived threats and that did not exclude prior proposals. He hoped that the group would be able to reach consensus on proposed recommendations that were balanced and inclusive and that represented the diverse interests of the international community.

23. At its third session, the working group would seek to develop recommendations on potential norms, rules and principles of responsible behaviour in relation to threats by States to space systems, considering, as appropriate, how such recommendations would contribute to the negotiation of legally binding instruments, including on the prevention of an arms race in outer space. It would not be a straightforward discussion. However, the discussions thus far made him optimistic that the group would be able to advance in its work, despite the adverse international context. Ensuring the security and sustainability of activities in outer space was a global priority; it affected every nation and, therefore, he encouraged every nation to participate actively in the work of the working group.

24. **Mr. Al-Rodhan** (Geneva Centre for Security Policy) said that humanity increasingly and irreversibly depended on outer space in such areas as economic prosperity, security, navigation, diplomacy, sustainable development, supply chains, cybersecurity and arms control. Outer space was a global commons, and everyone had a shared responsibility to keep it safe and secure; but it was becoming increasingly congested, contested and competitive. Any disruption in outer space would affect all space assets, regardless of who owned them. If outer space became critically unsafe, it would be so for everyone.

25. The major challenges in relation to outer space included space debris and anti-satellite tests, especially in low Earth orbit; militarization; an absence of space traffic management; gaps in space law; a lack of trust, transparency and cooperation; a lack of binding and non-binding agreements; an exponential increase in space assets, especially from the private sector; occasional malign activities in space; and growing economic competition for space resources. There were also positive developments, including the relentless efforts of the United Nations to ensure the security and sustainability of outer space activities; the unilateral ban by the United States on anti-satellite tests; the joint efforts of the Russian Federation, China and the European Union over the previous two decades to reach a consensus on norms and conduct in outer space; and the leadership of the United Kingdom in relation to General Assembly resolution 75/36.

26. Geopolitical and governance imperatives in relation to outer space included an urgent need for adequate, cooperative space traffic management rules; urgent efforts to declutter space, especially lower Earth

orbit; bilateral and multilateral trust-building measures, both through existing United Nations instruments and mandates and through other modalities; efforts to develop codes of conduct and urgently demilitarize outer space; increased engagement by all States, including small States and those without any space assets; and a change in the geopolitical mindset – from zero-sum and security dilemma paradigms to a "multi-sum security" paradigm. All stakeholders, whether from government, non-governmental organizations, intergovernmental organizations, the private sector or civil society, should work to safeguard the peaceful uses of outer space and focus on its cooperative, scientific and economic promise. States, in particular, should reconcile their national interests with transnational, global and planetary interests. It was understandable that States in an anarchic global system pursued what they saw s their national interest; but failing to reconcile their interests with those of others would lead to conflict and collective harm. Humanity owed it to current and future generations to establish a safe, prosperous global order that would support an inspired, responsible and sustainable adventure into the cosmos.

27. **Mr. Wang** Guoyu (Beijing Institute for Technology) said that there was an urgent need to reorganize the concepts of space security, safety, sustainability and stability. Traditionally, space security matters had been discussed in the First Committee or the Conference on Disarmament, while space safety had been associated with the peaceful use of space and was therefore addressed in COPUOS and the Fourth Committee. However, the blurring of the line between space security and space safety meant there was a risk of overlap between the work of those bodies, something that would hinder the development of space diplomacy and governance.

28. "Space security" referred to an absence of space threats posed by intentional acts, whether or not those acts actually resulted in damage. "Space safety" referred to an absence of damage, whether it was the result of intentional or unintentional acts. Thus, freedom from damage caused by intentional acts was covered by both concepts. Although space security related to the status of threats and space safety related to outcomes, global space governance in relation to a single topic often encompassed both concerns. For instance, the governance of large constellations was generally a matter of safety, but it could also fall under the ambit of arms control or the prevention of an arms race in outer space if there was evidence that operators were using satellites to generate space threats, for instance by using them to conduct operations of a military nature. From a national perspective, space security involved protecting space assets, activities and other interests from threats or any adverse consequences of others' deliberate behaviour, such as unfriendly, provocative or malicious space policies and operations, and the capability to adopt the necessary safeguards and to respond. From an international perspective, space security was about avoiding misunderstandings, misperceptions and conflicts among States with a view to preventing conflicts from spilling over into space.

29. "Space sustainability" encompassed three elements: maintaining the use of outer space at a certain rate or level, equitable utilization, and self-restraint. The latter meant that stakeholders should not always take full advantage of their space rights and freedoms, but should instead duly consider the interests of others, and in particular those of developing countries. "Space stability" meant the state of being free from space conflicts, particularly armed space conflicts and space warfare. All international initiatives aimed at preventing an arms race in outer space should be evaluated on the basis of their contribution to space stability. In order to achieve space stability, no actor should seek to change the status quo of space relations, for instance by pursuing superiority in space. Space security governance should be underpinned by comprehensiveness, balance of interests and self-restraint, with a view to achieving space stability. That meant that all kinds of challenges should be considered comprehensively; for instance, when examining a particular issue, stakeholders should bear in mind the increasing risks of an arms race, weaponization and the risk of outer space becoming a battlefield. As rules were developed, diverse interests, in particular the interests of developing countries, should be reflected in a balanced way. Self-restraint entailed avoiding hostile positions and policies and unfriendly, provocative or malicious acts, even when such acts were not expressly prohibited under international law.

30. The primary challenges to space security were the absence of an accurate, shared understanding of key terms; the lack of strategic understandings; the lack of necessary mechanisms, such as a military hotline for the purpose of preventing a potential space conflict; and the lack of a shared agreement regarding the applicability of international law to space scenarios. It might not be practical to define the remits of the various United Nations bodies according to dichotomies such as "safety/security" or "intentional/unintentional" because there were always overlaps between those concepts with respect to any given topic. Those overlaps reflected the dual-use nature of space technology and the growing interconnectedness of global space governance, security

and non-security concerns and of military and non-military affairs. Accordingly, the United Nations framework must be adapted and made fit for purpose. The joint First-Fourth Committee meeting, while serving as a timely response to various challenges and enabling an exchange of views between the bodies, was insufficient. It would therefore be useful to establish a mechanism for regular, joint meetings of the First, Fourth and Sixth Committees, to enable those bodies to consider the applicability of general international law to space, which was an urgent, but unsettled, issue; as well as the establishment of a joint expert group, under the auspices of the existing First-Fourth Committee meetings, which would address topics such as space traffic management, space crisis management and control, large constellation management, planetary defence and the exploitation and utilization of space resources.

31. **Ms. Warren** (Satellite Industry Association) said that the Satellite Industry Association represented more than 60 space companies engaged in every facet of the space industry, from telecommunications, the Internet of things and broadband, to future applications such as in-orbit servicing, space transportation and space exploration. Its satellite communications members made a major contribution to ensuring connectivity to every point on the globe. The majority of the more than 5,000 satellites currently in orbit were commercial, and thousands more were expected to be launched over the following decade. There was an inherent business interest in preserving space as a viable place to do business. In space, there were no designated safe areas for any given use, and no commercial or government lanes. Humanity had a common interest in ensuring the long-term sustainability of space, especially in view of the significant investments in research and innovation that had already been made.

32. The Satellite Industry Association was building on the work of COPUOS, and in particular its Guidelines for the Long-Term Sustainability of Outer Space Activities. Its own working group on space safety was currently integrating the Guidelines into a set of best practices and principles, which the Association planned to use as the basis for a ratings system for potential missions. Operators, manufacturers and proponents of new missions would be able to secure a "seal of approval" based on their ratings. Satellite industry actors were also involved at the national administration level. For instance, the Association had supported the recent adoption by the Federal Communications Commission of a five-year post-mission disposal regulation. In keeping with existing international standards, guidelines and expected norms of space behaviour, Association members typically promoted design, construction and operation of spacecraft that offered a high probability of successful disposal and minimized the amount of debris that could strike the ground in the re-entry phase. Commercial satellites were generally well under the internationally recognized casualty-risk threshold, and the re-entry of a commercial satellite had never caused a human casualty.

33. Including the broadest possible private sector representation in intergovernmental dialogues would help to ensure that governmental and commercial guidelines were aligned. Approximately two years earlier, the Association had adopted a set of space safety principles, which fell into three categories, namely, what operators should do pre-launch, what they should do during regular operations and what the operator community as a whole should do. Pre-launch, operators should consider space sustainability when selecting a manufacturer and a launch service provider, including to minimize the risk of failure and debris generation, to ensure that their satellites could be tracked and to limit the impact on other space operators in the event that their spacecraft became derelict. During operation, they should update positional information as soon as was practicable after the launch, monitor the status and health of their spacecraft in order to detect anomalies before they became serious, comply with rules for disposal, and ensure that security protocols were in place to prevent unauthorized actors from taking control of spacecraft or ground systems.

34. It was important for the operator community as a whole to improve the transparency and fidelity of the data sources used for conjunction assessments. There was a need for timely dissemination of transparent, cost effective and accurate space debris monitoring information to all space actors, drawing on commercial, government and academic data sources. Satellite Industry Association operators had been increasingly participating in international standards bodies to try to clarify data exchange needs and help to establish the necessary tools and algorithms. In addition, operators must be encouraged to maintain channels of communication that were open 24 hours a day, every day of the year, and to ensure that communication was two-way. Enhanced collaboration and education on space weather research were needed with a view to mitigating the impact of space weather on satellite infrastructure. It was also important to educate new entrants about space weather; although the space community as a whole still had a great deal to learn, there was a lot of knowledge within national Governments and it was critical to help each nation's new entrants to understand the risks and how to mitigate them, because one failure

could impact many. Spectrum access was another area that required increased collaboration. The World Meteorological Organization, International Telecommunications Union, First and Fourth Committees of the General Assembly and other bodies of the United Nations had a role to play in ensuring that there was an adequate spectrum for the variety of needs and missions of Governments, the private sector and academic institutions.

35. International institutions should involve the private sector in discussions as much as was possible, as doing so would help them to stay abreast of the innovation taking place in the private sector, which would have implications for policy discussions. Industry actors were currently investing in higher fidelity space situational awareness data, active debris removal technologies, satellite servicing, new automated collision-avoidance capabilities and new propulsion technologies.

36. **Mr. Pieris** (Co-Chair) said that the discussion had made it clear that the international regulation of the uses of outer space warranted careful and rigorous consideration. Owing to recent advances and a lack of regulation, cyberspace and artificial intelligence also represented threats to global security – and, as with space technologies, new developments in those areas were affecting warfare in the twenty-first century. Unfortunately, there was a growing risk that outer space might be used not only to facilitate armed conflict, as was already the case, but might ultimately become a theatre of war, despite the efforts of the international community. The military use of outer space and its possible weaponization was one of the most politicized and complex issues of recent times. All stakeholders must find ways to meet the resulting challenges.

37. It was imperative to establish an appropriate and acceptable regulatory regime to govern companies' and individuals' use of space technologies. However, it was unclear what form such a regime might take. Over time, more soft law agreements might be concluded between States, and customary international law might be applied in relation to space. However, specific principles would create more binding applications and decrease the threat posed by space assets. In the short term, States were taking it upon themselves to adopt national laws and to regulate State space technology, but most such laws were focused on commercial development as opposed to military uses of outer space. Ultimately, States would need to create an international standard for the regulation of outer space. However, until that occurred, a fundamental sense of humanity must remain paramount in order to avoid inconceivable scenarios.

38. *Mr. Al Hassan (Oman) took the Chair*.

39. **The Chair** said that the United Nations must avoid a race for the benefits of outer space, which was the common heritage of humankind. The United Nations was an institution for all; it must encourage the ideas, innovations, proposals and recommendations of all States, thereby strengthening international cooperation on outer space.

Interactive dialogue

40. **Ms. Hendrickson** (United Kingdom), speaking also on behalf of Albania, Australia, Austria, Belgium, Bulgaria, Canada, Chile, Colombia, Croatia, Cyprus, Czechia, Denmark, Estonia, European Union, Finland, France, Georgia, Germany, Greece, Guatemala, Hungary, Iceland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Korea, Romania, San Marino, Slovakia, Slovenia, Spain, Switzerland, Türkiye, United States of America and Ukraine, said that there was an important distinction to be made between discussions on national security activities in the Conference of the Committee on Disarmament and the Disarmament Commission and those on the peaceful uses of outer space in COPUOS. That distinction was reflected in the respective roles of the First and Fourth Committees. Nonetheless, and as recognized in General Assembly resolution 76/55, both Committees and their subsidiary bodies played vital and complementary roles in ensuring the safety, security and sustainability of human activities in outer space. For example, the deliberate destruction of space systems could have major impacts on both security and the space environment, creating unnecessary hazards to human spaceflight and other space missions. The convening of the current joint meeting of the two Committees was therefore welcome.

41. Since the previous joint meeting, on 31 October 2019 (A/C.4/74/SR.15-A/C.1/74/SR.20), significant progress had been made in raising awareness of space security and threats to space systems. At that meeting, calls for new, inclusive dialogue on addressing threats to space systems had led to the adoption of General Assembly resolutions 75/36 (2020) and 76/231 (2021), the latter of which had provided for an open-ended working group on reducing space threats through norms, rules and principles of responsible behaviours. Thus far, discussions in the open-ended working group had been conducted in an inclusive, transparent and creative manner, demonstrating the widespread interest in space security from both spacefaring and non-spacefaring countries, contributing towards the prevention of an

arms race in outer space and promoting transparency and trust between States.

42. The delegations concerned welcomed the overwhelming recognition that international law and international humanitarian law, including the Charter of the United Nations, applied to outer space activities. While those binding rules provided foundations, there was a need to work towards a more specific collective understanding of how such rules applied to certain conduct. The recognition of the applicability of international law to outer space should not be taken as permitting or encouraging the resort to force; rather, it was a reminder that certain forms of conduct were never lawful, even during armed conflict.

43. With regard to the proposed treaty on the prevention of an arms race in outer space, the discussion had moved beyond the deadlock between, on the one hand, the view that a single, comprehensive legally binding instrument was needed and, on the other hand, the view that such an outcome was unrealistic. While many States believed that such an instrument was the ultimate goal at hand, there was increasing recognition that it was not the only available measure, something that had been noted by the Secretary-General in his paragraph 47 of his report on reducing space threats through norms, rules and principles of responsible behaviours (A/76/77). Voluntary and collectively established norms of responsible behaviour, combined with enhanced mutual understanding, dialogue and transparency, alongside the sharing of an awareness of space domains, would help to reduce the risks of misunderstanding and unintended escalation.

44. There was growing recognition that the development and application of behavioural norms could be valuable steps towards the eventual negotiation of legally binding instruments. One example was the endeavour to consolidate the commitment made by an increasing number of States not to conduct destructive, direct-ascent anti-satellite missile testing. By demonstrating the effectiveness of voluntary measures over time, States could gradually build confidence towards converting those measures into legally binding rules. It was vital to ensure that any such rules were practically applicable, and that States complied with them. It was therefore important that States apply the 21 guidelines for the long-term sustainability of outer space activities, and that best practices be developed for that purpose. The decade-long process of formulating those guidelines represented a significant development in voluntary measures to ensure the safe and sustainable use of outer space for all countries. The continuation of that work in COPUOS was an opportunity to make lasting progress through dialogue and practical implementation.

45. Lastly, the Working Group on the Long-term Sustainability of Outer Space Activities and the open-ended working group were distinct, but complementary. Together, they would enhance the overall safety, security and sustainability of outer space.

46. **Ms. Sellner** (Austria) said that her delegation welcomed the establishment of the open-ended working group; however, there were many challenges to keeping outer space safe, secure and sustainable, including the significant increase in space activities. More than 50 new satellites were launched every week, mainly by private companies for commercial purposes, and there would be even more in the future. Member States should be encouraged to sign the United Nations treaties on outer space, and objects launched into outer space should be registered.

47. Outer space was a global commons. Its exploration and use should be undertaken for the benefit and in the interests of all, leaving no one behind, including future generations. The adoption of the 21 guidelines for the long-term sustainability of outer space activities was therefore welcome, as was the work of the Working Group on the Long-term Sustainability of Outer Space Activities.

48. Space had become essential to societies and their economies. At the national level, Austria worked to demonstrate the potential and benefits of space solutions in various policy areas. A stable and predictable outer space environment was necessary to further develop the space sector and to ensure that its benefits could be reaped by all. The existing regulatory frameworks must therefore be further developed, taking into account the growing participation of non-governmental entities and private sector actors, to include such areas as the definition and establishment of a solid international practice in the implementation of long-term sustainability in outer space activities; the future exploration, exploitation and use of space resources; and the international coordination of space traffic.

49. The “Space2030” Agenda reflected the pursuit of the Sustainable Development Goals, both in outer space and the use of outer space applications for their achievement on Earth. In that connection, the upcoming World Space Forum, organized by the Office for Outer Space Affairs and Austria, would be dedicated to the 2030 Agenda for Sustainable Development and preparations for the 2023 Sustainable Development Goals Summit. Austria stood ready to support a multi-stakeholder dialogue on outer space as identified in the report of the Secretary-General entitled “Our

common agenda" in preparation for the 2024 Summit of the Future.

50. **Ms. Archinard** (Switzerland) said that space activities such as active debris removal and rendezvous and proximity operations had the potential to contribute to a more sustainable use of space and better conservation of the orbital environment. COPUOS should continue to study the scientific, technical and legal aspects of those activities, such as the coordination and identification of objects to be approached and the regulation of such operations among States. However, the technology and expertise necessary for rendezvous and proximity operation activities could also be used for hostile purposes, for instance to seize, disrupt or even destroy an adversary satellite. Moreover, close proximity could appear threatening in the absence of a notification or coordination. Transparency and notifications were therefore crucial in order to avoid any misinterpretation.

51. Her delegation welcomed the report of the Secretary-General entitled "Our common agenda", in which several challenges to the uses of outer space were identified. The global governance of space activities should be strengthened with a view to maintaining peace and stability in outer space and enabling its safe and sustainable use over the long term. To that end, Switzerland would continue its involvement in the open-ended working group and COPUOS. In the latter, work on the long-term sustainability of space activities remained essential and could pave the way for space traffic coordination. The work of COPUOS also contributed significantly to the implementation of the Sustainable Development Goals, and had a role to play in preparing for multi-stakeholder dialogue and the Summit of the Future.

52. **Ms. Chan Valverde** (Costa Rica) said that ensuring the sustainability of space activities to guarantee equitable access to the benefits of peaceful exploration and use of outer space was crucial to meeting the needs of present and future generations. Moreover, some 60 per cent of indicators for the Sustainable Development Goals required space activities for their implementation or to monitor their progress.

53. Protecting space, including keeping it free from debris, was as important as protecting the planet. At a time when some States were far more advanced than others in space exploration, it must be recalled that outer space was the common good and collective responsibility of humanity. Outer space activities could be sustainable only if conducted exclusively for peaceful purposes. The placement of weapons in outer space was unacceptable under any circumstances.

54. The governance of outer space was based on criteria established at a time when only a few States had participated in outer space activities. Space was now more democratic; not only had many States ventured into space development, but different sectors of society participated in those activities, including academia and the private sector. Space governance should urgently be brought into line with the current reality, and all relevant actors should be involved.

55. **Mr. Ferreira Silva Aranda** (Portugal) said that his delegation took note of the concept of space security, safety, sustainability and stability by Mr. Wang Guoyu, and of his proposals for deeper cooperation between the First and Fourth Committees. Maintaining open dialogue among Member States in all United Nations forums was key to ensuring the sustainable use of outer space. Portugal supported the development of norms, rules and principles of responsible behaviour and welcomed initiatives on the part of Member States to refrain from carrying out destructive anti-satellite missile tests.

56. His Government welcomed the work of the Working Group on Legal Aspects of Space Resource Activities and of the Working Group on the Long-term Sustainability of Outer Space Activities. It had undertaken a satisfactory internal assessment of the 2019 Guidelines for the Long-term Sustainability of Outer Space Activities of COPUOS. The strategy of the Portuguese national space agency included the Sustainable Development Goals. One example was the use of artificial intelligence to promote the sustainable management of oceans and of terrestrial and space resources.

57. It was important to prepare for the massive transformation of the space sector over the coming decade. Portugal was home to companies that were providing data, sensors and services to monitor space debris, and would soon also provide collision avoidance capabilities to satellite operators. His delegation welcomed the participation of stakeholders from academia, the private sector and civil society in the current meeting. It supported the report of the Secretary-General entitled "Our common agenda" and intended to organize an international conference on the management and sustainability of space activities in 2024.

58. **Mr. in den Bosch** (Netherlands) said that the challenge of making a distinction between space safety and space security was an important one, particularly given the dual-use nature of space assets. For example, in rendezvous and proximity operations, the technology

used to service a satellite in orbit was comparable to that required for co-orbital and anti-satellite operations. A step-by-step approach based on responsible behaviour was the most pragmatic way forward, without prejudice to the possibility of concluding a legally binding instrument in the future. In that way, space security and sustainability could be improved while avoiding unnecessary restrictions on space capabilities used for technological and socioeconomic development.

59. The lack of consensus on the current legal framework for safety, security and sustainability in outer space was also a challenge. All Member States should accede to each of the five United Nations outer space treaties without further delay and incorporate them into their national space laws. They should use the mechanisms provided for in those treaties to duly register their space activities with a view to ensuring maximum transparency. International humanitarian law applied in outer space as it did on Earth.

60. Synergies should be fostered among the multilateral forums responsible for ensuring the safety, security and sustainability of outer space. While each forum had its own mandate, all could also benefit from the available expertise, ideas and documented outcomes. The discussions of COPUOS should not be overly political, and those of the Conference on Disarmament should not be overly legal. Such synergies could be promoted not only in the current joint panel discussion, but also in space surveillance and tracking, which had already improved space safety by providing collision avoidance guidance and information on re-entries and fragmentation. Effective and objective space surveillance and tracking had further potential for verifying compliance with international agreements.

61. Urgent attention should be given to geopolitical and technological developments that were making outer space congested and increasing competition. Undue delays resulting from procedural debates must be avoided; the focus must, instead, be on substantive discussions. He asked what further practical options existed to increase synergy, particularly with a view to strengthening cross-regional cooperation and interactions.

62. **Mr. Alvarez** (Argentina) said that the current meeting would help improve the efficiency of the General Assembly by fostering synergies and avoiding duplication. Nonetheless, a balance was required between the respective mandates of each forum, and coordination should take place in order to take into account the relationship between the peaceful uses of outer space and the threats to those uses.

63. While space activities were essential for the well-being of humanity, there were many factors that affected the sustainability of outer space activities. Various emerging threats to space activities could affect cybersecurity or lead to a conflict in outer space, which would have catastrophic consequences. Moreover, the exponential increase in the number of satellites in orbit could potentially lead to interference or collisions that could entail significant economic losses. Several actors, including many from the private sector and academia, were currently involved in space activities. States were thus not the only actor capable of developing technologies that threatened space systems and their applications. The development of the space industry might also make it possible for actors with the relevant capacities to exploit resources from the Moon and asteroids. With regard to the cybersecurity of space systems, the testing, placement and use of weapons in space, deliberate kinetic attacks and anti-satellite testing were all concerns relating to the physical security of operational space assets and to international peace and stability.

64. Argentina strictly complied with the principles and agreements governing the activities of States in the exploration and use of outer space, including non-militarization; its use exclusively for the improvement of living conditions and peace between peoples on Earth; and regional and universal cooperation in the development of outer space activities, whose benefits must be accessible to humanity as a whole.

65. **Mr. Vorontsov** (Russian Federation) said that the Treaty on the Prohibition of the Use of Force in Outer Space and from Space Against the Earth remained a cornerstone of the international law regime governing outer space. It was regrettable that several States continued to claim that the Treaty was incomplete and not fit for purpose, and to propose the adoption of norms, rules and principles of responsible behaviour in outer space. Such a proposal reflected the Western idea that a rules-based order should exist in tandem with international law.

66. The Treaty clearly established how States should conduct their outer space activities, which should be carried out exclusively in the interests of international peace and security. Nonetheless, a number of States, including the United States, had openly stated that the purpose of their space policy was to achieve military supremacy in orbit. The United States and its allies had adopted doctrines proclaiming that outer space constituted an additional operating environment. In other words, outer space was being considered as a new arena for confrontation, as such States pursued the

deployment of weapons in outer space, including strike capabilities. The North Atlantic Treaty Organization had been openly using civilian outer space infrastructure for military objectives in areas of armed conflict. Private commercial systems were also being used to support hostilities, including for intelligence gathering.

67. The criminal practice of using satellites for military purposes represented myriad threats to the international community, including to socioeconomic processes on Earth. Such threats affected developing countries in particular, as well as the long-term sustainability of outer space activities. Meanwhile the United States was attempting to divert the attention of the international community away from its activities in outer space through various campaigns, including an initiative to introduce a moratorium on anti-satellite weapons tests. Such measures were not enough to ensure the comprehensive security of outer space activities for all. Instead, the international community should pool its efforts into preventing an arms race in outer space.

68. The adoption of an obligation to avoid an arms race in outer space by Member States should be introduced on the basis of a multilateral, legally binding instrument, which would ban the placement of all types of arms in orbit. That instrument could be based on the Chinese and Russian draft treaty on the prevention of the placement of weapons in outer space, as well as prevention of the use or threat of the use of force in outer space. The peaceful exploration of outer space was a key goal of humanity, as reflected in the work of COPUOS and the Conference on Disarmament. Those two bodies should resolve any issues relating to the security of outer space activities, in keeping with their mandates, while avoiding any duplication. The agreement by Member States to set up an open-ended working group on so-called responsible behaviour was disappointing, as its mandate effectively duplicated the work being done by COPUOS and the Conference on Disarmament.

69. His delegation did not understand how COPUOS could be strengthened by the convening of multilateral dialogue as part of the Summit of the Future, with the involvement of non-governmental space bodies. The modalities and format of that event were unlikely to contribute towards the achievement of space exploration outcomes that would be acceptable to all. International cooperation on peaceful space exploration should fully support the step-by-step development of humanity. His country stood ready to cooperate with all countries, working together to develop practical methods and approaches to maintain outer space as a common heritage.

70. **Mr. Setia** (India) said that as a major spacefaring nation, India had made significant progress in developing advanced outer space applications and technologies, which were critical for its national economic and social infrastructure. His country opposed the weaponization of outer space and remained committed to the adoption of a legally binding instrument on the proposed treaty on the prevention of an arms race in space, which should be comprehensive, universally acceptable, verifiable and multilaterally negotiated in the Conference on Disarmament.

71. The potential threats to the long-term sustainability of outer space caused by space debris were a matter of concern. India had implemented several measures and practices in that connection, including the guidelines of the United Nations and the Inter-Agency Space Debris Coordination Committee. Space situational awareness was an integral and indispensable part of safe and sustainable national space operations. Accordingly, India had established a system for safe and sustainable space operations management and a network for space object tracking and analysis. Issues relating to space debris in general must be discussed in the relevant forums, such as COPUOS and the Inter-Agency Space Debris Coordination Committee.

72. International cooperation to promote the peaceful uses of outer space was highly important, and India continued to play an active role in deliberations within COPUOS, including as Chair of the Working Group on the Long-term Sustainability of Outer Space Activities. It also hosted a capacity-building programme on nanosatellite development as an initiative to mark the fiftieth anniversary of the United Nations Conference on the Exploration and Peaceful Uses of Outer Space.

73. **Mr. Al Qasim** (United Arab Emirates) said that international dialogue on the sustainable exploration and exploitation of outer space was more critical than ever, in the light of the current technological revolution and the emergence of a new space economy. International cooperation was also key to preserving outer space for peaceful uses, including through the development of international guidelines and standards governing outer space activities. The international community should remain committed to the peaceful exploration and use of outer space, and refrain from activities that contravened their international obligations, particularly those that may jeopardize the ability of Member States to freely explore and use outer space.

74. The existing threats to space assets and the risk of an arms race in space were matters of concern. His country therefore remained committed to developing

measures and means to preserve outer space safety and security. States with emerging space programmes should be given the opportunity to develop them with a view to supporting their sustainable socioeconomic development. Careful attention should therefore be paid to the drafting of binding and non-binding principles governing technological progress.

75. The United Arab Emirates was committed to international disarmament and non-proliferation efforts. All Member States should work with full transparency and adopt confidence-building measures to ensure the peaceful and sustainable use of outer space. The international community should continue considering space security, stability and responsible behaviour in space activities from a broader perspective, while promoting multilateral and regional cooperation.

76. **Mr. Li** Song (China) said that the current meeting made it possible to consider outer space security issues from different perspectives and in an integrated manner. Issues of outer space security and sustainability were increasingly intertwined, including those related to arms control and the peaceful uses of outer space, and actors were becoming more diversified. Global governance in outer space was therefore facing new realities and challenges, and strengthened coordination and cooperation among United Nations entities were all the more necessary. The Summit of the Future provided a significant opportunity for multilateral efforts in that regard.

77. A focus on the most fundamental threats to outer space was needed. Negotiations should continue towards an outer space arms control treaty that would address the loopholes in the existing legal system and ensuring that outer space was used exclusively for peaceful purposes. The weaponization of outer space and the rising risk of an arms race remained the most significant threats to the security and sustainable use of outer space. Delegations should support the First Committee draft resolution on further practical measures for the prevention of an arms race in outer space (A/C.1/77/L.70); establish a Group of Governmental Experts on the proposed treaty on the prevention of an arms race in space; and continue discussions on the elements of an international legal instrument on outer space, based on the work of the previous Group of Governmental Experts in 2018 and 2019.

78. Communication and collaboration among United Nations platforms and processes should be strengthened in order to form effective synergies in outer space governance and ensure a focus on core mandates. While various multilateral bodies had undertaken significant work on outer space issues within their respective mandates, the emergence of new processes had led to some duplication. Outer space security issues should be dealt with by the First Committee, the Conference on Disarmament, the Disarmament Commission and other disarmament mechanisms. Safety issues arising from the peaceful uses of outer space should continue to be addressed by COPUOS. The current joint meeting of the First and Fourth Committees should play a more effective role in providing a platform for communication and collaboration between the relevant United Nations bodies, thereby enhancing effectiveness in outer space governance.

79. The equal participation of all Member States was necessary to ensure the fairness and inclusiveness of the international rulemaking process on outer space. In that process, striking a balance between security and the peaceful use of outer space was important, to guarantee that all countries enjoyed their equal rights to such use, particularly developing countries and emerging spacefaring countries. It was also necessary to reject ideological biases, double standards and unilateral sanctions, and to avoid using excuses such as security threats to hinder the peaceful space activities of other countries. It remained to be seen whether the open-ended working group could pool the ideas of all parties and, in particular, fully respect the views of developing countries. All Member States should step up their efforts towards that goal.

80. **Ms. Rodríguez Acosta** (El Salvador) asked the panellists for their views on the process of updating the Guidelines for the Long-term Sustainability of Outer Space Activities, given current and future challenges relating to the development of scientific and economic activities undertaken in connection to space resources. She also wished to know how international cooperation could be strengthened in the areas of capacity-building and technology transfer to developing countries, with a view to achieving the main long-term sustainability goals for outer space activities.

81. **Mr. Hwang** (France) said that solutions existed to address the overlaps between the concepts of space safety and space security, which required different approaches. Hostile activities and behaviour in outer space, including the deliberate creation of space debris, could not be put in the same category as the effects of faulty satellite infrastructure. Contrary to what had been stated by the representative of Russia, there was thus no duplication in the relevant United Nations processes.

82. In order to strengthen space security and ensure space safety, two normative approaches were necessary, which were different but complementary in nature. The

normative framework must involve the space industry, and should be conceived of in a creative manner. With regard to weaponization, it was difficult to discuss weapons in outer space as the very notion of such weapons was currently evolving, particularly in relation to new technologies. The current meeting was an essential step towards strengthening United Nations coordination on those parallel and complementary processes.

83. **Ms. McKernan** (United States of America) said that her delegation welcomed the inclusion of perspectives on the commercial space industry in the panel discussion. The commercial space sector continued to advance the frontier of space technologies and applications, increasing opportunities for sustainable development and resulting in job creation, including in clean energy technology and broadband access. Commercial space operators also played a leading role in the development of technical standards and operational best practices for safe and sustainable space activities.

84. Key partnerships had been established with the commercial space industry to promote the implementation of the Space Debris Mitigation Guidelines and the Guidelines for the Long-term Sustainability of Outer Space Activities of COPUOS. Such collaboration, in addition to numerous cooperative endeavours with other nations, contributed to strengthening the global governance of space activities. The United States Space Priorities Framework and National Security Strategy were a testament to her country's commitment to uphold and strengthen a rules-based international order for outer space.

85. General Assembly resolution 76/3 highlighted the unique role of COPUOS and the Office for Outer Space Affairs in advancing international cooperation on space, sustainability and associated capacity-building. Her delegation looked forward to discussions the following year in COPUOS and its subcommittees on planning for a multistakeholder dialogue on space as part of the 2024 Summit of the Future. Such dialogue and preparatory events offered an important opportunity for Member States to bring together Governments and other leading space actors, and to take stock of the challenges to space security and sustainability and the opportunities for international cooperation to address current and emerging issues.

86. All Member States should fully implement the Space Debris Mitigation Guidelines and the Guidelines for the Long-term Sustainability of Outer Space Activities of COPUOS, which served as cornerstones for protecting the space environment and advancing key principles for international cooperation in the peaceful uses of outer space. Full implementation would also support efforts in United Nations disarmament forums on transparency and confidence-building measures to reduce space threats through rules, norms and principles of responsible behaviour for national security outer space activities.

87. The United States welcomed the progress of the open-ended working group and supported continued discussions on transparency and confidence-building measures in the Conference on Disarmament and the United Nations Disarmament Commission. Her delegation also encouraged support of a new First Committee resolution calling upon all States to refrain from conducting destructive direct-ascent anti-satellite missile testing (A/C.1/77/L.62), which was an urgent measure to prevent damage to the outer space environment and contribute to developing measures for the prevention of an arms race in outer space.

88. **Ms. Jeogin** (Republic of Korea) said that taking a practical and holistic approach was important when addressing outer space issues. The Republic of Korea was committed to ensuring a secure, safe and sustainable space environment and refraining from conducting destructive direct-ascent anti-satellite missile testing. It fully supported and had actively participated in the open-ended working group process, and believed that the current discussions would contribute to reducing space threats through norms, rules and principles of responsible behaviour in outer space. As it developed its space-related capacities, it would further strengthen its international cooperation on the peaceful uses of outer space.

89. **Mr. Ghelich** (Islamic Republic of Iran) said that it was essential to have equitable geographic distribution among the panellists. Any issues related to the participation of representatives from developing nations should be given due attention.

90. The world was currently experiencing a surge in space technologies. The rise in conflicts in outer space and the hegemonic activities of certain Governments had revealed the inadequacy of existing instruments, given the new challenges to the security of outer space and the promotion of its peaceful use and exploration. In response, certain States had put forward the concept of "responsible behaviour", which was merely a subjective, oversimplified and unclear political gesture. As had been demonstrated in the past, the practice of formulating norms rather than legal agreements could be used by some States to evade their responsibilities and displace blame. Doing so also created double standards, political divisions, technical barriers and abusive

unilateral restrictions that hampered the peaceful use of outer space.

91. As some States rapidly developed their military space assets and programmes, the threat of weaponization was the most critical and urgent challenge to be addressed. Reducing and preventing threats through concrete, legally binding instruments was more effective than responding to such threats as they arose. Lack of security in outer space was a shared concern for all humankind; preventing an arms race in outer space should therefore be an obligation for all States. Given that certain States had declared that outer space was a new war zone and were developing military capabilities for that purpose, non-binding norms were futile. All such actions should be regulated through legally binding norms, rather than norms to address so-called responsible or irresponsible behaviour.

92. The Islamic Republic of Iran had supported the proposed treaty on the prevention of an arms race in space as a basis for establishing an ad-hoc committee to negotiate a legally binding treaty in the Conference on Disarmament. It had actively participated in the United Nations Group of Governmental Experts on that draft treaty. However, a certain State had unfortunately stood against consensus in the Group of Governmental Experts. Selective approaches, such as those relating to behaviour, were unacceptable as they resulted in arbitrary assessments and discriminatory measures with no legal framework. In the absence of certainty regarding the legality of specific outer space behaviour, it would be impossible to judge whether such behaviour was responsible or irresponsible. In an era of renewed exploration and use of outer space, new threats were posed to security, safety and sustainability. Therefore, regulatory regimes required urgent updating, in order to preserve outer space as a global commons.

93. **Mr. Galindo** (Brazil) said that the complementarity between the work of the First and Fourth Committees should be noted, despite the specificities of their respective mandates. Space assets were critically important to societies and economies worldwide. The increasing reliance on outer space meant that any disruptions to that environment could seriously compromise prospects for its sustainable use for peaceful purposes. Furthermore, activities that were considered irresponsible and unsustainable could be perceived as threats to space security, something that could lead to misinterpretations and escalation.

94. Attention must be given to addressing the intentional creation of space debris. Promoting the safety of space assets was a real challenge, as outer space had become increasingly congested. In that context, the body of recommendations issued by COPUOS were a crucial contribution to safeguards accessibility and safety in outer space. With regard to security, Brazil actively participated in the discussions of the open-ended working group. The group had the potential to elaborate voluntary norms and rules grounded in existing legal frameworks, which could form the basis for the future adoption of legally binding obligations on the prevention of an arms race in outer space.

95. An environment of trust must be created as a basis for future negotiations on a treaty. A ban on destructive anti-satellite tests was the main step to be taken in that regard. The development, testing and possible use in conflict of destructive anti-satellite weapons was the most serious threat to the security and sustainability of outer space. Such weapons were one of the key drivers of mistrust and instability in outer space. Their testing generated significant debris, contaminating the orbital environment and heightening the risk of collisions with space objects. The commitment to ending such testing would significantly help improve the environment for negotiations on outer space security, notably on the proposed treaty on the prevention of an arms race in space.

96. **Mr. Omar** (Pakistan) said that as an emerging spacefaring nation, Pakistan had a modest but growing space programme and shared the concerns regarding the increasing threats to the security and sustainability of outer space. The spectrum of threats to outer space had become broader and more complex. Outer space was a global commons; all celestial bodies were the common heritage of humanity, to be explored and used solely for peaceful purposes and accessible to all nations, without discrimination. There was global consensus on the need to prevent an arms race; but efforts to that end were increasingly being challenged and, in certain cases, undermined.

97. The challenges posed by an increasingly congested and competitive outer space environment, including to space traffic management and space debris mitigation, were compounded by troubling trends in the security arena. Activities involving the placement of weapons were being exacerbated by the growing integration of weapons technology platforms and dedicated structures. The development and deployment of missile defence systems, as well as anti-satellite weapons, represented some of the most prominent threats. The increasing blurring of lines between the peaceful and military uses of outer space underscored the urgency of updating the existing normative and legal architecture. It was essential that the Conference on

Disarmament conclude a treaty on the prevention of an arms race.

98. While transparency and confidence-building measures were valuable, they were no substitute for legally binding, treaty-based obligations. Pakistan supported the roles of the multiple multilateral institutions that had distinct mandates to deliberate on and develop measures to maintain outer space as a global commons. The focus should not be on peripheral issues alone, at the cost of the core questions surrounding outer space security. Ratifying and complying with all five multilateral treaties on outer space was the first step in fulfilling a State's responsibility towards outer space. Space security could not be guaranteed without credible and legally binding tools, and required a holistic approach that was in the interests of all States.

99. **Mr. Makarevich** (Belarus) said that it was disappointing that multilateral efforts to achieve international peace and security were being hampered by the approaches adopted by key world powers. The multilateral system was currently being eroded, to the detriment of the principle of consensus. Rising tensions were undermining arms control instruments, including those for outer space. The resumption of broad-based dialogue was necessary to rebuild trust, both at the global and regional levels.

100. His delegation supported the draft treaty developed by Russia and China to prevent the placement of weapons in outer space and the threat or use of force against space objects. All States should join that initiative and abandon the practice of imposing red lines when discussing outer space issues. The best starting point for any discussion was a dialogue among experts. His delegation stood ready to engage in open, broad-based dialogue with the equal participation of all States.

101. **Mr. Sharaf** (Chair of the Committee on the Peaceful Uses of Outer Space) said that it was important to maintain a very clear distinction between the responsibilities and scope of work of COPUOS, the open-ended working group, the Office for Disarmament Affairs and the Office for Outer Space Affairs. While the sustainability and safety of outer space activities was discussed in COPUOS and security was discussed in the Conference on Disarmament, there were also certain issues that were relevant to both, such as space debris. Member States might consider promoting communications and cooperation between the two bodies. For example, the Chair of COPUOS or staff members of the Office for Outer Space Affairs might attend the work of other platforms as observers.

102. **Ms. Warren** (Satellite Industry Association) said that, given the current shortages, the space industry was very focused on the need to develop talent. A number of entities were conducting initiatives and working to channel resources into such efforts. For example, the International Astronautical Federation provided internships and mentorships, and many individual space companies had programmes to advance science, technology, engineering and mathematics, particularly where directly relevant to space, through related programmes for students at various levels of education.

103. **Mr. Wang** Guoyu (Beijing Institute of Technology) said that the issues under discussion must be considered from a more comprehensive perspective, as certain States believed others to constitute significant threats in outer space. The weaponization of outer space and other tensions should be considered together, while reflecting all concerns in a balanced manner. In addition, all States should consider the legal consequences of conducting asset tests.

104. With regard to the overlaps between outer space safety and outer space security, those matters could not necessarily be considered as a single issue to be discussed only in the Conference on Disarmament or in COPUOS. The context of discussions depended on which aspect of the issue was being addressed. For example, intentional threats should be dealt with in the Conference on Disarmament, and normal operations involving mitigation measures should be discussed in COPUOS. Legal matters in the military context should also be discussed, particularly the applicability of international law in different scenarios, and not only with regard to responsible or irresponsible behaviour.

105. **Mr. Al-Rodhan** (Geneva Centre for Security Policy) said that, while the two Committees and all Member States knew what needed to be done, diplomatic work and consensus-building were slow, laborious and difficult processes. Moreover, it was not in the nature of States to give up any competitive advantage. It was important to consider how major space powers could reconcile their significant competitive advantages with transnational, global and planetary interests.

The meeting rose at 1.20 p.m.