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Summary record of the joint ad hoc meeting of First and Fourth Committees on possible challenges to space security and sustainability
Held at Headquarters, New York, on Thursday, 31 October 2019, at 10 a.m.

Co-Chair:	Mr. Llorentty Solíz	(Chair, First Committee) . .	(Plurinational State of Bolivia)
Co-Chair:	Mr. Bahr Aluloom	(Chair, Fourth Committee)	(Iraq)

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* Verbatim records were issued for meetings of the First Committee prior to and subsequent to the 20th meeting and constitute the official records of those meetings.

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

Agenda item 96: Prevention of an arms race in outer space

Agenda item 98: General and complete disarmament

(w) Transparency and confidence-building measures in outer space activities

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

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

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

1. **Mr. Llorentty Solíz** (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. The joint panel of the First and Fourth Committees, convened pursuant to General Assembly resolutions 73/72 and 73/91, provided an integrated forum for both Committees to consider together the general topic of possible challenges to space security and sustainability, focusing on the following four themes: identification of issues that intersect with both space sustainability and security; taking stock of the status of recent United Nations processes on space sustainability and security; exchange of views on international cooperation and coordination, in particular on space science and technology and their applications and on the characteristics of expert processes in the various United Nations bodies; and identification of issues where coordinated approaches could advance long-sought objectives for space sustainability and security.

Introductory statements

2. **Mr. Markram** (Director and Deputy to the High Representative for Disarmament Affairs) said that the current joint panel discussion was taking place against a backdrop of accelerating challenges to the security and long-term stability of outer space, including the development of destructive counter-space and dual-use capabilities. In the absence of agreed norms, the expanding role and significance of the military use of outer space might encourage more countries to seek counter-space capabilities in order to protect their assets.

3. There was a risk that the pace of work within the United Nations would be insufficient to address the implications of emerging technologies. That the Group of Governmental Experts on the Prevention of an Arms Race in Outer Space had been unable to agree to a substantive final report was regrettable. However, the iterative drafting process had contributed significantly to the clarification of central concepts, the narrowing of differences and the identification of future areas of work.

4. The informal consultations held by the Disarmament Commission earlier that year had led to useful discussions in the context of the formulation of recommendations on implementing transparency and confidence-building measures with a view to preventing an arms race in outer space. The Committee on the Peaceful Uses of Outer Space (COPUOS) had adopted a preamble and 21 guidelines on the long-term sustainability of outer space and had re-established the working group to consider possible new guidelines.

5. The current session of the General Assembly had offered delegations the opportunity to voice ideas for new areas that could be pursued in future deliberations. They included the development and testing of anti-satellite weapons, guidance on rendezvous and proximity operations and norms of responsible behaviour to address all possible threats to space activities. All measures could be pursued through multiple pathways simultaneously. For example, legally binding approaches and transparency and confidence-building measures were not mutually exclusive.

6. United Nations entities could also do more to facilitate the implementation of agreed measures, including through the creation of a platform for exchanging information and dialogue on military space policies, doctrines and programmes, and promoting the implementation of agreed norms within the private sector. Joint meetings such as the current one played an important role in bringing the space policy community together to share their experiences and ensure the coordination of efforts, as well as in facilitating multi-stakeholder dialogue and engagement with the private and non-governmental sectors.

7. **Ms. Di Pippo** (Director of the Office for Outer Space Affairs) said that any action to address space security and sustainability concerns must relate to the fundamental development needs of all nations and peoples. The 2030 Agenda for Sustainable Development offered an opportunity for reflection on the future role of space exploration, science and technology in addressing global challenges for humanity. The approach of the Office for Outer Space Affairs to

capacity-building was holistic, modern and strategic, with the aim of making space activities and their benefits as inclusive as possible through triangular cooperation between established space actors, the United Nations and entities from non-space-faring nations.

8. Transparency and confidence-building measures in outer space activities could reduce mishaps, misinterpretations and miscalculations; foster cooperation; create more predictability; and gather consensus on matters crucial to maintaining outer space for peaceful purposes. The report of the Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities, contained in document A/68/189, had, along with other reports by United Nations entities and information exchange by Member States, established a knowledge base which provided a comprehensive basis for moving ahead. COPUOS had also made a tremendous achievement in adopting a preamble and 21 guidelines for the long-term sustainability of outer space activities. The guidelines took into account the relevant recommendations from the report of the Group of Governmental Experts and could themselves be considered as potential transparency and confidence-building measures.

9. Outer space was a fragile environment in which steps taken by one actor could have an impact on others, including users of space services on Earth. The broader application of space operations and the increased strategic value of space heightened the need to enhance the safety of space operations and the security of space assets and space systems, including critical infrastructure, and in preserving the space environment and the long-term sustainability of outer space activities.

10. 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.

11. In addition to discharging the responsibilities of the Secretary-General under the United Nations treaties and principles on outer space, the Office was mandated to assist in global efforts to enhance international governance in the long-term sustainability of outer space activities. The Office was taking measures to ensure that it was fully prepared and fit for purpose in light of challenges to the registration regime, including the future deployment of mega-constellations. Certain measures could be further elaborated to ensure the crucial and urgent promotion of the safety of space operations. They included enhanced capacity-building and awareness-raising; increased dialogue with private space actors; organized reporting on the implementation of the 21 long-term sustainability guidelines; and structured information exchange on space objects and events.

12. The Office stood ready to work with Member States on information exchange and procedures for promoting space operation safety; maintaining outer space for peaceful purposes must be the key objective of the international community.

13. **Ms. Howard** (Counsel, Office of Space Commerce, United States Department of Commerce), panellist, said that the nature of space security and sustainability would undoubtedly be changed by space entrepreneurship, with new developments in areas such as communications, remote sensing, space-based manufacturing and space tourism. The global space economy was currently estimated at $400 billion and was expected to reach between $1 trillion and $3 trillion by 2040, highlighting the overwhelmingly commercial nature of the future of space. Therefore, discussion on space could no longer be centred on security; it should also incorporate safety and sustainability, within a collaborative environment. A more robust commercial environment in space improved space security, as many more nations could benefit from the additional services, economic opportunities and scientific benefits that space provided.

14. Commercial actors were aware that space safety and sustainability were key to economic growth, protection of investment, service delivery and innovation. A case in point was the Space Safety Coalition, a group of companies and organizations that actively promoted responsible space safety through the adoption of international standards, guidelines and practices. Another example was the Consortium for Execution of Rendezvous and Servicing Operations, which was actively involved in articulating practices and developing standards for on-orbit servicing. Daily input which the Government received from private industry stakeholders on how to make space safer would allow for collaboration, including international collaboration, and the leveraging of private sector innovation.

15. Such collaborative efforts could build upon lessons learned, for example, from collaborations in the field of weather forecasting, which allowed

meteorologists around the world to agree upon data formats, common quality standards, common algorithms and common sensor characteristics. The Department of Commerce saw similar opportunities for international collaboration on space flight safety.

16. An economically robust space domain was a more secure space domain. However, certain space actors might be less ready or willing to engage in such public-private cooperation. As a result, only nations that were collaborating would benefit from deliberate long-term diplomatic discourse, embodied in the current panel discussion, on how the private sector and new space actors could have a positive impact on space security.

17. **Ms. Pillai Rajagopalan** (Distinguished Fellow, Observer Researcher Foundation), panellist, speaking via video link and accompanying her statement with a digital slide presentation, said that the outer space environment had undergone major changes over the previous two decades, including in the number and type of players in outer space. Overcrowding could make the management of space traffic and orbital debris more difficult, increasing the potential for collisions, accidents and illegal activities.

18. Incidents involving cyber and electronic warfare in outer space were already becoming a reality. Radio frequency was being used to interfere with satellites, causing temporary disruptions and denial of services, and cyber techniques were being used to compromise computer systems linked to satellite operations. States were therefore forced to develop capabilities to counter such activities.

19. Greater reliance on space for commercial military operations was one of the major changes currently under way. There was also a global power transition, including in terms of military power, particularly evident in the Asia-Pacific region with its growing economies and development of military space capabilities. However, such trends were not in the interests of the long-term sustainability of outer space, as almost all the major space players were assigning a greater military role to their space assets. At the same time, global governance debates had not kept pace with technological developments, and there was a lack of understanding and unclear definitions of space weapons and the defensive or peaceful use of outer space.

20. In the absence of multilateral dialogue processes, States would, through a cascading effect, be forced to rely on deterrence. The consequences would be negative for all and could increase suspicions among States, making cooperation extremely difficult. Deterrence must therefore be prevented, and red lines should be publicly clarified. Strengthening the development of norms of responsible behaviour and working towards more binding mechanisms was also important. Space situational awareness capabilities should also be reinforced through collaboration among all the key players. To build trust, more platforms must be established to create multiple levels of dialogue involving all stakeholders.

21. **Ms. Collins Arsenault** (Co-founder and President, Secure World Foundation), panellist, said that space provided myriad benefits to populations and unique opportunities to learn about the Earth, to enhance communications and to create new systems for working together. However, there were certain challenges to its security and sustainability which must be addressed using all resources, including women, who added unique value to multilateral and international discussions; with their involvement, negotiations were more likely to be successful and treaties lasted longer. Women also helped to promote dialogue, build trust, moderate extremism and work towards peace and, as research had shown, were better at navigating complexities and communicating. Those skills were effective in the realms of global leadership and problem-solving and would be particularly useful as the space community faced the complex challenge of balancing commercial and military interests with benefits to humanity.

22. Women also took a different approach to security, one that was holistic and long term, focusing on knowledge, inclusiveness and equal participation between women and men. They recommended good governance with a view to fully implementing, monitoring and evaluating laws and policies, as well as the improvement of infrastructure and institutions in order to promote safety. All such recommendations could be applied to space security. The skills and traits of women and the benefits of their participation could be applied to all common objectives, as captured in the Sustainable Development Goals.

23. With the growing complexity of challenges such as artificial intelligence, new technologies and the emerging space economy, it was important to understand the norms of and changes in behaviour that were necessary for the protection and security of humankind. Space security discussions were at an impasse; the contribution of new perspectives and skill sets would be helpful in finding solutions to such complex issues. Statistics on the participation of women in key forums demonstrated the extent of the gaps that remained to be bridged. Nonetheless, progress was being made in that regard, including with the adoption of Security Council resolution 1325 (2000), in which the Council called for the increased participation of women at all levels of decision-making and for a gender perspective to be

applied to all policies. The Secretary-General had also made a strong call for action the previous year for the full and equal participation of women in all decision-making processes related to disarmament and international security. Space technologies and applications had enormous potential for all. It was therefore time to benefit from the full participation of women in order to keep the space environment secure and sustainable.

General debate

24. *Mr. Bahr Aluloom (Co-Chair) took the Chair.*

25. **Mr. Peñaranda** (Philippines) said that his Government supported the exploration of outer space as a means of generating new knowledge that would help address such global challenges as natural disasters. Weather forecasting was a priority for countries like his own, which was faced with extreme weather conditions.

26. The Philippines strongly supported COPUOS in the face of the threat posed by the potential weaponization of outer space. At the intersessional meeting of the Working Group on the "Space2030" Agenda, COPUOS members, including his delegation, had agreed to contribute to a stronger global governance of outer space activities and to strengthen their contribution towards the implementation of global agendas addressing the long-term sustainability of outer space activities. The Philippines was also committed to international cooperation to assist developing countries with the development of their space technology and applications programmes. The interests of those countries and emerging spacefaring nations should be the main priority of the "Space2030" agenda.

27. The Philippines joined the call on spacefaring nations to respect existing instruments and norms. It was also crucial to define parameters and develop norms of responsible behaviour, paving the way for Member States to conclude an effective, legally binding multilateral instrument on the prevention of an arms race in outer space. In the meantime, transparency and confidence-building remained vital, and the readiness of States to work towards those ends was welcome. Lastly, his Government was a champion of a gender-balanced disarmament programme.

28. **Mr. Liddle** (United Kingdom), speaking also on behalf of Albania, Australia, Belgium, Canada, Chile, Croatia, Denmark, Estonia, France, Germany, Georgia, Hungary, Iceland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Netherlands, Norway, Poland, Portugal, Republic of Korea, Romania, Slovakia, Spain, Switzerland and Ukraine, said that the world was ever more reliant on space assets for its prosperity and security. As more countries became spacefaring nations and more companies were able to operate in space, all actors needed to take responsibility for keeping space a stable, safe and sustainable environment, allowing current actors to continue to operate with minimal disruption and assuring emerging ones that the domain would remain accessible for future generations. There was a common interest in maintaining peace and security in outer space for the benefit of all, despite the divergence of views on how to attain that goal.

29. As safety and sustainability concerns in space intersected with traditional security concerns, the convening role of the United Nations system in bringing together Governments, commercial actors and academics through such initiatives as the annual Space Security Conference in Geneva was welcome. While there was an important distinction between discussions in the Conference on Disarmament in Geneva on security and those in COPUOS in Vienna on peaceful uses, the issues covered were often the same.

30. Existing international law, in particular the Charter of the United Nations and the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty), provided a framework of principles governing the use and exploration of outer space for peaceful purposes. The effective implementation of the legal framework, alongside the promotion of regulatory arrangements that encouraged safety, participation and innovation, would be increasingly important as space activities increased.

31. Addressing a number of substantive issues more effectively would help improve sustainability, security and transparency. Issues primarily discussed in COPUOS were also relevant to traditional security concerns, as there was an increased risk that crises or conflicts in space would extend to the Earth. First, with the rapid growth in the launch industry, it was necessary to reduce the risk of mistrust and misunderstanding caused by launches that were not de-conflicted or properly notified. Operators could reduce that risk by ensuring minimum safety standards were met, by publishing timely notifications and by explaining to the international community what their spacecraft would do and the effects they would have.

32. Secondly, with regard to debris mitigation and management, without coordination and information exchange among all stakeholders, there was a significant risk to the safety, sustainability and security of future space operations. Actions that intentionally created multiple long-lived debris, such as kinetic attacks by

space objects on others, should also be avoided. Thirdly, to keep space sustainable and safe, efficient communication and enhanced knowledge regarding objects and events in space were critical. Further work on space traffic management, particularly on how to draw on the private sector's innovative work, would also satisfy the international community's common interest in improved space situational awareness.

33. Fourthly, with the recent developments in on-orbit servicing, rendezvous, proximity operations and active debris removal capabilities, objects would increasingly be in close proximity to each other, hence the need to ensure that the intentions of approaching objects were known. To mitigate risks in those circumstances, transparency and confidence-building measures or guidance materials for on-orbit servicing and active debris removal should be developed. Open lines of communication must also be maintained for incidents where a miscalculation could lead to the perception of a threat to an object.

34. In order to reduce risks and address threats to space systems, steps must be taken to ensure a stable international environment. Risk, whether civil or military, could be reduced through cooperation and effective communications that could enhance international confidence in outer space activities. The adoption by COPUOS of a preamble and 21 guidelines for the long-term sustainability of outer space activities was welcome; the guidelines highlighted the important role of COPUOS in developing the existing space legal framework and setting new international space standards. Its work should therefore be supported and promoted.

35. An incremental approach in Geneva, with a focus on seeking solutions to practical problems, would be the best way to address threats posed by and to objects in space. Norms of behaviour must be established for both private and government space operators, and consideration should be given to the treatment of threats from the Earth. Those norms would lay the foundation for trust and cooperation between operators in the space environment and eventually form the basis for a legally binding instrument on the prevention of an arms race in outer space.

36. To keep space sustainable and safe, efficient communication regarding objects and events was critical, as was the establishment of lines of communication for incidents where a miscalculation could lead to a perception of a hostile threat. Ways of signalling intent and demonstrating responsible behaviours should also be considered. Progress in Vienna could be complemented in Geneva through discussions about how to reduce the risks and threats to operations in space. As a start, the Conference on Disarmament could encourage all spacefaring nations to present an overview of their national space defence policies; by building a common understanding through increased transparency, such exchanges could reduce the risks to operations in space. The panellists' views on how States could become involved in a process to develop new ideas on risk reduction would be welcome.

37. **Ms. Jáquez Huacuja** (Mexico) said that, given that the existing framework governing outer space activities was insufficient to guarantee the strictly peaceful use of outer space, her delegation would like to know whether that normative gap should be bridged through disarmament-related action or instead through a political decision made at the intergovernmental level.

38. **Mr. Rypl** (Brazil) said that his country firmly believed that the existing legal framework was not sufficient to keep outer space safe and secure, or to address the very real risks associated with an arms race in outer space, which was becoming increasingly congested and contested. Recent discussions relating to the prevention of an arms race in outer space had yielded reasoning on such critical issues as the scope and limits of the existing legal regime and elements related to monitoring, verification, transparency and confidence-building measures. The 2018 report of subsidiary body 3 of the Conference on Disarmament had established the framework for future discussions agreed at the Conference. Likewise, the 25 experts had at their disposal the text negotiated in the Group of Governmental Experts on the Prevention of an Arms Race in Outer Space, enabling them to seek greater convergence when the debate was resumed. The advances in that process notwithstanding, the challenges posed by verification and dual-use technologies had yet to be addressed.

39. While transparency and confidence-building measures could not replace legally binding, treaty-based obligations, they could replace and complement other initiatives as legally binding instruments. Non-first placement initiatives at the national or multilateral level could also ease tensions.

40. Taking into account the consensus established within the Office for Outer Space Affairs on the management of good practices for the sustainability of the space environment, his delegation supported joint studies on technological solutions for the monitoring of space debris; standardization of launch rules, bearing in mind economically viable solutions for each country; establishment of a communication channel among satellite control centres; and establishment of legal

standards compelling spacefaring nations to mitigate space debris.

41. Lastly, discussions on the peaceful use of outer space could benefit from the interplay between the Conference on Disarmament, COPUOS, the Disarmament Commission and the General Assembly. Reciprocal reporting between COPUOS and the Conference on Disarmament should be explored, with each body providing updates on its progress, challenges and points that could be dealt with simultaneously in Geneva and Vienna, in accordance with the mandate of each forum. That initiative would be particularly important for the delegations of developing countries, whose access to discussions taking place simultaneously in different forums was sometimes limited.

42. **Ms. Claeys** (Observer for the European Union), speaking also on behalf of the candidate countries Albania, Montenegro, North Macedonia and Turkey; the stabilization and association process country Bosnia and Herzegovina; and, in addition, Georgia, the Republic of Moldova and Ukraine, said that the European Union and its member States, together with the European Space Agency, had developed strong and unique space capabilities and space industry in Europe. Most of its space budget was allocated primarily to the Galileo global navigation satellite system; the European Geostationary Navigation Overlay Service; the European Global Navigation Satellite systems; and Copernicus, the European Earth-observation system. For the budget period from 2021 to 2027, the European Commission had proposed a robust space programme to boost the space capabilities of the European Union. The new programme would also address such global challenges as fighting climate change and making the transition to a low-carbon economy, in addition to supporting a European “new space” approach with innovative start-ups and increased European technological autonomy.

43. The European Union continued to promote the preservation of a safe, secure and sustainable space environment, as well as the peaceful use of outer space, a global common good, on an equitable and mutually acceptable basis. Transparency and confidence-building measures and advocacy within the United Nations framework for responsible behaviour in outer space were vital. Furthermore, there was a need to foster international cooperation and to establish principles of responsible behaviour, while maintaining the sustainability of space activities. There was also a need to strengthen the commitment to avoid potentially harmful interference with the peaceful exploration and use of outer space, thereby facilitating equitable access to outer space.

44. The European Union remained committed to preventing an arms race in outer space and was concerned about the continued development of all anti-satellite weapons and capabilities. Such developments must be addressed promptly as part of international efforts to prevent an arms race in outer space. All States must avoid destroying space objects that would generate long-lived debris.

45. The Outer Space Treaty and other applicable international space law as developed in the United Nations framework constituted the cornerstone of the global governance of outer space. As a responsible space actor, the European Union was exploring the possibility of acceding to the relevant United Nations space treaties. The European Union hailed the adoption of the preamble and 21 guidelines on the long-term sustainability of outer space activities as the culmination of years of work by COPUOS and a testament to the efficacy of multilateral space diplomacy.

46. The agreement reached on establishing a working group on the long-term sustainability of outer space activities was equally noteworthy; the European Union looked forward to discussing how to implement the guidelines and consider other topics for future guidelines. The most realistic short-term prospect lay in agreeing on a voluntary instrument or voluntary norms that could establish standards of responsible behaviour across the full range of space activities and related challenges. Topics could include the mitigation and remediation of space debris and collision avoidance. Discussions on such a voluntary instrument or voluntary norms should complement the COPUOS long-term sustainability guidelines, with the assurance that the instrument or norms in question complied with existing international law and with transparency and confidence-building measures.

47. **Mr. Buenneke** (United States of America) said that his Government would use all available legal and diplomatic means to create a stable and orderly space environment that drove opportunity, created prosperity and ensured security on Earth and in space. It welcomed the adoption by COPUOS of a preamble and 21 guidelines for the long-term sustainability of outer space activities. The United States remained committed to existing international space law, including the Outer Space Treaty, the enduring, essential framework governing space activity for the benefit of all nations. Countries should continue to work on the implementation of those principles in order to avoid imperilling the security and stability of outer space. That Treaty and associated international instruments could be implemented without stifling the innovation required to make the benefits of space accessible to all. Some of the

long-term sustainability guidelines could also be considered as potential transparency and confidence-building measures, while other guidelines could provide a technical basis for the implementation of additional transparency and confidence-building measures.

48. The congested and contested nature of outer space posed increasing risks, affecting space sustainability and security. Efficient communication regarding hazards to space flight safety was therefore critical, as was the establishment of timely and effective forms of communication, especially between satellite operators, to facilitate the exchange of information and reduce operational risks. The Disarmament Commission should encourage all spacefaring nations to present the defence aspects of their space policies. The important context afforded by information on the full range of national security activities in outer space could facilitate mutual understanding and prevent miscalculations.

49. All spacefaring nations should engage actively in COPUOS, in relevant discussions on space security in Geneva and New York. COPUOS and its subcommittees should continue to serve as the Organization's leading forums on space activities. In addition, States should be prepared to work constructively to advance applicable transparency and confidence-building measures in other United Nations forums. His delegation was pleased to sponsor the resolution on advancing transparency and confidence-building measures for outer space activities. The inputs that States would provide under the resolution would facilitate discussion on such measures and examination of aspects of their implementation, in addition to framing new ideas on maintaining the conditions for a safe, stable and operational space environment.

50. **Ms. Zuo** Rui (China) said that outer space security and sustainability were becoming increasingly intertwined, with challenges arising simultaneously for both as outer space technology continued to develop and space applications proliferated. On the one hand, the deterioration of the space environment and the increase of space debris had adversely affected the peaceful uses of outer space. On the other hand, the arms race in and weaponization of outer space constituted the greatest challenges facing outer space security and sustainability. Existing instruments governing outer space had clear deficiencies and did not prohibit the introduction of conventional weapons into outer space.

51. The international community recognized the need to negotiate and conclude new outer space arms control instruments to remedy those deficiencies. China and Russia had therefore proposed to the Disarmament Commission a draft instrument on preventing an arms race in outer space and been instrumental in the establishment of the group of governmental experts on the subject. The experts had put forward many valuable suggestions that had laid a good foundation for future arms control efforts, despite their regrettable failure to adopt a report. Her delegation hoped that all parties would demonstrate the political will necessary to prevent an arms race in outer space.

52. Appropriate and feasible transparency and confidence-building measures, while complementary to legal instruments and conducive to greater mutual trust and reduced miscalculation, could not replace such instruments. In recent years, China had issued four white papers on its space activities and announced many of its major space launches through the media, in coordination with the relevant countries. In addition, owing to its space debris mitigation measures, China had been able to reduce its debris growth rate to near zero. China had also concluded over 130 space cooperation agreements or memorandums of understanding with more than 40 countries and provided satellite launch services to many countries more.

53. The need for interdisciplinary integration between such entities as COPUOS and the Disarmament Commission was increasingly obvious, as the effort to prevent the weaponization of outer space went hand in hand with that of promoting the peaceful uses of outer space. To that end, China supported the Organization's role in strengthening cooperation and coordination to ensure the long-term sustainability of outer space.

54. **Mr. Belousov** (Russian Federation) said that the well-being of independent States and humanity as a whole was increasingly dependent on space and space technologies. Until recently, the space activity of States had been based on the clear and understandable norms and principles of international space law, with the Outer Space Treaty as its cornerstone. However, in recent times, the Treaty had come to be regarded as an outdated instrument whose norms no longer reflected the situation in space, as new risks emerged for national space programmes and space was transformed into an arena of human activity. From that premise, dangerous conclusions had been drawn; Western countries were actively promoting the concept of competition in space and forcing others to accept the notion that the crises inevitably sparked by competition would have to be resolved through violent means, including the deployment of offensive weapons systems.

55. It was therefore obvious why Western countries objected to the regulation of space activity and disliked the Outer Space Treaty. The use of space vehicles as weapons and the targeting of ground-based objects

contravened the Treaty. Western countries believed that if any satellite or space vehicle could be regarded as a weapon, then any vehicle or satellite in orbit, including those launched by university research centres or other organizations, should be considered a threat to national or international security. His delegation opposed that rationale, as it had always considered all satellites around the Earth's orbit to be making legitimate use of space for peaceful purposes. Diverging interpretations on the matter would imperil the international community.

56. Preventing the weaponization of space, eliminating risks and threats to space activities and creating a favourable climate for such activities were elements of the joint effort to maintain international peace and security. That understanding directly informed the delegation of authority between COPUOS and the United Nations disarmament mechanisms. The unique roles of the various entities were thus closely linked, with the promotion of global security as their ultimate aim. However, confusing their roles and allowing mandates to overlap would be undesirable and counterproductive.

57. In that regard, the Russian Federation opposed the introduction in disarmament platforms of issues that had been effectively and comprehensively addressed by COPUOS. The unwelcome commingling of such issues as combating space debris, uncontrolled elimination of vehicles from orbit and uncontrolled space traffic had the intent of diverting the international community's attention from relevant matters. His delegation called on all States to develop practical measures that would enable the international community to maintain common achievements in outer space research for peaceful purposes for the benefit of humankind.

58. **Ms. Mac Loughlin** (Argentina) said that a growing number of countries were gaining access to space with new developments in space technology, driven largely by private stakeholders. Even countries without space programmes were benefitting from the peaceful use of outer space through satellite navigation and communications and other applications. Those developments, along with the dual nature of space technology, called for creative and comprehensive discussions in the various forums in which the uses of outer space were discussed. In those discussions, a clear distinction should be made between the safety risks stemming from the increasing use of outer space, such as the dangers of space debris, and the security aspects of certain uses of outer space, with the main objective being to preserve space as a safe environment where all stakeholders could continue to operate with minimal restrictions.

59. Her delegation welcomed the adoption by COPUOS of 21 guidelines on the long-term sustainability of outer space activities and supported the negotiation of a legally binding instrument on the prevention of an arms race in outer space; such an instrument would be appropriate and necessary as long as no transparency and confidence-building measures for outer space activities were adopted internationally. In that vein, her delegation hoped that discussions in the Disarmament Commission on the implementation of the recommendations of the Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities would continue in order to prevent an arms race in outer space.

60. **Ms. Archinard** (Switzerland) said that the collection of space activities referred to as rendezvous and proximity operations was an example of an issue that concerned both space security and space sustainability. While it was clear that such activities could continue enhancing space sustainability – provided they were conducted at a high safety standard in order to minimize the risk of generating debris in the event of an accident – they also involved security considerations, given the potential for them to be used in hostile ways. Moving forward, the new working group on the long-term sustainability of space activities would be the appropriate setting to address the safety and sustainability of rendezvous and proximity operations, while their security aspects would need to be addressed in a disarmament forum.

61. **Ms. Pillai Rajagopalan** (Distinguished Fellow, Observer Researcher Foundation) said that gaps in existing measures would have to be addressed not only along the peace and security track but also along the political track, as the two tracks were not mutually exclusive. Because political considerations might sometimes constitute an obstacle, it was important to examine all issues in the relevant forums concurrently. For example, transparency and confidence-building measures should be considered not just in COPUOS but also in the Disarmament Commission and other platforms.

62. The dual-use nature of outer space technology, which could be used for peaceful, civilian purposes but also for potentially nefarious purposes, made discussion of outer space issues extremely difficult. Countries would therefore be required to go beyond rhetoric, make progress in implementing transparency and confidence-building measures and work towards adopting legally binding instruments. Such instruments were vital because current transparency and confidence-building measures had been criticized for being nothing but

political agreements that States could easily violate with impunity.

63. While transparency and confidence-building measures were a useful addition to legal measures, the international political climate had not been conducive to the building of sustained momentum to develop legally binding measures. Nonetheless, the existing transparency and confidence-building measures were important as a starting point, because establishing such norms of responsible behaviour could also be useful in that they might serve as an intermediate step between the recognition that a binding instrument was needed and the act of formulating said instrument.

64. While the Outer Space Treaty remained the foundational agreement governing outer space activities, it had come into being at a time when the placement of weapons of mass destruction in outer space was a pressing concern. As such, it had failed to anticipate present-day threats, hence the need for additional measures to complement – but by no means replace – the Treaty.

65. **Ms. Howard** (Counsel, Office of Space Commerce, United States Department of Commerce), panellist, said that the United States Government relied greatly on inter-agency efforts to address space issues. There was sustained dialogue between the Departments of State, Defence and Commerce, and with the National Aeronautics and Space Administration and independent agencies. Accordingly, interests could be shared and preserved in a constructive manner. Recognizing the changing nature of the use of and reliance upon the space domain was necessary. Information exchange could be seen within her Government, for example through the sharing of space situational awareness data between departments. Similar inter-agency efforts in the space domain were under way within the United Nations system.

66. **Ms. Collins Arsenault** (Co-founder and President, Secure World Foundation), panellist, said that one way of reducing security risks was to broaden the conversation around such risks. Many people were impacted by the decisions made in the bodies that discussed space security, hence the need to bring additional information to the table from all relevant stakeholders, including women and members of industry, civil society and even amateur astronomers. They could offer new insights and ideas on how to reduce some of the risks. Such issues must be addressed in both the First and Fourth Committees.

67. Assets in space afforded many benefits; as such assets increased, so too did interdependence among States, which in turn would bring greater security. By sharing knowledge of Earth, space, weather, land and resources while working collaboratively to build assets and communications, States would also be able to enhance their security. It was very difficult to separate assets into different categories, as so many had dual uses. The Outer Space Treaty, which had been adopted in 1967, was an inspirational testimony to what could be achieved. However, the world back then had been very different, notably in terms of communications technology. It was therefore necessary to consider what was currently missing and how to move forward.

68. **Mr. Ahmed** (Pakistan) said that space was the common heritage of humankind and all nations must desist from actions that could lead to its militarization. While dependence on outer space applications was increasing, so too was the risk of weaponization. The Outer Space Treaty had been a landmark instrument, introducing the concept that the use of outer space should be for the benefit and in the interests of all countries. However, gaps had been identified in the Treaty following its adoption and little progress had been made in bridging them. Those gaps must be addressed in order to prevent threats to the peaceful activities and applications of space technologies for socioeconomic development. While there was certainly value in pursuing transparency and confidence-building measures in outer space activities, they could not replace legally binding instruments. Such measures and instruments were not mutually exclusive and should be pursued simultaneously.

69. As a party to United Nations space treaties and a supporter of all major initiatives on the prevention of an arms race in outer space, Pakistan was strongly committed to the principle of peaceful uses of outer space and to preserving the space environment for the collective benefit of all humankind. His delegation also appreciated the role of COPUOS in developing the global legal regime of outer space and the framework for space governance, and in fostering initiatives and mechanisms to increase transparency and confidence-building measures among Member States.

70. **Ms. Quintero Correa** (Colombia) said that her country remained committed to promoting the exclusively peaceful uses of outer space, particularly through international cooperation, and advocated continued efforts in that regard within the framework of COPUOS. Colombia was also concerned by the threat posed by the increasing level of space debris; the uncertainty surrounding the exploitation of space resources; asteroids; the placement or use of weapons in outer space; and the potential for an arms race. Adopting measures to guarantee the long-term sustainability of outer space activities was therefore necessary.

71. COPUOS played an essential role in increasing transparency, building confidence between States and ensuring the peaceful uses of outer space through its activities in the scientific, technical and legal domains, and through the promotion of international dialogue and information exchange. The United Nations should continue to play an instrumental role in issues relating to outer space and its uses. The existing space law regime should be examined in accordance with the spirit of international cooperation. COPUOS should also keep abreast of the most significant developments in other forums, including the Conference on Disarmament, and should continue its discussions on the prevention of an arms race in outer space.

72. It was important to continue adopting voluntary measures as guidelines for best practices, transparency and confidence-building measures and norms of safe and responsible behaviour in outer space. Such actions would not only safeguard the space environment for future generations, but also provide a way of avoiding aggressive and potentially provocative acts in outer space. Developing countries that did not have a strong space industry must not be denied the opportunity to pursue such a path in the future. Therefore, the policies and procedures established to minimize the risk of accidents in outer space must not impede launches by future spacefaring nations.

73. **Ms. Pillai Rajagopalan** (Distinguished Fellow, Observer Researcher Foundation), panellist, said that the Outer Space Treaty continued to be a landmark instrument. However, the emergence of new technologies meant that the current environment was very different from the environment that prevailed at the time of adoption of the Treaty, particularly in relation to aspects of space security and sustainability. Outer space was truly a collective space and the actions of one State affected all. Measures therefore needed to be taken to strengthen the sustainability of outer space through an inclusive process involving all stakeholders.

74. **Ms. Collins Arsenault** (Co-founder and President, Secure World Foundation), panellist, said that emerging technologies could either be to the benefit or to the detriment of all, an outcome which would be determined in part by the discussions held in international bodies. Space offered new economic opportunities; it was therefore important to ensure its security and sustainability.

The meeting rose at 12.05 p.m.