



General Assembly

Date: 18 August

English only

Open-ended working group on reducing space threats through norms, rules and principles of responsible behaviours

Geneva, 28 August – 1 September 2023

Agenda Item 7

Adoption of the report to be submitted to the General Assembly at its seventy-eighth session

Draft report of the Open-ended working group on reducing space threats through norms, rules and principles of responsible behaviours

I. Introduction

1. By its resolution 76/231 adopted on 24 December 2021, the General Assembly decided to convene, beginning in 2022, an open-ended working group:

(a) To take stock of the existing international legal and other normative frameworks concerning threats arising from State behaviours with respect to outer space;

(b) To consider current and future threats by States to space systems, and actions, activities and omissions that could be considered irresponsible;

(c) To make recommendations on possible norms, rules and principles of responsible behaviours relating to threats by States to space systems, including, as appropriate, how they would contribute to the negotiation of legally binding instruments, including on the prevention of an arms race in outer space;

(d) To submit a report to the General Assembly at its seventy-eighth session.

2. The General Assembly also decided that the open-ended working group should work on the basis of consensus, hold its organizational session in Geneva for two days, and meet in Geneva for two sessions of five days each in both 2022 and 2023, with the participation of intergovernmental organizations and other entities having received a standing invitation to participate as observers in the work of the General Assembly, as well as organizations and bodies of the United Nations, and with the attendance of other international organizations, commercial actors and civil society representatives, in accordance with established practice. It further decided that the Chair may also hold intersessional consultative meetings with interested parties to exchange views on the issues within the mandate of the open-ended working group.

II. Organizational matters

3. [to be inserted]

III. Conclusions

4. The working group reaffirmed the applicability of international law, including the Charter of the United Nations, to activities in the exploration and use of outer space. The working group recalled that this principle was first recognized by the General Assembly in its resolution 1721 (XVI) of 20 December 1961 and reflected in article III of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (the “Outer Space Treaty”). It was also noted that applicable international law includes other relevant international treaties, customary international law, such as the law of State responsibility, as well as other bodies of international law.

5. The working group recalled that the General Assembly, at its first Special Session devoted to Disarmament, affirmed that in order to prevent an arms race in outer space, further measures should be taken and appropriate international negotiations held in accordance with the spirit of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies. The working group emphasized the importance of the Outer Space Treaty as a foundational element of space governance. The working group recalled the provisions of the Outer Space Treaty particularly relevant to its work, in particular its articles I, II, III, IV, V, VI, VII, VIII and IX.

6. The working group also reaffirmed the other principal United Nations treaties on Outer Space, including: The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space; The Convention on International Liability for Damage Caused by Space Objects; The Convention on Registration of Objects Launched into Outer Space. The working group also noted other efforts to further develop principles contained within the Outer Space Treaty, including the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.

7. In addition, the working group affirmed that international treaties, to which many States are parties, in the field of disarmament and arms control are applicable to outer space. In particular, the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water obliges its parties to prohibit, to prevent and not to carry out any nuclear weapon test explosions, or any other nuclear explosion [...] in the atmosphere; [or] beyond its limits, including outer space. The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques prohibits its parties from the military or any hostile use of environmental modification techniques, referring to “any technique for changing – through the deliberate manipulation of natural processes – the dynamics, composition or structure of the earth [...] or of outer space.

8. The working group also affirmed the availability of the consultation mechanism provided by the Outer Space Treaty, as well as of means for peaceful settlement of disputes between States, including Article 33 of the Charter of the United Nations.

9. The working group considered in particular the duty of “due regard”, which could be found in the Outer Space Treaty and other applicable treaties. The working group considered that understanding of the application of “due regard” in a space context could be informed by its application in the context of the high seas. In this connection, it was noted that jurisprudence on the law of the sea has since indicated that the duty of due regard represents a balancing of rights and interests between and among States, and between States and the international community as a whole. In the context of outer space, this balancing of rights and interests could involve two dimensions: first, between and among spacefaring nations; and, second, between a spacefaring nation and the wider international community, as a whole.

10. It was also noted that the application of due regard cannot be predetermined through a general rule because it depends on the specific circumstances of any situation. The working group also noted the availability of consultations as a means to ensure compliance with the duty of due regard.

11. The working group emphasized the desirability of clarifying the application of existing international law. It was noted that the existing legal framework applicable to outer space by itself is not sufficient to address threats to space systems, threats emanating from space or

the prevention of an arms race in outer space, that the regime plays a significant role in the prevention of an arms race in that environment, that there is a need to build upon existing legal frameworks and enhance their effectiveness and respond to contemporary challenges and that it is important to comply strictly with existing treaties, both bilateral and multilateral as well as customary international law. The working group also stressed the importance of strengthening the existing legal framework applicable to outer space to deal with new threats and risks. The working group noted that the prohibition contained within article IV of the Outer Space Treaty, on the non-placement in orbit around the earth of any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, and the non-installation of such weapons on celestial bodies or their stationing in space in any manner, does not address other types of possible weapons.

12. The working group affirmed that the prohibition on the threat or use force, as contained in Article 2(4) of the Charter of the United Nations, is applicable in outer space. The working group discussed issues in connection with the application of Article 51 of the Charter of the United Nations. The working group recalled the obligation of States, under Article 2(3) of the Charter, to settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered.

13. The working group reaffirmed that international humanitarian law applies in situations of international armed conflict and non-international armed conflict. In line with the objective of international negotiations on the prevention of an arms race in outer space, the working group reaffirms that no discussion regarding the application or further elaboration of international humanitarian law can be construed as legitimizing or authorizing any act of aggression or any other use of force inconsistent with the Charter of the United Nations.

14. The working group considered the relevance of aspects of elements drawn from the legal regimes governing other domains, notably aviation and the law of the sea as well as norms of responsible State behaviour in cyberspace.

15. The working group underscored the importance of transparency and confidence-building measures, which provide mechanisms to reduce the risks of misperception, miscalculation and unintended escalation. The working group also recognized that such measures can also contribute to, but not substitute for, an international legally binding instrument on the prevention of an arms race in outer space. The working group reaffirmed the transparency and confidence building measures contained in the 2013 report of the group of governmental experts (A/68/189) and called for their implementation. The working group also recalled the criteria for transparency and confidence-building measures outlined by that report.

16. The working group reaffirmed that transparency and confidence-building measures for outer space activities should complement, but not substitute for, the verification measures in legally binding instruments. Voluntary transparency and confidence-building measures, considered as complementary measures, could contribute to the consideration of concepts and proposals for legally binding measures for the prevention of an arms race in outer space as well as verification protocols included in legally binding international instruments.

17. The working group considered a number of examples of existing transparency and confidence-building measures, derived from the 2013 report of the group of governmental experts as well as from various United Nations and other international instruments, mechanisms or arrangements. The working group stressed in particular the importance of effective and timely communication in order to build transparency and trust. The working group considered there was merit in the elaboration of further transparency and confidence building measures.

18. The working group also reaffirmed that negotiations for the conclusion of an international agreement or agreements to prevent an arms race in outer space remain a priority task, noting the introduction by China and the Russian Federation at the Conference on Disarmament of the draft treaty in 2008¹ and the submission of its updated version in 2014².

¹ CD/1839

² CD/1985

19. The working group noted work that takes place within the Committee on the Peaceful Uses of Outer Space on the safety and long-term sustainability of outer space as well as on the mitigation of space debris.

20. It was observed that the deteriorating international security situation and increasing strategic competition between States, together with a growing number of space actors and space objects, is heightening the risk of misunderstanding and miscalculation. Similarly, the large and growing population of orbital debris increased the risk of collisions involving space objects. In this regard, while the mitigation of debris has been addressed in the Committee on the Peaceful Uses of Outer Space and the Inter-Agency Space Debris Coordination Committee, there was no international obligation that specifically prohibits the creation of debris caused by deliberate hostile acts or by the destructive testing of anti-satellite weapons.

21. It was also observed that a number of States already possess counter-space systems capable of damaging, degrading or destroying space systems. It was noted that security concerns resulting from such developments could drive other States to develop further systems to protect and defend those space systems. It was further noted that many current and emerging threats could fall below the threshold of the threat or use of force and can include strategies, methods and acts which could negatively impact the space environment and international stability. These trends have given rise to serious concern regarding the threats to international peace and security posed by the possible weaponization of outer space and the transformation of outer space into a domain of active hostilities.

22. For the purpose of this report, the working group considered space systems as comprised of three components: (a) the space segment, including satellites and launch vehicles; (b) the ground segment, including, inter alia, space monitoring systems and command and control, as well as data storage, processing and distribution; and (c) data links between the two, including uplinks and downlinks, as well as services provided to end users.

23. The working group considered the distinction between risks, hazards and threats. Hazards involve harmful effects not caused by deliberate actions. These can include natural risks to space objects, including solar activity and radiation. They can also include risks of accidental collision with natural space objects, orbital debris, derelict objects or active space objects.

24. Threats were regarded as deliberate and non-consensual acts intended to, directly or indirectly, interfere with, deny, disrupt, degrade, damage or destroy space systems. It was considered that such threats could hamper the free and unhindered access and use of space, harm the safe operation of space systems and jeopardize the long-term sustainability of outer space, the provision of key space-based services to the civilian population, and the use of relevant national-security space-based services. Such threats against space systems can be divided into four categories, based upon its vector: Earth-to-space, space-to-space, Earth-to-Earth and space-to-Earth. These threats can have reversible or irreversible effects. Reversible effects are temporary and can include interference with radio-frequency signals or the dazzling of remote sensing systems. Irreversible effects involve may damage to or the destruction of space systems.

25. The working group considered various types of counter-space capabilities with physical or kinetic effects that could pose a threat by States to space systems.

(a) Direct-ascent anti-satellite missiles could be launched from the ground, air or sea and make use of explosives, kinetic impact or other means to degrade or destroy a space object. The destructive testing or use of such capabilities are especially a particular concern, including due to their potential to produce large amounts of debris.

(b) Co-orbital anti-satellite capabilities can include satellites placed in Earth orbit capable of producing reversible or irreversible effects. They may carry anti-satellite missiles, other projectiles or chemical sprayers or directed energy electronic warfare capabilities. They may also include satellites that deliberately collide with other space objects or that come into proximity with other space objects in order to interfere with it or disrupt its normal operations.

(c) Space-based missiles or anti-missile interceptors, designed to target objects on the ground, air or sea or to target missiles launched from the Earth, were regarded as having

potential to increase the risk of conflict in outer space. It was also noted that such a capability was both impractical and hypothetical in nature.

(d) Nuclear detonations could be used to directly damage or destroy satellites, and also could be used to create harmful electromagnetic effects that could also degrade and destroy satellites as well as damage terrestrial infrastructure. It was noted that the 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water prohibits any nuclear weapon test explosion, or any other nuclear explosion, in outer space. The 1967 Outer Space Treaty prohibits placing nuclear weapons or other weapons of mass destruction in orbit around the Earth, installing such weapons on celestial bodies, or stationing such weapons in outer space in any other manner. As such, nuclear weapons or other weapons of mass destruction are prohibited from being placed in orbit, installed on celestial bodies, or otherwise stationed in space.

26. The working group also considered various non-kinetic capabilities that could be used to affect the use of space assets as well and impair services of the targeted satellite or payload to the detriment of its users. The effects of such capabilities could be permanent or temporary and their origin could be difficult to detect and attribute, increasing mistrust and the risk of misinterpretation.

(a) Directed-energy capabilities include lasers, high-powered microwaves, particle beams and electromagnetic pulse. They may produce reversible effects, including by temporarily blinding optical sensors, or irreversible effects by permanently degrading or damaging components such as sensors or solar panels.

(b) Radiofrequency capabilities can disrupt, deny, deceive, or degrade space services. Methods can include uplink jamming or spoofing, directed toward a target satellite but which can have widespread effects, or can include downlink jamming or spoofing which is directed at users on the ground and may have more localized effects. It was noted that such systems are possessed by a number of States and non-state actors and have been used.

(c) Cyber capabilities can target satellite command and data distribution networks, resulting in data loss, widespread disruption, loss of operational control or the sending of unauthorized commands to potentially take over operational control of a satellite. It was noted that such capabilities do not necessarily require significant resources, are difficult to attribute and may also be conducted by non-state actors.

27. The working group considered certain types of capabilities and operations that could have possible applications as co-orbital anti-satellite capabilities. It was noted that, due to the nature of the space environment, many active satellites could be regarded as have such capabilities and this makes it difficult to distinguish between threatening and benign capabilities and operations. On-orbit servicing involves the maintenance, repair, fuelling or construction of spacecraft in orbit. Active debris removal systems are intended to dispose of non-operational satellites. Both capabilities entail rendezvous and proximity operations and may employ robotic arms, harpoons, magnets, nets or other capture mechanisms. Such capabilities could be used to manipulate, damage, degrade or destroy other space objects. Therefore, despite their beneficial uses, such capabilities and operations could increase the risk of misunderstanding or be perceived as hostile or threatening, especially when used or conducted in a non-transparent manner.

28. For the purpose of its work, the working group considered irresponsible behaviours to be actions, activities or omissions by States that could pose a threat to space systems. It was emphasized that a focus on behaviour is compatible with traditional approaches to arms control and that the notion of irresponsible behaviour is inclusive of specific actions, activities or omissions involving counter-space capabilities.

29. Criteria for determining whether a behaviour was irresponsible could include whether it violates the Charter of the United Nations or other bodies of international law. Other criteria could include its consequences on safety, sustainability and security in outer space, its consequences on the civilian population and civilian objects, its impact on international peace and security, as well as whether it follows an understood pattern of action. It was noted that determining what actions, activities or omissions could be perceived as a threat by another

State was useful as these actions, activities or omissions may not necessarily be unlawful. A view was also expressed that the working group should limit its consideration to actions, activities or omissions that should be regarded as unlawful. Another view was expressed that determining the lawfulness of an action was highly dependent on the circumstances. It was also noted that irresponsible behaviours affecting space systems could negatively impact a number of areas, including freedom of access to outer space, transportation safety, scientific research and development, climate change adaptation and mitigation, disaster risk prediction and management, emergency and rescue and other essential civilian services as well as international peace, security and stability.

30. The view was also expressed that criteria for determining whether a behaviour was irresponsible were subjective and that the matter requires further discussion at the conceptual level. Concern was expressed about the subjective application of such criteria. It was stated the further discussions are required on who makes these determinations and characterizations, how they are made and the factual basis of such determinations.

31. The working group considered various actions, activities or omissions in relation to outer space policies that could be considered threatening, including, but not necessarily limited to:

(a) Insufficient or false provision of information about the purpose and use of certain space objects, capabilities, technologies or activities, which can increase the risk of misperception;

(b) Failure to register space objects pursuant to the Registration Convention or in accordance with General Assembly resolution 1721 B (XVI) (XVI), as applicable;

(c) Insufficient understanding of mutual threat perceptions, including in relation to the different extent to which States are dependent on space systems for their national security or economy;

(d) The absence of clear and internationally understood standards and norms of responsible behaviours in outer space, which could increase the risk of misperception and unintended escalation;

(e) The absence of specifically identified channels of communication for regular coordination of spacecraft manoeuvres, which can make it difficult to address potential concerns regarding such manoeuvres or to deconflict operations in outer space;

(f) A lack of transparency on national space programmes, space security and defence policies, strategies and doctrines, which can feed mistrust and suspicion, thereby increasing risks of misperception and miscalculation;

(g) Publicly declaring outer space to be a warfighting domain or as an arena for military confrontation, or in pursuing military strategies, doctrines or policies aimed at achieving military superiority in outer space, which could promote an arms race in outer space and increase uncertainty regarding outer space security.

32. The working group considered various actions, activities or omissions in relation to outer space operations that could be considered threatening, including, but not necessarily limited to:

(a) Launching space vehicles without issuing pre-launch notifications, as well as without prior coordination with potentially affected countries, including those whose territories may be potential drop zones of uncontrolled re-entering or launch debris that pose a potential risk of injury to people, damage or destruction to property;

(b) Conducting rendezvous and proximity operations, including close approaches, that involve the space objects of another State without prior notification, coordination and consent, or those performed after the affected State has requested consultation or cessation of the manoeuvre;

(c) Failure to communicate with other States about potential collisions involving satellites and a failure to conduct anti-collision manoeuvres when required.

33. The working group considered various specific actions, activities or omissions in relation to counter-space capabilities that could be considered threatening, including, but not necessarily limited to:

- (a) The development, acquisition, deployment, testing or use of counter-space capabilities that could hold at risk, interfere with, damage, or destroy space systems;
- (b) The placement of satellites equipped with armaments in outer space;
- (c) The placement of a co-orbital weapon or an electronic warfare satellite in the proximity of another national security satellite of another State;
- (d) The development, testing or use of destructive direct-ascent anti-satellite missiles;
- (e) Any other non-consensual and destructive act that could create large amounts of debris;
- (f) Releasing objects such as sub-satellites or ejecting projectile-like fragments in the immediate vicinity of the satellite of another State without prior consultation and consent;
- (g) Acts that interfere with the command and control of space systems or that impair or lead to the loss of the ability of an operator to control a satellite;
- (h) Blinding the sensors of a satellite;
- (i) Jamming or spoofing the signals of positioning, navigation and timing satellites or interfering with such systems via cyber or other means, or conducting or supporting any other activity designed or expected to disrupt, damage, destroy or disable space systems necessary for the provision of essential civilian services and for the protection and functioning of persons and objects specifically protected under international law;
- (j) Any act that impairs, disrupts or targets military space systems, especially systems used for situational awareness, outer space monitoring, reconnaissance, navigation, communication, early warning, as well as for the conduct of military activities and operations.

IV. Recommendations

34. The working group stressed the importance of ensuring that all activities by States in outer space are carried in accordance with international law and with due regard to the corresponding interests of other States. The working group also stressed the importance of ensuring that armed conflict does not extend into outer space. The working group recognized that non-legally binding measures applicable to outer space activities, while not a substitute for legally binding arms control measures, could contribute to the consideration of concepts and proposals for such measures as well as verification protocols included in legally binding international instruments, including on the prevention of an arms race in outer space.

35. The working group considered various benefits that norms, rules and principles relating to addressing threats by States to space systems could have, including to:

- (a) Reduce threats to international peace and security related to activities in outer space;
- (b) Prevent, with a view to eradicating, the risk of the armed conflict being initiated in or extending to outer space;
- (c) Contribute to the long-term sustainability of and continuing and non-discriminatory access to outer space;
- (d) Reduce the risk of misunderstandings, misperceptions, miscalculations and unintended escalation and conflict;
- (e) Encourage transparency and communication regarding space activities in order to avoid misinterpretation;
- (f) Encourage safe practices related to outer space activities;

- (g) Discourage or minimize activities that could lead to the creation of debris or harmful interference that affects the civilian population;
- (h) Inform State practice regarding the application of existing international law;
- (i) Identify activities that could provide States with indications of hostile intentions of another State;
- (j) Proceed with negotiations of a legally binding instrument or instruments on the prevention of an arms race in outer space.

36. The working group recommended that Member States give further consideration to proposals for possible norms, rules and principles, including the following non-exhaustive set of elements, without prejudice to the national positions of States participating in the working group:

Damage and destruction of space objects or use of space objects as weapons

(a) States should refrain from any act that causes non-consensual physical damage to or disabling or destruction of other States' space objects, including where such acts are expected to result in the generation of space debris. This includes any tests, experiments, or other activities that result in satellite break-ups or the intentional destruction of spacecraft or orbital stages. In particular, States should:

- i. Refrain from the threat or use of force against space objects inconsistent with the Charter of the United Nations;
- ii. Refrain from destructive direct-ascent anti-satellite missile tests or from destructive tests using any other type of counter-space capabilities;
- iii. Refrain from deliberately colliding space objects;
- iv. Refrain from any other non-consensual act that destroys or damages the space objects of other States, including those using anti-missile systems;
- v. Refrain from testing or using space objects as weapons for any purpose, including anti-missile systems, against any targets on Earth, in the air or in outer space.

Development and deployment of counterspace capabilities

(b) States should not develop, produce, test or deploy weapons in space for any purpose.

Interference with the normal and safe operation of space objects

(c) States should refrain from any intentional and non-consensual act that interferes with the normal and safe operation of the space objects under the jurisdiction or control of other States. Such acts of interference may give rise to tensions and increase the risk of escalation and inadvertent conflict. In particular, States should:

- i. Refrain from any act that disrupts or alters the trajectory of the space objects of other States without prior consent;
- ii. Refrain from any act that leads to a loss of command and control over, irreversible damage to or permanent loss of space systems of other States, regardless of the means, which could include the malicious use of information and communication technologies, directed energy, or jamming or spoofing of signals, and which would be directed at any segment of a space system;
- iii. Refrain from the testing of counter-space capabilities under their jurisdiction and control or operating on their behalf that impairs the safe operation of satellites under the jurisdiction or control of another State;
- iv. Maintain safe separation from other space objects;
- v. Plan trajectories that avoid or mitigate spaceflight safety risks for other space objects;

- vi. Ensure that satellites under their jurisdiction and control or operating on their behalf do not rendezvous, physically connect or physically damage with satellites under the jurisdiction and control of another state without prior consultation and consent;
- vii. Submit a request for consent to the affected State in advance of such an operation, including notification at least of the planned timing, trajectory and objective of the operation.

Acts involving military systems

(d) States should avoid any acts that cause harmful interference with certain military space objects, especially those that can pose a particular risk of escalation. Among these are satellites providing services related to early warning.

Space objects and activities that are entitled to special protection

(e) States should avoid activities that would endanger the lives of humans in space.

(f) States should refrain from any acts that would impair the provision of critical space-based services to civilians. These services include position, navigation and timing, communications, remote sensing, space traffic management, scientific research, environmental monitoring and climate change mitigation, services critical to the production and maintenance of objects indispensable to the survival of the civilian population and to persons and objects specifically protected under international law, as well as services that support humanitarian operations and the safety of dangerous installations such as nuclear power plants or infrastructure containing hazardous or toxic materials.

(g) States should consider registering, marking or otherwise indicating space objects that provide critical space-based services to civilians and to exchange information in this regard, including through the Registration Convention.

Assistance and encouragement in certain acts

(h) States should refrain from assisting, encouraging or inducing any State or intergovernmental organization, any entity or anyone located on their territory or under their jurisdiction or control, in the conduct of any of the above-mentioned activities from which States should refrain.

Cooperation in the peaceful use of outer space

(i) States with significant space technologies could consider international cooperation such as providing assistance and training and transferring technology, data and material to requesting States for the equitable and mutual benefit of and taking into account the legitimate rights and interest of all parties concerned, in particular the needs of developing countries, noting that the disparity in space capabilities of States, the inability of most States to participate in space activities without the assistance of others, uncertainty concerning sufficient transfer of Space technologies between State and the inability of many States to acquire significant space-based information are factors contributing to a lack of confidence among States.

(j) States should respect the rights of other States to participate in outer space security governance on an equal and non-discriminatory basis, carry out information exchanges or technical cooperation on a voluntary basis, and follow the principles of openness, transparency and equality.

Cooperation in space situational awareness, surveillance and tracking

(k) States should share space situational awareness data and catalogues to the greatest extent practicable. Bearing in mind the disparities in capabilities and resources of States, space situation awareness cooperation should be open, transparent, non-discriminatory and voluntary. This could be done through a multilateral mechanism, including under the auspices of the United Nations. Increasing the availability of space situational awareness data and the interoperability of space situational awareness systems could facilitate the detection of abnormal behaviour, verification of compliance with legal

obligations and political commitments, as well as identification and attribution of activities, acts and omissions of other States.

Military space policies, doctrines and strategies

(l) States should commit to prevention of an arms race in outer space and to the peaceful exploration and use of outer space for the benefit of all humankind. States should avoid policies, doctrines and strategies, as well as rhetoric that could jeopardize the safety, security and sustainability of outer space activities. States be transparent about their uses of outer space, both civilian and military, and should share information that clarifies their intentions regarding their space activities, outer space policies, doctrines and strategies, including within multilateral forums, without prejudice to their national security interests. States should consider consulting with other States during their formulation of their outer space policies, doctrines and strategies.

Implementation of international obligations, commitments and measures

(m) States should promote the universalization of, and compliance with, existing international law applicable to outer space activities, including all relevant treaties and applicable bodies of law. None of the proposed norms, rules and principles, and affirming that none of these norms, rules and principles listed in this document can be construed as legitimizing or authorizing any act of aggression or any other threat or use of force inconsistent with the Charter of the United Nations.

(n) States should promote the implementation of agreed international guidelines for outer space activities, including the United Nations Space Debris Mitigation Guidelines, the United Nations Guidelines on the Long-Term Sustainability of Outer Space Activities, and other United Nations principles relevant to outer space activities.

(o) States should consider implementing, to the greatest extent practicable, the recommendations contained in the 2013 report of the Group of Governmental Experts on Transparency and Confidence-building Measures in Outer Space activities (A/68/189) and seek to further strengthen transparency and confidence-building measures in outer space activities.

Launch notifications

(p) States should provide pre-launch notifications of space vehicle launches, including information on the mission of launch vehicles, and consider providing post-launch notifications, including estimated date, time, and location of re-entry and surface impact of launch vehicles, taking into account examples of instruments that provide for such notifications.

Notifications of military operations and exercises

(q) States should provide notifications, to the greatest extent practicable, regarding military operations and exercises, in conformity with the above-mentioned norms, rules and principles, that could have an impact on space systems and services, as well as regarding the creation of debris and its possible re-entry.

Consultative mechanisms

(r) To facilitate exchanges of notification and information, States should establish routine channels of communication and designating points of contact, as appropriate. Such channels of communication could facilitate communication and resolution of concerns when a situation related to outer space activities gives rise to tensions between States.

Annex

I. List of documents submitted to the Open-ended Working Group on reducing space threats through norms, rules and principles of responsible behaviours

[to be inserted]
