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Possible substantive elements of a final report of the UN Group of governmental experts on the prevention of an arms race in outer space

Keeping outer space free from weapons of any kind, resisting the emergence of a new military space threat to the international peace and global security is an issue of growing importance for the international community that requires united efforts of all UN Member States.

Prevention of an arms race in outer space (PAROS) and, thus, exclusion of outer space from turning into a new area of military confrontation is a necessary precondition for free and equal admission into outer space of all States without exception and their equal engagement in the research and use of outer space for peaceful purposes in the interests of successful national, regional and global development.

In this context the Group of Governmental Experts (GGE) established by the UN GA resolution 77/250 "Further practical measures for the prevention of an arms race in outer space" should contribute to the achievement of these goals by making recommendations on substantial elements of an international legally binding instrument. Therefore, in the preparation of the GGE final report it is necessary to consider the following aspects.

I. Introduction

1. State that GGE should focus its work in compliance with its mandate on elaborating secure guarantees for keeping outer space free of weapons, of use of force or threat of force against or by means of outer space objects by considering and making recommendations on substantial elements of a relevant international legally binding instrument.

2. Confirm the commitment to the decisions of the UN General Assembly 1978 First Special Session on Disarmament that provides for the conduct of exploration and use of outer space for peaceful purposes, prevention of an arms race in outer space (PAROS) and launch of relevant negotiations in line with the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space including the Moon and Other Celestial Bodies of 1967 (hereinafter – the "Outer Space Treaty").

3. Note that PAROS serves the interests of maintaining international peace and security, being an essential condition for the development and strengthening of international cooperation in the exploration and use of outer space for peaceful purposes.

4. Point out that the conceptual basis for implementing the goals of keeping outer space as a purely peaceful environment, including PAROS, are the existing international legal norms and principles governing space activities. This includes the provisions of the UN Charter, the Outer Space Treaty, the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water of 1963, the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space of 1963, the

For instance, Article 2 of the UN Charter provides for the principle of refraining in international relations from the threat or use of force. This principle applies to the activities in, from and against outer space.

Under Article 3 of the Outer Space Treaty and paragraph 4 of the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, States Parties to the Treaty commit to carry on “activities in the exploration and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international cooperation and understanding”.

Article 4 of the Outer Space Treaty provides that States Parties to the Treaty undertake not to place “in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner. The Moon and other celestial bodies shall be used <…> exclusively for peaceful purposes”. Moreover, Article 1 of the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and under Water obliges States “to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control: in the atmosphere; beyond its limits, including outer space; or under water, including territorial waters or high seas”.

Article 4 of the Outer Space Treaty also prohibits “the establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military manoeuvres”. However, the use of military personnel for scientific research or for any other peaceful purposes, as well as the use of any equipment or facility necessary for peaceful exploration of the Moon and other celestial bodies shall be permitted.

Article 6 of the Outer Space Treaty provides for “the international responsibility for national activities in outer space, including the Moon and other celestial bodies, whether such activities are carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions set forth in the Treaty. The activities of non-governmental entities in outer space, including the Moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty. When activities are carried on in outer space, including the Moon and other celestial bodies, by an international organization, responsibility for compliance with this Treaty shall be borne both by the international organization and by the States Parties to the Treaty participating in such organization”.

Under Article 1 of the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, States undertake “not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party”.

5. Underline that, however, the existing treaties relating to outer space and the legal regime they provide for, while playing a positive role in regulating space activities, are not intended to prevent an arms race in outer space, do not prohibit deployment of weapons that are not weapons of mass destruction in outer space, the use or threat of force in, from or against outer space. Other priorities were put forward during their elaboration. Today the States’ aims have changed.

6. In this regard, to appeal strongly to elaborate and conclude, as soon as possible, an international legally binding instrument for PAROS in all its aspects, which will permit to improve the said legal regime regarding achievement of PAROS goals. The Draft Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects (PPWT), submitted by China and the Russian Federation for consideration by the Conference on Disarmament (CD) in 2008 and its updated version of 2014 should serve as the basis for such an instrument.
7. Point out that the CD is the single multilateral disarmament negotiating forum mandated to develop an international legally binding instrument on PAROS under its agenda item 3. The CD regularly considers political aspects of PAROS and related issues. Due to its Member States’ inability to reach a compromise regarding the Programme of work this key negotiations structure is still yet to commence the development of a corresponding international treaty. For this reason, the GGE and the Open-ended Working Group established pursuant to the UN GA resolution 78/238 "Further practical measures for the prevention of an arms race in outer space" are the best possible platforms for elaborating substantive framework of the future legally binding instrument on PAROS.

II. Substantive éléments of the agreement

Preamble

1. Note that further exploration and use of outer space plays the ever-increasing role in development of humankind.

2. Stress the unacceptability of turning the outer space into a new environment of weapons deployment and an arena of military confrontation.

3. Reaffirm the importance of full compliance with the existing multilateral agreements related to outer space activities.

4. Acknowledge the applicability of Article 2 of the UN Charter to actions in, from and against outer space.

5. Note that 1967 Outer Space Treaty obliges the States Parties not to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner.

6. Acknowledge that the existing outer space-related international treaties and the international legal regime they form play the key role in governing the outer space activities. However, they cannot fully prevent the placement of weapons in outer space.

7. Remind of the UN GA Resolutions "Prevention of an arms race in outer space" which express, in particular, conviction of the need to examine further measures in the search for effective and verifiable bilateral and multilateral agreements for the purposes of PAROS.

8. Declare that carrying out of the outer space activities in compliance with the principles of the international space law contributes to building confidence with regard to peaceful intentions of the States.

9. Confirm that the Moon and other celestial bodies shall be used exclusively for peaceful purposes.

10. Recognize the uncertainty inherent to ensuring space situational awareness, which may lead to misunderstanding and strategic miscalculations between space faring nations.

11. Reaffirm the importance of further practical steps on PAROS for the purposes of maintaining the international peace and security.

12. Emphasize that the space systems, including relevant ground and space segments, play the ever-increasing role in ensuring the national security and development of States, as well as the international security.

13. Highlight the need to counter the research, development, testing, production, acquisition, transferring and stockpiling of weapons specifically designed to damage and destroy outer space objects, space surveillance systems, or space-based weapons specifically designed to damage terrestrial objects.

14. Stress that nothing should impact the exploration and use of outer space for peaceful purposes by all States or access to the achievements of space science and technologies, exclusively for peaceful purposes.
15. Stress a dangerous trend, namely an increasing use of satellite systems and relevant ground infrastructure claimed as civil ones to support combat operations.

16. Note the unalienable right of the States to participate in fullest possible exchange of scientific and technical information for the exploration and use of outer space for peaceful purposes.

**Basic obligations**

1. Include provisions regarding the obligation not to place weapons designed to attack outer space objects, terrestrial or aerial targets, in outer space (including orbit around the Earth and celestial bodies) as well as not to resort to the threat or use of force against or by means of outer space objects.

2. Also introduce the following prohibitions and restrictions:
   - Not to use outer space objects as a mean to destroy any targets on Earth, in airspace or outer space;
   - Not to create, test or place weapons in outer space for any purposes, including antimissile defense, as anti-satellite systems or to destroy the targets on Earth and in the air, as well as to eliminate such systems that are already at the States’ disposal;
   - Not to develop, test, deploy or use space weapons for missile defense, as anti-satellite systems or against ground or airspace targets;
   - Not to destroy, damage, disrupt the normal functioning or alter the trajectory of outer space objects belonging to other States without their consent;
   - Not to assist or induce other States, groups of States, international, intergovernmental as well as non-governmental legal entities, including non-governmental legal entities established, registered or located in the territory under their jurisdiction and/or control, to engage in the above-mentioned activities.

3. Note that a legally binding instrument should also include provisions on the international responsibility of States for outer space activities, regardless of who is carrying them out – government bodies or non-governmental legal entities under their jurisdiction. It is essential that each State undertakes an obligation, in accordance with its constitutional procedures, to take necessary measures to ensure compliance with the provisions of the future agreement within the territory of that State, or within any territory under the jurisdiction or control of that State, in any part of the world. When activities are carried on in outer space, including the Moon and other celestial bodies, by an international organization, responsibility for compliance with the agreement shall be borne by the international organization and by the States participating in such organization.

**Definitions**

1. Underline that, for the purposes of the future agreement the following definitions should be provided:
   - Outer space object;
   - Space infrastructure;
   - Space weapon;
   - Weapon in outer space;
   - Space debris;
   - Converted;
   - To disrupt normal functioning;
   - To damage;
   - To destroy;
• Denial;
• Degradation;
• Placed in outer space;
• Threat or use of force against outer space objects;
• Threat or use of force by means of outer space objects;
• Harmful interference to outer space objects.

2. In the context of a legally binding instrument on PAROS, acknowledge the importance of the use, to the greatest extent possible, of existing definitions in agreed international instruments.

3. State the role of the PPWT and the definitions it sets forth.

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

1. Indicate that TCBMs, like other political commitments, are not fully capable of preventing an arms race in outer space, including placement of weapons in outer space, the threat or use of force in, from and against outer space, or keeping outer space free from armed conflicts and hostilities.

2. Note that TCBMs are intended to contribute to space security and sustainability and, in particular, to PAROS and the elaboration of a legally binding instrument on PAROS. Such measures should complement, rather than replace a legally binding instrument on PAROS.

3. Recognize the importance of TCBMs as an integral part of a legally binding international instrument on PAROS. They could be used as an interim verification mechanism for the said agreement. The implementation of these measures is depends directly on the progress made in developing such an agreement on PAROS.

4. Point out that as far as relevant legally binding instrument has yet to be developed and concluded, other measures can contribute to the non-placement of weapons in outer space goal achievement. In this context, the international initiative/political commitment “No First Placement of Weapons in Outer Space” (NFP) remains relevant. The NFP initiative is of unprecedented importance as a transparency and confidence-building measure. The NFP is the only truly working instrument to keep outer space free of any kind of weapons.

   Thirty-three UN Member States have already become full-fledged NFP participants. Support for the NFP is reflected in joint statements by the CSTO, CIS, BRICS, SCO and in a number of bilateral documents. If all States, primarily the space faring ones, join it, the situation with non-deployment of weapons in space will become more predictable and there will be reasonable confidence that space will remain free of strike systems. At the same time, the NFP is a significant step on the way to the Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects and cannot be considered in isolation from the efforts undertaken by the international community on PAROS in accordance with the UN GA resolution of the same name.

5. Stress that in this regard, we consider necessary the voluntary implementation on national level, to the extent feasible and practicable and based on the interests of UN Member States, of TCBMs endorsed by the corresponding UN Group of Governmental Experts and included in the consensus recommendations of the UN Disarmament Commission to promote the practical implementation of transparency and confidence-building measures in outer space activities with the goal of preventing an arms race in outer space.

6. Note that the overall international security context and all factors affecting strategic stability should also be taken into account with regard to the prospects of the TCBMs. Given the international security crisis and trust deficit, the role of existing legally binding instruments and the need for new such arrangements to address PAROS, including preventing the weaponization of space, is even more important.
Verification

1. Emphasize that multilateral and non-discriminatory verification mechanisms are one of essential components of any international arms control agreements. Such measures should be proportional to the nature of the obligations. Any verification mechanism should be adequate to provide credible assurances that States are complying with their treaty obligations.

2. Note that verification can rely on a diverse set of tools and measures. Existing international multilateral and bilateral arms control treaties can be a source for potential methodology, such as the provisions of the Treaty between the Russian Federation and the United States of America on Measures for the Further Reduction and Limitation of Strategic Offensive Arms and the Comprehensive Nuclear-Test-Ban Treaty.

3. Mention that verification of the fulfilment of obligations by the parties to a future legally binding instrument on PAROS, in order to ensure its effective execution, could be carried out in three ways:
   • Space observation by means of a mechanism for monitoring objects and events in space. For this purpose, national space control means of States could be used within the framework of international cooperation, including, for example, under the coordinating role of the UN or an international structure specially created for these tasks. Countries' space surveillance activities to inform about their national assessments of other States' compliance with their obligations under a future legally binding instrument could complement a multilateral verification mechanism in accordance with established procedures;
   • Observation of activities on Earth through an inspection mechanism. Verification of any obligations related to terrestrial systems may be technically simpler than verification of obligations related to outer space objects. However, such verification would still require considerable political will and could be costly. In this regard, a balance should be struck between efficiency and the burden on the States to be inspected;
   • An information exchange mechanism, including review of doctrinal documents relevant to space security issues. This mechanism could be based on the implementation of the “Exchange of Information on the Principles and Goals of a State’s Outer Space Policy” TCBM, mentioned in the 2013 GGE (A/68/189) report.

4. Highlight that given the existing objective complexities and challenges associated with verification in the context of the development of a legally binding instrument on PAROS, further scrutiny of possible verification elements of a future arrangement is required.

International cooperation

1. Note that a multilateral legally binding instrument on PAROS should recognize the right of States Parties to the peaceful exploration and use of outer space, including the development, research, production and use of related technologies, taking into account, inter alia, the needs of developing countries. The instrument shall be non-discriminatory and include a provision on the avoidance of unreasonable restrictions, including unilateral coercive measures, and related to the use or transfer of outer space-related technologies for peaceful purposes.

2. Point out that the agreement could also provide that States Parties in a position to do so would cooperate in promoting the implementation of the instrument to increase the peaceful uses of outer space, and contribute to the sustainability of space activities. Such international cooperation could include, inter alia, the exchange of experience, scientific knowledge, technology and equipment for space activities on an equitable, unhindered, non-discriminatory and mutually acceptable basis.

Institutional arrangements

1. Stress that the institutional arrangements of a multilateral legally binding instrument shall include three main elements: institutionalization, consultation and dispute resolution.
2. The institutionalization of the PAROS agreement involves a review of the implementation of the future instrument’s provisions. This includes review conferences, regular meetings of States Parties, including an intersessional process, and the establishment of a specialized international institutional body (e.g. a secretariat, an implementation support unit or an executive organization following the model of similar provisions contained in other legally binding arms control instruments).

3. When developing a consultative mechanism, it would be possible to employ the existing procedures, such as those provided for in Article IX of the 1967 Outer Space Treaty or Article V of the Biological Weapons Convention. However, disputes between States related to the implementation of the future agreement could be resolved primarily through direct consultations between the parties concerned, and with procedures established for this purpose, including the right of a State Party to request clarification from another State Party. Provision could also be made for the need for regular consultations through bilateral and multilateral diplomatic exchanges and other intergovernmental mechanisms, including bilateral, military, scientific and other channels, which can help prevent misunderstandings, misperceptions and mistrust.

4. Information on unresolved disputes could be reported to the UN Security Council, including upon the recommendation of the annual conference of States Parties.

III. Final provisions

1. The final provisions of the legally binding instrument shall include a set of provisions inherent in any international treaty, namely the entry into force, depository, term of validity, withdrawal, amendments, additional protocols, and languages.

2. State that in order to be viable and effective, the legally binding instrument shall first and foremost provide for the participation of the major space faring nations. Specifically the following conditions could be set for the agreement to enter into force: a limit on deposited instruments of ratification, and de facto participation of all major space faring nations (including all permanent members of the UN Security Council).

3. Note that the UN Secretary General could act as the depositary of the future legally binding instrument on PAROS. It would be advisable to designate the term of such an agreement as “indefinite”.

4. Point out that however, any State Party will be able to propose amendments to the text of the legally binding instrument. The text of the amendment shall be submitted to the UN Secretary General for its subsequent circulation to States Parties and organization of the relevant Conference, if at least one third of States Parties agree so. Amendments shall enter into force for each State Party upon their adoption by consensus.

The above considerations require to be taken into account in the GGE final report to ensure its adoption and the fulfilment GGE mandate.