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**Committee on the Peaceful Uses of Outer Space Legal Subcommittee Sixty-second session** Vienna, 20–31 March 2023

# **Draft report**

# Annex I

# Report of the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space

1. At its 1034th meeting, on 20 March, the Legal Subcommittee reconvened its Working Group on the Status and Application of the Five United Nations Treaties on Outer Space, with Franziska Knur (Germany) as its new Chair.

2. The Working Group expressed its appreciation to the former Chair, Bernhard Schmidt-Tedd, for his able leadership of the Working Group.

3. From 20 to 29 March 2023, the Working Group held five meetings and also held informal consultations on the margins of the Subcommittee's session. The Working Group considered the following items:

(a) The status of the five United Nations treaties on outer space;

(b) The set of questions of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space and the questionnaire on the application of international law to small-satellite activities;

(c) Establishing a dedicated web page of the Working Group containing documents relevant to its considerations;

(d) Recommendations concerning the submission of registration information on space objects forming part of a satellite constellation;

(e) Future topics to be considered by the Working Group.

4. The Working Group had before it the documents listed in paragraph [...] of the report of the Subcommittee at its sixty-second session.

5. The Working Group agreed that States members and permanent observers of the Committee should continue to be invited to provide comments and responses to the set of questions provided by the Chair of the Working Group as contained in appendix I to the present report. Any replies received would be made available in conference room papers.





6. The Working Group agreed that States members and permanent observers of the Committee should continue to be invited to provide comments and responses to the questionnaire on the application of international law to small-satellite activities, as contained in appendix II to the present report. Any replies received would be made available in conference room papers.

7. The Working Group agreed that the secretariat should create a dedicated web page of the Working Group that provided access to the document entitled "Bringing the benefits of space to all countries: a guidance document on the legal framework for space activities" (A/AC.105/C.2/117), as well as other relevant documents, for the consideration of the Working Group at the sixty-third session of the Subcommittee, in 2024.

8. The Working Group reaffirmed the importance of achieving the most complete registration of space objects, in line with article VIII 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 Convention on Registration of Objects Launched into Outer Space and General Assembly resolution 1721 B (XVI), and as recommended by the General Assembly in its resolution 62/101, entitled "Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects", and as contained in the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee on the Peaceful Uses of Outer Space (A/74/20, annex II).

9. The Working Group welcomed the ongoing work of the Office for Outer Space Affairs to develop an online registration portal to ensure the efficiency of registration submissions. The Working Group also recalled that the background paper by the Secretariat entitled "Registration of large constellations and megaconstellations" (A/AC.105/C.2/L.322) had outlined challenges associated with the registration of a space object forming part of a satellite constellation, as well as steps taken by States of registry to accommodate the increased number of registrations, such as increasing the frequency of submissions, using a spreadsheet format, and other measures such as consulting the secretariat about how best to provide the information and refining those practices.

10. The Working Group noted with appreciation the launching of the "Registration project: supporting implementation of treaty obligations related to the registration of objects launched into outer space" to improve awareness of and promote the coherent application of the Registration Convention and noted that the expert event on the registration of objects launched into outer space was to be held in Vienna on 29 and 30 May 2023, at which participants could further discuss the enhancement of registration practices for space objects forming part of a satellite constellation.

11. In that regard, the Working Group agreed the following:

(a) When submitting registration information on a space object forming part of a satellite constellation, further consideration should be given to the implementation of the recommendations of the General Assembly contained in its resolution 62/101, entitled "Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects";

(b) When submitting registration information on a space object forming part of a satellite constellation, consideration could be given to furnishing additional information, including, but not limited to:

(i) Information on the owner and operator, including any contact details, to the extent practicable and feasible;

(ii) Web links to official information, such as web links to the national space object registries;

(iii) Contact details of designated focal points for national space object registries;

(c) Without prejudice to the formal submission of registration information on a space object forming part of a satellite constellation, and in order to promote the availability of registration information during the period of time between the submission of registration information to the Secretary-General of the United Nations and its distribution by the Office for Outer Space Affairs, appropriate means to make available registration information concerning a space object forming part of a satellite constellation, including public websites linked to national space object registries, could be considered.

12. In order to facilitate the implementation of the above recommendations, the Office for Outer Space Affairs was requested to consider options, within existing resources, for improvements to ensure the efficient processing of registration information submissions on space objects forming part of a satellite constellation as part of its ongoing process of developing an online registration portal. The model registration form made available by the Office pursuant to paragraph 5 (a) of Assembly resolution 62/101 could serve for furnishing additional information on registered space objects, including those forming part of satellite constellations.

13. The Working Group recalled that States conducting space activities and international intergovernmental organizations that had declared their acceptance of the rights and obligations under the Registration Convention should, when they had designated focal points for their appropriate registries, provide the Office for Outer Space Affairs with the contact details of those focal points, as recommended by the General Assembly in its resolution 62/101, paragraph 2 (c).

14. The view was expressed that, in accordance with the territorial rights relating to the provision of services, including Internet services, satellite operators must obtain a licence from the communications regulators of each country of operation in accordance with the requirements and conditions of that country. The delegation expressing that view also expressed the view that that topic should be addressed by the Working Group.

15. The view was expressed that ITU was the primary forum in the United Nations system for international coordination of matters related to the radio frequency spectrum and space-based radiocommunication services and that the Committee and its subsidiary bodies or this Working Group were not the appropriate forums to discuss such matters.

16. The Working Group welcomed the conference room paper on dedicated tools and practices for enhanced information-sharing under article XI of the Outer Space Treaty, submitted by Belgium, Czechia, Germany, Finland, Luxembourg and the Netherlands (Kingdom of the) (A/AC.105/C.2/2023/CRP.40).

17. The Working Group agreed that at the sixty-third session of the Subcommittee, it should commence the exchange views on the implementation of article XI of the Outer Space Treaty, in which States agreed to inform the Secretary-General of the United Nations, as well as the public and the international scientific community, to the greatest extent feasible and practicable, of the nature, conduct, locations and results of activities in outer space, including on the Moon and other celestial bodies.

18. At its [...] meeting, on [...] March 2023, the Working Group adopted the present report.

## Appendix I

# Set of questions provided by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space, taking into account the UNISPACE+50 process

#### 1. The legal regime of outer space and global space governance

1.1 What is the main impact on the application and implementation of the five United Nations treaties on outer space of additional principles, resolutions and guidelines governing outer space activities?

1.2 Are such non-legally binding instruments sufficiently complementing the legally binding treaties for the application and implementation of rights and obligations under the legal regime of outer space? Is there a need for additional actions to be taken?

1.3 What are the perspectives for the further development of the five United Nations treaties on outer space?

# 2. United Nations treaties on outer space and provisions related to the Moon and other celestial bodies

2.1 Do the provisions 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 (Outer Space Treaty) constitute a sufficient legal framework for the use and exploration of the Moon and other celestial bodies or are there legal gaps in the treaties (the Outer Space Treaty and the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Moon Agreement))?

2.2 What are the benefits of being a party to the Moon Agreement?

2.3 Which principles or provisions of the Moon Agreement should be clarified or amended in order to allow for wider adherence to it by States?

#### 3. International responsibility and liability

3.1 Could the notion of "fault", as featured in articles III and IV of the Convention on International Liability for Damage Caused by Space Objects (Liability Convention), be used for sanctioning non-compliance by a State with the resolutions related to space activities adopted by the General Assembly or its subsidiary bodies, such as Assembly resolution 47/68, on the Principles Relevant to the Use of Nuclear Power Sources in Outer Space, and the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space? In other words, could non-compliance with resolutions adopted by the General Assembly or with instruments adopted by its subsidiary bodies related to space activities be considered to constitute "fault" within the meaning of articles III and IV of the Liability Convention?

3.2 Could the notion of "damage", as featured in article I of the Liability Convention, be used to cover loss resulting from a manoeuvre performed by an operational space object in order to avoid collision with a space object or space debris not complying with the Space Debris Mitigation Guidelines of the Committee?

3.3 Are there specific aspects related to the implementation of international responsibility, as provided for in article VI of the Outer Space Treaty, in connection with General Assembly resolution 41/65, on the Principles Relating to Remote Sensing of the Earth from Outer Space?

3.4 Is there a need for traffic rules in outer space as a prerequisite to a fault-based liability regime?

## 4. Registration of space objects

4.1 Is there a legal basis to be found in the existing international legal framework applicable to space activities and space objects, in particular the provisions of the Outer Space Treaty and the Convention on Registration of Objects Launched into Outer Space (Registration Convention), which would allow the transfer of the registration of a space object from one State to another during its operation in orbit?

4.2 How could a transfer of activities or ownership involving a space object during its operation in orbit from a company of the State of registry to a company of a foreign State be handled in compliance with the existing international legal framework applicable to space activities and space objects?

4.3 What jurisdiction and control are exercised, as provided for in article VIII of the Outer Space Treaty, over a space object registered by an international intergovernmental organization in accordance with the provisions of the Registration Convention?

4.4 Does the concept of megaconstellations raise legal and/or practical questions, and is there a need to react with an adapted form of registration?

4.5 Is there a possibility, in compliance with the existing international legal framework, based on the existing registration practices, of introducing a registration "on behalf" of a State of a launch service customer, based on its prior consent? Would this be an alternative tool to react to megaconstellations and other challenges in registration?

## 5. International customary law in outer space

5. Are there any provisions in the five United Nations treaties on outer space that could be considered to form part of international customary law and, if yes, which ones? Could you explain the legal and/or factual elements on which your answer is based?

## 6. Proposal for other questions

6. Please suggest additional questions that could be inserted into the set of questions above to meet the objective of the UNISPACE+50 thematic priority on the legal regime of outer space and global space governance.

# Appendix II

#### Questionnaire on the application of international law to small-satellite activities

#### 1. Overview of small-satellite activities

1.1 Are small satellites serving the needs of your society? Has your country determined whether small satellites could serve an identified technological or development need?

1.2 Is your country involved in small-satellite activities such as designing, manufacturing, launching and operating? If so, please list projects, as appropriate. If not, are there future plans to do so?

1.3 Which kind of entity in your country is carrying out small-satellite activities?

1.4 Is there a focal point in your country responsible for coordinating small-satellite activities as part of your national space activities?

1.5 Are small-satellite activities carried out in the framework of international cooperation agreements? If so, what type of provisions specific to small-satellite activities are included in such cooperation agreements?

#### 2. Licensing and authorization

2. Do you have a legal or regulatory framework to supervise any aspect of small-satellite activities in your country? If so, are they general acts or specific rules?

#### 3. Responsibility and liability

3.1 Are there new challenges for responsibility and liability in view of small-satellite activities?

3.2 How are liability and insurance requirements enforced on an operator in your country, for a small satellite under your country's responsibility, in the event that "damage" occurs on the surface of Earth, to aircraft in flight or to another space object in orbit?

## 4. Launching State and liability

4.1 Since small satellites are not always deployed into orbit with dedicated rockets as in the case of larger satellites, there is a need for clarification in the understanding of the definition of "launch". When a launch of a small satellite requires two steps – first, launching from a site to an orbit and, second, deploying the small satellite to another orbit – in your view, would the first step be regarded as the "launch" within the meaning of the United Nations treaties on outer space?

4.2 Do you think that the current international regulatory regime is sufficient to regulate operators of small satellites or that there should be a new or different international regulatory approach to address operations of small satellites?

## 5. Registration

5. Does your country have a practice of registering small satellites? If so, does your country have a practice of updating the status of small satellites? Is there any legislation or regulation in your country that requires non-governmental entities to submit to the Government information for the purpose of registration, including updating of the status of small satellites they operate?

#### 6. Space debris mitigation in the context of small-satellite activities

6. How has your country incorporated specific requirements or guidelines into its national regulatory framework to take into account space debris mitigation?