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**Committee on the Peaceful
Uses of Outer Space**
Legal Subcommittee
Fifty-fifth session
Vienna, 4-15 April 2016
Item 6 of the provisional agenda*
**Status and application of the five United Nations
treaties on outer space**

**Overview and final summary by the outgoing Chair of the
Working Group on the Status and Application of the
Five United Nations Treaties on Outer Space on the
responses from member States and permanent observers of
the Committee to the set of questions provided by the Chair
and contained in the Report of the Legal Subcommittee on
its fifty-fourth session, document A/AC.105/1090 (Annex 1,
Appendix)**

I. Introduction

1. As a conclusion of our work during the fifty-fourth session of the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space, it was agreed that *“the Chair of the Working Group, together with the Secretariat, should present to the Working Group for consideration at its next session, in 2016, an updated overview of the responses to the set of questions, including a synthesis of views presented in writing and raised in the discussions during the meetings of the Working Group, at the fifty-fourth session of the Legal Subcommittee, in 2015, as well as any other responses to the set of questions provided during the intersessional period, as a basis for future work of the Working Group and for promoting further discussions within the mandate of the Working Group”*. (See Report of the Chair of the Working Group, as annexed to the Report of the Legal Subcommittee on its fifty-fourth session, document A/AC.105/1090, Annex 1, para. 13).

* A/AC.105/C.2/L.297.



2. The Working Group noted that continued discussions would benefit from more written contributions from member States and international intergovernmental and non-governmental organizations having permanent observer status with the Committee, in order for the Working Group to gather a collection of views for further consideration, and agreed that such entities should again be invited to provide comments and responses to the questionnaire. The questionnaire was attached to the report of the Working Group as an appendix, contained in the Report of the Legal Subcommittee on its fifty-fourth session, document A/AC.105/1090, Annex 1.

3. The Working Group has received a written contribution under the consideration of the here above-mentioned set of questions, which is contained in document A/AC.105/C.2/2016/CRP.6. The present synthesis also includes submissions, received during the fifty-fourth session of the Legal Subcommittee in 2015, which have not yet been included (documents A/AC.105/C.2/2015/CRP.21 and A/AC.105/C.2/2015/CRP.25) and additional contributions, which have been provided during oral statements at the meetings of the Working Group during the fifty-fourth session of the Legal Subcommittee in 2015.

4. Before considering the substance of those contributions by member States and observers of the Committee, it should be recalled that:

(a) The set of questions addressed by the Chair to the Working Group does not affect in any way the mandate of the Working Group as defined by the Committee. Member States and observers may address any points or questions within the scope of that mandate, even though they are not related to this set of questions;

(b) The synthesis to be provided by the Chair is not meant to be an abstract or a summary of the replies provided by the member States and observers. It is therefore advised to refer to the text of the written contributions or to the record of oral statements to get acquaintance with the views expressed by member States and observers;

(c) The exercise undertaken by the Working Group with this set of questions is not meant to remain a theoretical review of space law issues. It aims at determining to which extent current issues with regard to space activities and international cooperation in outer space either may be tackled under the provisions of the existing treaties, or require further development of those provisions through appropriate complementary instruments or constructive interpretation, or even require a change in the existing corpus juris. This being said, it should be also recalled that the Working Group has no mandate to propose any revision or authoritative interpretation of the existing United Nations treaties on outer space. It may only highlight possible shortcomings, uncertainties, ambiguities and draw attention from the States parties thereon.

5. Under the General Assembly Resolution 56/51 of 15 February 2002, the Working Group was established with terms of reference that included the status of the treaties, review of their implementation and obstacles to their universal acceptance, as well as promotion of space law, especially through the United Nations Programme on Space Applications (A/AC.105/763 and Corr. 1, para. 118). The Working Group has elaborated and extended its mandate several times since its establishment. In the most recent addition to its mandate in 2011, the Working Group agreed that States members of the Committee should be invited to provide comments and responses to the questionnaire prepared by the Chair, that the

questionnaire would be made available on the website of the Office for Outer Space Affairs of the Secretariat, and any replies would be made available in a conference room paper (A/AC.105/990, annex 1, para. 7).

6. In 2015, the Working Group agreed that the outgoing Chair of the Working Group, together with the Secretariat, should present to the Working Group, an updated overview of the responses to the questionnaire, including a synthesis of views presented in writing and raised in the discussions during its sessions. The following are the set of responses received to the questionnaire to date and the two overviews, provided by the Chair:

- (a) Responses to the questionnaire
- | | | |
|-------|--------------------------------------|-----------------------------------|
| i. | A/AC.105/C.2/2012/CRP.11 | Belgium, The Netherlands, Germany |
| ii. | A/AC.105/C.2/2013/CRP.13 | Kazakhstan, Germany |
| iii. | A/AC.105/C.2/2013/CRP.18 | Austria |
| iv. | A/AC.105/C.2/2014/CRP.17 | Germany |
| v. | A/AC.105/C.2/2014/CRP.18
(Corr.1) | Russian Federation |
| vi. | A/AC.105/C.2/2015/CRP.11 | Germany |
| vii. | A/AC.105/C.2/2015/CRP.21 | Canada |
| viii. | A/AC.105/C.2/2015/CRP.25 | International Law Association |
| ix. | A/AC.105/C.2/2016/CRP.6 | Belgium |
- (b) Chair's Overview
- | | |
|-----|--------------------------|
| i. | A/AC.105/C.2/2014/CRP.22 |
| ii. | A/AC.105/C.2/2015/CRP.12 |

II. The set of questions provided by the Chair in document A/AC.105/1090, Annex 1, Appendix

Issues relating to the 1979 United Nations Moon Agreement, including possible points of consensus or of concern among States about the Agreement and its implementation

1.1 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?

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

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

Issues relating to the implementation of the mechanisms of responsibility and liability of the States parties as provided for by the 1967 Outer Space Treaty, and by the 1972 Liability Convention

2.1 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?

2.2 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?

2.3 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?

Issues related to the registration of space objects, notably in the case of transfer of space activities or space objects in orbit, and the related possible solutions for the States involved

3.1 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 of 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?

3.2 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?

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

Issues related to the five United Nations treaties on outer space and international customary law in outer space

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

III. Synthesis of views presented on the set of questions

On the Moon Agreement

1. Several delegations of States having issued the Joint Statement on the Benefits of Adherence to the Agreement governing the Activities of States on the Moon and

Other Celestial Bodies by States Parties to the Agreement (A/AC/105/C.2/L.272, annex, submitted at the forty-seventh session of the Legal Subcommittee in 2008) referred to that document in order to provide responses or to complement their replies to the following questions.

2. Some delegations insisted on the need to go further with the development of the Common Heritage of Mankind regime, in particular to the extent that this regime allows commercial exploitation of celestial bodies' mineral resources, although the modalities for such exploitation remain to be agreed upon.
3. The view was expressed that States parties should continue the momentum of the Working Group's initial work with the discussion of submitting their substantial reflections on a way to move forward with the issue of exploitation of celestial bodies' natural resources to other Member States.
4. Some delegations expressed the view that the Moon Agreement, in all its aspects, should continue to be discussed by the Subcommittee in order for its provisions to be further clarified and understood.
5. The view was expressed that a wider participation in the Moon Agreement would require an approach taking into account modern space activities, notably in order to secure the prohibition of military activities on celestial bodies.
6. The view was also expressed that the Moon Agreement provides to this day the only set of rules applicable to the exploitation of extraterrestrial mineral resources. That delegation also recalled the principle of non-militarization of the celestial bodies and the fact that the Moon Agreement complements other treaties with regard to activities on celestial bodies.
7. The view was expressed that regretfully the Moon Agreement does not provide any definition of the concept of "celestial bodies". The view was also expressed that no sufficient coordination exists between the United Nations treaties on outer space. This is notably the case for the Moon Agreement with regard to the Outer Space Treaty, which results in conflicting statements and positions between States parties to each of them. A further view was expressed on the issue of the compatibility between Article II of the Outer Space Treaty and the Moon Agreement.
8. The view was expressed that given the current level of development and the space activities taking place, the Outer Space Treaty provides a sufficient legal framework for the use and exploration of the Moon and other celestial bodies and establishes basic legal principles that are relevant today and will probably remain relevant for the foreseeable future. Scientific research, surveying work and even the removal of samples for study and identification of possible natural resources worthy of exploitation does not present great difficulties to the current legal framework. The use and exploration of the Moon and other celestial bodies can be carried out in conformity with those legal principles. The challenge posed by new and innovative space activities is to ensure respect for those legal principles through continuous authorization and supervision by the appropriate State. It is for this reason that national space legislation, and its development, is an issue of crucial importance for States parties to the Outer Space Treaty. That delegation was also of the view that since the Outer Space Treaty still provides a sufficient legal framework for the current use and exploration of the Moon and other celestial bodies, it was not immediately apparent what the benefits of the Moon Agreement are at present.

Those States that are a party to the Moon Agreement would be better placed to expound upon those benefits.

9. The view was expressed that the provisions of the Moon Agreement could be seen as a slight step forward in the progressive development of international law but still have not solved some lacunae left by the Outer Space Treaty. In the first place the longstanding debate over rights of ownership on the Moon, as embodied in Article II of the Outer Space Treaty, remains unclear. Secondly, the definition and legal status of natural resources on the Moon and celestial bodies is unresolved. This is a matter of concern given the outstanding technological development and programmes, both underway and envisaged for the short and medium term, regarding the exploration, exploitation and possible mining activities on the Moon and other Celestial Bodies. It is essential to bear in mind, at all times, that the scope and application of the Outer Space Treaty and the Moon Agreement extend to outer space, the Moon and other Celestial Bodies as well.

10. Some delegations were of the view that it was clear that Article 11 of the Moon Agreement could benefit from greater clarification or an amendment since it was the most misunderstood provision in the Moon Agreement.

11. The view was expressed that States parties to the Moon Agreement should reactivate informal discussions on a possible joint document foreshadowing implementation of Article 11 of the Moon Agreement. That delegation was of the view that States parties to the Moon Agreement should designate contact points to participate in informal discussions to be held on the margins of the sessions of the Legal Subcommittee and in the intersessional periods. This consultation mechanism could report to the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space.

On the liability for the damage caused by space objects

12. The view was expressed that the liability regime applicable to the damage caused in outer space was obsolete and not corresponding to the reality of current space activities or to its associated problems. That delegation proposed, as an alternative to the liability for damage caused by a space object in outer space, to provide for a mutual waiver of liability among States applying international standards and norms and complying with international instruments providing such standards and norms, notably through their national space legislation.

13. As far as the notion of “damage” as defined by the Liability Convention is concerned, some delegations expressed the view that it should include the loss of propulsion energy resulting from an avoidance manoeuvre in outer space. A reference in that sense was made to Article XII of the Liability Convention in connection with the Chorzów Case (Permanent Court of International Justice, 26 July 1927). To the contrary, other delegations expressed the view that the definition of the term “damage” given by Article I of the Liability Convention does not cover this type of economic loss and should be limited to material damage. It was added that the current wording of Article I of the Liability Convention could cover the economic loss as described in question 2.2, but only in abstract terms. It was also recalled that the *travaux préparatoires* of the Liability Convention indicate that the damage covered under Article I was meant to result from the physical

impact with a space object and that the loss of property would require that property to be rendered unfit in order to be considered as damage.

14. The view was expressed that, to the extent they consist of the operation and exploitation of satellites and their payload, activities covered by resolution 41/65 of the United Nations General Assembly on Principles applicable to Remote Sensing by Satellite correspond to activities covered by Article VI of the Outer Space Treaty. That being said, the same delegation considered that the non-compliance with the Principles stated by that resolution could not provide as such the legal ground for State responsibility under Article VI of the Outer Space Treaty because such a resolution is of recommendatory nature. Another delegation considered remote sensing activities as activities covered under Article VI of the Outer Space Treaty and, therefore, not subject to any specific aspects. One delegation pointed out the distinction of wording between Article VI of the Outer Space Treaty (speaking of “national activities in outer space”) and Principle XIV of General Assembly resolution 41/65 speaking of “their activities”, while referring to States. The latter wording would refer only to governmental activities, while “national activities” in Article VI of the Outer Space Treaty are explicitly extended to non-governmental entities’ activities. However, in its second part, Principle XIV of General Assembly resolution 41/65 covers activities of both governmental and non-governmental entities. There is a need, according to this delegation’s view, to assess the concrete consequences of those two provisions in practice.

15. Another delegation mentioned the example of ERS data in order to establish the application of the international responsibility under Article VI of the Outer Space Treaty to the production, access and use of the data under the General Assembly Principles on Remote Sensing. That delegation advocated for a responsibility extended to the economic models derived from the use of the data. It was also recalled that dispute arising over the use of industrially manufactured or processed data could also be settled under private law mechanisms.

16. The view was expressed that the notion of “fault” in Articles III and IV of the Liability Convention should be thoroughly reviewed in its content. According to this delegation’s view, State parties to the Convention should investigate, on a voluntary basis, an additional arrangement which would provide for an objective definition of “fault” as featured in Articles III and IV. The definition would reference an identified set of norms based on recognized practices such as to ensure a sufficient level of safety, security, and sustainability. It was further advocated that the arrangement would provide for effective implementation and supervision of those norms, could be qualified as a waiver of liability between States parties, and provide clear criteria for designation of State of registry among several launching States and appropriate State in charge of authorizing and continuously supervising. This arrangement could serve as an instrument for exchange of information among parties, and could set up an ad hoc mechanism for continuous cooperation among States involved in the same activity.

17. The view was expressed that the liability system provided for by the Liability Convention when it comes to damage caused in outer space has barely been referred to as a legal solution for the management of orbital activities. It was added that, in practice, the Convention is not effective in responding to current issues such as space debris or collision avoidance.

18. The view was expressed that since the adoption of the Liability Convention, in particular recent years, some events have provided factual conditions for an activation of liability on the basis of Article III and/or Article IV. It was further noted that without prejudice to future actions by States in relation with those events, none have given rise to any recognition of State liability or provided elements for a better assessment of the notion of “fault” and its application *in casu*.

On the registration of space objects

19. Delegations referred to General Assembly resolution 62/101 of 17 December 2007, on “Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects”. The view was expressed that, recalling that, under the current provisions of the United Nations treaties on outer space, it is not possible to allow registration of a space object by a non-launching State. However, transfer from one launching State to another launching should be allowed according to the reference made by Article II.2 of the Registration Convention to agreements to be concluded between co-launching States for the purpose of identifying the State of registry. Such agreements could be amended in order to allow transfer of registration.

20. One delegation highlighted the fact that, according to Article VIII of the Outer Space Treaty, the State of registry is to exercise control and jurisdiction over the space object. Such control and jurisdiction imply State prerogatives and obligations on the object.

21. The view was also expressed that in the case of transfer of activity on the space object from a launching State to a third State, initially not involved in the launch, a possible solution could be that the third State makes a declaration associating itself to the launch, possibly by sponsoring it. This would make that third State a State procuring the launch. Such mechanism implies an interpretation of the definition of launching State that would not require the launching States to be definitely identified at the moment of the launch.

22. The view was expressed that it was wise to safeguard the present legal situation and to add a pragmatic but responsible solution for the growing number of cases of transfer of operation. As a result, the launching State with the persistent position “jurisdiction and control” remained under international law/space law the guarantor for the good execution of those obligations, but at the same time the launching State would transfer, on a bilateral basis, the obligations to the State behind the new operator, being responsible under Article VI of the Outer Space Treaty. That delegation was of the view that a generally accepted Standard State-to-State Agreement would facilitate the implementation of the related international responsibility and would not create any unacceptable burden for commercial space activities.

23. Another solution proposed by one delegation would be to allow agreements between the State of registry and a third State, which would provide for the modalities of exercising jurisdiction and control between them.

24. Delegations expressed views on registration by international intergovernmental organizations (IGO) was discussed by several delegations. The view was expressed that because IGOs could not exercise control and jurisdiction over the space objects they register, as such an effect was provided for by the Outer Space Treaty to which

IGOs are not allowed to become parties. Another Delegation advised for a “double” registration both by the IGO and by one of its member States in order to avoid such a situation. One delegation assumed that any IGO which registers a space object is clothed, by its member States, with the necessary competencies to effectively control and supervise the space object. It was also stated by one delegation that the Registration Convention establishes the appropriate terminology to clarify the notions of “space object”, “launching State” and “State of registry”, as its provisions also apply to any IGO that conducts space activities and has declared its acceptance of the rights and obligations provided for in the Convention.

25. The view was expressed that a registration of a space object by a non-launching State was better than no registration at all, and that one path to explore could be the registration “on behalf”, based on Article VIII of the Outer Space Treaty. That delegation was of the view that the purpose of such registration would be: (a) to allow the communication of all relevant information and data concerning the space object, its status and its operation to the United Nations Secretary General, including those mentioned in the United Nations General Assembly resolution 62/101, of 17 December 2007 on Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects; and (b) to allow, possibly on a temporary basis, the exercise of jurisdiction and control on the object. That delegation was also of the view that registration “on behalf” should not be done by a launching State of the space object on behalf of another launching State of the same object. Such a registration may be subject to transfer under current practices.

On the international customary law

26. One delegation was of the view that the general principles of the Outer Space Treaty have become international customary law since almost all States conducting activities in outer space have ratified the Outer Space Treaty and acted according to its provisions. Furthermore, a dissenting practice of the States not having signed the Outer Space Treaty was not identifiable. That delegation was also of the view that the general principles of the Outer Space Treaty accepted as customary law were the following: the space freedoms (Article I), the non-appropriation principle (Article II), the applicability of public international law to space activities (Article III), the responsibility and liability of States for national activities in outer space (Articles VI and VII); and the duty to authorize and supervise non-governmental activities in outer space (Article VI) as well as the duty to register space objects (Article VIII). That delegation stressed that universal validity of these rules was of utmost importance for the peaceful use of outer space.

27. Another delegation was of the view that customary international law had a fundamental role in the area of space law and that by and large the rules of customary law ingrained in the Outer Space Treaty, also referred to as the “Treaty on General Principles”, overrode those of conventional law. That delegation was of the view that one of the few exceptions was Article II of the Outer Space Treaty, addressing the principle of non-appropriation and banning any claims of sovereignty over those regions.