

Distr.: Limited 9 April 2019

Original: English

Committee on the Peaceful Uses of Outer Space Legal Subcommittee Fifty-eighth session Vienna, 1–12 April 2019

Draft report

III. Information on the activities of international intergovernmental and non-governmental organizations relating to space law

1. Pursuant to General Assembly resolution 73/91, the Subcommittee considered agenda item 4, entitled "Information on the activities of international intergovernmental and non-governmental organizations relating to space law", as a regular item on its agenda.

2. The representatives of Mexico and the United States made statements under agenda item 4. Statements were also made under the item by the observers for the Asia-Pacific Space Cooperation Organization (APSCO), For All Moonkind, Intersputnik and the Secure World Foundation (SWF). During the general exchange of views, statements relating to the item were made by observers of other international intergovernmental and non-governmental organizations.

3. For its consideration of the item, the Subcommittee had before it the following:

(a) Note by the Secretariat containing information on activities relating to space law received from the Ibero-American Institute of Aeronautic and Space Law and Commercial Aviation, the International Law Association (ILA) and SWF (A/AC.105/C.2/114);

(b) Conference room paper containing information on activities relating to space law received from the International Institute of Space Law (IISL) (A/AC.105/C.2/2019/CRP.12);

(c) Conference room paper containing information on activities relating to space law received from For All Moonkind (A/AC.105/C.2/2019/CRP.19);

(d) Conference room paper containing information on activities relating to space law received from Intersputnik (A/AC.105/C.2/2019/CRP.25).

4. The Subcommittee heard the following presentations:

(a) "Terrestrial models for the recognition of human heritage in space", by the observer for For All Moonkind;



Please recycle

(b) "Defining heritage in the space age", by the observer for For All Moonkind;

(c) "A pragmatic, evolutionary path to international space law", by the observer for the National Space Society;

(d) "Views and activities of the Space Law and Policy Project Group", by the observer for the Space Generation Advisory Council (SGAC);

(e) "Thirteenth Air Navigation Conference", by the observer for the International Civil Aviation Organization (ICAO).

5. The Subcommittee noted with satisfaction that the activities of international intergovernmental and non-governmental organizations relating to space law had continued to contribute significantly to the study, clarification and development of space law and that those organizations had continued to organize conferences and symposiums, prepare publications and reports and organize training seminars for practitioners and students in order to broaden and advance knowledge of space law.

6. The Subcommittee noted that international intergovernmental and non-governmental organizations had an important role to play in the development, strengthening and furtherance of understanding of international space law.

7. The Subcommittee welcomed the information provided by the observer for APSCO, including information on the APSCO tenth anniversary high-level forum, held in combination with the APSCO ninth international symposium in Beijing from 14 to 16 November 2018; the endorsement of the APSCO Development Vision 2030; the creation of a new programme operation and data service department within the APSCO secretariat; and efforts to develop the talents of a new generation, including through educational degree programmes, short-term training programmes and hands-on training based on actual missions.

8. The Subcommittee welcomed the information provided by the observer for the European Space Agency (ESA), including information on advice given by ESA to its member States on developing and updating national space legislation; the first ESA-European Centre for Space Law Workshop on Space Debris: Regulation, Standards and Tools, held in Darmstadt, Germany, from 19 to 21 March 2019; and two memorandums of understanding concluded between ESA and the Office for Outer Space Affairs: one enabling the free use by selected teams of the ESA Large Diameter Centrifuge and one supporting the achievement of the Sustainable Development Goals.

9. The Subcommittee welcomed the information provided by the observer for For All Moonkind (see A/AC.105/C.2/2019/CRP.19), including information on research undertaken on the intersection of space law and heritage preservation; the publication of a booklet intended for school-age children that summarizes the history of human activity on the Moon; a digital catalogue of human-made items on the lunar surface; work undertaken to explore physical strategies to protect heritage sites and other sites on the Moon; and the partnership between the Stanford Student Space Initiative and For All Moonkind.

10. The Subcommittee welcomed the information provided by the observer for the Ibero-American Institute of Aeronautic and Space Law and Commercial Aviation (see A/AC.105/C.2/114), including information on a round table on the space policy of Spain, held in Madrid on 29 May 2018; the forty-fifth Ibero-American Conference on Aeronautic and Space Law and Commercial Aviation, held in Buenos Aires from 6 to 9 November 2018; and the redesign of the Institute's website to include a separate area devoted to space affairs.

11. The Subcommittee welcomed the information provided by the observer for IISL (see A/AC.105/C.2/2019/CRP.12), including information on the sixty-first IISL Colloquium, held in Bremen, Germany, from 1 to 5 October 2018; the World Final round of the Manfred Lachs Space Law Moot Court Competition, also held in Bremen in October 2018; the thirteenth Eilene M. Galloway Symposium on Critical Issues in

Space Law, held in Washington, D.C., on 5 December 2018; the formation of the new IISL Working Group on Cyber Law; and the conclusion of a second agreement between the International Academy of Astronautics, the International Astronautical Federation and IISL in October 2018, by which those three organizations committed themselves to collaborating on issues related to space traffic management.

12. The Subcommittee welcomed the information provided by the observer for ILA on its activities relating to space law (see A/AC.105/C.2/114), including information on the seventy-eighth conference of ILA, held in Sydney, Australia, in August 2018; the terms of reference of the ILA Space Law Committee for the period 2014–2020; and the final report of the Space Law Committee, to be submitted to the upcoming ILA conference, to be held in Kyoto, Japan, in 2020.

13. The Subcommittee welcomed the information provided by the observer for Intersputnik, including information on the establishment of a new programme for the development of satellite telecommunications business in the Intersputnik member States; Intersputnik's annual seminar on the development of domestic satellite telecommunications for its member States; and support provided to Russian Federation teams participating in the Manfred Lachs Space Law Moot Court Competition.

14. The Subcommittee welcomed the information provided by the observer for the National Space Society, including information on the publication of *Ad Astra*, a quarterly magazine chronicling important developments in space; and the International Space Development Conference, on the theme "Back to the Moon to stay", which was to be held in Arlington, United States, from 6 to 9 June 2019.

15. The Subcommittee welcomed the information provided by the observer for SGAC, including information on the Space for Youth Competition, launched together with the Office for Outer Space Affairs, with the aim of engaging youth in the discussion of how space science and technology could be used to achieve the Sustainable Development Goals; the SGAC contribution to the book entitled *Promoting Productive Cooperation between Space Lawyers and Engineers*; and the eighth annual Space Generation Fusion Forum, held in conjunction with the thirty-fifth Space Symposium, in Colorado Springs, United States, in April 2019.

16. The Subcommittee welcomed the information provided by the observer for SWF (see A/AC.105/C.2/114), including information on the yearly United Nations Institute for Disarmament Research spring conference on space security; the ongoing participation of SWF in the Hague International Space Resources Governance Working Group; scholarships provided to young professionals to present research papers at the International Astronautical Congress; the first Summit for Space Sustainability, to be held in Washington, D.C., on 25 and 26 June 2019; and SWF publications related to space law, including the *Handbook for New Actors in Space* and *Global Counterspace Capabilities: An Open Source Assessment*.

17. The view was expressed that overregulation would inhibit the growth of the space industry; that, at the present time, national regulation, which was focused on the safety of operations, and deconfliction with other uses of airspace was the appropriate means of regulating the commercial space transportation industry; and that it would be premature for ICAO, or any other body, to develop internationally binding rules or standards relating to suborbital or orbital spaceflights or commercial spaceports. The delegation expressing that view was also of the view that increased coordination between the ICAO secretariat and the Office for Outer Space Affairs would be welcomed and that dialogue and the gradual development of industry standards, coupled with national legislation and regulation, could meet the needs of populations and industry.

18. The Subcommittee agreed that it was important to continue exchanging information on recent developments in the area of space law with international intergovernmental and non-governmental organizations and that such organizations

should once again be invited to report to the Subcommittee, at its fifty-ninth session, on their activities relating to space law.

XIII. General exchange of views on potential legal models for activities in the exploration, exploitation and utilization of space resources

19. Pursuant to General Assembly resolution 73/91, the Subcommittee considered agenda item 14, entitled "General exchange of views on potential legal models for activities in the exploration, exploitation and utilization of space resources", as a single issue/item for discussion.

20. The representatives of Australia, Austria, Belgium, Brazil, China, Colombia, France, Germany, Greece, Indonesia, Italy, Japan, Luxembourg, Mexico, the Netherlands, the Russian Federation, the United Kingdom and the United States made statements. Statements were also made by the representative of Egypt on behalf of the Group of 77 and China and the representative of Costa Rica on behalf of Argentina, Bolivia (Plurinational State of), Brazil, Chile, Costa Rica, Cuba, the Dominican Republic, Ecuador, El Salvador, Paraguay, Uruguay and Venezuela (Bolivarian Republic of). During the general exchange of views, statements relating to the item were also made by representatives of other member States.

21. The Subcommittee had before it the following:

(a) Working paper by Belgium and Greece containing a proposal for the establishment of a working group on the development of an international regime for the utilization and exploitation of space resources (A/AC.105/C.2/L.311);

(b) Addendum to the working paper by Belgium and Greece (A/AC.105/C.2/L.311) containing a proposal on the working methods and workplan for the proposed working group on the development of an international regime for the utilization and exploitation of space resources (A/AC.105/C.2/2019/CRP.22).

22. Some delegations expressed the view that activities in the exploration, exploitation and utilization of space resources should not depart from the basic principles of international space law, namely, the principles of non-appropriation and equitable access and the principle that the exploration and use of outer space is the province of all humankind. The delegations expressing that view also expressed the view that newly enacted national laws that allowed for the exploitation of celestial bodies for economic purposes had given rise to an urgent need to develop a common understanding of the legal obligations of States though constructive, collaborative and consensus-based discussions within the Committee.

23. Some delegations expressed the view that the principle of freedom of exploration, use and exploitation was not absolute, but rather was limited by the principles of non-discrimination, equality among States and observance of international law established under the Outer Space Treaty. The delegations expressing that view also expressed the view that any national legislation should be based on the guiding principle that the use and exploration of space is to be carried out in a sustainable manner and exclusively for the benefit of all countries, regardless of their level of economic and scientific development.

24. Some delegations expressed the view that domestic legislation that safeguarded international obligations related to the exploration, exploitation and utilization of space resources only in general terms was not sufficient to ensure compliance with the spirit of the Outer Space Treaty. The delegations expressing that view also expressed the view that the Committee needed to analyse in good faith the provisions of the treaties on outer space in order to ensure that interpretations and approaches to implementation in national legislation that were contrary to that spirit would be avoided, and to propose model provisions that reflected in a precise and explicit manner the principles set out in the international treaties on outer space, including

provisions on the establishment of effective institutional mechanisms to ensure that those principles are observed.

25. The view was expressed that the utilization of space-based resources, including commercial utilization, was consistent with the United Nations treaties on outer space and that although the Outer Space Treaty shaped the manner in which space resource utilization activities could be carried out, it did not broadly preclude such activities.

26. The view was expressed that the Outer Space Treaty did not provide a comprehensive international regime governing activities relating to the utilization of space resources and that, given the current state of technological and industrial development, there was neither a need for such a regime nor a practical basis for creating one. The delegation expressing that view also expressed the view that the existing legal framework for outer space activities was sufficient for interested States to conduct activities that included the utilization of space resources.

27. The view was expressed that, while the consensus was that the appropriation of outer space, including the Moon and other celestial bodies, was prohibited under international law, it still remained to be discussed and determined whether non-renewable space resources could be subjected to an ownership regime. The delegation expressing that view also expressed the view that, with regard to the exploration, exploitation and utilization of space resources, it was necessary to address the following non-exhaustive list of issues arising under various provisions of the Outer Space Treaty: (a) how to ensure that space resource activities were carried out for the benefit of and in the interests of all countries; (b) how to ensure that space as a whole remained free for exploration and use by all States without discrimination of any kind; (c) how to ensure free access to all areas of all celestial bodies; (d) how to ensure that space resource mining did not amount to national appropriation of territories in outer space; (e) how to ensure that due regard was given to the interests of all other States parties to the Treaty; and (f) how to ensure that all stations, installations, equipment and space vehicles would be open to representatives of other States on the basis of reciprocity.

28. Some delegations expressed the view that, with regard to the exploration, exploitation and utilization of space resources, the Subcommittee must not limit itself to simply exchanging views but should fulfil its proper role by developing the legal framework necessary for the conduct of space activities while striving for multilateral consensus. The delegations expressing that view also expressed the view that such a framework must be aligned with the Outer Space Treaty and provide legal certainty and predictability to all public and private actors intending to explore, exploit and/or utilize space resources.

29. The Subcommittee was informed that, between 2016 and 2018, the Hague International Space Resources Governance Working Group had developed 19 building blocks for the governance of space resource activities and had sought comments from the public and input from a technical panel made up of universities, space agencies and industrial stakeholders. The Subcommittee was also informed that the Working Group would continue to explore the need for any future mechanisms for the governance of space resource activities and the form they should take.

30. The view was expressed that, while a discussion within the Committee on an international regulatory framework for the exploration, exploitation and utilization of space resources was welcome, it was not desirable to designate one particular body as the unique forum for developing such a regulatory framework and that, whatever the forum, the views of civil society and industry would have to be included for the resulting regime to be successful.

31. Some delegations expressed the view that there was a growing need to initiate a proper and substantial debate on the issue of the exploration, exploitation and utilization of space resources within the Committee, in particular within the Legal Subcommittee, as the Subcommittee was the primary forum for intergovernmental discussions and negotiations on a future regime for space resource exploitation.

32. The view was expressed that the terms "exploration" and "utilization" should be clearly defined and that an understanding should be reached regarding the way in which the concept "exploitation of space resources" was related to those terms. The delegation expressing that view also expressed the view that mining activities for commercial purposes went beyond exploration and use and that those were fundamentally different from the use of probes to take scientific samples and from the use of planetary resources to maintain a planetary station in the context of an exploration mission.

33. The view was expressed that there were three distinct types of space resource activities: (a) collecting and removing samples of minerals or other substances for scientific purposes, which was a generally accepted practice; (b) using minerals and other substances in the course of scientific investigations in quantities appropriate to sustain the missions in question, so long as their use did not encroach on the legitimate space activities of others and did not amount to undue appropriation; and (c) exploiting minerals and substances for commercial purposes, for which an international legal framework was deemed to be required to ensure that the general principles of the Outer Space Treaty would be upheld, in particular the principle of non-appropriation.

34. The view was expressed that, at present, space resources were accessible only to a very limited number of States and to a few private sector actors within those States and that it was therefore relevant to assess the impact on the world economy of applying a doctrine of "first come, first served", as it would create a de facto monopoly and would thus be in absolute contradiction with the letter and spirit of the Outer Space Treaty.

35. The view was expressed that a debate on rules and norms for the exploration, exploitation and utilization of space resources should be guided by the wish to encourage the flourishment of the space resource industry as a whole and to ensure that such activities were consistent with existing international law. The delegation expressing that view also expressed the view that the discussion should evolve in a way that reflected the actual technology and economic reality, as well as the needs of industry.

36. The view was expressed that, in the future, the exploration, exploitation and utilization of space resources could prove to be worthwhile activities that governmental as well as non-governmental actors may wish to pursue and that it lay therefore within the Subcommittee's mandate to define and develop the legal framework for space resource activities.

37. The view was expressed that, before the objective of establishing an international regime for space resource exploitation was realized, it must first be ensured that the international community as a whole would benefit from space resource exploitation in conformity with accepted international principles of space law, while at the same time ensuring that neither governmental nor private actors would lose their incentive to invest in space activities and, finally, that any international regime for space resource exploitation must ensure that such activities were conducted in an orderly, safe and sustainable manner.

38. Some delegations expressed the view that the work of the Hague International Space Resources Governance Working Group was of great importance and that consideration of its 19 building blocks for the governance of space resource activities would greatly enhance discussions in the Subcommittee.

39. The view was expressed that the Committee and its Subcommittees were unique in the sense that they had the experience and expertise required to address the legal challenges of space activities and, as such, embodied the spirit of multilateralism that was a prerequisite for negotiations on a governance model that could foster the exploration, exploitation and utilization of space resources in accordance with the international legal regime for outer space. The delegation expressing that view also expressed the view that as the Subcommittee was the only forum with the necessary level of governmental representation, ways should be found to improve its interaction with industry, academia and other organizations.

40. Some delegations supported the initiative of Greece and Belgium to establish a working group to discuss the legal aspects of the exploration, exploitation and utilization of space resources.

41. Some delegations expressed the view that, if a working group were to be established under the Subcommittee, a clear timeline and a results-based work programme would have to be discussed and agreed prior to its formation.

42. The view was expressed that, with regard to such a working group, the exploration, exploitation and utilization of space resources were in their technological infancy and that the Subcommittee should not move too quickly in establishing that working group, as regulation might stifle innovation.

43. The view was expressed that the current legal framework was sufficient for current and contemplated space activities, including resource extraction and utilization, and that, to the extent that additional mechanisms could complement the existing legal regime, the Subcommittee could benefit from the ongoing work of the legal experts involved with the Hague International Space Resources Governance Working Group, and that the Subcommittee should consider those topics only after that Group has made its recommendations.

44. The view was expressed that, should a working group on space resources be established under the Subcommittee, its discussions should be enriched by the views of various scientific, economic, technical and legal expert groups in order to establish a shared factual basis from which to proceed and that input from the Hague International Space Resources Governance Working Group in particular could prove valuable in that regard.

45. The view was expressed that a working group on the exploration, exploitation and utilization of space resources, to be established under the Subcommittee, should be guided by two main policy principles, namely (a) that it was necessary to promote public and private investment in technological, operational and economic solutions that would make it possible to use space resources; and (b) that it was necessary to recognize both individual rights and collective interests in the exploration and use of space resources.

46. The view was expressed that the Scientific and Technical Subcommittee should play a permanent and significant role consistent with its mandate in collecting, systematizing and evaluating information about the state of the scientific, technological, economic and financial capabilities of the international community to explore, exploit and utilize space resources, so that the consideration of both the legal and the technical aspects of activities related to the use of space resources remained within the Committee.

47. The view was expressed that a working group on the exploration, exploitation and utilization of space resources should be established as an open-ended intergovernmental group and that the objective of its consultations and negotiations should be to arrive at draft articles for a universal treaty establishing a legally binding international framework for the exploration, exploitation and utilization of space resources.