

## **General Assembly**

Distr.: Limited 2 April 2007

Original: English

Committee on the Peaceful Uses of Outer Space Legal Subcommittee Forty-sixth session Vienna, 26 March-5 April 2007

#### Draft report

Addendum

## III. Status and application of the five United Nations treaties on outer space

- 1. The Legal Subcommittee recalled that the General Assembly, in its resolution 61/111 of 14 December 2006, had endorsed the recommendation of the Committee on the Peaceful Uses of Outer Space that the Subcommittee should consider the agenda item on the status and application of the five United Nations treaties on outer space as a regular item and had noted that the Subcommittee at its forty-sixth session would reconvene its Working Group on the item and would review the need to extend the mandate of the Working Group beyond that session.
- 2. The Subcommittee noted with satisfaction that the Secretariat had distributed an updated document containing information, as at 1 January 2007, on States parties and additional signatories to the United Nations treaties and other international agreements relating to activities in outer space (ST/SPACE/11/Rev.1/Add.1/Rev.1).
- 3. The Subcommittee noted that, as at 1 January 2007, the status of the five United Nations treaties on outer space was as follows:
- (a) The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (General Assembly resolution 2222 (XXI), annex) had 98 States parties and had been signed by 27 additional States;
- (b) The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (Assembly resolution 2345 (XXII), annex) had 89 States parties and had been signed by 24 additional States;

V.07-82040 (E)



- (c) The Convention on International Liability for Damage Caused by Space Objects (Assembly resolution 2777 (XXVI), annex) had 84 States parties and had been signed by 24 additional States;
- (d) The Convention on Registration of Objects Launched into Outer Space (Assembly resolution 3235 (XXIX), annex) had 49 States parties and had been signed by 4 additional States;
- (e) The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Assembly resolution 34/68, annex) had 13 States parties and had been signed by 4 additional States.
- 4. The Subcommittee welcomed the ratification by Algeria of the Liability Convention, the accession by Lebanon to the Registration Convention and the Moon Agreement and the accession by Turkey to the Rescue Agreement and the Registration Convention, as well as reports from Member States regarding their progress towards becoming parties to the five United Nations treaties on outer space and towards developing national space laws to implement their obligations under those treaties. The Subcommittee noted with satisfaction that the activities of the Office for Outer Space Affairs were directly contributing to that progress.
- 5. The Subcommittee noted with appreciation that in 2006 a number of States had concluded bilateral and multilateral agreements promoting broad international cooperation with regard to the conduct of space activities.
- 6. The Subcommittee noted that a number of States were developing national mechanisms for registration of space objects.
- 7. Some delegations expressed the view that the United Nations treaties on outer space constituted a coherent and useful framework for increasingly widespread and complex outer space activities of both governmental and private entities. Those delegations welcomed further adherence to the treaties and hoped that States that had not yet ratified or acceded to those treaties would consider becoming parties to them.
- 8. Other delegations expressed the view that, although the provisions and principles of the United Nations treaties on outer space constituted the regime to be observed by States and more States should be encouraged to adhere to them, the current legal framework for outer space activities required modification and further development in order to keep pace with advances in space technology and changes in the nature of space activities. Those delegations expressed the view that the lacunae resulting from the current legal framework could be addressed by the development of a universal, comprehensive convention on space law without disrupting the fundamental principles contained in the treaties currently in force.
- 9. The view was expressed that a more holistic approach was required in the work conducted on the status and application of the five United Nations treaties on outer space. That delegation was of the view that a review of the status and application of those five treaties required a more substantive and qualitative approach. That delegation discouraged the more formal and quantitative approach applied to merely collecting data on the status of the treaties.
- 10. Some delegations expressed the view that it was important to continue efforts towards universal acceptance of the international legal regime governing activities

in outer space, taking into account the need to identify those new areas which might require regulation and which could be addressed by developing complementary instruments.

- 11. Some delegations expressed the view that the Legal Subcommittee should assess whether international and national rules adequately addressed current and potential activities on the Moon and other celestial bodies. Those delegations proposed that the Subcommittee, through its Working Group on the Status and Application of the Five United Nations Treaties on Outer Space: (a) address activities currently being carried out or to be carried out on the Moon and other celestial bodies in the near future; (b) identify the national and international rules governing activities on the Moon and other celestial bodies; and (c) assess whether existing international and national rules adequately addressed activities on the Moon and other celestial bodies.
- 12. The view was expressed that, as the usual practice of the Legal Subcommittee was to encourage States to become parties to the United Nations treaties on outer space by providing information on the benefits of adhering to the treaties, the first task of the Subcommittee should be to ask States parties to the Moon Agreement to demonstrate the benefits of becoming a party to that Agreement. That delegation was of the view that the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space should not act outside its mandate by assessing the adequacy of national laws in addressing activities on the Moon and other celestial bodies.
- 13. As mentioned in paragraph [...] above, at its 748th meeting, on 26 March, the Subcommittee reconvened its Working Group on the Status and Application of the Five United Nations Treaties on Outer Space under the chairmanship of Vassilios Cassapoglou (Greece). The Working Group held five meetings. At its [...]th meeting, on [...] April, the Subcommittee endorsed the report of the Working Group, which is contained in annex I to the present report.
- 14. The Subcommittee endorsed the recommendation that the mandate of the Working Group be extended for one additional year. It was agreed that the Subcommittee, at its forty-seventh session, in 2008, would review the need to extend the mandate of the Working Group beyond that period.
- 15. The full text of the statements made by delegations during the discussion on agenda item 4 is contained in unedited verbatim transcripts (COPUOS/Legal/T.750 and 752-756).

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

16. The Legal Subcommittee recalled that the General Assembly, in its resolution 61/111, had endorsed the recommendation of the Committee on the Peaceful Uses of Outer Space that the Subcommittee, at its forty-sixth session, should consider, as a regular item of its agenda, an item entitled "Information on the activities of international intergovernmental and non-governmental organizations relating to space law". The Subcommittee noted with satisfaction that various

international organizations had been invited by the Secretariat to report to it on their activities relating to space law. The Subcommittee agreed that, for its forty seventh session, the Secretariat should extend a similar invitation.

- 17. The Legal Subcommittee had before it a note by the Secretariat (A/AC.105/C.2/L.265 and Add.1) containing information on activities relating to space law received from the following international organizations: ECSL, IAF, IISL and ILA.
- 18. The Legal Subcommittee heard a special presentation entitled "WIPO: patents and space activities" by the observer for WIPO.
- 19. The Legal Subcommittee expressed its satisfaction with the presentation made by WIPO, which provided valuable information on a topic of high relevance to the work of the Subcommittee. The Subcommittee noted with appreciation the participation of WIPO, a specialized agency of the United Nations system, in its current session and encouraged other specialized agencies of the United Nations system, in particular UNESCO and ITU, to attend its sessions on a regular basis and report on their activities relevant to its work.
- 20. The Subcommittee was of the view that the activities of international intergovernmental and non-governmental organizations relating to space law had contributed much to the development of the field. International intergovernmental organizations had an important role to play in the strengthening of the legal framework applicable to space activities and should consider taking steps to encourage their members to adhere to the outer space treaties. Several of the treaties contained mechanisms to permit international intergovernmental organizations conducting space activities to declare their acceptance of the rights and obligations under those treaties.
- 21. The Subcommittee expressed its appreciation to IISL and ECSL for organizing the symposium entitled "Capacity-building in space law". It noted the importance of education, training and capacity-building in space law, in particular in support of the establishment and development of national space law. The Subcommittee agreed that IISL and ECSL should be invited to hold a further symposium on space law at its forty-seventh session.
- 22. The Subcommittee took note of the report by Intersputnik on its activities relating to space law. The Governments of 25 countries were members of Intersputnik, which was currently undergoing phase-by-phase privatization through the establishment of a group of companies to take over the bulk of the core business of Intersputnik. New versions of its regulations of the directorate and staff regulations were to be reviewed and approved by the Intersputnik Operations Committee at its forthcoming session, to be held in April 2007.
- 23. The Subcommittee took note of the report by ESA on its activities relating to space law in 2006, which included lecturing by ESA staff on legal implications of space activities and the publication of legal studies on various aspects of space law, such as the protection of intellectual property rights in space activities and the legal aspects of space debris.
- 24. The Subcommittee took note of the report by the Space Law Committee of ILA on its most recent contributions relating to space law, including its comments

and suggestions on registration issues, contained in a note by the Secretariat (A/AC.105/C.2/L.265).

- 25. The Subcommittee took note of the report by IISL on its most recent contributions relating to space law, contained in a note by the Secretariat (A/AC.105/C.2/L.265/Add.1).
- 26. The Subcommittee expressed its appreciation to the Government of Ukraine, the National Space Agency of Ukraine and the International Center for Space Law for co-sponsoring the United Nations/Ukraine Workshop on Space Law on the theme "Status, application and progressive development of international and national space law", held in Kyiv from 6 to 9 November 2006 (A/AC/105/880). The Subcommittee expressed its appreciation to the Office for Outer Space Affairs for its dedication and efficient organization of the Workshop, in coordination with the host country, as well as to the experts who had attended the Workshop, for having shared their knowledge and experiences with the participants.
- 27. The Subcommittee noted with appreciation that the United Nations/Ukraine Workshop on Space Law had provided an overview of the United Nations treaties and principles on outer space, had addressed the development of national space laws and policies and had considered ways and means of enhancing the availability and development of university-level studies and programmes in space law, particularly in Central and Eastern Europe and in Central Asia and the Caucasus. The Subcommittee also noted with appreciation that the Workshop had made a positive contribution to the dissemination and development of international and national space law and to the promotion of the universality of the five United Nations treaties on outer space.
- 28. The Subcommittee noted with appreciation that the Office for Outer Space Affairs was making plans for the next United Nations Workshop on Space Law, to be held in Thailand in late November 2007.
- 29. The Subcommittee agreed that capacity-building, training and education in space law were of paramount importance to international, regional and national efforts in the further development of space activities and to the knowledge of the legal framework within which space activities were carried out. In that regard, the Subcommittee requested the Office for Outer Space Affairs to further develop and update the directory of education opportunities in space law available on the website of the Office (www.unoosa.org), including information on the availability of fellowships for participants from developing countries. The Subcommittee also requested the Office for Outer Space Affairs to continue exploring the possibility of developing a curriculum for a basic course on space law that could be used, in particular for the benefit of developing countries, by initiating space law studies, as appropriate, in the activities of the regional centres on space science and technology education, affiliated to the United Nations.
- 30. The Subcommittee noted with appreciation that member States had been invited by IAF to participate in the next International Astronautical Congress, to be held in Hyderabad, India, in September 2007.
- 31. The full text of the statements made by delegations during the discussion on agenda item 5 is contained in unedited verbatim transcripts (COPUOS/Legal/...).

- V. Matters relating to the definition and delimitation of outer space and the character and utilization of the geostationary orbit, including consideration of ways and means to ensure the rational and equitable use of the geostationary orbit without prejudice to the role of the International Telecommunication Union
  - 32. The Legal Subcommittee recalled that the General Assembly, in its resolution 61/111, had endorsed the recommendation of the Committee on the Peaceful Uses of Outer Space that the Subcommittee, at its forty-sixth session, taking into account the concerns of all countries, in particular those of developing countries, should consider matters relating to the definition and delimitation of outer space and to the character and utilization of the geostationary orbit, including consideration of ways and means to ensure the rational and equitable use of the geostationary orbit without prejudice to the role of ITU.
  - 33. The Subcommittee had before it the following documents:
  - (a) Note by the Secretariat entitled "Questionnaire on possible legal issues with regard to aerospace objects: replies from member States" (A/AC.105/635 and Add.1-15, Add.7/Corr.1 and Add.11/Corr.1). A compilation of replies received from member States to the questionnaire is available on the website of the Office for Outer Space Affairs (http://www.unoosa.org/oosa/en/SpaceLaw/aero/index.html);
  - (b) Note by the Secretariat entitled "Analytical summary of the replies to the questionnaire on possible legal issues with regard to aerospace objects" (A/AC.105/C.2/L.249 and Corr.1 and Add.1 and 2);
  - (c) Note by the Secretariat entitled "National legislation and practice relating to definition and delimitation of outer space" (A/AC.105/865 and Add.1 and 2);
  - (d) Note by the Secretariat entitled "Proposals of Member States concerning criteria for analysing the replies to the questionnaire on aerospace objects" (A/AC.105/C.2/L.267);
  - (e) Note by the Secretariat entitled "Questions on the definition and delimitation of outer space: replies from Member States" (A/AC.105/889).
  - 34. The view was expressed that the use of the geostationary orbit, which was a limited natural resource, should, in addition to being rational, be made available to all countries, irrespective of their current technical capacities, thereby providing them with the possibility of having access to the orbit under equitable conditions, bearing in mind, in particular, the needs and interests of developing countries, as well as the geographical position of certain countries and taking into account the process of ITU.
  - 35. Some delegations expressed the view that the geostationary orbit was a limited natural resource with sui generis characteristics that risked saturation and that equitable access to it should therefore be guaranteed for all States, taking into account in particular the needs of developing countries and the geographical position of certain countries.

- 36. The view was expressed that access to the geostationary orbit should be provided to States on equitable conditions, taking into account, in particular, the needs and interests of developing countries, irrespective of their geographical location.
- 37. The view was expressed that the increasing commercialization of space activities could undermine the principle of the equitable access of States to the geostationary orbit.
- 38. Some delegations were of the view that the geostationary orbit was an integral part of outer space and that, therefore, its use should be governed by the provisions of the United Nations treaties on outer space, including ITU regulations.
- 39. The view was expressed that the provisions of articles I and II of the Outer Space Treaty made it clear that a party to the Treaty could not appropriate any part of outer space, such as an orbital location in the geostationary orbit, either by claim of sovereignty or by means of use, even repeated use.
- 40. The Subcommittee noted the information provided by the United States on its actions to further the use of the geostationary orbit and other uniquely situated orbits, such as the free provision of the signal from the Global Positioning System (GPS), information from the polar meteorological satellites of the National Oceanic and Atmospheric Administration (NOAA) of the United States and data from the Geostationary Operational Environmental Satellites (GOES).
- 41. The view was expressed that procedures of spectrum/orbit allocation established by ITU could be detrimental to developing countries and established precedents when operators capable of launching their satellites were granted priority to occupy orbital slots over those applicants which did not have their own launch facilities. In that connection, that delegation was of the view that, in granting satellite operators orbital slots, ITU should consider the conclusion by an applicant of an irrevocable procurement, insurance and launch contract for its satellite, rather than actual launching of the satellite.
- 42. Some delegations expressed their satisfaction with the agreement reached by the Subcommittee at its thirty-ninth session (see A/AC.105/738, annex III) that coordination among countries aimed at the utilization of the geostationary orbit should be carried out in a rational and equitable manner and in conformity with the ITU Radio Regulations.
- 43. The Subcommittee recalled that, in 2000, it transmitted to ITU the information regarding the agreement reached at its thirty-ninth session on the question of the character and utilization of the geostationary orbit and that ITU had noted that information in its resolution 80 (Rev. WRC-2000). In that regard, the Subcommittee expressed its concern about the absence of a reply from ITU and about the gap in information regarding action taken by ITU in response to its resolution 80 (Rev. WRC-2000).
- 44. The Subcommittee noted that the 2007 World Radiocommunication Conference of ITU was to be convened in Geneva from 8 October to 2 November 2007.
- 45. The Subcommittee agreed that the working relationship between ITU and the Committee on the Peaceful Uses of Outer Space should become closer and more

effective and that the chairmen of the Committee and its subcommittees and the Office for Outer Space should participate in relevant meetings of ITU.

- 46. The Subcommittee agreed that ITU should be invited to participate regularly in its sessions and to submit, on an annual basis, reports on its activities relating to the use of the geostationary orbit and on matters of interest to the work of the Committee and its subcommittees.
- 47. The Subcommittee requested the Secretariat to include in future editions of the publication *United Nations Treaties and Principles on Outer Space and Other Related General Assembly Resolutions*<sup>1</sup> the text of paragraph 4 of General Assembly resolution 55/122 of 8 December 2000, in which the Assembly had endorsed the agreement reached by the Subcommittee at its thirty-ninth session, in 2000, on the question of the character and utilization of the geostationary orbit, as reflected in the paper entitled "Some aspects concerning the use of the geostationary orbit", annexed to the report of the Subcommittee on its thirty-ninth session (A/AC.105/738, annex III).
- 48. The view was expressed that the question of the definition and delimitation of outer space was linked to the issue of geostationary orbit.
- 49. Some delegations were of the view that scientific and technological progress, the commercialization of outer space, emerging legal questions and the increasing use of outer space in general had made it necessary for the Legal Subcommittee to consider the question of the definition and delimitation of outer space.
- 50. Some delegations expressed the view that the lack of a definition or delimitation of outer space created legal uncertainty concerning the applicability of space law and air law and that matters concerning State sovereignty and the boundary between air space and outer space needed to be clarified in order to reduce the possibility of disputes among States.
- 51. The view was expressed that the delimitation of outer space was important for determining the scope of application of air law and space law. That delegation was of the view that certainty in the application of space law would encourage Member States to accede to the United Nations treaties on outer space.
- 52. The view was expressed that States should continue to operate under the current framework, which was functioning well, until such time as there was a demonstrated need and a practical basis for developing a definition or delimitation of outer space. That delegation was of the view that, at the time, an attempt to define or delimit outer space would be a theoretical exercise that could lead to a complication of existing activities and that might not be able to anticipate continuing technological developments.
- 53. The view was expressed that the tendency of using the lowest satellite orbit as a criterion for the delimitation of air space and outer space was obsolete in view of the fact that both the X-15 rocket plane and SpaceShipOne were regarded as spacecraft and qualified as sub-orbital, which, according to the criterion, meant that the beginning of outer space could be far below the lowest satellite orbit.

<sup>&</sup>lt;sup>1</sup> United Nations publication, Sales No. E.05.I.90.

- 54. The view was expressed that a single regime for navigation of space objects was necessary.
- 55. The view was expressed that progress in the definition and delimitation of outer space could be achieved through cooperation with the International Civil Aviation Organization (ICAO).
- 56. As mentioned in paragraph [...] above, at its 748th meeting, the Legal Subcommittee reconvened its Working Group on the Definition and Delimitation of Outer Space and elected José Monserrat Filho (Brazil) as Chairman of the Working Group. In accordance with the agreement reached by the Subcommittee at its thirty-ninth session and endorsed by the Committee on the Peaceful Uses of Outer Space at its forty-third session, the Working Group was convened to consider only matters relating to the definition and delimitation of outer space.
- 57. The Subcommittee noted with satisfaction the work of the Working Group and expressed its appreciation to its Chairman.
- 58. The Working Group on the Definition and Delimitation of Outer Space held [...] meetings. At its [...] meeting, on [...] April, the Subcommittee endorsed the report of the Working Group, contained in annex [...] to the present report.
- 59. The full text of the statements made by delegations during the discussion on agenda item 6 is contained in unedited verbatim transcripts (COPUOS/Legal/[...]).

### VI. Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space

- 60. The Legal Subcommittee recalled that the General Assembly, in its resolution 61/111, had endorsed the recommendation of the Committee on the Peaceful Uses of Outer Space that the Legal Subcommittee, at its forty-sixth session, taking into account the concerns of all countries, in particular those of developing countries, should consider the review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space (Assembly resolution 47/68) as a single issue/item for discussion.
- 61. The Legal Subcommittee noted with satisfaction the progress made by the Scientific and Technical Subcommittee at its forty-fourth session in developing the objectives, scope and attributes of an international, technically based framework of goals and recommendations for the safety of nuclear power source (NPS) applications in outer space. The Legal Subcommittee also noted with satisfaction that the Scientific and Technical Subcommittee had endorsed a new three-year workplan for the Working Group on the Use of Nuclear Power Sources in Outer Space for the period 2007-2010.
- 62. The Legal Subcommittee further noted with satisfaction the agreement that a partnership be established between the Scientific and Technical Subcommittee and the International Atomic Energy Agency (IAEA) by means of a joint experts group in order to prepare and publish the safety framework for NPS applications in outer space by 2010.

- 63. The Legal Subcommittee took note of the positive benefits of the cooperation between the Scientific and Technical Subcommittee and IAEA, which could set a good example of inter-institutional cooperation to be encouraged in the future.
- 64. Some delegations expressed the view that, at the present stage, revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space was not warranted.
- 65. The view was expressed that the Legal Subcommittee should consider the relevance of a possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space and gather as much information as possible on that matter. A legal framework on the use of nuclear power sources in outer space should be in accord with the principles of the peaceful uses of outer space, preserving the interests of all States.
- 66. The view was expressed that the Legal Subcommittee could consider the question of a possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space after the adoption by the Committee on the Peaceful Uses of Outer Space of an international, technically based framework of goals and recommendations for the safety of nuclear power source applications in outer space.
- 67. The view was expressed that the use of nuclear power sources as a source of energy to supplement the use of solar energy might be inevitable on board missions aimed at establishing facilities on celestial bodies.
- 68. The Legal Subcommittee agreed that it was necessary to continue examining the issue and that the item should remain on its agenda.
- 69. The full text of the statements made during the discussions on agenda item 7 is contained in unedited verbatim transcripts (COPUOS/Legal/[...]).

10