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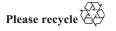
## Report of the Legal Subcommittee on its fifty-fourth session, held in Vienna from 13 to 24 April 2015

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#### I. Introduction

#### A. Opening of the session

- 1. The Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space held its fifty-fourth session at the United Nations Office at Vienna from 13 to 24 April 2015 under the chairmanship of Kai-Uwe Schrogl (Germany).
- 2. The Subcommittee held 20 meetings.

#### B. Adoption of the agenda

- 3. At its 897th meeting, on 13 April, the Subcommittee adopted the following agenda:
  - 1. Adoption of the agenda.
  - 2. Statement by the Chair.
  - 3. General exchange of views.
  - 4. Information on the activities of international intergovernmental and non-governmental organizations relating to space law.
  - 5. Status and application of the five United Nations treaties on outer space.
  - 6. Matters relating to:
    - (a) The definition and delimitation of outer space;
    - (b) 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.
  - 7. National legislation relevant to the peaceful exploration and use of outer space.
  - 8. Capacity-building in space law.
  - 9. Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space.
  - General exchange of information and views on legal mechanisms relating to space debris mitigation measures, taking into account the work of the Scientific and Technical Subcommittee.
  - 11. General exchange of information on non-legally binding United Nations instruments on outer space.
  - 12. Review of international mechanisms for cooperation in the peaceful exploration and use of outer space.
  - 13. Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-fifth session.

#### C. Attendance

- 4. Representatives of the following 56 States members of the Committee attended the session: Algeria, Argentina, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bolivia (Plurinational State of), Brazil, Bulgaria, Burkina Faso, Canada, Chile, China, Colombia, Costa Rica, Cuba, Czech Republic, Ecuador, France, Germany, Greece, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Italy, Japan, Kenya, Lebanon, Luxembourg, Malaysia, Mexico, Morocco, Netherlands, Pakistan, Peru, Philippines, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Saudi Arabia, Slovakia, South Africa, Spain, Switzerland, Tunisia, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Venezuela (Bolivarian Republic of) and Viet Nam.
- 5. The Subcommittee decided to invite, at their request, observers for the Dominican Republic, El Salvador, Israel, Namibia, Oman, Panama, Qatar, Sri Lanka and the United Arab Emirates to attend the session and to address it, as appropriate, on the understanding that it would be without prejudice to further requests of that nature and that doing so would not involve any decision of the Committee concerning status.
- 6. The Subcommittee also decided to invite the observer for the European Union, at its request, to attend the session and to address it, as appropriate, on the understanding that it would be without prejudice to further requests of that nature and that doing so would not involve any decision of the Committee concerning status.
- 7. An observer for the International Telecommunication Union (ITU) attended the session.
- 8. The session was attended by observers for the following intergovernmental organizations having permanent observer status with the Committee: Asia-Pacific Space Cooperation Organization (APSCO), European Space Agency (ESA), European Telecommunications Satellite Organization (EUTELSAT-IGO), Inter-Islamic Network on Space Sciences and Technology (ISNET) and International Organization of Space Communications (Intersputnik).
- 9. The session was also attended by observers for the following non-governmental organizations having permanent observer status with the Committee: European Centre for Space Law (ECSL), European Space Policy Institute (ESPI), Ibero-American Institute of Aeronautic and Space Law and Commercial Aviation, International Association for the Advancement of Space Safety (IAASS), International Institute of Space Law (IISL), International Law Association (ILA), Secure World Foundation (SWF) and Space Generation Advisory Council (SGAC).
- 10. The Subcommittee had before it information concerning the applications of El Salvador, Israel, Oman, Qatar, Sri Lanka and the United Arab Emirates for membership in the Committee (A/AC.105/C.2/2015/CRP.4, A/AC.105/C.2/2015/CRP.22, A/AC.105/C.2/2015/CRP.7, A/AC.105/C.2/2015/CRP.3, A/AC.105/C.2/2015/CRP.5, A/AC.105/C.2/2015/CRP.6, respectively).

11. A list of the representatives of States, United Nations entities and other international organizations attending the session is contained in document A/AC.105/C.2/2015/INF/47.

#### D. Symposium

- On 13 April, IISL and ECSL held a symposium on the theme "Space traffic management", co-chaired by Tanja Masson-Zwaan of IISL and Sergio Marchisio of ECSL. The symposium was opened with a statement of welcome, and the Subcommittee subsequently heard the following presentations: "From the 2006 to the 2016 space traffic management studies of the International Academy of Astronautics", prepared by Corinne Jorgenson and presented by Alexander Soucek; "Rights and obligations in the international commons: the case of outer space", by Stephan Hobe; "Space safety and space traffic management", by Isabelle Rongier; "Frequency management and space traffic management", by Yvon Henri; "Space traffic management and the governance of space activities", by Guoyu Wang; "International Civil Aviation Organization/Office for Outer Space Affairs Aerospace Symposium: an inter-agency effort on space traffic management", by Simonetta Di Pippo and Niklas Hedman; and "Road map to the stars: a conference report", by Diane Howard. Concluding remarks were made by the co-chairs of the symposium and the Chair of the Subcommittee. The presentations delivered during the symposium were made available on the website of the Office for Outer Space Affairs of the Secretariat (www.unoosa.org/oosa/en/COPUOS/lsc/2015/symposium.html).
- 13. The Subcommittee noted with appreciation that the symposium had constituted a valuable contribution to its work.

#### E. Adoption of the report of the Legal Subcommittee

14. At its 916th meeting, on 24 April, the Subcommittee adopted the present report and concluded the work of its fifty-fourth session.

#### II. General exchange of views

- 15. Statements were made by representatives of the following States members of the Committee during the general exchange of views: Algeria, Argentina, Austria, Belgium, Bulgaria, Brazil, Canada, Chile, China, Cuba, Czech Republic, France, Germany, Hungary, India, Indonesia, Iran (Islamic Republic of), Italy, Japan, Luxembourg, Mexico, Morocco, Pakistan, Republic of Korea, Russian Federation, South Africa, Ukraine, United Kingdom, United States, Venezuela (Bolivarian Republic of) and Viet Nam. Statements were made by Chile on behalf of the Group of 77 and China and by Colombia on behalf of the Group of Latin American and Caribbean States. The observers for El Salvador, Oman and the United Arab Emirates also made statements. The observers for ESA, ESPI, SGAC and SWF also made statements.
- 16. At the 897th meeting, on 13 April, the Chair made a statement in which he highlighted the programme of work and organizational matters pertaining to the current session of the Subcommittee.

- 17. At the same meeting, the Director of the Office for Outer Space Affairs made a statement in which she reviewed the role of the Office in discharging the responsibilities of the Secretary-General under the United Nations treaties on outer space. The Director also reviewed Office activities and initiatives in areas relevant to the Subcommittee. She drew the attention of the Subcommittee to a reduction in the Office's resources and stressed the importance of the availability of resources for the successful implementation of the programme of work, as well as for the Office's ability to develop new initiatives and meet emerging needs.
- 18. The Subcommittee welcomed Luxembourg as a new member of the Committee.
- 19. The Subcommittee noted that it represented the main intergovernmental multilateral forum for developing space law.
- 20. The Subcommittee recalled paragraph 15 of General Assembly resolution 69/85, relating to ways and means of maintaining outer space for peaceful purposes, and welcomed the views submitted by States thus far on the report of the Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities (A/68/189).
- 21. Some delegations reaffirmed the commitment of their countries to the peaceful use and exploration of outer space and emphasized the following principles: universal and equal access to outer space for all countries without discrimination, regardless of their level of scientific, technical and economic development, as well as the equitable and rational use of outer space for the benefit of all humankind; non-appropriation of outer space, including the Moon and other celestial bodies, by claim of sovereignty, use, occupation or any other means; the non-militarization of outer space, which should never be used for the installation of weapons of any kind, and, as a common heritage of humankind, its strict use for the improvement of living conditions and peace among the peoples that inhabit our planet; and international cooperation in the development of space activities.
- 22. Some delegations expressed the view that the United Nations treaties and principles on outer space provided the basis for regulating the involvement of the governmental, non-governmental and private sectors in outer space.
- 23. Some delegations expressed the view that in order to harmonize the multilateral regime governing activities in outer space with new scientific and technological advances, it was necessary to review, update and strengthen the five United Nations treaties on outer space with a view to invigorating the principles that govern the space activities of States, strengthening international cooperation and making space technology accessible to the people.
- 24. Some delegations expressed the view that a universal comprehensive convention on outer space should be developed, with the aim of finding solutions for existing issues while fully respecting the fundamental principles incorporated in the existing United Nations treaties on outer space.
- 25. Some delegations reaffirmed the importance of preventing an arms race in outer space and noted the useful role that transparency and confidence-building measures could play in this regard.

- 26. Some delegations expressed the view that measures that would limit access to space for nations with emerging space capabilities should be avoided and that States should refrain from further developing the international legal framework in a manner that sets overly high standards or thresholds that could hinder the enhancement of capacity-building for developing countries.
- 27. The view was expressed that the rule of law in space was the cornerstone that could ensure the use of outer space for peaceful purposes, as well as its long-term sustainable development.
- 28. Some delegations expressed the view that the growth of actors engaged in space activities, and the increasing complexity of such activities, underscored the need for States to work within the Subcommittee for the improvement of the existing legal framework.
- 29. The view was expressed that attention should be paid to the review of the existing United Nations treaties on outer space, as well as other sources of law, such as international customary rules and soft-law standards.
- 30. Some delegations expressed the view that interaction between the Legal Subcommittee and the Scientific and Technical Subcommittee should be strengthened in order to synchronize the progressive development of space law with the major scientific and technical advances in this area.
- 31. Some delegations expressed the view that the Legal Subcommittee should keep abreast of the work of the Working Group on the Long-term Sustainability of Outer Space Activities of the Scientific and Technical Subcommittee.
- 32. Some delegations expressed the view that the Subcommittee should consider the legal basis for, and the modalities of, the right to self-defence in outer space in accordance with the Charter of the United Nations, as well as associated legal issues.
- 33. The view was expressed that all States should encourage private investment in the exploration and peaceful use of outer space.
- 34. The view was expressed that the Office for Outer Space Affairs should establish a technical cooperation section to help triangulate efforts among States and provide technical assistance to countries upon their request.

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

- 35. Pursuant to General Assembly resolution 69/85, 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.
- 36. The representatives of Chile and the United States made statements under agenda item 4. Statements were also made by the observers for APSCO, ECSL, the Ibero-American Institute of Aeronautic and Space Law and Commercial Aviation, IISL, ILA and Intersputnik.

- 37. 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 ECSL, the International Institute for the Unification of Private Law (Unidroit), ILA and Intersputnik (A/AC.105/C.2/106);
- (b) Conference room paper containing information on activities relating to space law received from IISL (A/AC.105/C.2/2015/CRP.19).
- 38. The Subcommittee heard a presentation entitled "The Space Generation Advisory Council: a focus on the Space Law and Policy Project Group", by an observer for SGAC.
- 39. 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, all of which were intended to broaden and advance knowledge of space law.
- 40. The Subcommittee noted that international intergovernmental organizations had an important role to play in the development, strengthening and furtherance of understanding of international space law.
- 41. The Subcommittee welcomed the information provided by the observer for IISL on its activities relating to space law (see A/AC.105/C.2/2015/CRP.19), including the outcome of the final round of the twenty-third Manfred Lachs Space Law Moot Court Competition, held in Toronto, Canada, on 3 October 2014; the outcome of the ninth Eilene M. Galloway Symposium on Critical Issues in Space Law, held in Washington, D.C., on 10 December 2014; information on the upcoming 58th Colloquium on the Law of Outer Space, to be held in Jerusalem from 12 to 16 October 2015; and information on the International Academy of Astronautics/IISL Conference on Climate Change and Disaster Management, held in Trivandrum, India, from 26 to 28 February 2015.
- 42. The Subcommittee welcomed the information provided by the observer for ECSL on its activities relating to space law (see A/AC.105/C.2/106), including information on the 2014 ECSL Practitioners' Forum, held in Paris on 14 March; on the European round of the Manfred Lachs Space Law Moot Court Competition, held in Wroclaw, Poland, from 14 to 17 May 2014; and on the outcome of the twenty-third ECSL Summer Course on Space Law and Policy, held in Geneva, Switzerland, from 1 to 12 September 2014.
- 43. The Subcommittee welcomed the information provided by the observer for APSCO on its activities relating to space law, including information on the United Nations/China/APSCO Workshop on Space Law, held in Beijing from 17 to 21 November 2014, and on the upcoming third APSCO Space Law and Policy Forum, to be held in Beijing in September 2015.
- 44. The Subcommittee welcomed the information provided by the observer for ILA on its activities relating to space law (see A/AC.105/C.2/106), including information on the seventy-sixth ILA Biennial Conference, organized jointly with

- the American Society of International Law, held in Washington, D.C., from 7 to 11 April 2014.
- 45. The Subcommittee welcomed the information provided by the observer for the Ibero-American Institute of Aeronautic and Space Law and Commercial Aviation on its activities relating to space law, including on its latest event dedicated to space law, held in November 2014.
- 46. The Subcommittee welcomed the information provided by the observer for Intersputnik on its activities relating to space law (see A/AC.105/C.2/106), including information on the training and professional support that Intersputnik provided to its partners, and on international cooperation in the form of joint satellite projects.
- 47. In accordance with the agreement reached by the Subcommittee at its fifty-third session, in 2014 (see A/AC.105/1067, para. 45), Unidroit made available to the Subcommittee information on recent developments in relation to the Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets (see A/AC.105/C.2/106). The Subcommittee noted that the Preparatory Commission for the Establishment of the International Registry for Space Assets, acting as the Provisional Supervisory Authority of the future international registry, had successfully held three sessions. At its third session, in September 2014, the Preparatory Commission had finalized the text of the registry regulations except in regard to the issue of the identification criteria for parts of spacecraft.
- 48. The Subcommittee agreed that the representative of Unidroit should be invited to update the Subcommittee at its fifty-fifth session on further developments relating to the Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets.
- 49. The Subcommittee agreed that it was important to continue the exchange of information on recent developments in the area of space law between the Subcommittee and international intergovernmental and non-governmental organizations and that such organizations should once again be invited to report to the Subcommittee, at its fifty-fifth session, on their activities relating to space law.

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

- 50. Pursuant to General Assembly resolution 69/85, the Subcommittee considered agenda item 5, entitled "Status and application of the five United Nations treaties on outer space", as a regular item on its agenda.
- 51. The representatives of Algeria, Brazil, Canada, Germany, Japan, Spain, the Netherlands, the Republic of Korea, the Russian Federation, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 5. A statement was also made by the representative of Chile on behalf of the Group of Latin American and Caribbean States. During the general exchange of views, statements relating to the item were also made by representatives of other member States.

- 52. The Subcommittee heard a presentation entitled "Space object registration by the European Space Agency: current policy and practice", by the observer for ESA.
- 53. At its 897th meeting, on 13 April, the Subcommittee reconvened its Working Group on the Status and Application of the Five United Nations Treaties on Outer Space under the chairmanship of Jean-François Mayence (Belgium). The Subcommittee commended the outgoing Chair of the Working Group for his dedication in chairing the Working Group and his tireless efforts in moving the discussions in the Working Group forward.
- 54. At its 913th meeting, on 23 April, the Subcommittee endorsed the report of the Chair of the Working Group, contained in annex I to the present report.
- 55. The Subcommittee had before it the following:
- (a) Conference room paper on the status of international agreements relating to activities in outer space as at 1 January 2015 (A/AC.105/C.2/2015/CRP.8);
- (b) Notes by the Secretariat containing responses to the 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, received from Germany (A/AC.105/C.2/2015/CRP.11) and Canada (A/AC.105/C.2/2015/CRP.21);
- (c) Overview by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space on the responses from States members and permanent observers of the Committee to the set of questions provided by the Chair, contained in the report of the Legal Subcommittee on its fifty-third session, document A/AC.105/1067, annex I, appendix (A/AC.105/C.2/2015/CRP.12);
- (d) Answers from the Chair of the Space Law Committee of ILA to questions provided by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space (A/AC.105/C.2/2015/CRP.25).
- 56. The Subcommittee noted that, as at 1 January 2015, 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 (Outer Space Treaty), had 103 States parties and had been signed by 25 additional States;
- (b) The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (Rescue Agreement) had 94 States parties and had been signed by 24 additional States; two international intergovernmental organizations had declared their acceptance of the rights and obligations established under the Agreement;
- (c) The Convention on International Liability for Damage Caused by Space Objects (Liability Convention) had 92 States parties and had been signed by 21 additional States; three international intergovernmental organizations had declared their acceptance of the rights and obligations established under the Convention;
- (d) The Convention on Registration of Objects Launched into Outer Space (Registration Convention) had 62 States parties and had been signed by 4 additional

States; three international intergovernmental organizations had declared their acceptance of the rights and obligations established under the Convention;

- (e) The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Moon Agreement) had 16 States parties and had been signed by 4 additional States.
- 57. The Subcommittee noted the fortieth anniversary of the Registration Convention, one of the most important instruments in the application and implementation of obligations under the United Nations treaties on outer space. That Convention, which had been adopted on 12 November 1974, was opened for signature on 14 January 1975 and entered into force on 15 September 1976, constituted the foundation for the registration of objects launched into outer space.
- 58. The Subcommittee noted with appreciation that the Secretariat continued to update, on an annual basis, the status of international agreements relating to activities in outer space; the current update had been made available to the Subcommittee in conference room paper A/AC.105/C.2/2015/CRP.8. The Subcommittee requested the Secretariat to include, in future updates, the contact information of the depositaries of those agreements.
- 59. Some delegations expressed the view that the United Nations treaties on outer space formed an indispensable legal basis for supporting the increasing scale of space activities and strengthening international cooperation in the peaceful uses of outer space. Those delegations welcomed the growing adherence to the United Nations treaties on outer space and encouraged those States that had not yet become parties to the treaties to consider doing so.
- 60. Some delegations expressed the view that it was necessary to review, update and strengthen the five United Nations treaties on outer space with a view to invigorating the guiding principles that govern the space activities of States and to filling any legal lacunae in the current international legal regime on outer space, as well as strengthening international cooperation and facilitating the exchange of space technology and expertise for the benefit of all people. Those delegations were of the view that such reviewing and updating should not undermine the fundamental principles underlying the existing legal regime, but should rather enrich and further develop those principles.
- 61. Some delegations expressed the view that it was essential to ensure that all States adhere to and implement the five United Nations treaties on outer space, which form the legal foundation for governing outer space activities and have enabled States and their people to enjoy tremendous benefits from such activities. Those delegations were of the view that in cases where legal uncertainties might be found in those treaties, actors conducting activities in outer space could make use of non-legally binding instruments.
- 62. Some delegations expressed the view that the five United Nations treaties on outer space were a basis for the regulation of the participation and the responsibility of both Governments and non-governmental organizations and that they strengthened the safety and security of space activities. Those delegations were of the view that the legal regime governing activities in outer space should ensure that space research and space activities benefit the quality of life and well-being of human beings and the prosperity of current and future generations.

- 63. Some delegations expressed the view that in order to meet the challenges associated with the rapid development of space activities, which could not have been foreseen at the time when the five United Nations treaties were negotiated, it was necessary to reach an agreement on updating the existing legal regime on outer space.
- 64. Some delegations expressed the view that the wide array of non-binding mechanisms and initiatives being developed to supplement the five United Nations treaties on outer space, such as the European Union-led initiative on a draft international code of conduct for outer space activities and the set of draft guidelines for the long-term sustainability of outer space activities prepared by the Working Group on the Long-term Sustainability of Outer Space Activities of the Scientific and Technical Subcommittee, not only yielded practical benefits in the present but could also influence the future creation of treaties on outer space.
- 65. The view was expressed that the existing shortcomings of and loopholes found in the current United Nations treaties on outer space, in particular the Liability Convention and the Registration Convention, were among the reasons for the low rate of adherence to the United Nations treaties on outer space.
- 66. The view was expressed that the general principles of the Outer Space Treaty had become international customary law, since almost all States conducting activities in outer space had ratified that Treaty and acted in accordance with its provisions; furthermore, there was no evidence of practice contrary to the Treaty on the part of States that had not acceded to it.
- 67. The view was expressed that the Legal Subcommittee should examine the work of the International Seabed Authority related to a draft framework for the regulation of exploitation activities in the international deep seabed area and on the development of financial terms for such exploitation in order to examine possible linkages between the commercial regime for the deep seabed and the questions arising from article XI of the Moon Agreement.
- 68. The view was expressed that, while under article VI of the Outer Space Treaty States bore responsibility for national activities in outer space, that did not mean that a State was liable under article VII of that Treaty or under the Liability Convention for damage caused by a space object owned or operated by an enterprise registered in that State, when the enterprise had requested that the launch should take place from a State other than the enterprise's State of registration. The delegation expressing that view was also of the view that liability in such an instance could be appropriately allocated in a bilateral agreement between the State of registration and the State that had launched the space object.
- 69. The view was expressed that the registration of space objects was one of the key elements of the United Nations treaties on outer space and that the registration principles contained in the Outer Space Treaty and in the Registration Convention were sufficient, if properly applied. The delegation expressing that view was also of the view that in accordance with articles VI and VII of the Outer Space Treaty, the launching State remained responsible for all the space objects it had launched. As a consequence, and to avoid the use of "flags of convenience", a transfer of registration was possible only between launching States.

- 70. The view was expressed that the establishment of a national registry of objects launched into outer space in itself complied with the Registration Convention.
- 71. Some delegations, expressed the view, however, that the Democratic People's Republic of Korea was in clear violation of Security Council resolutions 1718 (2006), 1874 (2009) and 2087 (2013), as the launch on 12 December 2012 of Kwangmyongsong 3-2 had been conducted with the use of ballistic missile technology, and that it was important to continue to emphasize strongly that the Democratic People's Republic of Korea must not conduct any further actions in violation of those Security Council resolutions.
- The view was expressed that the circulation of document ST/SG/SER.E/INF/31, containing the notification by the Democratic People's Republic of Korea of the establishment of a national registry of objects launched into outer space, in accordance with article II of the Registration Convention, and of document ST/SG/SER.E/662, concerning the registration data furnished by the Democratic People's Republic of Korea, could be construed as a legitimization by the Secretariat of the attempt by the Democratic People's Republic of Korea to disguise the launch of its space object using ballistic missile technology and to circumvent those Security Council resolutions. The delegation expressing that view drew attention to the report of the Panel of Experts established pursuant to Security Council resolution 1874 (2009) dated 23 February 2015 (S/2015/131, annex), which pointed out that the National Aerospace Development Administration, the national contact point of the Democratic People's Republic of Korea according to document ST/SG/SER.E/INF/31, was an alias of the Korean Committee for Space Technology, an entity named on the sanctions list maintained by the Committee established pursuant to Security Council resolution 1718 (2006), and requested that a formal notice quoting the relevant content of the Secretary-General's letter contained in document S/2013/108 and the 2014 report of the Panel of Experts (S/2014/147, annex) be placed on the website of the Office for Outer Space Affairs along with the registration information provided by the Democratic People's Republic of Korea.
- At the Subcommittee's 913th meeting, on 23 April 2015, the Director of the Office for Outer Space Affairs stated that the Office took note of the concerns raised by the delegation of the Republic of Korea and the statement by Japan concerning the notification by the Democratic People's Republic of Korea of the establishment of a national registry of objects launched into outer space, in accordance with article II of the Registration Convention, and of the establishment of a national focal point for the registration of space objects, pursuant to paragraph 2 (c) of General Assembly resolution 62/101. She informed the Subcommittee that the Office had immediately communicated the notification to the Executive Office of the Secretary-General, the Office of Legal Affairs, the Department of Political Affairs of the Secretariat and the Coordinator of the Panel of Experts established pursuant to Security Council resolution 1874 (2009). She also informed the Subcommittee that the statements made by the Republic of Korea and Japan on 14 April 2015 had already been communicated to the above-mentioned offices, departments and individuals. On the basis of the advice received from them, the Director of the Office for Outer Space Affairs reminded the Subcommittee that the function of the Secretary-General and the Office for Outer Space Affairs with respect to notifications from States parties to the Registration Convention and Member States

was an administrative and technical one. Thus, it had been the established practice of the Office not to add information of the nature indicated by the Republic of Korea to notifications. In that light, it was noted that the Office for Outer Space Affairs was not in a position to post the requested notices on its website.

- 74. The view was expressed that it was regrettable that the results of the illegal act committed by the Democratic People's Republic of Korea, which had been condemned by the Security Council on a number of occasions, were being treated simply as an administrative and technical matter by the Office. The delegation expressing that view found it very regrettable that the advice received by the aforementioned offices of the United Nations did not fully reflect the provisions of the Charter of the United Nations, the resolutions adopted by the Security Council and the report submitted by the Panel of Experts in document S/2015/131. The delegation stated that the issue should be re-examined and discussed at the fifty-eighth session of the Committee on the Peaceful Uses of Outer Space, to be held in June 2015.
- 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
  - 75. Pursuant to General Assembly resolution 69/85, the Subcommittee considered, as a regular item on its agenda, agenda item 6, entitled:

"Matters relating to:

- "(a) The definition and delimitation of outer space;
- "(b) 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."
- 76. The representatives of Algeria, Belgium, Brazil, Canada, China, Colombia, France, Mexico, the Netherlands, the Republic of Korea, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 6. The representative of Chile made a statement on behalf of the Group of Latin American and Caribbean States, and a statement on behalf of the Group of 77 and China. A statement was also made by the observer for the United Arab Emirates. The observer for ITU also made a statement. During the general exchange of views, statements relating to item 6 were made by the representatives of other member States.
- 77. At its 897th meeting, on 13 April 2015, the Legal Subcommittee reconvened its Working Group on the Definition and Delimitation of Outer Space under the chairmanship of José Monserrat Filho (Brazil). In accordance with the agreement reached by the Subcommittee at its thirty-ninth session and endorsed by the

Committee at its forty-third session, the Working Group was convened to consider only matters relating to the definition and delimitation of outer space.

- 78. The Working Group held 4 meetings. The Subcommittee, at its 913th meeting, on 23 April, endorsed the report of the Chair of the Working Group, contained in annex II to the present report.
- 79. For its consideration of the item, the Subcommittee had before it the following:
- (a) Note by the Secretariat on questions on the definition and delimitation of outer space: replies from Member States (A/AC.105/889/Add.15 and 16);
- (b) Note by the Secretariat on questions on suborbital flights for scientific missions and/or for human transportation (A/AC.105/1039/Add.4 and 5).
- 80. The Subcommittee noted with satisfaction that a joint Aerospace Symposium on the theme "Emerging space activities and civil aviation: challenges and opportunities" had been organized by the International Civil Aviation Organization (ICAO) and the Office for Outer Space Affairs and held in Montreal, Canada, from 18 to 20 March 2015. That unprecedented event had brought together 350 participants from around the globe representing the aviation and space communities and had succeeded in strengthening the dialogue between the relevant legal and regulatory actors and in enhancing the common understanding of the challenges and opportunities related to commercial space transportation development. The Symposium agreed on follow-up symposiums to be held in the United Arab Emirates in 2016 and in Vienna in 2017.
- 81. The Subcommittee noted that the Office for Outer Space Affairs and ICAO would lead the learning group set up as an interactive forum for discussion under this framework and that States members of the Committee were invited to nominate their experts for membership in the learning group.
- 82. Some delegations expressed the view that scientific and technological progress, the commercialization of outer space, the participation of the private sector, emerging legal questions and the increasing use of outer space in general had made it necessary for the Subcommittee to consider the question of the definition and delimitation of outer space. The delegations expressing that view were also of the view that the definition and delimitation of outer space would help to establish a single legal regime regulating the movement of an aerospace object and to bring about legal clarity in the implementation of space law and air law, as well as clarify the issues of the sovereignty and international responsibility of States and the boundary between airspace and outer space.
- 83. The view was expressed that the definition and delimitation of outer space were important for ensuring the safety of aerospace operations.
- 84. The view was expressed that an agreement on a clear definition of the boundaries between outer space and airspace would allow the Committee and the Subcommittee to concentrate on developing and improving legal instruments whose application was not restricted to one single realm of space activities and would create the legal certainty that would provide commercial operators with the assurances they needed in order to carry out their activities. The delegation expressing that view was also of the view that if the Subcommittee failed to act, it

might lose its leading role on the issue, and that would be tantamount to neglecting its mandate.

- 85. The view was expressed that the further development of aerospace activities could lead to the creation of relevant customary norms, which could assist in the regulation of such activities without the need to define and delimit outer space.
- 86. Some delegations expressed the view that in relation to the definition and/or delimitation of outer space, it would be preferable to focus on the function and purpose of an object rather than on its location, in order to determine if and when space law would govern its activities.
- 87. The view was expressed that it was important to consider the interrelationship between air law and space law.
- 88. Some delegations expressed the view that States should continue to operate in the current framework, which functioned well, until such time as there was a demonstrated need and a practical basis for developing a definition or delimitation of outer space. The delegations expressing that view were also of the view that at present any attempt to define and delimit outer space would be a theoretical exercise that could unintentionally complicate existing activities and that might not be adaptable to continuing technological developments.
- 89. Some delegations expressed the view that the delimitation of outer space was closely connected with the management of space activities and that the Subcommittee and its Working Group could first concentrate on relevant matters that needed practical solutions, such as suborbital flights or launches from flying objects. The delegations expressing that view were also of the view that international cooperation could be helpful, as exemplified by the recent undertaking by the Office for Outer Space Affairs and ICAO.
- 90. Some delegations expressed the view that progress in the definition and delimitation of outer space could be achieved through cooperation with ICAO.
- 91. Some delegations expressed the view that the Subcommittee should reinvigorate its efforts to reach consensus on the issue of the definition and delimitation of outer space and called upon States to make every effort necessary to reach a positive and legally sound solution.
- 92. Some delegations expressed the view that the geostationary orbit a limited natural resource clearly in danger of saturation needed to be used rationally and should be made available to all States, irrespective of their current technical capacities. That would provide States with the possibility of having access to the geostationary 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 processes of ITU and relevant norms and decisions of the United Nations.
- 93. Some delegations expressed the view that the geostationary orbit was a limited natural resource with great potential for the implementation of a wide array of programmes for the benefit of all States, and that it was at risk of becoming saturated, thereby threatening the sustainability of space activities in that environment; that its exploitation should be rationalized; and that it should be made available to all States, under equitable conditions, taking into particular account the

needs of developing countries. Those delegations were also of the view that it was important to use the geostationary orbit in compliance with international law, in accordance with the decisions of ITU and within the legal framework established in the relevant United Nations treaties, while giving consideration to the contributions of space activities to sustainable development and the achievement of the Millennium Development Goals.

- 94. Some delegations expressed the view that the geostationary orbit was part of outer space, that it was not subject to national appropriation by claim of sovereignty, by means of use, repeated use or occupation, or by any other means, and that its utilization was governed by the Outer Space Treaty and ITU treaties. The delegations expressing that view were also of the view 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, including repeated use, or by any other means.
- 95. The view was expressed that the geostationary orbit, as a limited natural resource clearly in danger of saturation, must be used rationally, efficiently, economically and equitably. That principle was deemed fundamental for safeguarding the interests of developing countries and countries in certain geographical positions, as set out in article 44, paragraph 196.2, of the Constitution of ITU, as amended by the ITU Plenipotentiary Conference held in 1998.
- 96. The view was expressed that the utilization by States of the geostationary orbit on the basis of "first come, first served" was unacceptable and that the Subcommittee should therefore develop a legal regime guaranteeing equitable access to orbital positions for States, in accordance with the principles of the peaceful use and non-appropriation of outer space.
- 97. The view was expressed that special attention should be given to equitable access for all States to orbit-spectrum resources in geostationary orbit while recognizing their potential with respect to social programmes that benefited the most underserved communities, making educational and medical projects possible, guaranteeing access to information and communications technology and improving links to necessary sources of information in order to strengthen social organization, as well as promoting knowledge and the exchange thereof without commercial interests acting as intermediaries.
- 98. Some delegations expressed the view that, in order to ensure the sustainability of the geostationary orbit, it was necessary to keep that issue on the agenda of the Subcommittee and to explore it further, through the creation of appropriate working groups and legal and technical intergovernmental panels, as necessary. Those delegations were of the view that working groups or intergovernmental panels with technical and legal expertise should be established to promote equal access to the geostationary orbit, and called for the greater participation of ITU in the work of the Subcommittee under those matters.

### VI. National legislation relevant to the peaceful exploration and use of outer space

- 99. Pursuant to General Assembly resolution 69/85, the Subcommittee considered agenda item 7, entitled "National legislation relevant to the peaceful exploration and use of outer space", as a regular item on its agenda.
- 100. The representatives of Algeria, Austria, Brazil, Japan, Mexico, the Netherlands and the Republic of Korea made statements under agenda item 7. The observer for ITU also made a statement. During the general exchange of views, statements relating to the item were made by the representatives of other member States.
- 101. In accordance with the request made by the Subcommittee at its fifty-third session, in 2014, an information handout on issues related to registration, authorization, debris mitigation and frequency management with respect to small and very small satellites had been jointly developed by the Office for Outer Space Affairs and ITU. The publication was made available to the Subcommittee in conference room paper A/AC.105/C.2/2015/CRP.17 and was also published on the website of the Office for Outer Space Affairs (www.unoosa.org/oosa/en/COPUOS/lsc/small-sat-handout.html).
- 102. The Subcommittee heard a presentation entitled "Current status of Japan's space policy and development of legal frameworks", by the representative of Japan.
- 103. The Subcommittee commended the Office and ITU for preparing the handout, which would become an important source of information for the benefit of space actors intending to operate such satellites.
- 104. The Subcommittee agreed that the handout could also be further promoted through the efforts of States members of the Committee.
- 105. The Subcommittee noted with satisfaction that some States members of the Committee had already begun to implement the recommendations of General Assembly resolution 68/74.
- 106. The Subcommittee noted various activities of member States in strengthening or developing their national space laws and policies, as well as in reforming or establishing the governance of national space activities. In that connection, the Subcommittee also noted that those activities were aimed at improving management, increasing competitiveness, involving academia, better responding to challenges posed by the development of space activities and better implementing international obligations.
- 107. The Subcommittee noted with satisfaction the increasing number of space-related international cooperation programmes and projects. In that connection, the Subcommittee noted the importance of the development of space legislation by States, as national regulatory frameworks played a significant role in regulating and promoting such cooperation activities.
- 108. The Subcommittee reiterated that it was important to take into account the increased level of commercial and private activities in outer space in the context of developing a national space-related regulatory framework, particularly with respect to the responsibilities of States regarding their national space activities.

- 109. The Subcommittee agreed that the discussions under this item were important and that they enabled States to gain an understanding of existing national regulatory frameworks, share experiences on national practices and exchange information on national legal frameworks.
- 110. The Subcommittee agreed that it was important to continue to exchange information regularly on developments in the area of national space-related regulatory frameworks. In that regard, the Subcommittee encouraged member States to continue to submit to the Secretariat texts of their national space laws and regulations and to provide updates and inputs for the schematic overview of national regulatory frameworks for space activities.

#### VII. Capacity-building in space law

- 111. Pursuant to General Assembly resolution 69/85, the Subcommittee considered agenda item 8, entitled "Capacity-building in space law", as a single issue/item for discussion.
- 112. The representatives of Algeria, Canada, China, Colombia, Costa Rica, France, Germany, Indonesia, Japan, Kenya, Mexico, Morocco, the Republic of Korea, the Russian Federation, South Africa and Venezuela (Bolivarian Republic of) made statements under agenda item 8. The representative of Chile made a statement on behalf of the Group of 77 and China, and a statement on behalf of the Group of Latin American and Caribbean States. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
- 113. The Subcommittee had before it the following:
- (a) Report on the United Nations/China/Asia-Pacific Space Cooperation Organization Workshop on Space Law on the Role of National Space Legislation in Strengthening the Rule of Law, held in Beijing from 17 to 20 November 2014 (A/AC.105/1089);
- (b) Proceedings of the United Nations/China Workshop on Space Law: The Role of National Space Legislation in Strengthening the Rule of Law, available on the website of the Office for Outer Space Affairs as ST/SPACE/66;
- (c) Conference room paper containing a directory of educational opportunities in space law (A/AC.105/C.2/2015/CRP.9);
- (d) Conference room paper containing information submitted by Austria on actions and initiatives to build capacity in space law (A/AC.105/C.2/2015/CRP.16).
- 114. The Subcommittee heard the following presentations made under the agenda item:
- (a) "The Brazilian Air Force University: supporting the Brazilian space programme", by the representative of Brazil;
- (b) "Regulatory aspects of small satellite remote operations in radio amateur bands", by the representative of Spain;

- (c) "Japan's capacity-building in space law: recent progress", by the representative of Japan.
- 115. The Subcommittee agreed that capacity-building, training and education in space law were of paramount importance to national, regional and international efforts to further develop the practical aspects of space science and technology, especially in developing countries, and to increasing knowledge of the legal framework within which space activities were carried out. It was emphasized that the Subcommittee had an important role to play in that regard.
- 116. The Subcommittee noted with appreciation that a number of national, regional and international efforts to build capacity in space law were being undertaken by governmental and non-governmental entities. Those efforts included encouraging universities to offer modules and seminars on space law; providing fellowships for graduate and postgraduate education in space law; assisting in the development of national space legislation and policy frameworks; organizing workshops, seminars and other specialized activities to promote greater understanding of space law; providing financial and technical support for legal research; preparing dedicated studies, papers, textbooks and publications on space law; supporting space law moot court competitions; supporting the participation of young professionals in regional and international meetings relating to space law; providing for training and other opportunities to build experience, in particular through internships with space agencies; and supporting entities dedicated to the study of and research relating to space law.
- 117. The Subcommittee recalled the importance of promoting regional and interregional cooperation through organizations such as APSCO and ESA, and through regional forums such as the Asia-Pacific Regional Space Agency Forum (APRSAF), the Space Conference of the Americas and the African Leadership Conference on Space Science and Technology for Sustainable Development.
- 118. The Subcommittee noted that some Member States provided financial assistance to enable students to attend the Manfred Lachs Space Law Moot Court Competition, held each year during the International Astronautical Congress.
- 119. The Subcommittee noted that the agenda item on national legislation relevant to the peaceful exploration and use of outer space and the agenda item on the review of international mechanisms for cooperation in the peaceful exploration and use of outer space had great potential to further the contribution of the Subcommittee to capacity-building, as the discussions and exchange of information would be of practical value to States in setting up their space activities.
- 120. The Subcommittee welcomed the establishment of the Regional Centre for Space Science and Technology Education, affiliated to the United Nations, at Beihang University in Beijing, as it would supplement space law teaching and training opportunities for countries in the Asia-Pacific region.
- 121. Some delegations expressed the view that the regional centres for space science and technology education could offer specialized training and scholarships in space law and related fields such as space data, space traffic management and the general use of space for socioeconomic development.
- 122. The Subcommittee noted with appreciation the holding of the ninth United Nations workshop on space law, on the theme "The role of national space legislation

- in strengthening the rule of law". The workshop, held in Beijing from 17 to 21 November 2014, had been hosted by the Government of China and organized jointly by the Office for Outer Space Affairs, APSCO and the China National Space Administration.
- 123. The Subcommittee noted that the workshop had discussed the role of national space legislation in strengthening the rule of law to adequately address the complexity of regulatory mechanisms and policy development in space activities. The workshop had taken note of General Assembly resolution 60/1, entitled "2005 World Summit Outcome", in which the Assembly acknowledged that good governance and the rule of law at the national and international levels were essential for sustained economic growth, sustainable development and the eradication of poverty and hunger.
- 124. The Subcommittee noted that the workshop had conducted a review of the objectives of international space law development and noted that, in view of the growing number of benefits derived from space science and technology applications and the continued expansion of space activities, greater attention must be paid to national regulatory and policy developments.
- 125. The Subcommittee also noted that the workshop had welcomed General Assembly resolution 68/74, on recommendations on national legislation relevant to the peaceful exploration and use of outer space, in which the Assembly had provided a set of elements for consideration, as appropriate, by States when enacting regulatory frameworks for national space activities, in accordance with their national legal systems. The workshop agreed that action could be taken by other States to cover those elements when developing national regulatory frameworks.
- 126. The Subcommittee noted that the workshops organized by the Office for Outer Space Affairs in cooperation with host countries were a valuable contribution to capacity-building in space law and international cooperation in the peaceful uses of outer space.
- 127. Some delegations expressed the view that it was necessary to strengthen the capacity of the Office for Outer Space Affairs with regard to capacity-building and training in space law.
- 128. The Subcommittee reaffirmed its satisfaction at the completion of the education curriculum on space law and the updated web-based compilation of reading materials, found on the website of the Office for Outer Space Affairs.
- 129. Some delegations expressed a willingness to assist the regional centres for space science and technology education, affiliated to the United Nations, to facilitate the introduction of the curriculum in their respective education programmes, as it was a dynamic educational tool that could be easily used by educators from different professional backgrounds.
- 130. Some delegations requested the Office for Outer Space Affairs to strengthen its efforts to support capacity-building in space law in the Latin American and Caribbean region, in particular through the organization of seminars or workshops.
- 131. The view was expressed that, while not all nations were spacefaring nations, they could still be affected by outer space-related incidents. In order to anticipate

the enforcement of liability measures, it was necessary that all countries know their obligations and rights. With the growing involvement of actors in space-related activities, both public and private, building capacity in space law was more urgent than ever before.

- 132. The Subcommittee noted with satisfaction that the Office for Outer Space Affairs had updated the directory of education opportunities in space law (A/AC.105/C.2/2015/CRP.9), including with information on available fellowships and scholarships, and agreed that the Office should continue to update the directory. In that connection, the Subcommittee invited member States to encourage contributions at the national level for the future updating of the directory.
- 133. The Subcommittee expressed its appreciation to the delegation of Germany for having presented volume III of the Cologne Commentary on Space Law to delegations at the present session of the Subcommittee, as a contribution to capacity-building in space law. Together with volume I, which had been presented in 2010, and volume II, presented in 2013, it constituted a complete, article-by-article commentary on all five United Nations treaties and other legal instruments on outer space.
- 134. The Subcommittee recommended that States members and permanent observers of the Committee inform the Subcommittee, at its fifty-fifth session, of any action taken or planned at the national, regional or international level to build capacity in space law.

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

- 135. Pursuant to General Assembly resolution 69/85, the Subcommittee considered agenda item 9, entitled "Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space", as a single issue/item for discussion.
- 136. The representatives of Canada, Mexico, the Netherlands, the Republic of Korea, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 9. The representative of Chile made a statement on behalf of the Group of 77 and China, and a statement on behalf of the Group of Latin American and Caribbean States. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
- 137. The Subcommittee recalled that the Safety Framework for Nuclear Power Source Applications in Outer Space (A/AC.105/934), adopted by the Scientific and Technical Subcommittee at its forty-sixth session, in 2009, and endorsed by the Committee at its fifty-second session, also in 2009, had considerably advanced international cooperation in ensuring the safe use of nuclear power sources in outer space and had facilitated the development of international space law.
- 138. The Legal Subcommittee noted with satisfaction the extension of the multi-year workplan of the Working Group on the Use of Nuclear Power Sources in Outer Space to 2017 (A/AC.105/1065, annex II, para. 9).

- 139. Some delegations expressed the view that it was exclusively States, irrespective of their level of social, economic, scientific or technical development, that had an obligation to engage in regulatory activity associated with the use of nuclear power sources in outer space and to adapt national legislation to relevant international standards. Those delegations were also of the view that Governments bore international responsibility for national activities involving the use of nuclear power sources in outer space conducted by governmental and non-governmental organizations and that such activities must be beneficial and not detrimental to humanity.
- 140. Some delegations expressed the view that the Principles Relevant to the Use of Nuclear Power Sources in Outer Space (General Assembly resolution 47/68) should be reviewed with a view to developing binding international standards to provide a legal framework for the use of nuclear power sources in outer space.
- 141. Some delegations expressed the view that a revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space was not warranted.
- 142. Some delegations expressed the view that there should be greater coordination and interaction between the Scientific and Technical Subcommittee and the Legal Subcommittee in order to promote the development of a legally binding framework for the use of nuclear power sources in outer space.
- 143. Some delegations expressed the view that the Safety Framework for Nuclear Power Source Applications in Outer Space should be officially presented to the Legal Subcommittee for examination.
- 144. Some delegations expressed the view that appropriate interaction between the two Subcommittees was required in order to develop strategies, long-term planning and regulations related to the use of nuclear power sources in outer space, considering the recommendations included in the Safety Framework.
- 145. The view was expressed that a balanced approach between meeting the current needs of space activities and the risk arising from the use of nuclear power sources should be taken into consideration with a view to further work of the Subcommittee.
- 146. Some delegations expressed the view that more consideration should be given to the use of nuclear power sources in outer space, specifically in the geostationary orbit and lower atmosphere of the Earth, in order to address the legal aspects of the problem of potential collisions of nuclear-powered space objects in orbit, the incidents or emergencies that could be created by the accidental re-entry of such objects into the Earth's atmosphere and their impact on its surface, and the consequences for the health and lives of people and for the ecosystem.
- 147. Some delegations expressed the view that more attention should be paid to the legal issues associated with the use of satellite platforms with nuclear power sources in Earth orbits, including the geostationary orbit, in the light of reported failures and collisions that posed a high risk to humanity. Those delegations were also of the view that it was necessary to discuss the inclusion of new principles aimed at improving the provisions relating to the safety of the use of nuclear energy sources and their adaptation to new technologies, as well as to study in depth the use of such platforms with a view to promoting the development of legally binding rules.

- 148. Some delegations expressed the view that the use of nuclear power sources in outer space must be as limited as possible, and should be based on a thorough safety assessment to reduce the risk of accidental exposure of the public to harmful radiation or radioactive materials.
- 149. The view was expressed that the Principles Relevant to the Use of Nuclear Power Sources in Outer Space should be modified by deleting, from principle 3 (Guidelines and criteria for safe use), paragraphs 2 (a)(iii) and 3 (a), which referred to the use of nuclear reactors and radioisotope generators in Earth orbits.
- 150. The view was expressed that it was necessary to involve experts, industry, academia and the competent authorities in the development of standards relating to the use of nuclear power sources in outer space.
- 151. The view was expressed that the establishment of an independent nuclear safety review panel to regulate the use of nuclear power sources in outer space could be considered.
- 152. The view was expressed that the use of nuclear power sources in outer space should be allowed only in the case of deep space missions and only when other power sources had been considered and rejected.
- 153. The view was expressed that research should be conducted to find alternative power sources to replace the use of nuclear power sources in outer space.

# IX. General exchange of information and views on legal mechanisms relating to space debris mitigation measures, taking into account the work of the Scientific and Technical Subcommittee

- 154. Pursuant to General Assembly resolution 69/85, the Subcommittee considered agenda item 10, entitled "General exchange of information and views on legal mechanisms relating to space debris mitigation measures, taking into account the work of the Scientific and Technical Subcommittee", as a single issue/item for discussion.
- 155. The representatives of Brazil, Canada, the Czech Republic, Germany, Japan, Mexico, the Netherlands, the Republic of Korea, the Russian Federation, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 10. The representative of Chile made a statement on behalf of the Group of 77 and China, and a statement on behalf of the Group of Latin American and Caribbean States. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
- 156. The Subcommittee had before it a conference room paper on the compendium of space debris mitigation standards adopted by States and international organizations (A/AC.105/C.2/2015/CRP.20).
- 157. The Subcommittee recalled with satisfaction that the endorsement by the General Assembly, in its resolution 62/217, of the Space Debris Mitigation Guidelines of the Committee on the Peaceful Uses of Outer Space had been an

important step in providing all spacefaring nations with guidance on how to mitigate the problem of space debris.

- 158. The Subcommittee noted with satisfaction that some States were implementing space debris mitigation measures consistent with the Space Debris Mitigation Guidelines of the Committee and/or the Inter-Agency Space Debris Coordination Committee (IADC) Space Debris Mitigation Guidelines and that other States had developed their own space debris mitigation standards based on those guidelines. The Subcommittee also noted that some States were using the IADC Space Debris Mitigation Guidelines, the European Code of Conduct for Space Debris Mitigation and International Organization for Standardization (ISO) standard 24113:2011 (Space systems: space debris mitigation requirements) as references in their regulatory frameworks for national space activities.
- 159. The Subcommittee noted with satisfaction that some States had taken measures to incorporate internationally recognized guidelines and standards related to space debris into relevant provisions in their national legislation.
- 160. The Subcommittee noted that some States had strengthened their national mechanisms governing space debris mitigation through the nomination of governmental supervisory authorities, the involvement of academia and industry and the development of new legislative norms, instructions, standards and frameworks.
- 161. The Subcommittee expressed its appreciation to Canada, the Czech Republic and Germany for their initiative and action to develop a compendium of space debris mitigation standards adopted by States and international organizations.
- 162. The Subcommittee also expressed its appreciation to the Secretariat for the establishment of a dedicated web page for maintaining the compendium, and for making the information on the compendium available to the Scientific and Technical Subcommittee for consideration at its fifty-second session.
- 163. Some delegations expressed the view that since the future of space activities would depend largely on space debris mitigation measures, research should be deepened in the areas of technology for space debris observation, space debris environmental modelling and technologies to protect space systems from space debris and to limit substantially the creation of additional space debris. Those delegations were of the view that the outcome of the research should be used to improve the Space Debris Mitigation Guidelines of the Committee and to keep them updated.
- 164. Some delegations expressed the view that the Legal Subcommittee should undertake a legal analysis of the Space Debris Mitigation Guidelines of the Committee.
- 165. The view was expressed that it was necessary to involve experts, industry, academia and the competent authorities in the development of standards and criteria for strengthening the Space Debris Mitigation Guidelines of the Committee.
- 166. The view was expressed that the development of a legally binding instrument for space debris mitigation would not automatically result in its comprehensive acceptance and implementation.
- 167. Some delegations expressed the view that the transformation of technical debris mitigation guidelines into a legally binding instrument was not necessary, as

- spacefaring nations were motivated to reduce space debris by their self-interest in preserving the safety and sustainability of space activities.
- 168. Some delegations expressed the view that non-binding international principles and guidelines on space debris mitigation should be flexible and easily adaptable to new technological and situational circumstances and that it was not reasonable to establish debris mitigation standards in international law at present.
- 169. The view was expressed that a non-binding approach could be effective and benefit all nations if implemented domestically through policies, regulations and standards.
- 170. The view was expressed that it was necessary to examine the compendium of space debris mitigation standards adopted by States and international organizations in order to determine whether and how the information contained in the compendium could be used to update the Space Debris Mitigation Guidelines of the Committee.
- 171. The view was expressed that the compendium of space debris mitigation standards could be a starting point for international regulation.
- 172. Some delegations expressed the view that information on actions to reduce the creation of space debris should be made available to the Subcommittee, in particular by those States that were largely responsible for creating space debris and by the States that had the capacity to take action with regard to space debris mitigation.
- 173. The view was expressed that reporting on the status of implementation of the Space Debris Mitigation Guidelines of the Committee would contribute to improving transparency and developing confidence-building measures among States.
- 174. Some delegations expressed the view that the Subcommittee should consider the issue of space debris in connection with the growing number of deployments of small satellites.
- 175. Some delegations expressed the view that the Subcommittee should pay greater attention to space debris in the geostationary orbit.
- 176. Some delegations expressed the view that the Subcommittee should pay greater attention to space debris derived from space platforms with nuclear power sources on board and from the collision of such objects with space debris, and to technology for monitoring space debris.
- 177. Some delegations expressed the view that the issue of space debris should not be treated in a way that limited access to outer space or impaired the development of space capabilities by the least developed or developing countries, and that it was necessary to take into account the principle of proportional responsibility for space debris removal.
- 178. Some delegations expressed the view that the removal of large pieces of debris was necessary to prevent the proliferation of space debris and that the removal should be carried out by those space actors that were responsible for space debris generation.
- 179. Some delegations expressed the view that addressing the issue of active removal required the clarification of a number of legal questions.

- 180. The view was expressed that any active debris removal operations should be based on legal documents developed under the auspices of the United Nations, and that the development of a legal instrument on active debris removal outside the framework of the United Nations was not acceptable.
- 181. Some delegations expressed the view that cooperation between the Legal Subcommittee and the Scientific and Technical Subcommittee was increasing and that the progress achieved by the Working Group on the Long-term Sustainability of Outer Space Activities of the Scientific and Technical Subcommittee could be of benefit for the Legal Subcommittee.
- 182. Some delegations expressed the view that cooperation between the Legal Subcommittee and the Scientific and Technical Subcommittee should be strengthened and that the Subcommittees should cooperate in developing binding and non-legally binding rules for space debris mitigation. Those delegations were of the view that the results obtained in the working groups of the Scientific and Technical Subcommittee should be officially presented to the Legal Subcommittee for examination and for the identification of legal issues that should be addressed by the Legal Subcommittee.
- 183. The view was expressed that the recommendations of the Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities could also contribute to the mitigation of space debris.
- 184. The Subcommittee agreed that States members of the Committee and international intergovernmental organizations having permanent observer status with the Committee should be invited to further contribute to the compendium of space debris mitigation standards adopted by States and international organizations by providing or updating the information on any legislation or standards adopted with regard to space debris mitigation, using the template provided for that purpose. The Subcommittee also agreed that all other States Members of the United Nations should be invited to contribute to the compendium, encouraging States with such regulations or standards to provide information on them.

## X. General exchange of information on non-legally binding United Nations instruments on outer space

185. Pursuant to General Assembly resolution 69/85, the Subcommittee considered agenda item 11, entitled "General exchange of information on non-legally binding United Nations instruments on outer space", as a single issue/item for discussion.

186. The representatives of Austria, Brazil, Canada, Chile, China, Cuba, the Czech Republic, France, Germany, Greece, Italy, Japan, Mexico, the Netherlands, the Republic of Korea, the Russian Federation, Spain, the United Kingdom, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 11. A statement was made by Chile on behalf of the Group of Latin American and Caribbean States. Statements were made by the observers for ESA and ILA. A statement was also made by the representative of Luxembourg, together with the observer for the European Union, on behalf of the European Union. During the general exchange of views, statements relating to the item were also made by representatives of other member States.

- 187. The Subcommittee had before it a conference room paper prepared by Japan entitled "Questionnaire on general exchange of information on non-legally binding United Nations instruments on outer space" (A/AC.105/C.2/2015/CRP.24/Rev.1).
- 188. The Subcommittee was informed by the observer for the European Union that, in response to General Assembly resolutions 68/50 and 69/38, as well as to the report of the Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities, diplomatic negotiations on the European Union-led initiative on a draft international code of conduct for outer space activities would take place in New York from 27 to 31 July 2015, and that all United Nations Member States would be invited.
- 189. Some delegations expressed concern that the European Union-led initiative on a draft international code of conduct for outer space activities had not been discussed in the Committee or its Subcommittees, and were of the view that negotiations on it had thus not been given the proper United Nations mandate. Those delegations were of the view that in order to imbue that European Union-led initiative with a universal character, such negotiations should be conducted within the framework of the United Nations, in particular in the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space.
- 190. The Subcommittee welcomed the exchange of information under this agenda item and noted that existing non-legally binding United Nations instruments related to space activities had played an important role by complementing and supporting the United Nations treaties on outer space, and that they continued to be an effective means to address emerging challenges posed by the increase and diversification of activities in outer space, and to serve as a basis for ensuring the safe and sustainable use of outer space.
- 191. The Subcommittee encouraged States members of the Committee, as well as international intergovernmental organizations having permanent observer status with the Committee, to respond, on a voluntary basis and as appropriate, to the questionnaire contained in A/AC.105/C.2/2015/CRP.24/Rev.1, and to submit their responses to the delegation of Japan, which was invited to prepare a compilation of responses to be submitted to the Subcommittee during its fifty-fifth session.
- 192. Some delegations expressed the view that the goals set forth in the questionnaire could be more appropriately addressed in discussions of the Subcommittee under agenda item 7, on national legislation relevant to the peaceful exploration and use of outer space.
- 193. Some delegations expressed the view that the questionnaire limited the discussion to the existing non-legally binding United Nations instruments.
- 194. The Subcommittee recalled paragraph 197 of the report of the Legal Subcommittee on its fifty-third session, in 2014 (A/AC.105/1067), whereby the Subcommittee agreed that under this agenda item, "member States could, as appropriate, discuss other non-legally binding instruments on outer space, as well as the relationship between legally binding and non-legally binding instruments."
- 195. Some delegations expressed the view that discussions under this agenda item should not be confined to examining solely the non-legally binding United Nations instruments, and that the task of the Legal Subcommittee was to examine all non-legally binding instruments, those existing as well as those under development,

such as the draft international code of conduct for outer space activities being developed under the European Union-led initiative, that could have a long-term impact on the peaceful use of outer space, as well as the safety and long-term sustainability of outer space activities.

196. Some delegations expressed the view that only existing non-legally binding United Nations instruments should be discussed under this agenda item, in accordance with the objectives associated with the item, as described in document A/AC.105/C.2/L.291.

197. Some delegations expressed the view that the scope of this agenda item should be broad, in line with the agreement mentioned in paragraph 197 of the report of the Legal Subcommittee on its fifty-third session, and that the item should be entitled "General exchange of information on non-legally binding instruments and initiatives related to the peaceful use of outer space".

198. Some delegations expressed the view that the exchange of information under this agenda item would assist States in their deliberations and would shed light on the use of non-legally binding United Nations instruments on outer space. The delegations expressing that view were also of the view that the discussion under this agenda item should not be limited to the questionnaire itself.

199. Some delegations expressed the view that discussions under this agenda item should focus on the implementation by member States of the non-legally binding United Nations instruments, rather than on the instruments as such. The delegations expressing that view were also of the view that a review of implementation measures by member States would shed light on the effectiveness of the instruments and that the questionnaire was of the utmost importance for enhancing discussions under this agenda item.

200. Some delegations expressed the view that an exchange of information on the non-legally binding principles and technical guidelines developed by the Committee on the Peaceful Uses of Outer Space was especially welcome in view of the recommendation contained in the report of the Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities (A/68/189) that Member States take measures to implement, to the greatest extent practicable, principles and guidelines endorsed on the basis of consensus by the Committee on the Peaceful Uses of Outer Space and the General Assembly.

201. The view was expressed that the Committee on the Peaceful Uses of Outer Space was the appropriate international multilateral forum for discussions on the further development of space law and its application, and that the deliberations on the European Union-led initiative on a draft international code of conduct for outer space activities should be conducted in the Committee in the overall context of the topic on the long-term sustainability of outer space activities and in view of the recommendations of the Group of Governmental Experts.

202. The view was expressed that one of the most important roles for international lawyers in facilitating successful international cooperation was that of identifying the optimal cooperative mechanism in any given case, including when a non-legally binding mechanism might facilitate the objectives of cooperation better than a treaty. The delegation expressing that view was also of the view that the Principles Relating to Remote Sensing of the Earth from Outer Space, which were widely

credited with fostering a successful international regime in remote sensing to the benefit of all States, and the Charter on Cooperation to Achieve the Coordinated Use of Space Facilities in the Event of Natural or Technological Disasters (also called the International Charter on Space and Major Disasters) served as excellent examples of such mechanisms.

203. The Subcommittee agreed that this item should be retained on the agenda of the Subcommittee at its fifty-fifth session to continue the debate on both its substance and its scope.

## XI. Review of international mechanisms for cooperation in the peaceful exploration and use of outer space

- 204. Pursuant to General Assembly resolution 69/85, the Subcommittee considered agenda item 12, entitled "Review of international mechanisms for cooperation in the peaceful exploration and use of outer space", as an item under its five-year workplan (A/AC.105/1003, para. 179). In accordance with the workplan for 2015, the Subcommittee continued to conduct an exchange of information on the range of existing international space cooperation mechanisms.
- 205. The representatives of Algeria, China, France, Japan, Mexico, the Netherlands, the Republic of Korea, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 12. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
- 206. At its 896th meeting, on 13 April, the Subcommittee reconvened its Working Group on the Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space, under the chairmanship of Setsuko Aoki (Japan). At its 914th meeting, on 23 April 2015, the Subcommittee endorsed the report of the Chair of the Working Group, contained in annex III to the present report.
- 207. The Subcommittee had before it the following documents:
- (a) Note by the Secretariat on the review of international mechanisms for cooperation in the peaceful exploration and use of outer space, containing information received from Japan and Spain (A/AC.105/C.2/107);
- (b) Conference room paper on the review of international mechanisms for cooperation in the peaceful exploration and use of outer space, containing information received from Austria (A/AC.105/C.2/2015/CRP.14);
- (c) Conference room paper containing a note by the Secretariat on the categorization of international mechanisms for cooperation in the peaceful exploration and use of outer space (A/AC.105/C.2/2015/CRP.15).
- 208. The Subcommittee heard the following presentations:
- (a) "Japan Aerospace Exploration Agency (JAXA) examples of international mechanisms for cooperation in the peaceful exploration and use of outer space", by the representative of Japan;

- (b) "The need for an international approach and framework for new, developing activities below 200 km", by the observer for IAASS.
- 209. The Subcommittee noted the breadth, diversity and important elements of the mechanisms utilized in space cooperation, including legally binding multilateral and bilateral agreements; memorandums of understanding; non-legally binding arrangements, principles and technical guidelines; multilateral coordination mechanisms through which space-system operators coordinated the development of applications of space systems for the benefit of the environment, human security and welfare, and development; international intergovernmental organizations, such as APSCO and ESA; and a variety of international and regional forums, including the African Leadership Conference on Space Science and Technology for Sustainable Development, the Asia-Pacific Regional Space Agency Forum and the Space Conference of the Americas.
- 210. The view was expressed that the Subcommittee should play a positive role in fostering international cooperation so as to strengthen the design of the system of international cooperation and develop an effective and practical cooperative mechanism for the purpose of safeguarding peace, security and the rule of law in outer space.
- 211. The view was expressed that international initiatives for cooperation on specific aspects of the exploration and use of outer space, such as Earth observation and global navigation, were conceived for the purpose of uniting different space actors so as to maximize synergies, thereby fostering information-sharing and promoting the use of space applications and services, including in developing countries.
- 212. Some delegations expressed the view that it would be important to give consideration, as appropriate, to possible ways to enable knowledge and technology transfer, capacity-building and other means of cooperation so that more countries and people would be able to gain access to outer space for the benefit of their welfare and socioeconomic conditions.
- 213. The view was expressed that international space cooperation should be based on the concept of inclusive development, which would enable all States, regardless of the level of their economic development, to enjoy benefits derived from the use of space applications.
- 214. The view was expressed that the mechanisms for international space cooperation and the enhancement of the rule of law in outer space had been shown, in practice, to be complementary in nature: international cooperation served as an important means for advancing the rule of law in outer space, while the rule of law provided an effective institutional guarantee of international cooperation. The delegation expressing that view was also of the view that the Legal Subcommittee should play a leading role in that context, actively seeking workable cooperation mechanisms, as well as taking stock of them, to ensure the effective implementation of principles on international cooperation.
- 215. Some delegations expressed the view that international cooperation would continue to be a necessary basis for dealing with new challenges, such as ensuring the long-term sustainability of space activities and promoting peace and security so as to enable the sustainable development of all countries.

216. The Subcommittee agreed that the review of the mechanisms for cooperation in space activities would continue to assist States in understanding the different approaches to cooperation in space activities and would contribute to the further strengthening of international cooperation in the exploration and peaceful uses of outer space. In that regard, the Subcommittee reiterated that 2017, which, under its workplan was the final year of consideration of this agenda item, would be the fiftieth anniversary of the Outer Space Treaty.

#### XII. Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-fifth session

- 217. Pursuant to General Assembly resolution 69/85, the Subcommittee considered agenda item 13, entitled "Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-fifth session", as a regular item on the agenda. Under the item the Subcommittee also considered matters related to the organization of work.
- 218. The representatives of Algeria, Austria, Brazil, Canada, Chile, the Czech Republic, France, Germany, Indonesia, Italy, Japan, Mexico, Morocco, the Netherlands, the Republic of Korea, the Russian Federation, South Africa, Spain and the United States made statements under agenda item 13. During the general exchange of views, statements relating to the item were also made by representatives of other member States. The observers for ITU and SWF also made statements under the item.
- 219. The Subcommittee had before it the following:
- (a) Working paper submitted by the Secretariat entitled "Review of the use of transcripts of the Committee on the Peaceful Uses of Outer Space and its Legal Subcommittee" (A/AC.105/C.2/L.282);
- (b) Working paper submitted by Germany entitled "Proposal for a renewal of the structure of the agenda and the organization of work of the Legal Subcommittee" (A/AC.105/C.2/L.293/Rev.2);
- (c) Note by the past, present and incoming Chairs of the Committee on the Peaceful Uses of Outer Space entitled "2018 'UNISPACE+50' theme of the Scientific and Technical Subcommittee, the Legal Subcommittee and the Committee on the Peaceful Uses of Outer Space" (A/AC.105/C.2/2015/CRP.10);
- (d) Proposal by Germany for a single issue/item for discussion at the fifty-fifth session of the Legal Subcommittee: "Exchange of views on the concept of space traffic management" (A/AC.105/C.2/2015/CRP.13), supported by Austria, Luxembourg and the Netherlands:
- (e) Proposal by Brazil for a single issue/item for discussion at the fifty-fifth session of the Legal Subcommittee: "Exchange of views on the application of international law to small satellite activities" (A/AC.105/C.2/2015/CRP.23);

(f) Proposal by the Group of Latin American and Caribbean States for a single issue/item for discussion at the fifty-fifth session of the Legal Subcommittee: "Exchange of views on the application of international law to small satellite activities" (A/AC.105/C.2/2015/CRP.23/Rev.1).

## A. Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-fifth session

- 220. The Subcommittee agreed that the three single issues/items for discussion, entitled "Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space", "General exchange of information and views on legal mechanisms relating to space debris mitigation measures, taking into account the work of the Scientific and Technical Subcommittee" and "General exchange of information on non-legally binding United Nations instruments on outer space", should be retained on the agenda of the Subcommittee at its fifty-fifth session.
- 221. The Subcommittee agreed that a new single issue/item for discussion entitled "General exchange of views on the legal aspects of space traffic management" should be included on the agenda of the Subcommittee at its fifty-fifth session, on the basis of conference room paper A/AC.105/C.2/2015/CRP.13.
- 222. The Subcommittee agreed that a new single issue/item for discussion entitled "General exchange of views on the application of international law to small satellite activities" should be included on the agenda of the Subcommittee at its fifty-fifth session, on the basis of conference room paper A/AC.105/C.2/2015/CRP.23/Rev.1, and that ITU should be invited to update the Subcommittee at its fifty-fifth session on relevant developments and issues regarding ITU procedures and regulations applicable to small satellites.
- 223. The Subcommittee agreed on the following items to be proposed to the Committee for inclusion in the agenda of the Subcommittee at its fifty-fifth session:

#### Regular items

- 1. Adoption of the agenda.
- 2. Election of the Chair.
- 3. Statement by the Chair.
- 4. General exchange of views.
- 5. Information on the activities of international intergovernmental and non-governmental organizations relating to space law.
- 6. Status and application of the five United Nations treaties on outer space.
- 7. Matters relating to:
  - (a) The definition and delimitation of outer space;
  - (b) 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.

- 8. National legislation relevant to the peaceful exploration and use of outer space.
- 9. Capacity-building in space law.

#### Single issues/items for discussion

- 10. Review and possible revision of the Principles Relevant to the Use of Nuclear Power Sources in Outer Space.
- 11. General exchange of information and views on legal mechanisms relating to space debris mitigation measures, taking into account the work of the Scientific and Technical Subcommittee.
- 12. General exchange of information on non-legally binding United Nations instruments on outer space.
- 13. General exchange of views on the legal aspects of space traffic management.
- General exchange of views on the application of international law to small satellite activities.

#### Items considered under workplans

15. Review of international mechanisms for cooperation in the peaceful exploration and use of outer space.

(Work for 2016 as reflected in the multi-year workplan in the report of the Legal Subcommittee on its fifty-first session (A/AC.105/1003, para. 179))

#### New items

- 16. Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-sixth session.
- 224. The Subcommittee agreed that IISL and ECSL should again be invited to organize a symposium, to be held during its fifty-fifth session, and noted that delegations wishing to propose topics for the symposium could do so directly to the organizers.
- 225. The Subcommittee noted that its fifty-fifth session had been tentatively scheduled to be held from 4 to 15 April 2016.

#### **B.** Organizational matters

226. The Subcommittee had before it the revised proposal by Germany for the renewal of the structure of the agenda and organization of work of the Legal Subcommittee, as contained in document A/AC.105/C.2/L.293/Rev.2.

- 227. Some delegations reiterated the view that the proposal by Germany constituted a timely and constructive effort to simplify the structure of the Subcommittee's agenda and to make more efficient use of the sessions of the Subcommittee.
- 228. Some delegations reiterated the view that, while the intention of the proposal by Germany was welcome, in particular on the restructuring of the schedule of work of the Subcommittee, some elements of the proposal needed further clarification and elaboration, including on the proposed new structure, with preparatory groups and working groups.
- 229. The view was expressed that the German delegation should further elaborate on the consensual aspects of the proposal, namely the restructuring of the agenda, and withdraw from the text the other aspects of the proposal, in particular those related to the role and organizational aspects of the working groups and their preparatory groups.
- 230. In the discussion under the agenda item, Germany was invited to continue carrying out open-ended consultations in the intersessional period in order to further elaborate on its proposal contained in A/AC.105/C.2/L.293/Rev.2, with a view to presenting to the Subcommittee a revised document taking into account comments by member States.
- 231. Some delegations expressed the view that there should be increased synergy and cooperation between the Scientific and Technical Subcommittee and the Legal Subcommittee, in order to further enhance consistency in the work of the Committee and its Subcommittees and to further the understanding and application of existing legal instruments relating to space law.
- 232. The view was expressed that the Committee should establish rules of procedure, as well as review its current practice of making decisions by consensus, and that the Secretariat should consult member States on the matter.
- 233. The Subcommittee considered the note by the past, present and incoming Chairs of the Committee on the Peaceful Uses of Outer Space entitled "2018 'UNISPACE+50' theme of the Scientific and Technical Subcommittee, the Legal Subcommittee and the Committee on the Peaceful Uses of Outer Space", contained in A/AC.105/C.2/2015/CRP.10.
- 234. The Subcommittee agreed to the main proposal put forward in that conference room paper and requested the Secretariat, in close consultation with the past, present and incoming Chairs of the Committee, to develop their proposal in further detail and to present it in the six official languages of the United Nations for consideration by the Committee at its fifty-eighth session, in June 2015, taking into account the recommendations made by the Scientific and Technical Subcommittee at its fifty-second session (A/AC.105/1088, annex I, para. 4).
- 235. In accordance with the decision made by the Legal Subcommittee in 2011 (A/AC.105/990, para. 198), and on the basis of the proposal made by the Secretariat to discontinue the use of unedited transcripts (see A/AC.105/C.2/L.282), the Subcommittee agreed to use digital recordings on a permanent basis, and agreed that the digital recording application should be further enhanced.

#### 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 897th meeting, on 13 April 2015, the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space reconvened its Working Group on the Status and Application of the Five United Nations Treaties on Outer Space under the chairmanship of Jean-François Mayence (Belgium).
- 2. The Working Group held four meetings, from 13 to 23 April 2015. At the opening meeting, the Chair recalled the mandate of the Working Group (see A/AC.105/942, annex I, paras. 4 and 6, and A/AC.105/990, annex I, para. 7). The Chair informed the Working Group that this was his last year in his capacity as its Chair.
- 3. The Chair also recalled that at its fifty-third session the Subcommittee had agreed to review, at its fifty-fourth session, the need to extend the mandate of the Working Group beyond the fifty-fourth session of the Subcommittee (see A/AC.105/1067, annex I, para. 15).
- 4. At the opening meeting, the Chair expressed his deep regret at the passing away of Vassilios Cassapoglou (Greece), who chaired the Working Group from 2006 to 2009, and paid tribute to his great dedication and contribution to the area of space law.
- 5. The Working Group had before it the following:
- (a) Conference room paper on the status of international agreements relating to activities in outer space as at 1 January 2015 (A/AC.105/C.2/2015/CRP.8);
- (b) Note by the Secretariat containing responses to the 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, received from Germany (A/AC.105/C.2/2015/CRP.11) and Canada (A/AC.105/C.2/2015/CRP.21);
- (c) Overview by the Chair of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space of the responses from States members and permanent observers of the Committee to the set of questions provided by the Chair (A/AC.105/C.2/2015/CRP.12).
- 6. The Working Group also took note of the conference room paper containing answers from the Chair of the Space Law Committee of ILA to questions provided by the Chair of the Working Group (A/AC.105/C.2/2015/CRP.25).
- 7. The Working Group reviewed the responses to the set of questions provided by the Chair (see appendix), and a synthesis of views presented in writing and raised in the discussions of the Working Group during past sessions of the Legal Subcommittee, as contained in the overview by the Chair of the Working Group.
- 8. The Working Group noted that the set of questions continued to provide a good basis for discussion, within the mandate of the Working Group, on matters relevant to the status and application of the five United Nations treaties on outer

- space. The Working Group also noted that the questions presented in the questionnaire were not exhaustive and should not serve to limit the discussion of the Working Group.
- 9. The Working Group noted that a comprehensive discussion had taken place at the current session with respect to issues concerning the relationship between the United Nations treaties on outer space, their implementation and application, and the nature of several fundamental principles laid down in those treaties.
- 10. Some delegations reiterated the view that the principles contained in the United Nations treaties on outer space remained a solid foundation and that the Working Group should take a practical rather than a theoretical approach in discussing the provisions of the treaties.
- 11. The Working Group noted that a number of views, either converging or diverging, had been expressed during the discussion on the questionnaire and in the responses received from States members of the Committee, either in written form or raised during the deliberations of the Working Group.
- 12. The Working Group recognized that it was useful to further explore such views under its current mandate, in particular those that might serve as elements of solutions, in order to ensure the rational implementation and full application of the provisions of the five United Nations treaties on outer space to current and future space activities.
- 13. The Working Group agreed that the outgoing Chair, 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.
- 14. The Working Group also 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 future consideration.
- 15. The Working Group agreed that States members of the Committee and international intergovernmental and non-governmental organizations having permanent observer status with the Committee should again be invited to provide comments and responses to the questionnaire. Any replies received would be made available in a conference room paper.
- 16. The Working Group recommended that the Subcommittee, at its fifty-fifth session, in 2016, should reconvene the Working Group and review the need to extend the mandate of the Working Group beyond that session.

#### **Appendix**

#### 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

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

- 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?

#### 2. International responsibility and liability

- 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?

#### 3. Registration of space objects

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, over a space object registered by an international intergovernmental organization in accordance with the provisions of the Registration Convention?

#### 4. 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 what legal and/or factual elements your answer is based?

#### Annex II

## Report of the Chair of the Working Group on the Definition and Delimitation of Outer Space

- 1. At its 897th meeting, on 13 April 2015, the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space reconvened its Working Group on the Definition and Delimitation of Outer Space under the chairmanship of José Monserrat Filho (Brazil).
- 2. The Chair drew the attention of the Working Group to the fact that, pursuant to General Assembly resolution 69/85, the Working Group had been convened to consider only matters relating to the definition and delimitation of outer space.
- 3. The Working Group had before it the following:
- (a) Note by the Secretariat on questions on the definition and delimitation of outer space: replies from Member States (A/AC.105/889/Add.15 and 16);
- (b) Note by the Secretariat on questions on suborbital flights for scientific missions and/or for human transportation (A/AC.105/1039/Add.4 and 5).
- 4. The Chair called on delegations to undertake practical and tangible steps that could lead to progress in the work of the Working Group, and stressed that such steps should facilitate a constructive discussion among delegations. The Chair recalled his proposal made at the fifty-third session of the Subcommittee, in 2014, to define the term "space activities" with the objective of building a consensus, even a preliminary one, while temporarily putting aside the task of defining and delimiting outer space in order to concentrate on the task of defining space activities, which was one of the areas to be regulated by space law.
- 5. Some delegations expressed the view that scientific and technological progress, the commercialization of outer space, the participation of the private sector, emerging legal questions and the increasing use of outer space in general had made it necessary for the Subcommittee to consider the question of the definition and delimitation of outer space.
- 6. Some delegations expressed the view that the definition and delimitation of outer space would help to bring about legal clarity in the application of air law and space law.
- 7. Some delegations expressed the view that there was no need to seek a legal definition or delimitation of outer space and that States should continue to operate under the current framework, which presented no practical difficulties, until such time as there was a demonstrated need and a practical basis for developing a definition or delimitation of outer space.
- 8. The view was expressed that continuing the discussion of the delimitation and definition under the present methodology might not lead to concrete solutions and that it would thus be preferable to consider, for example, other matters linked to the possible definition and delimitation of outer space.

- 9. Some delegations expressed the view that this matter was practical in nature and called for concrete solutions. The delegations expressing that view were also of the view that the work was not theoretical in nature.
- 10. The view was expressed that the Working Group could, as a possible way forward, consider matters relating to the compatibility of and interaction between air law and space law.
- 11. Some delegations were of the view that the delimitation of outer space was closely connected with the management of space activities and that the Working Group could first and foremost concentrate on relevant matters that needed a practical solution, such as suborbital flights or launches from flying objects.
- 12. Some delegations expressed the view that specific cases brought up by various actors conducting space activities could intensify the discussion in the Working Group.
- 13. Some delegations expressed the view that the Working Group and the Subcommittee should endeavour to foresee hazardous circumstances arising from aerospace activities and legislate them, as well as attempt to develop norms, bearing in mind various scenarios relating to the development of space technology and activities.
- 14. The view was expressed that it was important for the Working Group to concentrate on its mandate and to consider all possible solutions, and that one such solution could be to conclude that there would not be a need to define and/or to delimit outer space.
- 15. The view was expressed that, in order to progress in its work, the Working Group could continue to consider national legislation or any national practices that might exist or were being developed that related directly or indirectly to the definition and/or delimitation of outer space and airspace.
- 16. Some delegations expressed the view that it was necessary for the Subcommittee to address the issue of the definition and delimitation of outer space with a contribution in the form of technical expertise from the International Civil Aviation Organization (ICAO), which had also been addressing the matter.
- 17. On the basis of its discussions, the Working Group agreed:
- (a) To continue to invite States members of the Committee to submit information on national legislation or any national practices that might exist or were being developed that related directly or indirectly to the definition and/or delimitation of outer space and airspace;
- (b) To invite, through the Secretariat, States members and permanent observers of the Committee to submit concrete and detailed proposals regarding the need to define and delimit outer space, or justifying the absence of such a need, or to provide the Working Group with specific cases of a practical nature relating to the definition and delimitation of outer space and the safety of aerospace operations. Such structured, consistent and grounded contributions would be considered by the Working Group at its future meetings;

- (c) To continue to invite States Members of the United Nations and permanent observers of the Committee to provide their replies to the following questions:
  - (i) Is there a relationship between suborbital flights for scientific missions and/or for human transportation and the definition and delimitation of outer space?
  - (ii) Will the legal definition of suborbital flights for scientific missions and/or for human transportation be practically useful for States and other actors with regard to space activities?
  - (iii) How could suborbital flights for scientific missions and/or for human transportation be defined?
  - (iv) Which legislation applies or could be applied to suborbital flights for scientific missions and/or for human transportation?
  - (v) How will the legal definition of suborbital flights for scientific missions and/or for human transportation impact the progressive development of space law?
  - (vi) Please propose other questions to be considered in the framework of the legal definition of suborbital flights for scientific missions and/or for human transportation.

#### Annex III

## Report of the Chair of the Working Group on the Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space

- 1. In accordance with General Assembly resolution 69/85, the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space reconvened its Working Group on the Review of International Mechanisms for Cooperation in the Peaceful Exploration and Use of Outer Space under the chairmanship of Setsuko Aoki (Japan).
- 2. The Working Group held five meetings between 17 and 23 April 2015. At the opening meeting, the Chair outlined the mandate of the Working Group under its multi-year workplan (A/AC.105/1003, para. 179).
- 3. The Working Group had before it the following:
- (a) Note by the Secretariat on the review of international mechanisms for cooperation in the peaceful exploration and use of outer space, containing information received from Japan and Spain (A/AC.105/C.2/107);
- (b) Conference room paper on the review of international mechanisms for cooperation in the peaceful exploration and use of outer space, containing information received from Austria (A/AC.105/C.2/2015/CRP.14);
- (c) Conference room paper on the categorization of international mechanisms for cooperation in the peaceful exploration and use of outer space (A/AC.105/C.2/2015/CRP.15).
- 4. The Working Group also took into account in its deliberations the documents made available at the fifty-second and fifty-third sessions of the Subcommittee and presentations made under the present agenda item.
- 5. The Working Group recalled that the conclusion of its work under the five-year workplan, in 2017, would coincide with the fiftieth anniversary 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, and that the result of that work could serve as an important contribution to that commemoration, as international mechanisms for cooperation had evolved considerably over the past 50 years. In that regard, the Working Group noted that its work could provide a significant contribution to the 2018 "UNISPACE+50" thematic cycle of the Committee on the Peaceful Uses of Outer Space and its Scientific and Technical Subcommittee and Legal Subcommittee.
- 6. The Working Group recalled that categorizing mechanisms for international cooperation would lead to a better understanding of the different approaches to cooperation in space activities taken by States and international organizations and that the findings would assist the Working Group in identifying the types of mechanisms being used and their content. An analysis of the findings would allow the Working Group to consider how its work could contribute to the further strengthening of international cooperation in the peaceful exploration and use of outer space.

- 7. In that regard, the Working Group noted with satisfaction conference room paper A/AC.105/C.2/2015/CRP.15, which had been prepared by the Secretariat, in close consultation with the Chair of the Working Group on the basis of contributions made by States members and permanent observers of the Committee to the work of the Working Group and of additional research. The Working Group agreed that the document constituted a sound basis on which to further develop its work.
- 8. In the course of the work of the Working Group during the present session of the Subcommittee, several examples of international mechanisms for cooperation were observed, ranging from the use of bilateral and multilateral agreements and memorandums of understanding to the use of regional and interregional cooperation and coordination mechanisms and other international cooperation mechanisms for specific space activities. States members of the Committee presented the lessons learned about international cooperative mechanisms, in the form of case studies, reflecting on the reasons for selecting certain cooperative mechanisms for certain cooperative objectives. The Chair of the Working Group and the Secretariat were requested to continue analysing contributions made to the work of the Working Group and to the consideration of the present agenda item of the Subcommittee, with a view to further developing the content of conference room paper A/AC.105/C.2/2015/CRP.15.
- 9. The Working Group agreed to the following:
- (a) States members of the Committee on the Peaceful Uses of Outer Space and international intergovernmental and non-governmental organizations having permanent observer status with the Committee should again be invited by the Secretariat to provide examples and information on the mechanisms for international cooperation they utilized for space cooperation, in order to develop an understanding of the range of collaborative mechanisms employed by States and international organizations and the circumstances in which certain classes of mechanisms were favoured by States over other mechanisms;
- (b) States members and permanent observers of the Committee were encouraged to include in their responses examples of case studies and lessons learned, as appropriate, so that the Working Group could get an understanding of why certain cooperative mechanisms were selected for certain types of international cooperation, how the choice was made between legally binding and non-legally binding mechanisms and between formal and informal arrangements, and why, for example, bilateral agreements for space cooperation were structured as they were;
- (c) States members and permanent observers of the Committee might again refer to the set of questions contained in the report of the Chair of the Working Group included in the report on the fifty-third session of the Legal Subcommittee (A/AC.105/1067, annex III, para. 10).
- 10. On the basis of responses provided by States members and permanent observers of the Committee, the Secretariat, in close consultation with the Chair of the Working Group, was requested to update conference room paper A/AC.105/C.2/2015/CRP.15, including by adding a new chapter on lessons learned, and to make available a revised version of that conference room paper for consideration and further guidance by the Working Group at the fifty-fifth session of the Subcommittee, to be held in 2016.