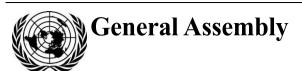
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Committee on the Peaceful Uses of Outer Space Sixty-first session Vienna, 20–29 June 2018

# **Draft report**

Addendum

## **Chapter III**

### Recommendations and decisions

#### H. Space and climate change

- 1. The Committee considered the agenda item entitled "Space and climate change", in accordance with General Assembly resolution 72/77.
- 2. The representatives of Brazil, Canada, France, India, Japan and the United States made statements under the item. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
- 3. The Committee underscored the importance of continued commitment by the global community to tackling climate change as that was one of the most pressing issues for humankind and the Earth and adversely affected large segments of the world population, in particular in developing countries, and emphasized the growing value of space-based technology in providing critical climate data to better understand and mitigate climate change and to monitor implementation of the Paris Agreement.
- 4. The Committee noted that space-based observations could contribute to the understanding of climate change through the monitoring of essential climate variables, and took note of the benefits of the use of Earth observations to track changes in sea level, carbon dioxide concentrations, sea ice depletion and terrestrial snow mass, and to gather data on remote areas such as deserts, oceans, the polar caps and glaciers.
- 5. The Committee noted the usefulness of satellite observations and Earth observation applications, and noted that an integrated perspective on the changing environment of the Earth required combining and complementing space-derived data with ground-based, in situ observations (ground-based and sea-based observations).
- 6. The Committee also noted that global efforts to monitor climate change would benefit from the incorporation of open data policies, Earth observation applications that transform raw data into information of critical importance to people and societies, and the sharing of data and information with the most vulnerable regions of the world.







- 7. The Committee noted the importance of bilateral partnerships in climate change-related activities in the area of Earth observation, such as the efforts undertaken by France and India to better understand the life cycle of convective systems in tropical regions; the France/Israel "Vegetation and environment monitoring on a new microsatellite" mission (Venµs mission) to track the cycle of vegetation and the impact of climate change on vegetation; the upcoming CNES/DLR Merlin mission to track methane emissions; the upcoming CNES/UK Space Agency MicroCarb mission to map carbon dioxide sources; and the NASA/DLR/ESA collaboration to track the Earth's water movement and to extend the data series related to the Gravity Recovery and Climate Experiment mission (GRACE).
- 8. The Committee further noted a number of space programmes at the national level that placed high priority on building, launching and operating Earth-observation satellite systems to track the manifestations and effects of climate change.
- 9. The Committee noted that it was important to support international cooperation in the use of Earth observation, including long-established organizations such as WMO, the Committee on Earth-Observing Satellites, the Coordination Group for Meteorological Satellites, the Global Climate Observing System and the Group on Earth Observations.
- 10. The Committee noted that the Space Climate Observatory, an initiative launched by CNES and agreed upon by a number of space agencies in the declaration entitled "Towards a space climate observatory", adopted at the One Planet Summit held in Paris on 11 December 2017, would allow for the rational use of space-based data to monitor the state of the Earth and that at that Summit space agencies and the Office for Outer Space Affairs had been invited to contribute to its development.
- 11. The view was expressed that there was a relationship between space weather and climate change, as space weather was an important issue with regard to the long-term sustainability of outer space activities and posed a threat to the terrestrial and space infrastructure necessary for the proper functioning of the technologies currently used by society, including for Earth observation satellites and their use for monitoring climate change.

#### I. Use of space technology in the United Nations system

- 12. The Committee considered the agenda item entitled "Use of space technology in the United Nations system", in accordance with General Assembly resolution 72/77.
- 13. The representatives of India, Indonesia and Nigeria made statements under the item. During the general exchange of views, further statements relating to the item were made by representatives of other member States.
- 14. The Committee welcomed with appreciation the report of the Secretary-General on coordination of space-related activities within the United Nations system: directions and anticipated results for the period 2018–2019 a United Nations that delivers (A/AC.105/1179). The Committee welcomed the focus of the report on reinforcing synergies in efficiency measures in the use of space science, technology and applications within the United Nations system in support of global development.
- 15. The Director of the Office for Outer Space Affairs, in her capacity as the Chair of UN-Space, made a statement informing the Committee about the thirty-seventh session of UN-Space, held in Geneva in August 2017. In that regard, the Committee took note of the report of UN-Space on its thirty-seventh session (A/AC.105/1143).
- 16. The Committee noted that in line with the agreement of UN-Space made at its thirtieth session, held in Geneva in March 2010 (A/AC.105/960, paras. 11 and 14), UN-Space had reviewed its reporting structure and agreed that reports of the Secretary-General on the coordination of space-related activities within the United

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Nations system and special reports of UN-Space should continue to be issued biennially, in alternating years. The Committee also noted the agreement of UN-Space that the focus of its special report to be presented to the Committee at its sixty-second session, in 2019, would be decided at the thirty-eighth session of UN-Space, in 2018.

- 17. The Committee took note of the agreement of UN-Space to organize a workshop, to be held in New York in the second half of 2018, to consider public/private partnership models and cooperation with the private sector. The Committee noted the plans of the Office for Outer Space Affairs to organize the workshop in conjunction with the consideration of the item on international cooperation in the peaceful uses of outer space by the Special Political and Decolonization Committee of the General Assembly.
- 18. The Committee noted with satisfaction that the thirteenth open session of UN-Space, entitled "The transformative potential of space technology for development: approaches and opportunities in the United Nations system", was held on 24 August 2017. The session was moderated by the Director of the Office for Outer Space Affairs and featured the following panellists: Assistant Director-General for General Management, in charge of the Health Systems and Innovation cluster of WHO; Director of the United Nations Office for Disarmament Affairs, Geneva Branch, and Deputy Secretary-General of the Conference on Disarmament; Chief of the Space-based Observing System Division, Space Programme Office, WMO; Acting Head of the Space Services Department, Radiocommunication Bureau, ITU; and the representative of the executive secretariat of ICG.
- 19. The Committee noted that UN-Space open sessions, including the UN-Space high-level panel entitled "United Nations: reinforcing synergies for UNISPACE+50 and beyond" held on 21 June 2018 as part of the UNISPACE+50 high-level segment, provided an opportunity for member States to better understand the work of participating United Nations entities. The Committee took note of the joint statement of UN-Space issued in connection with that high-level panel (A/AC.105/2018/CRP.24).
- 20. The Committee noted with appreciation the increasing bilateral cooperation of the Office for Outer Space Affairs within the United Nations system, including with ICAO through a series of aerospace symposiums; with the United Nations Development Programme through a memorandum of understanding for increased use of space technology for sustainable development; with the United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women) through an expert meeting on space for women held in New York in October 2017; and with the Office for Disarmament Affairs through the holding on 12 October 2017 of a joint panel discussion by the Disarmament and International Security Committee (First Committee) and Special Political and Decolonization Committee (Fourth Committee) of the General Assembly.
- 21. The Committee noted with satisfaction the action taken by the Economic and Social Commission for Asia and the Pacific to adopt a plan of action for space applications for the Asia-Pacific region for the period 2018–2030.
- 22. The Committee took note with satisfaction of the large number of outreach activities carried out at the regional level for building capacity through education and training in using space science and technology applications for sustainable development. The Committee noted with appreciation the role played in space-related education by the regional centres for space science and technology education, affiliated to the United Nations.
- 23. The view was expressed that the Office for Outer Space Affairs should contact member States through their permanent missions to the United Nations in Austria, to call for more support by member States for the regional centres.
- 24. The Committee took note of the cooperative efforts by Member States and United Nations entities to promote the use of space technology, including in drought,

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land degradation and desertification monitoring and in disaster risk reduction and emergency response operations, in order to resolve global issues.

25. The Committee requested the Office for Outer Space Affairs to further promote, through United Nations entities, the increased practical application of space science and technology for development in view of the catalytic role that they could play in the implementation of the 2030 Agenda for Sustainable Development.

#### J. Future role of the Committee

- 26. The Committee considered the agenda item entitled "Future role of the Committee", in accordance with General Assembly resolution 72/77.
- 27. The representatives of China, Indonesia, Israel and the Russian Federation made statements under the item. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
- 28. The Committee agreed that it served, together with its two subcommittees, and supported by the Office for Outer Space Affairs, as a unique common platform for promoting international cooperation in the exploration and peaceful uses of outer space on a global scale.
- 29. The view was expressed that the review of principles and norms of international law could be decisive in shaping a common understanding about the future regulation of space activities and the arrangements that would be a real help in meeting new challenges in outer space. However, the Committee was yet to start actual work in that regard. This illustrated how the Committee was losing its competitive edge while renowned national educational and research establishments were defining new trends in the interpretation of existing principles and norms and the development of new models of so-called global governance of outer space activities.
- 30. The view was expressed that the deeply contradictory situation of the Committee resulted from a lack of commitment to comprehending topical themes of practical significance to safety and security in outer space and to focusing attention on the connections between various aspects of safety and security. The delegation expressing that view was also of the view that safety and security in outer space was a matter relevant to all participants in space activities and to humankind as a whole, and that the Committee therefore bore a tremendous responsibility for arriving at comprehensive arrangements.
- 31. The view was expressed that it was important that the Committee and its subsidiary bodies coordinated their efforts to avoid duplication of work, given that they needed to enhance their common output. They should formulate a common agenda and further strengthen the governance role played by the Committee as a whole in promoting international cooperation and strengthening the rule of law in outer space activities. It was important to avoid the fragmentation of international space law and to ensure that the Committee properly addressed key matters, such as new legal issues pertaining to current and future outer space activities; the increasing activity of space actors, including non-governmental entities; and the strengthening of national and regional capabilities, notably through the regional centres for space science and technology education, affiliated to the United Nations.
- 32. The view was expressed that the Committee should adapt to new realities and preserve its position as the focal point for communication and interaction between States on matters relating to the regulation of space activities. At the same time, it should find remedies for inefficient practices and be more proactive in addressing important issues on its agenda that relate, first and foremost, to the cross-cutting relationship between the safety and security of outer space activities.
- 33. The view was expressed that the Committee should remain a facilitator for coordination between countries and that the Committee and its subcommittees should therefore coordinate their efforts better. The Committee should address matters

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relating to the commercial activities of private actors, not least because regulatory frameworks and standards needed to be enhanced so that they better supported national space activities and protected long-term investments in the space sector.

- 34. Some delegations expressed the view that several measures to improve the organization of work of the Committee and its subcommittees should be thoroughly considered as part of strengthening the governance role of the Committee as a whole. It was of paramount importance to modernize the working methods of the Committee as an intergovernmental platform so that it would be in a stronger position to cope with the scientific, technical, policy and legal dimensions of outer space activities in the future.
- 35. The Committee noted that the deliberations on the future role of the Committee were closely related to the overall consideration of UNISPACE+50 and the development of a "Space2030" agenda. Further consideration should be aimed at strengthening the governance role of the Committee and its subcommittees, supported by the Office for Outer Space Affairs, and issues pertaining to the Committee's method of work should be assessed carefully in order to improve its overall work and output as an intergovernmental platform.

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