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**Committee on the Peaceful
Uses of Outer Space**
Scientific and Technical Subcommittee
Sixty-first session
Vienna, 29 January–9 February 2024

Draft report

Addendum

II. Space for sustainable development: technology and its applications, including the United Nations Programme on Space Applications

1. In accordance with General Assembly resolution 78/72, the Subcommittee considered agenda item 5, entitled “Space for sustainable development: technology and its applications, including the United Nations Programme on Space Applications”.

2. The representatives of Argentina, Austria, Brazil, Canada, China, Cuba, France, India, Indonesia, Japan, Nigeria, Paraguay, the Russian Federation, Rwanda, Ukraine, the United Arab Emirates, the United States and Venezuela (Bolivarian Republic of) made statements under agenda item 5. The representative of the European Union, in its capacity as permanent observer, made a statement on behalf of the European Union and its member States. Additional statements were made by the observers for the Economic and Social Commission for Asia and the Pacific, SKAO and PSIPW. During the general exchange of views, statements relating to the item were made by representatives of other member States.

3. The Subcommittee had before it the following:

(a) Report on the United Nations/Austria Symposium on Space for Climate Action, held in Graz, Austria (online), from 12 to 14 September 2023 ([A/AC.105/1299](#));

(b) Report on the third Space4Water stakeholder meeting, held in Vienna on 24 and 25 October 2023 ([A/AC.105/1300](#));

(c) Report on the United Nations/International Astronautical Federation Workshop on Space Technology for Socioeconomic Benefits, on the theme “Challenges and capacity-building opportunities for emerging space nations”, held in Baku from 29 September to 1 October 2023 ([A/AC.105/1301](#));

(d) Report on the United Nations/Canada Space for Women expert meeting on the theme “Building capacity to promote and advance gender equality in the space sector”, held in Montreal, Canada, from 30 October to 3 November 2023 ([A/AC.105/1309](#));



(e) Conference room paper submitted by the Russian Federation entitled “Draft General Assembly resolution ‘Space science and technology for promoting peace’” (A/AC.105/C.1/2024/CRP.7);

(f) Conference room paper submitted by the Russian Federation entitled “Explanatory note to the draft resolution entitled ‘Space science and technology for promoting peace’” (A/AC.105/C.1/2024/CRP.28).

4. The Subcommittee heard the following scientific and technical presentations:

(a) “Revolutionizing traceability in agro-forest commodities: integrating GNSS technology for European Union Deforestation Regulation compliance in the coffee and timber industries”, by the representative of Austria;

(b) “Technological development in the space sector: political and institutional set-up in Brazil”, by the representative of Brazil;

(c) “The Open Universe Initiative”, by the representative of Brazil;

(d) “Results of the 2023 Space4Women expert meeting”, by the representative of Canada;

(e) “Application of Fengyun meteorological satellites for sustainable development”, by the representative of China;

(f) “Remote sensing applications for supporting the Sustainable Development Goals in Indonesia”, by the representative of Indonesia;

(g) “The development of the space industry in the Republic of Kazakhstan”, by the representative of Kazakhstan;

(h) “Space systems production in Kazakhstan”, by the representative of Kazakhstan;

(i) “Leveraging the space value chain for sustainable development”, by the representative of the Philippines;

(j) “NEMO-HD satellite data and digital twin models to support the sustainable management of ecosystems and related multi-hazard risks”, by the representative of Slovenia;

(k) “Overview of the Space Analytics and Solution Programme”, by the representative of the United Arab Emirates;

(l) “Space technologies for tackling sustainability challenges”, by the representative of the United Arab Emirates;

(m) “Showcasing the benefits of space at the Summit of the Future: opportunity to advance the peaceful and sustainable use of outer space”, by the observers for CANEUS International;

(n) “Leveraging digital and geospatial innovations for building capacity in Asia and the Pacific”, by the observer for the Economic and Social Commission for Asia and the Pacific;

(o) “Space4Water”, by the representative of the Office for Outer Space Affairs.

5. The Subcommittee noted the value of space technology and its applications, as well as of space-derived data and information, for sustainable development, including in the areas of improving the formulation and subsequent implementation of policies and programmes of action relating to environmental protection, land and water management, the development of degraded land and wastelands, urban and rural development, marine and coastal ecosystems, health care, climate change, disaster risk reduction and emergency response, energy, infrastructure, navigation, transport and logistics, rural connectivity, seismic monitoring, natural resource management, snow and glaciers, biodiversity, agriculture and food security.

6. In the course of the discussions, delegations reviewed national, bilateral, regional and international programmes on space technology and its applications for sustainable development, including in terms of improving the formulation and subsequent implementation of policies and programmes related to achieving the Sustainable Development Goals, the “Space2030” Agenda and regional instruments such as the African Union’s Agenda 2063 and the Asia-Pacific Plan of Action on Space Applications for Sustainable Development (2018–2030).

7. The Subcommittee noted the importance of the Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries (General Assembly resolution 51/122, annex), which stated that international cooperation in the exploration and use of outer space for peaceful purposes should take particular account of the needs of developing countries and should be conducted both on an equitable and mutually acceptable basis and in modes that are considered most effective and appropriate by the participating countries.

8. The Subcommittee noted that the Committee and its subcommittees, with the support of the Office for Outer Space Affairs, had a fundamental role to play in promoting international cooperation and capacity-building in support of socioeconomic development, in disseminating information and knowledge on space applications, in empowering women and young people in the space sector, and in removing barriers and advancing inclusive and equitable development in space in support of people with disabilities.

9. The Subcommittee noted with appreciation that, since its previous session, cash and in-kind contributions, including the provision of staff on a non-reimbursable loan basis, had been offered for the activities of the Office by the following donors: APSCO; Austrian Space Forum; Brazilian Air Force; CSA; Center for Applied Space Technology and Microgravity (ZARM), University of Bremen, Germany; China National Space Administration (CNSA); City of Vienna; European Commission; ESA; Geneva Digital Health Hub; Government of Austria; Government of China; Government of Finland; Government of France; Government of Germany; Government of Japan; Government of the Republic of Korea; Government of Switzerland; Government of the United Kingdom; Government of the United States (Department of State); IAF; Japan Aerospace Exploration Agency (JAXA); Keldysh Institute of Applied Mathematics of the Russian Academy of Sciences; Kyushu Institute of Technology, Japan; Ministry of Emergency Management of China; National Aeronautics and Space Administration (NASA); PSIPW; Sapienza University of Rome; SWF; United Kingdom Space Agency; and United Nations Development Programme.

10. The Subcommittee noted that the United Nations Programme on Space Applications had enabled national programmes on space applications to disseminate information and knowledge to a wider audience and achieve greater development.

11. The Subcommittee noted that the United Nations Programme on Space Applications continued to implement the following programme and activities, including the Access to Space for All initiative, which was focused on developing the capacity of Member States to access the benefits of space:

- (a) Drop Tower Experiment Series;
- (b) Hypergravity Experiment Series;
- (c) United Nations/Japan Cooperation Programme on CubeSat Deployment from the International Space Station Japanese Experiment Module (KiboCUBE), the “Kibo-Robot Programming Challenge” and “KiboCUBE Academy” online lectures;
- (d) United Nations/China cooperation on the utilization of the China Space Station;
- (e) Cooperation programme on the utilization of the Vega-C launcher;
- (f) “ISONscope” telescope provision cooperation programme;

- (g) The Payload Hosting Initiative;
- (h) United Nations/Airbus Defence and Space cooperation on accessing space using the Bartolomeo platform;
- (i) “Post-Graduate Study on Nanosatellite Technology” fellowship programme, carried out in collaboration with the Kyushu Institute of Technology.

12. The Subcommittee also noted the highlights of the activities of the regional centres for space science and technology education, affiliated to the United Nations.

13. The Subcommittee noted that the activities of the Office included the United Nations/Austria Symposium on Space for Climate Action, which reviewed experiences and best practices in mitigating and adapting to climate change and supporting sustainability on Earth; the third Space4Water stakeholder meeting, which was focused on increasing understanding of the diverse nature of water-related challenges faced by communities globally; the United Nations/International Astronautical Federation Workshop on Space Technology for Socioeconomic Benefits, which was aimed at addressing challenges and capacity-building opportunities for emerging space nations; and the United Nations/Canada Space for Women expert meeting, which was aimed at advancing gender equality and developing the gender mainstreaming toolkit for the space sector.

14. On the margins of the session, informal consultations were held on the proposal contained in conference room paper A/AC.105/C.1/2024/CRP.7.

15. Some delegations expressed the view that the draft resolution presented elements of importance to member States, emphasizing fundamental principles such as the peaceful use of outer space, the promotion of international cooperation and the work of the Office to continue promoting cooperation among States.

16. The view was expressed that the growing trend of using large constellations of small commercial satellites and related ground-based infrastructure to support military operations posed a risk to the safety of space operations and the long-term sustainability of outer space.

17. Some delegations expressed the view that the draft resolution included paragraphs that referred to issues that should be dealt with in the context of the United Nations disarmament platforms. The delegations expressing that view were also of the view that some paragraphs contained ambiguous concepts or wording not entirely aligned with existing international space law.

18. Some delegations expressed the view that the draft resolution as submitted would not be endorsed through consensus and that the issues raised needed further consideration, including with regard to the resolution’s aim and purpose, under the agenda item of the Committee on the Peaceful Uses of Outer Space entitled “Ways and means of maintaining outer space for peaceful purposes”.

19. In accordance with paragraph 10 of General Assembly resolution 78/72, the Working Group of the Whole was reconvened, with Prakash Chauhan (India) as Chair.

20. At its [XX]th meeting, on [XX] February, the Subcommittee endorsed the report of the Working Group of the Whole, which is contained in annex I to the present report.
