



**Committee on the Peaceful
Uses of Outer Space
Scientific and Technical Subcommittee
Fifty-ninth session
Vienna, 7–18 February 2022****Draft report****IV. Matters relating to remote sensing of the Earth by satellite,
including applications for developing countries and
monitoring of the Earth's environment**

1. In accordance with General Assembly resolution [76/76](#), the Subcommittee considered agenda item 7, entitled “Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth’s environment”.
2. The representatives of Argentina, Canada, China, France, India, Indonesia, Iran (Islamic Republic of), Israel, Italy, Japan, Kenya, Mexico, the Netherlands, Panama, the Russian Federation, South Africa, Thailand and the United States made statements under agenda item 7. During the general exchange of views, statements relating to the item were also made by representatives of other member States.
3. The Subcommittee heard the following scientific and technical presentations:
 - (a) “Monitoring mangrove forests in the Philippines using remote sensing”, by the representative of the Philippines;
 - (b) “Advances in resource mapping from space: development of Earth observing dashboards”, by the representative of the Islamic Republic of Iran;
 - (c) “Indigenous mapping workshop and satellite Earth observation”, by the representatives of Canada;
 - (d) “Open access to Italian Earth observation satellite data: the ASI open call initiative”, by the representative of Italy.
4. In the course of the discussions, delegations reviewed national, bilateral, regional and international programmes on remote sensing, in particular in the following areas: monitoring the broader impacts of climate change; land use and land cover monitoring; natural resource management; monitoring of forests and wildfires; detection of illegal fishing; monitoring of oil pipelines and illegal extraction; monitoring of protected marine areas and marine species; environmental monitoring; monitoring of the atmosphere, greenhouse gases and air pollution; urban planning; disaster management support; telehealth and epidemiology; watershed monitoring and development planning; irrigation infrastructure assessment; agriculture,



horticulture and crop production forecasting; desertification monitoring; snow and glacier monitoring; and monitoring of oceans, glacial lakes and other water bodies.

5. Some delegations expressed the view that remote sensing of the Earth was important for advancing the Sustainable Development Goals. The integration of Earth observation data with statistical data systems and geospatial data could serve the compilation and monitoring of many Sustainable Development Goal indicators, and collaboration within dedicated international expert bodies, such as the Committee on Earth Observation Satellites or the Group on Earth Observations, remained useful in that context.

6. Some delegations expressed the view that remote sensing served the monitoring of the impact of COVID-19 and that platforms for sharing data derived from Earth observation were relevant and useful.

7. Some delegations expressed the view that, while national remote sensing activities and missions were conducted primarily for governmental purposes, providing open and cost-free access to satellite data and images, as well as direct satellite downlinks to international partners, should be encouraged, and that the use of remote sensing technology applications to support societal and commercial development should also be encouraged and promoted.

8. Some delegations mentioned the importance of capacity-strengthening initiatives in improving, expanding and facilitating access to information and data obtained from activities involving the use of remote sensing. In that regard, the role of web-based educational solutions was emphasized.

9. The view was expressed that the policies covering remote sensing data-sharing and the expansion of international cooperation for the non-discriminatory use of satellite data by all countries were important factors to consider in order to benefit society.

10. The view was expressed that the international charter of the Space Climate Observatory, which was scheduled to be put into force on 1 September 2022, would enable the Space Climate Observatory to strengthen the network of countries and international organizations tackling climate change.

VIII. Space weather

11. At the 970th meeting of the Subcommittee, on 16 February, the Rapporteur of the Expert Group on Space Weather presented the progress made by the Expert Group during the meetings it had held on the margins of the current session of the Subcommittee.

12. The Expert Group highlighted the set of six high-level recommendations contained in the report entitled “Draft final report of the Expert Group on Space Weather: towards improved international coordination for space weather services” ([A/AC.105/C.1/L.401](#)) as a mechanism through which the Subcommittee might advance the goal of improved global resilience against the threat of space weather, with the goal of facilitating the implementation of the space weather-related Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee, namely, guidelines B.6 and B.7. In particular, recommendation 1, on improving communication, cooperation and coordination between key stakeholders in the space weather domain, such as COSPAR, the International Space Environment Service and WMO, was considered important.

13. The Expert Group also noted the conference room paper entitled “Non-consensus paper of the Expert Group on Space Weather on the survey of the state of Member State preparedness, and current and future activities and needs for space weather impact mitigation” ([A/AC.105/C.1/2022/CRP.10](#)), which had been updated following further input from States members of the Committee and their

experts over the past year to inform and potentially benefit Member States as they continued their work on space weather.

14. The Subcommittee expressed its appreciation for the eight years of work of the Expert Group and endorsed the draft final report and the recommendations contained therein. The Subcommittee agreed to consider the draft final report ([A/AC.105/C.1/L.401](#)) as a final report of the Expert Group and to issue the report under the symbol [A/AC.105/C.1/122](#).

XI. Future role and method of work of the Committee

15. In accordance with General Assembly resolution [76/76](#), the Subcommittee considered agenda item 14, entitled “Future role and method of work of the Committee”.

16. The representatives of China, Japan, the Netherlands, the Russian Federation and the United Kingdom made statements under agenda item 14. During the general exchange of views, statements relating to the item were made by representatives of other member States.

17. The Subcommittee had before it the note by the Secretariat on the governance and method of work of the Committee and its subsidiary bodies ([A/AC.105/C.1/L.384](#)).

18. The Subcommittee noted that the Committee and its Subcommittees served as a unique platform for international cooperation in the peaceful uses of outer space.

19. The view was expressed that the Committee should strengthen its interaction with relevant international organizations through appropriate means to increase the awareness of Member States of the relevant processes and to prevent the fragmentation of global governance in outer space.

20. The view was expressed that the discussion of important topics on the space agenda should be carried out in the framework of the Committee and that transferring such discussions to parallel platforms would have a negative effect on the role of the Committee.

21. The view was expressed that the Committee should focus exclusively on promoting the peaceful uses of outer space, while matters of preventing escalation and conflict that could arise from the use of weapons against space systems should be dealt with in the United Nations disarmament platforms.

22. The view was expressed that it was important to further strengthen the intergovernmental status of the Committee and that a dialogue with commercial operators and scientific and academic circles should be conducted in such a way as to avoid any form of interference in the work of the Committee.

23. The view was expressed that the Committee should consider new and innovative ways to best engage relevant stakeholders, such as industry, academia and civil society actors, in its activities.

24. The view was expressed that the Committee should be more proactive in responding to emerging challenges, including issues such as satellite megaconstellations in low Earth orbits, the impact of private business activities on outer space governance and the sustainable development of space technology services.

25. The view was expressed that new items should be added to the agenda of the Committee and its Subcommittees only when other items were removed from the agenda.

26. The view was expressed that all countries should be able to participate in the work of the Committee and that there should be no politicization of participation in the work of the Committee.

27. The view was expressed that States members of the Committee should strictly follow the existing procedures and rules while participating in international mechanisms established under the auspices of the Office for Outer Space Affairs, including on matters such as the admission of new members to ICG.

28. The view was expressed that qualified international, regional and non-governmental organizations with permanent observer status with the Committee should abide by recognized international law and norms of international relations.
