Committee on the Peaceful Uses of Outer Space
Sixty-sixth session
Vienna, 31 May–9 June 2023
Item 6 of the provisional agenda*
Report of the Scientific and Technical Subcommittee on its sixtieth session

Working Group on the Long-term Sustainability of Outer Space Activities: ideas for the workshop in 2024

Conference room paper by the Chair of the Working Group on the Long-term Sustainability of Outer Space Activities

At the sixtieth session of the Scientific and Technical Subcommittee, the Working Group on the Long-term Sustainability of Outer Space Activities agreed that members of the Working Group would be asked to send suggestions for specific topics for the workshop to take place in 2024 to the Chair and the secretariat and that those could be discussed further by the Working Group during the Working Group’s meetings at the sixty-sixth session of the Committee, in June 2023 (A/AC.105/1279, annex II, para. 10).

The following is a compilation of key ideas received, for further consideration by the Working Group.¹

Suggested topics for the workshop

- How the Guidelines enhance space utilization and bring more value for people in emerging space countries
- International cooperation in engineering and legal studies conducted by higher education institutions to increase the awareness of future space agency managers and about long-term sustainability as early as during their university education.
- The role of regional space agencies in capacity-building. In the context of the emergence of the African Space Agency, the Latin American Space Agency and the increased role of the Association of Southeast Asian Nations (ASEAN) in Asia, we can reflect on how regional integration in the space sector could

¹ A/AC.105/L.333.

A non-paper with ideas received was compiled and circulated to Working Group members in the intersessional period. The present conference room paper contains the same ideas that were in the non-paper, as well as additional input that was received after the non-paper was circulated. The existing list does not preclude the proposal of new suggestions nor the merging of related or overlapping ideas.
support efficient capacity-building initiative through pooling of resources and expertise.

- The role of companies in assisting the development of local space programmes: There are several examples where companies have invested resources to support the training of foreign experts in countries where they won contracts with public or private partners.

- Design and operation of space objects
- Space situational awareness
- Capacity-building in space situational awareness
- Space situational awareness, including how to access available data and how to use those data
- Best practices in national response to orbital debris incidents
  - Capacity-building for new satellite operators on conjunction assessment. With the emergence of many new satellite owners and operators, both commercial and public, many have little knowledge and awareness of the needs for conjunction assessment analysis or have a smaller and more automated operational environment. How can experienced actors contribute to awareness-raising and competence-building? Potential panellists can range from satellite operators, policymakers to space situational awareness data providers. Relevant questions to address within this topic include: what capacity-building activities should be established for emerging satellite operators? How do we establish a common understanding and share practices? How can we raise awareness of the need for conjunction assessment analysis? On what essential aspects of conjunction assessment is it vital to have a common understanding? How can smaller operators gain experience? How can capacity-building be tailored for smaller actors with more automated operation?

- Issues related to space debris remediation, including active debris removal, with the aim of raising awareness and building capacity for the long-term sustainability of space activities through the exchange of best practices. Examples to be explored could include research and development in the field of active debris removal and national guidelines for satellites carrying out on-orbit servicing that prescribe requirements to ensure safe, secure and transparent implementation of on-orbit servicing.

- Detection of, and risk mitigation from, falling space debris from launches and uncontrolled re-entries
- Raising awareness for implementing cyber safety and resiliency measures in space missions
- Incorporating sustainability into national regulations
- States experiences of national coordination
- Licensing and supervising national space activities
- Registration of space objects
- Sharing recommendations on implementation of Guideline A.5 – Enhance the practice of registering space objects
- Best practices in the development of national space registries
- Challenges in implementing the adopted Guidelines
- Identifying and studying challenges, with a view to developing eventual new guidelines
- Satellite communications for society. Satellite communications are an indispensable component of everyday life on Earth allowing people to access
basic social services, education and medical care in remote parts of the planet, while also having the fundamental humanitarian function of keeping disaster sites connected and ensuring safety-related communication. When discussing the preservation of space for society, it is essential to emphasize the contribution that satellite communications make to the achievement of the Sustainable Development Goals.

- A focus group on space science and technologies for Indigenous peoples knowledge and practices should be created with related dedicated session(s) to take place at the workshop in 2024.

Other ideas related to the organization of the workshop

- The workshop should be held in a hybrid format, so that technical experts from capitals could also participate.
- Sharing best practices and the results of technological developments with non-governmental organizations and the private sector during the workshop will facilitate international cooperation and rulemaking to ensure long-term sustainable space activities.
- The workshop should not be aimed only at raising awareness of long-term sustainability activities and supporting capacity-building, but also at identifying and studying challenges, with a view to developing eventual new guidelines for the long-term sustainability of outer space activities.
- Items and case studies selected for consideration during the workshop should demonstrate their economic and societal relevance for the Member States, taking as a reference the Sustainable Development Goals.
- Capacity-building is mainly focused on skills and processes at initial development stages for emerging space nations and therefore should not be reduced to the notion of technology transfer.
- Dedicated sessions/time slots dedicated to networking activities and informal exchanges of needs would be beneficial, as this would greatly facilitate the participation of institutions and companies.
- A round-table on the topic of international cooperation in engineering and legal studies conducted by higher education institutions would help to give recognition of the role higher education institutions play in capacity-building activities, alongside space agencies.
- If holding dedicated discussions on space situational awareness, a structure for the allotted three-hour timeslot, could be:
  - One hour on information-sharing on conjunction assessment. This could cover mechanisms and protocols for reporting uncontrolled re-entries/launch failures/satellite malfunctions that could impact nations other than the launching states;
  - One hour on space-situational tools for on-orbit collision avoidance; and
  - One hour on registration (in support of space situational awareness).
- There is potential to have a one-day side event prior to the workshop that could provide a “networking” opportunity for interested States to meet with space situational awareness experts in various areas and have one-to-one conversations on specifics.