Committee on the Peaceful Uses of Outer Space 66th Session



Japan Item 6 – "Report of the Scientific and Technical Subcommittee on its sixty session"

Chair, Distinguished delegates,

For Japan, the Scientific and Technical Subcommittee (STSC) provides a unique and important platform to promote international cooperation in the field of outer space. Japan would like to express our sincere appreciation to the Chair of the Subcommittee, Mr. Juan Francisco Facetti, for his excellent work.

Chair,

Given the rapid evolution of the outer space environment and of related technologies, the guidelines for long-term sustainability (LTS) of outer space activities are increasingly becoming a relevant tool to tackle the proliferation of space debris, the increasing complexity of space operations, and the increasing risks of collision and interference that affect the sustainability of space activities.

Recalling the previous session of the STSC, Japan extends our sincere appreciation for the efforts made by the LTS 2.0 Working Group and its Chair, Mr. Umamaheswaran. Japan's views have been well reflected in the conference room paper (A/AC.105/C.1/2023/CRP.31) that was jointly submitted by Canada, Italy, Luxembourg, New Zealand, the United Kingdom and the United States of America. This CRP highlighted the importance of ensuring that consideration of possible areas for new guidelines does not disrupt the balanced dialogue on all three elements of the Working Group's method of work and the consensus-based work plan.

Chair,

Japan is conducting research and developing technologies related to the mitigation and remediation of space debris. One example is an open tool developed by JAXA to aid collision avoidance operation by satellite operators known as *Risk Avoidance assist tool based on debris Collision proBaBIliTy* (RABBIT). By providing training of this vital tool, JAXA has been able to assist approximately 44 global organizations to sure safe flight

operations of more than 120 satellites.

Moreover, Japan is investigating different ways to remove large-size space debris. JAXA is currently cooperating with Japanese industry in research and development of active debris removal (ADR) under the Commercial Removal of Debris Demonstration program (CRD2). The first phase of this project is currently underway and will demonstrate key ADR technology such as non-cooperative rendezvous, proximity operation and inspection of a discarded Japanese rocket upper stage.

Respecting the need for considerable transparency and promoting confidence building in licensing On-Orbit Servicing (OOS) missions, the Government of Japan has developed domestic guidelines for the operation of a spacecraft designed to perform OOS, based on the technical and legal requirements submitted by an expert working group. Through the implementation of the guidelines, Japan will ensure that OOS missions are conducted in a safe and transparent manner, avoiding miscalculations and misunderstandings, and in compliance with international rules including the Outer Space Treaty and the UN Convention on Registration of Objects Launched into Outer Space.

Chair,

The topic of Space Traffic Management (STM) is continually being discussed in Japan as it pertains to the space related activities of Japanese private entities in the near future. In March 2022, Japan published the *Midto Long-term Policy on Efforts for Rule-Making on the Use of Earth Orbit* with a focus on collision avoidance, Space Situation Awareness, debris mitigation and large constellations.

Chair,

Considering the increasing number of space operations, it is important to monitor solar activities and the space environment as a whole for the safety and sustainability of our outer space activities. The National Institute of Information and Communications Technology (NICT) has made continuous contribution to the formulation of an international space weather framework,

2/3 Japan

including the publication of the "Final report of the Expert Group on Space Weather: towards improved international coordination for space weather services" (A/AC.105C. 1/L.401) in 2022.

Chair,

Japan recognizes that STSC has been the driver of international cooperation in the peaceful uses of outer space. We encourage all members and observers of this Committee to be part of this movement. For its part, Japan will continue its efforts in research, exploration and international cooperation for the benefit of humankind.

Thank you for your attention.

3/3