Committee on the Peaceful Uses of Outer Space
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Japan

Japan, Agenda Item 8 – "Space Debris"

Mr. Chair, Distinguished Delegates,

The proliferation of space debris poses a serious risk to the safety, security, sustainability, and stability of outer space activities. It is vital to protect the outer space environment, particularly since our lives on earth depend upon space assets. Japan calls upon all relevant countries to carry out their space activities in a responsible manner in order to prevent the generation and diffusion of long-lived space debris.

Specifically, the destruction of a satellite that generates a large amount of space debris indiscriminately increases the risk of collisions of on-orbit space objects and is an irresponsible behavior that undermines sustainable and stable use of outer space. As the importance of outer space is increasing, Japan is concerned about the destruction also from the perspective of peaceful use of outer space and security. In addition, the Space Debris Mitigation Guidelines adopted in 2007 by COPUOS member states require that intentional destruction of any on-orbit space objects that generates long-lived space debris should be avoided.

In this regard, Japan expresses concerns towards anti-satellite tests and calls upon all countries not to conduct this kind of test in the future.

Mr. Chair,

International rule-making as well as national policy and regulatory framework for space activities offer key solutions to limit future generations of space debris. In this regard, Japan supports the work of COPUOS and the LTS2.0 WG, and encourages all states to properly implement the LTS guidelines as well as the Space Debris Mitigation Guidelines.

In the area of national regulation, Japan enforced the Space Activities Act in 2018 to efficiently authorize and supervise non-governmental entities' space activities. Under this law, the Government of Japan licenses non-governmental entities' activities to launch or control spacecraft within Japanese jurisdiction. All activities are required to satisfy specific criteria such as prevention of on-orbit break-up and post-mission disposal, thereby preventing generations of space debris. Furthermore, JAXA has its own space debris mitigation standard, which provides in-depth technical procedures for multiple debris mitigation areas

involving reentry risks and specifies detailed requirements.

Last November, Japan developed national guidelines for on-orbit servicing. We believe that these guidelines will facilitate "end-of-life service" and active debris removal provided by Japanese companies.

In addition, Japan is currently discussing the potential mid-term Space Traffic Coordination and Management policy to contribute to international rule-making.

Mr. Chair,

Another way to address the issue of space debris is through research and development of related technology. Japan has been developing technology to measure, monitor, and gather information on the characterization and accumulation of the orbit and physical properties of space objects and debris. As a good example of this, JAXA has developed "Risk Avoidance Support Tool Based on Debris Approach Collision Probability" (RABBIT) to facilitate debris avoidance operation by satellite operators. Moreover, Japan is investigating ways to remove large space debris in crowded orbits for space environmental remediation, and JAXA is currently cooperating with a private entity on research and development in the area of active debris removal (ADR). The first phase of this project is currently underway to be launched in JFY 2022 to demonstrate the key technology of ADR such as non-cooperative rendezvous, proximity operation and inspection of a discarded Japanese rocket upper stage.

Japan remains committed to tackling the issue of space debris for the sustainable use of the outer space environment.

Thank you for your attention.