Japan

Japan, Item 7 – "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 society is increasingly relying on space systems. Japan calls upon all relevant stakeholders to carry out their space activities in a responsible manner in order to prevent a new 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. In order to maintain sustainable and stable uses of outer space, Japan announced its commitment not to conduct destructive direct-ascent anti-satellite (ASAT) missile testing last September. Japan welcomes the adoption of the General Assembly resolution submitted by USA, Japan, and other like-minded countries last year, which calls upon all countries not to conduct such tests for the benefit of all. In order to develop this initiative, Japan will continue working with like-minded countries to ensure that the resolution becomes an international norm.

Mr. Chair,

International rule-making as well as national policies and regulatory frameworks for space activities offer key solutions to limiting future generations of space debris. In this regard, Japan supports the work of COPUOS and the LTS 2.0 WG, and encourages all states to properly implement the LTS guidelines as well as the Space Debris Mitigation Guidelines as much as feasibly possible.

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 the Act, the Government of Japan licenses the activities of non-governmental entities 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.

In November 2021, 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 considering adopting 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 a "Risk Avoidance assist tool based on debris collision proBaBIliTy" (RABBIT) to facilitate debris avoidance operations 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 a project named Commercial Removal of Debris Demonstration, CRD2, in the area of Active Debris Removal (ADR). The first phase of this project to demonstrate the key technology of ADR such as non-cooperative rendezvous, proximity operation and inspection of a discarded Japanese rocket upper stage, is currently underway and is expected to be launched in JFY 2022

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

Thank you for your attention.