*Committee on the Peaceful Uses of Outer Space*
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Japan

Agenda Item 7 – "Space Debris"

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Madam Chair, Distinguished Delegates,

The proliferation of space debris poses a serious risk to the safety, security and sustainability of outer space activities. It is vital to protect the outer space environment when our lives on earth depend on space assets. All states carrying out space activities should behave in a responsible manner to prevent the increase of space debris.

There are a number of ways to tackle the issue of space debris. One way is to implement and respect international rules. Japan encourages all states to properly implement the LTS Guidelines and Space Debris Mitigation Guidelines.

National policy and regulatory framework for space activities also offer a key solution to limit the generation of space debris. The Japanese government organized a "task force" under the leadership of the Minister of State for Space Policy, comprised of the related State Ministers and the President of JAXA to discuss efficient measures for tackling the issue of space debris.

Japan also enforced the Space Activities Act in 2018 to efficiently authorize and supervise non-governmental entities' space activities. Under this law, the Government of Japan examines non-governmental entities' plans to launch or control satellites within the Japanese jurisdiction. All plans are required to satisfy criteria such as prevention of on-orbit break-up and post-mission disposal, thereby preventing the generation 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.

Madam Chair, Distinguished Delegates,

Another way to address the issue of space debris is through research and development of related technology. Japan develops technology for the measurement, monitoring, 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. We are pleased to inform you that this tool is open free of charge to satellite operating organizations all over the world. With this tool, satellite operators can find the best collision avoidance method without a support of flight dynamics experts. We hope that many people across the world will utilize this tool. Moreover, Japan is investigating ways to remove large size debris, and JAXA is currently cooperating with a private entity for research and development in the area of active debris removal (ADR). The first phase of this project is currently scheduled for FY 2022 to demonstrate the key technology of ADR such as non-cooperative rendezvous, proximity operation and inspection of a discarded Japanese rocket upper stage. JAXA has made a technical presentation about our recent research and development activities including this ADR project yesterday.

Madam Chair, Distinguished Delegates,

Japan is currently discussing debris mitigation as well as STM in general to prepare for related activities by Japanese private entities in the near future. We acknowledge the need for transparency and confidence-building measures in space activities to protect miscalculation and misunderstanding, and Japan is also discussing with our partners on what is the best approach for ensuring the transparency of our future activities.

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

Thank you for your attention.