New Zealand National Statement

Agenda Item 7: Space Debris

60th Session of the COPUOS

Scientific and Technical Subcommittee

6-17 February 2023

Check Against Delivery

Chair, Distinguished Delegates

The proliferation of space debris poses an increasingly serious risk to the safety and sustainability of space activity in certain Earth orbits. This risk is of growing significance given the increasing human dependence on space assets. Aotearoa New Zealand is pleased to have the opportunity to share its approach to improving the safety and sustainability of the orbital environment.

Chair,

New Zealand takes its responsibility as a launching state very seriously, and we are committed to ensuring New Zealand's space activities are conducted safely, responsibly and sustainably. This is reflected in our space regulatory regime, which requires all space objects launching from New Zealand to be licensed. Licence approval is contingent on the provision of an orbital debris mitigation plan that meets international standards, among other requirements. Requiring an orbital debris mitigation plan is intended to limit the proliferation of space debris by space objects launched from New Zealand, reducing the risk of collisions in space and the potential for debris to cause damage in orbit and upon atmospheric re-entry.

New Zealand's commitment to mitigating orbital debris generation continues after space objects have launched. In 2019 the New Zealand Space Agency partnered with LeoLabs, a supplier of tracking services for low-Earth orbit, to develop the Space Regulatory and Sustainability Platform. The novel platform enables the New Zealand Space Agency to track and monitor objects launched from New Zealand, in real time, using the LeoLabs radar network. This allows the Space Agency to determine whether operators are complying with their orbital debris mitigation plan and other requirements of their licence.

Chair,

Adherence to current international best practice for mitigating the generation of orbital debris and on-going supervision of space activities are important for slowing the proliferation of debris. However, there is a large amount of existing space debris, some that will remain in orbit for hundreds of years if left to decay naturally, highlighting the need for remediation efforts to reduce the space debris population.

New Zealand has recently developed regulatory policy to enable safe and transparent active debris removal and on-orbit servicing activities to take place from New Zealand, in the interest of promoting space activities that will improve the safety and sustainability of Earth orbit. The policy sets out a safe, sustainable and secure approach to satellite servicing and debris removal activities, including the removal of defunct satellites, rocket bodies and other pieces of space debris from Earth orbit. Our regulatory policy seeks to ensure that satellite servicing activities, including removal of space debris, are conducted safely and securely, in a manner that is consistent with the UN space treaties. It also underscores the importance of transparency around debris remediation and other satellite servicing activities, requiring clear communication of planned activities by operators.

To further the enablement of space debris remediation, the New Zealand Government has entered into a Memorandum of Understanding with Astroscale, a leading commercial provider of active debris removal services, to cooperate on areas of space safety and sustainability, including space debris mitigation and remediation. As part of this cooperation, Astroscale, Rocket Lab and Te Pūnaha Ātea—Auckland Space Institute have carried out a study on advanced concepts for multi-active debris removal missions. The study focused on the engineering, cost and policy requirements for removing multiple space debris objects with a single servicing satellite on a single mission.

Chair,

Addressing the growing challenge posed by the proliferation of space debris requires an international effort, and New Zealand is committed to playing our part. Our efforts to date highlight the role that commercial space companies can play in both space debris mitigation and remediation efforts, and the advances that can be made through partnerships between governments and commercial companies with a shared goal of improving the safety and sustainability of space.

Thank you Chair