United Kingdom, Item 7

UK Statement on space debris at the 60th session of the Scientific and Technical Subcommittee of COPUOS, 6th-17th February 2023

Chair, Distinguished Delegates.

The Delegation of the United Kingdom is pleased to have the opportunity to share with you the progress and developments on the topic of space debris that we have made since the last meeting of this sub-committee.

In September of 2021, the UK published its National Space Strategy, the first time the UK government has brought together civil and defence space policy. The Strategy notes the growing risk posed by accidental collisions with space debris and between space objects, and sets out the UK’s intent to lead the global effort to make space more sustainable. To help achieve this goal, at the Summit for Space Sustainability held alongside the Secure World Foundation in June, it was announced that UK industry will work in partnership with government to develop a new Space Sustainability Standard, which will incentivise companies to adopt best practice. In addition in October 2022, the UK government committed not to destructively test direct ascent anti-satellite (DA-ASAT) missiles; one of the key sources of debris in Low Earth Orbit. The UK also continues to be a strong advocate for the important work performed by the Inter-Agency Space Debris Coordination Committee (IADC).

The widespread adoption of the IADC space debris mitigation guidelines and the IADC recommendations for large constellations of satellites continue to remain the most effective method to reduce the long-term environmental impacts of global space activity by slowing the rate of growth of the space debris population observed. The UK welcomes the IADC report on the “Status of the Space Environment” as a critical insight
into the global compliance to the space debris mitigation guidelines and the forecasted environmental challenges that we may begin to face on-orbit.

Key to reducing the risk from debris during a satellite’s operational mission is the ability to predict and warn satellite operators of potential collisions in real time through space surveillance and tracking. The UK has been conducting space surveillance since 2008 and was a founding member of the EU’s Space Surveillance and Tracking capability in 2015. In recent years we have continued to develop our national capability and the UK Space Agency is now the lead UK government department on providing alerts for conjunctions, fragmentation and re-entry events. Last year, we began rolling out our conjunction analysis service, known as Monitor Your Satellites, to commercial satellite operators licensed in the UK. The service provides warnings when their satellites are at risk of collision, as well as the contextual information they need to make a safe decision about whether to manoeuvre.

Alongside mitigation and prevention, remediation of space debris represents an important tool to reduce the risk of collision on orbit. In recognition of this the UK Space Agency initiated a national programme to design a mission to remove two unprepared, UK licensed objects from orbit in 2026. The mission is currently in its design phase, with two competing parallel contracts which will define the architecture, key technologies and programmatic of the mission.

The sustainability and safety of the space environment continues to be a key priority for the UK. The UK continues to work internationally to develop good practice and guidelines for space debris mitigation. Nationally we continue to use this best practice to inform our national regulatory framework. The UK continues to aim to be at the forefront of modern regulation for novel space activities, while seeking to keep space sustainable, safe, and secure. The UK is also supporting new missions and technology across in orbit servicing, refuelling and assembly technologies.
as well as debris removal to ensure the UK is ready to grasp the opportunities of the future space economy.

Thank you Chair and Distinguished delegates.