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33rd IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3) Assuring a Safe, Secure and Sustainable Environment for Space Activities (4)

Author: Mr. Toby Harris UK Space Agency, United Kingdom

ENSURING SAFE, SUSTAINABLE AND SECURE IN-ORBIT ACTIVITIES THROUGH THE UK LICENSING FRAMEWORK

Abstract

Within the UK, the UN Space Treaties are conveyed through the 1986 UK Outer Space Act. This provides a basis for the current UK regulatory framework to license launches for UK licensed payloads outside the UK, and the licensing of UK operations in-orbit. The arrival of new and innovative space systems, such as large constellations comprising hundreds or even thousands of satellites, as well as in-orbit rendezvous and proximity operations involving multiple spacecraft visitations, manoeuvres and novel activities, pose significant regulatory challenges. Many of these activities and mission types were not conceived of when the original Act was implemented. In 2018, the UK Space Industry Act (SIA), introduced into Parliament in June 2017, received Royal Ascent. The goal of the SIA is to provide the future framework to license launches from the UK, as well as UK operations in-orbit. However, the SIA also contains a number of delegated powers to enable the creation of secondary legislation, providing a flexible platform to revise and amend the current UK national regulatory framework. This offers the opportunity to revise the licensing of in-orbit activities, as well as ensure that international best practice and guidance, including that from the Inter-Agency Space Debris Coordination Committee (IADC), the International Organization for Standardization (ISO), the UN Committee on Peaceful Uses of Outer Space (UN COPUOS) Long-term Sustainability (LTS) guidelines and many others, are incorporated. This presentation aims to discuss the current UK approach in ensuring that the activities sanctioned by the UK are safe, secure and sustainable, and that licensed space operators act in a responsible way. The method by which licensing is performed, the assessment areas that are reviewed, and the criteria in which applications are assessed are considered. In addition to authorisation of activities, supervision throughout the life-time of the mission, from launch to disposal, is also examined. The UK are currently reviewing and investing in the UK's national Space Domain Awareness capability, to identify capability gaps and undertake improvements in support of both licence supervision and general space safety.