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Legal framework for collaborative space activities - New ways of launching (micro-launching) and large constellation microsats (Joint IAF/IISL session) (7-B3.8)

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THE ITU SPACE REGULATION - A KEY ELEMENT TO ACCESS SPACE

Abstract

This paper presents a background of existing ITU regulatory procedures related to non-GSO Fixed satellite service systems (FSS) called also “Mega constellations” as well as non-GSO small satellite systems and progress of WRC-19 studies related to these systems at the ITU-R Study Group 4, Working Party 4A (WP4A).

For more info see: <https://www.itu.int/en/ITU-R/conferences/wrc/2019/>

Basic principles of the ITU Radio Regulations (RR): block allocations of frequencies that are intended for use by defined radiocommunication services; providing common frequency allocations to mutually compatible services operating with similar technical characteristics in specific parts of the spectrum, and the corresponding voluntary or mandatory regulatory procedures for coordination, notification and recording. The ITU RR establishes a stable planning environment for administrations, equipment manufacturers, and satellite operators with a view to preventing interference before the frequencies are put into operation.

Requirements for administrations to notify satellite frequency assignments and associated orbital positions for recording in the Space Master International Frequency Register (MIFR) and declaration of bringing satellite into use are the a key pillars of the ITU RR international orbit/spectrum regime.

Current ITU RR consider any frequency assignment to a space station of a non-geostationary satellite system as having been brought into use, the notifying administration has to inform the Bureau that at least one space station with the confirmed capability of transmitting or receiving that frequency assignment has been deployed for a continuous period of ninety days on one of the notified orbital planes of the non-geostationary satellite system, irrespective of the notified number of orbital planes and satellites per orbital plane in the system. The date of deployment of the first satellite at its intended orbit shall be within the seven-year time limit for bringing frequency assignments to a space station into use under No. 11.44. The ITU-R WP4A is studying declaration of bringing into use of non-GSO FSS systems in order to clarify this issue and preparing a Report on this matter to the WRC-19.

The WP4A is also studying a possible relaxation of the ITU RR related to notification of non-GSO small satellites and may report to the WRC-19 about some regulatory improvements related to non-GSO small satellites.