

27th IAA SYMPOSIUM ON SMALL SATELLITE MISSIONS (B4)
Small Satellite Missions Global Technical Session (9-GTS.5)

Author: Mr. Chuen Chern Loo
International Telecommunication Union (ITU), Switzerland, chuen-chern.loo@itu.int

NEW AND REVISED REGULATIONS APPLICABLE TO THE SMALL SATELLITE INDUSTRY
TAKEN AT THE ITU WORLD RADIOCOMMUNICATION CONFERENCE 2019 IN SHARM EL
SHEIKH

Abstract

With the rapidly increasing number of small satellite missions being planned and launched in recent years, member states of the International Telecommunication Union, with participation from various organizations from the industry, had conducted 4 years of studies on the relevance of the existing regulations to meet the needs of the small satellite industry. These studies led to inputs and discussions at the World Radiocommunication Conference (WRC-19) in Sharm el-Sheikh, Egypt, when ITU member states adopted various decisions that are favorable for small satellite operators. These include the identification of specific frequency bands that can be used for telemetry, tracking and control of small satellites without having to go through the heavy coordination procedure required for normal satellite networks, and a streamlined regulatory procedure for these small satellite missions that are expected to be of short duration. The satellite networks that could benefit from these decisions would have to satisfy a host of new conditions, which include power flux density limits, limit to the number of satellites that can be in the constellation, and a period of validity of only 3 years. This paper briefly describes the preparation process leading up to the World Radiocommunication Conference, and explains in detail the decisions taken by the conference that are relevant to small satellite operators. It will also explain the procedures for the operators of small satellite networks to register their frequency assignments into the Master International Frequency Register.