

RESOLUTION ITU-R 68

Improving the dissemination of knowledge concerning the applicable regulatory procedures for small satellites, including nanosatellites and picosatellites

(2015)

The ITU Radiocommunication Assembly,

considering

- a) that some developers and manufacturers of small satellites (usually having a mass of less than 100 kg), including those also known as nanosatellites (typically 1 to 10 kg in mass) and picosatellites (typically 0.1 to 1 kg in mass), may not be aware of the applicable ITU regulatory procedures;
- b) that some administrations may benefit from additional information regarding application of the ITU regulatory procedures for spectrum and orbit use;
- c) that lack of knowledge of the ITU procedures may lead to notification delays and sometimes launch of these types of satellite without following the applicable regulatory procedures, which may create a risk of interference to other satellite networks,

further considering

- a) that, in accordance with Article 8 of the Radio Regulations: “The international rights and obligations of administrations in respect of their own and other administrations’ frequency assignments shall be derived from recording of those assignments in the Master International Frequency Register (MIFR)”;
- b) that, for any satellite system, the recording of assignments requires fulfilment of provisions under Articles 9 and 11 of the Radio Regulations, as appropriate;
- c) that it is important to ensure that any satellite radio-frequency operation (including those of nanosatellites and picosatellites) avoids harmful interference to other systems and services;
- d) that the relevant ITU satellite registration (e.g. filings, recording in the MIFR) should be performed in a timely manner;
- e) that it is important that the administrations involved, as well as developers, be aware of the applicable ITU processes with regard to the practices mentioned in *further considering d)*;
- f) that any satellite, including small satellites such as nanosatellites and picosatellites, should use radio frequencies in accordance with the Radio Regulations and ITU-R Recommendations, where applicable;
- g) that many small satellites have no propulsion system and are therefore unable to maintain a constant orbital altitude,

recognizing

- a) that the number of small satellites (in particular, satellites whose mass is typically less than 100 kg) already launched and to be launched is growing;
- b) that these types of satellites can provide an affordable means to access orbital resources (spectrum and orbit) for new entrants in space;

c) that, even though satellite mass and size are not relevant from a frequency management perspective, the small mass and small dimensions of these satellites have been some of the major contributors to their success amongst new spacefaring nations,

recognizing further

the application of RR No. **22.1** and **25.11** for space stations,

noting

the “Guidance on Space Object Registration and Frequency Management for Small and Very Small Satellites” developed by the UN Office for Outer Space Affairs and ITU,

resolves

to develop material, such as Recommendations, Reports or a Handbook on small satellites (in particular, satellites whose mass is less than 100 kg), containing detailed information that would help to improve knowledge of the applicable procedures for submitting filings of satellite networks to ITU,

invites administrations

1 to inform their national entities involved in the development, manufacturing, operation and launch of small satellites, in particular of those satellites whose mass is less than 100 kg (such as nanosatellites and picosatellites), about the applicable ITU and national regulatory provisions for the coordination, notification and use of orbital resources (i.e. orbits and frequencies);

2 to encourage their national entities aiming to launch and deploy in outer space the satellites mentioned above to initiate the relevant ITU registration procedures as soon as possible before the launch of the satellite,

requests the Secretary-General

to bring this resolution to the attention of the United Nations Committee On Peaceful Use of Outer Space.