

RESOLUTION 757 (WRC-12)

Regulatory aspects for nanosatellites and picosatellites

The World Radiocommunication Conference (Geneva, 2012),

considering

- a)* that nanosatellites and picosatellites, commonly described as ranging in mass from 0.1 to 10 kg and measuring less than 0.5 m in any linear dimension, have physical characteristics that differ from those of larger satellites;
- b)* that nanosatellites and picosatellites are satellites which typically have a short (1-2 years) development time and are low cost, often using off-the-shelf components;
- c)* that the operational lifetime of these satellites ranges from several weeks up to a few (< 5) years depending on their mission;
- d)* that nanosatellites and picosatellites are being used for a wide variety of missions and applications, including remote sensing, space weather research, upper atmosphere research, astronomy, communications, technology demonstration and education, as well as commercial applications, and therefore may operate under various radiocommunication services;
- e)* that these satellites are typically launched as secondary payloads;
- f)* that some missions performed with these satellites require the simultaneous launch and operation of several such satellites;
- g)* that, currently, many nanosatellites and picosatellites use spectrum allocated to the amateur satellite service and the MetSat service in the frequency range 30-3 000 MHz although their missions are potentially inconsistent with these services;
- h)* that nanosatellites and picosatellites may have limited orbit control capabilities and therefore have unique orbital characteristics;
- i)* that the standing Agenda item 7 of WRCs has up to now not led to consideration of regulatory procedures for notifying nanosatellites and picosatellites,

further considering

- a)* that successful and timely development and operation of picosatellites and nanosatellites may require regulatory procedures which take account of the short development cycle, the short lifetimes and the typical missions of such satellites;
- b)* that the existing provisions of the Radio Regulations for coordination and notification of satellites under Articles **9** and **11** may need to be adapted to take account of the nature of these satellites,

resolves to invite WRC-18

to consider whether modifications to the regulatory procedures for notifying satellite networks are needed to facilitate the deployment and operation of nanosatellites and picosatellites, and to take the appropriate actions,

invites ITU-R

to examine the procedures for notifying space networks and consider possible modifications to enable the deployment and operation of nanosatellites and picosatellites, taking into account the short development time, short mission time and unique orbital characteristics,

instructs the Director of the Radiocommunication Bureau

to report to WRC-15 on the results of these studies,

invites administrations and Sector Members

to participate actively in the studies by submitting contributions to ITU-R.