

RESOLUTION 765 (WRC-15)

Establishment of in-band power limits for earth stations operating in mobile-satellite service, the meteorological-satellite service and the Earth exploration-satellite service in the frequency bands 401-403 MHz and 399.9-400.05 MHz

The World Radiocommunication Conference (Geneva, 2015),

considering

- a)* that the Earth exploration-satellite service (EESS) (Earth-to-space) and meteorological-satellite service (MetSat) (Earth-to-space) systems deployed in the frequency band 401-403 MHz and mobile-satellite service (MSS) (Earth-to-space) systems in the frequency band 399.9-400.05 MHz are currently used for data collection;
- b)* that these systems usually operate using moderate/low power levels;
- c)* that Recommendation ITU-R SA.2045 provides information on the performance and interference criteria for relevant geostationary-satellite orbit (GSO) and non-geostationary satellite (non-GSO) data collection systems (DCS) in the frequency band 401-403 MHz;
- d)* that Recommendation ITU-R SA.2044 provides information on the current and future usage of non-GSO DCS in the frequency band 401-403 MHz, and the portioning of the frequency band to allow all DCS equal access to the spectrum;
- e)* that Recommendation ITU-R M.2046 provides a description, and the corresponding protection criteria for broadband noise and narrowband interference, of one MSS system that uses the frequency band 399.9-400.05 MHz (Earth-to-space);
- f)* that these EESS, MetSat and MSS systems are essential for monitoring and predicting climate change, monitoring oceans, weather and water resources, weather forecasting and assisting in protecting biodiversity, improving maritime security;
- g)* that a growing number of satellites are planned to use these frequency bands mainly for telecommand (see No. **1.135**) (Earth-to-space) purposes under the EESS, MetSat or MSS allocations,

considering further

- a)* that the output power levels of the earth stations referred to in *considering g*), at the antenna port of these telecommand links (Earth-to-space), can be much higher than the moderate/low power levels traditionally used for the operation of EESS, MetSat or MSS system, service links in the frequency bands 401-403 MHz and 399.9-400.05 MHz referred to in *considering a*);
- b)* that, according to the ITU Radiocommunication Sector (ITU-R) Recommendations referred to in *considering c*), *d*), and *e*), the frequency bands 401-403 MHz and 399.9-400.05 MHz are mainly currently dedicated to data collection platforms;

c) that the operation of the telecommand links referred to in *considering g)* would cause harmful interference to the satellite receivers on board the satellites referred to in *considering a)*,
recognizing

a) that it is necessary to have stable regulatory certainty in order to be able to provide long-term continuity for the operation of DCS;

b) that these DCS represent a long-term effort and investment;

c) that it is necessary to ensure the operations of existing and future systems that usually implement low or moderate output power levels for EESS, MetSat and MSS systems referred to in *considering a)*;

d) that the establishment of in-band power limits for earth stations within the Radio Regulations applicable to the EESS, MetSat and MSS will bring confidence for DCS using these frequency bands,

resolves to invite the 2019 World Radiocommunication Conference

to take into account the results of ITU-R studies, and consider the possibility of establishing in-band power limits for earth stations in the EESS and MetSat in the frequency bands 401-403 MHz and in the MSS frequency band 399.9-400.05 MHz,

invites ITU-R

to conduct and complete, in time for WRC-19, the necessary technical, operational and regulatory studies on the possibility of establishing in-band power limits for earth stations in the EESS and MetSat in the frequency band 401-403 MHz and the MSS in the frequency band 399.9-400.05 MHz,

invites administrations

to participate actively in the studies and provide the technical and operational characteristics of the systems involved by submitting contributions to ITU-R,

instructs the Secretary-General

to bring this Resolution to the attention of the World Meteorological Organization (WMO) and other international and regional organizations concerned.