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| **World Radiocommunication Conference (WRC-19) Sharm el-Sheikh, Egypt, 28 October – 22 November 2019** |  |
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| PLENARY MEETING | **Addendum 2 to Document 80-E** |
|  | **7 October 2019** |
|  | **Original: English** |
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| Japan | |
| Proposals for the work of the conference | |
|  | |
| Agenda item 1.2 | |

1.2 to consider in-band power limits for earth stations operating in the mobile-satellite service, meteorological-satellite service and Earth exploration-satellite service in the frequency bands 401-403 MHz and 399.9-400.05 MHz, in accordance with **Resolution 765 (WRC-15)**;

Background

Resolution **765 (WRC-15)** on WRC-19 agenda item 1.2 “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”. The objective of this agenda item is to establish, within the Radio Regulations, in-band power limits applicable to earth stations in the frequency bands above in order to ensure the operation of existing and future systems that usually implement low or moderate output powers for EESS, MetSat and MSS systems.

In Japan, data collection systems (DCSs) are operated under the EESS (Earth-to-space) and the MetSat (Earth-to-space) services in the frequency band 401-403 MHz. These systems are deployed worldwide in order to collect essential data on weather and climate. As one of these systems, a couple of Japanese DCSs are operated in this frequency band. DCS of the Himawari GSO satellite series is designed for collecting and distributing real-time meteorological, tidal/tsunami, seismological and oceanographic observational data obtained through regional data collection platforms (DCPs). In addition, DCS of Hodoyoshi-3 and 4, which are non-GSO EESS satellites, is used for monitoring water levels in order to detect flood, drought and inundation.

In parallel, Japan has several non-GSO EESS satellites which are being operated for telecommand in the frequency band 401-403 MHz.

APT members support Method C and Method E in the CPM Report for agenda item 1.2 in the frequency bands 399.9-400.05 MHz and 401-403 MHz, respectively, as mentioned in APT common proposal (ACP) for the agenda item. Some APT members are of the view that telecommand links for all of the existing satellite systems in operation under EESS are necessary to be ensured continuously until 22 November 2029.

Proposal

A number of the EESS satellites are operating for the telecommand under the allocation to the EESS (Earth-to-space) in the frequency band 401-403 MHz. Therefore, Japan proposes Method E in the CPM Report for agenda item 1.2 with the transition period for not applying the relevant e.i.r.p. limits up to 22 November 2029 to ensure operation of existing satellite systems, for which complete notification information is received by the Radiocommunication Bureau before 22 November 2019 and brought into use before 22 November 2019.

ARTICLE 5

Frequency allocations

Section IV – Table of Frequency Allocations  
(See No. 2.1)

MOD J/80A2/1#50180

335.4-410 MHz

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| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 401-402 METEOROLOGICAL AIDS  SPACE OPERATION (space-to-Earth)  EARTH EXPLORATION-SATELLITE (Earth-to-space)  METEOROLOGICAL-SATELLITE (Earth-to-space)  Fixed  Mobile except aeronautical mobile  ADD 5.D12 | | |
| 402-403 METEOROLOGICAL AIDS  EARTH EXPLORATION-SATELLITE (Earth-to-space)  METEOROLOGICAL-SATELLITE (Earth-to-space)  Fixed  Mobile except aeronautical mobile  ADD 5.D12 | | |

ADD J/80A2/2#50181

5.D12 In the frequency band 401-403 MHz, the maximum e.i.r.p. of any emission of the earth stations in the meteorological-satellite service and the Earth exploration-satellite service shall not exceed 22 dBW in any 4 kHz for geostationary systems and non-geostationary systems with an orbit of apogee equal or greater than 35 786 km and 7 dBW in any 4 kHz for non-geostationary systems with an orbit of apogee lower than 35 786 km and maximum e.i.r.p. of each earth station in the meteorological-satellite service and the Earth exploration-satellite service shall not exceed 22 dBW for geostationary systems and non-geostationary systems with an orbit of apogee equal or greater than 35 786 km and 7 dBW for non-geostationary systems with an orbit of apogee lower than 35 786 km in the whole 401-403 MHz frequency band.

These provisions shall not apply to all systems in the meteorological-satellite service and the Earth exploration-satellite service in this frequency band for which complete notification information has been received by the Radiocommunication Bureau before 22 November 2019 and brought into use before 22 November 2019.

After 22 November 2029, these limits shall apply to all systems in the meteorological-satellite service and the Earth exploration-satellite service operating in this frequency band excluding non-geostationary satellite systems for which complete notification information has been received by the Radiocommunication Bureau before 28 April 2007, for which maximum e.i.r.p. of earth stations within the 401.898-402.522 MHz frequency band can be increased to 12 dBW.     (WRC‑19)

**Reasons:** The operations of existing satellite systems are to be ensured continuously until 2029.

SUP J/80A2/3#50189

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

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