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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 92-E** |
|  | **7 October 2019** |
|  | **Original: English** |
|  | |
| India (Republic of) | |
| 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)**;

# 1 Introduction

ITU-R has done studies in accordance with Resolution **765 (WRC-15)** on establishing in-band power limits, given in section 4/1.2/3.1 and 4/1.2/3.2 on agenda item (AI) 2 of the CPM Report, for earth stations required to protect satellite system with lower or moderate power (e.g. DCS) from harmful interference from telecommand-link earth stations operating in the EESS and MetSat in the frequency band 401-403 MHz and the MSS in the frequency band 399.9-400.05 MHz.

For the band 399.9-400.05 MHz

India supports Method C in the CPM Report for this agenda item and supports the e.i.r.p. limit indicated in Table 4/1.2/3-1of the CPM Report. APT Members are of the view that a transitional period until 22 November 2024 is needed to ensure that the existing telecommands for EESS systems, including those systems to be notified before 22 November 2019, may continue to operate.

For the band 401-403 MHz

India supports Method E in the CPM Report for this agenda item. APT Members are of the view that transitional arrangements are needed to ensure that the existing telecommands for EESS, including those systems to be notified and brought into use before 22 November 2019, may continue to operate until 22 November 2024 or 2029 (date to be agreed on at WRC‑19).

Telecommand links for all of the existing satellite systems in operation under EESS are necessary to be ensured continuously until 22 November 2029. Therefore, we support the Method E of the CPM Report with a transition period for applying the relevant e.i.r.p. limits of up to 22 November 2029 in this band.

# 2 Proposals

ARTICLE 5

Frequency allocations

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

MOD IND/92A2/1#50176

335.4-410 MHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 399.9-400.05 MOBILE-SATELLITE (Earth-to-space) 5.209 5.220 ADD 5.B12 | | |

ADD IND/92A2/2#50177

5.B12 In the frequency band 399.9-400.05 MHz, the maximum e.i.r.p of any emission of the earth stations in the mobile-satellite service shall not exceed 5 dBW in any 4 kHz and maximum e.i.r.p. of each earth station in the mobile-satellite service shall not exceed 5 dBW in the whole 399.9-400.05 MHz frequency band. Until 22 November 2024, this limit shall not apply to satellite systems for which complete notification information has been received by the Radiocommunication Bureau by 22 November 2019 and that have been brought into use by that date. After 22 November 2024 these limits shall apply to all systems within the mobile-satellite service operating in this frequency band.     (WRC‑19)

**Reasons:** According to the study results of ITU-R, the appropriate emission limits for earth station operation and transition period are provided in the new footnote.

MOD IND/92A2/3#50180

335.4-410 MHz

|  |  |  |
| --- | --- | --- |
| 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 | | |

**Reasons:** India proposes adding a new footnote in the frequency band 401-403 MHz to specify the maximum e.i.r.p. of any emission of the earth stations in the Earth exploration-satellite service to mitigate potential interference to DCS operations.

ADD IND/92A2/4#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 2024 or 2029 (date to be agreed on at WRC‑19), 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:** According to the study results of ITU-R, the appropriate emission limits for earth stations operation and transition period are provided in the new footnote.

SUP IND/92A2/5#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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