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| **World Radiocommunication Conference (WRC-15) Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| PLENARY MEETING | **Document 108-E** |
|  | **19 October 2015** |
|  | **Original: English** |
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| Japan/Sweden | |
| Proposals for the work of the conference | |
| Multi-country proposals for Identification  of the frequency band 3 800-4 200 MHz for IMT | |
| Agenda item 1.1 | |

1.1 to consider additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT) and related regulatory provisions, to facilitate the development of terrestrial mobile broadband applications, in accordance with Resolution **233 (WRC‑12)**;

Introduction

This contribution from Japan and Sweden proposes to identify the frequency band 3 800-4 200 MHz for IMT in those countries in Regions 1 and 3 which would wish to do so due to the following reasons:

– This band is suitable for accommodating IMT to provide increased capacity and performance by using large contiguous bandwidths, in particular, in dense urban areas. The small antenna size for IMT equipment in the band is a favourable feature to implement multiple-antenna techniques enabling high spectrum efficiency and high data rate.

– Deployment of IMT networks in a country would be feasible by stipulating appropriate technical and regulatory conditions in the ITU Radio Regulations to protect FSS earth stations in neighbouring countries. IMT small cell deployment using low transmission power and antenna height could meet these conditions more easily compared to IMT macro cell deployment. It should be noted that the technical and regulatory conditions as agreed at WRC-07 have been effective to protect FSS earth stations in neighbouring countries when the band 3 400-3 600 MHz was identified for IMT in some countries in Regions 1 and 3.

Proposals

ARTICLE 5

Frequency allocations

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

MOD J/S/108/1

2 700-4 800 MHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| ... | ... | ... |
| 3 600-3 800  FIXED  FIXED-SATELLITE (space-to-Earth)  Mobile | ... |
|  | 3 700-3 800  FIXED  FIXED-SATELLITE (space to-Earth)  MOBILE except aeronautical mobile | |
| 3 800-4 200  FIXED  FIXED-SATELLITE (space-to-Earth)  Mobile ADD 5.A11 ADD 5.B11 | 3 800-4 200  FIXED  FIXED-SATELLITE (space to-Earth)  MOBILE except aeronautical mobile ADD 5.B11 | |

**Reasons:** This proposal is only related to the frequency band 3 800-4 200 MHz in Regions 1 and 3, which is associated with the addition of new footnotes indicated below. Other proposals cover the frequency band 3 400-3 800 MHz.

ADD J/S/108/2

5.A11 Different category of service: in Sweden, [*additional country names*], the frequency band 3 800-4 200 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis.    (WRC‑15)

**Reasons:** To allocate the frequency band 3 800-4 200 MHz to the mobile service on a primary basis in those countries in Region 1 which would wish to do so.

ADD J/S/108/3

5.B11 In Japan, Sweden, [*additional country names*] the band 3 800-4 200 MHz is identified for International Mobile Telecommunications (IMT). This identification does not preclude the use of this band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. At the stage of coordination the provisions of Nos. **9.17** and **9.18** also apply. Before an administration brings into use a (base or mobile) station of the mobile service in this band it shall ensure that the power flux-density (pfd) produced at 3 m above ground does not exceed −154.5 dB(W/(m2 ⋅ 4 kHz)) for more than 20% of time at the border of the territory of any other administration. This limit may be exceeded on the territory of any country whose administration has so agreed. In order to ensure that the pfd limit at the border of the territory of any other administration is met, the calculations and verification shall be made, taking into account all relevant information, with the mutual agreement of both administrations (the administration responsible for the terrestrial station and the administration responsible for the earth station), with the assistance of the Bureau if so requested. In case of disagreement, the calculation and verification of the pfd shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service in the band 3 800-4 200 MHz shall not claim more protection from space stations than that provided in Table 21-4 of the Radio Regulations (Edition of 2012).     (WRC‑15)

**Reasons:** To identify the frequency band 3 800-4 200 MHz for IMT in those countries in Regions 1 and 3 which would wish to do so.

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