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| **World Radiocommunication Conference (WRC-15) Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| PLENARY MEETING | **Addendum 10 to Document 7-E** |
|  | **29 October 2015** |
|  | **Original: English** |
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| Member States of the Inter-American Telecommunication Commission (CITEL) | |
| Proposals for the work of the conference | |
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| Agenda item 1.10 | |

1.10 to consider spectrum requirements and possible additional spectrum allocations for the mobile-satellite service in the Earth-to-space and space-to-Earth directions, including the satellite component for broadband applications, including International Mobile Telecommunications (IMT), within the frequency range from 22 GHz to 26 GHz, in accordance with Resolution **234 (WRC‑12)**;

Background

WRC-12 adopted agenda item 1.10 in order to consideradditional allocations to the mobile-satellite service (MSS) taking into account ITU-R studies in accordance with Resolution234 (WRC-12). Resolution234 (WRC-12)invites the ITU-R to complete, for WRC-15, sharing and compatibility studies towards additional allocations to the mobile-satellite service in the Earth-to-space and space-to-Earth directions, within portions of the bands between 22 GHz and 26 GHz, while ensuring protection of existing services within these bands as well as taking into account No. 5.340 and No. 5.149.

WARC-92 allocated numerous bands to the MSS. However, WRC-97 and WRC-2000 made modifications to and suppressed some of these MSS allocations because sharing with other services was difficult or the conditions of use by MSS in some bands were impractical. WRC-12 considered possible new MSS allocations in the 4-16 GHz range under agenda item 1.25, but ITU-R studies and WRC-12 determined that sharing with existing services by small mobile terminals in this range would require complex regulatory provisions. No MSS allocations resulted. However, WRC-12 agreed to include agenda item 1.10 on the agenda for WRC-15, to consider possible MSS allocations in the 22-26 GHz range.

Sharing studies under this agenda item assumed characteristics for MSS networks required for operation through local atmospheric propagation conditions. The work underway in the ITU-R for this agenda item indicates that sharing between the many services currently allocated in the 22-26 GHz range and MSS systems would be infeasible/impractical.

Proposals

ARTICLE 5

Frequency allocations

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

NOC IAP/7A10/1

22-24.75 GHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 22-22.21 FIXED  MOBILE except aeronautical mobile  5.149 | | |
| 22.21-22.5 EARTH EXPLORATION-SATELLITE (passive)  FIXED  MOBILE except aeronautical mobile  RADIO ASTRONOMY  SPACE RESEARCH (passive)  5.149 5.532 | | |
| 22.5-22.55 FIXED  MOBILE | | |
| 22.55-23.15 FIXED  INTER-SATELLITE 5.338A  MOBILE  SPACE RESEARCH (Earth-to-space) 5.532A  5.149 | | |
| 23.15-23.55 FIXED  INTER-SATELLITE 5.338A  MOBILE | | |
| 23.55-23.6 FIXED  MOBILE | | |
| 23.6-24 EARTH EXPLORATION-SATELLITE (passive)  RADIO ASTRONOMY  SPACE RESEARCH (passive)  5.340 | | |
| 24-24.05 AMATEUR  AMATEUR-SATELLITE  5.150 | | |
| 24.05-24.25 RADIOLOCATION  Amateur  Earth exploration-satellite (active)  5.150 | | |
| 24.25-24.45  FIXED | 24.25-24.45  RADIONAVIGATION | 24.25-24.45  RADIONAVIGATION  FIXED  MOBILE |
| 24.45-24.65  FIXED  INTER-SATELLITE | 24.45-24.65  INTER-SATELLITE  RADIONAVIGATION | 24.45-24.65  FIXED  INTER-SATELLITE  MOBILE  RADIONAVIGATION |
|  | 5.533 | 5.533 |
| 24.65-24.75  FIXED  FIXED-SATELLITE (Earth-to-space) 5.532B  INTER-SATELLITE | 24.65-24.75  INTER-SATELLITE  RADIOLOCATION- SATELLITE (Earth-to-space) | 24.65-24.75  FIXED  FIXED-SATELLITE (Earth-to-space) 5.532B  INTER-SATELLITE  MOBILE |
|  |  | 5.533 |

24.75-29.9 GHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 24.75-25.25  FIXED  FIXED-SATELLITE (Earth-to-space) 5.532B | 24.75-25.25  FIXED-SATELLITE (Earth-to-space) 5.535 | 24.75-25.25  FIXED  FIXED-SATELLITE (Earth-to-space) 5.535  MOBILE |
| 25.25-25.5 FIXED  INTER-SATELLITE 5.536  MOBILE  Standard frequency and time signal-satellite (Earth-to-space) | | |
| 25.5-27EARTH EXPLORATION-SATELLITE (space-to Earth) 5.536B  FIXED  INTER-SATELLITE 5.536  MOBILE  SPACE RESEARCH (space-to-Earth) 5.536C  Standard frequency and time signal-satellite (Earth-to-space)  5.536A | | |

**Reasons:** Sharing with incumbent services in all cases is either not feasible or will require technical and operational constraints that will be impractical for use by the MSS. Additionally specific atmospheric propagation conditions around 24 GHz create additional sharing difficulties.

SUP IAP/7A10/2

RESOLUTION 234 (WRC‑12)

Additional primary allocations to the mobile-satellite service   
within the bands from 22 GHz to 26 GHz

**Reasons:** This is consequential to the above proposal to leave Article 5 unchanged under agenda item 1.10 of WRC-15.

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