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| **World Radiocommunication Conference (WRC-15) Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| **PLENARY MEETING** | **Addendum 12 to Document 9-E** |
|  | **24 June 2015** |
|  | **Original: English** |
|  | |
| European Common Proposals | |
| Proposals for the work of the conference | |
|  | |
| Agenda item 1.12 | |

1.12to consider an extension of the current worldwide allocation to the Earth exploration-satellite (active) service in the frequency band 9 300-9 900 MHz by up to 600 MHz within the frequency bands 8 700-9 300 MHz and/or 9 900-10 500 MHz, in accordance with Resolution **651 (WRC‑12)**;

Introduction

Resolution 651 (WRC-12) invites ITU-R to conduct and complete compatibility studies addressing the EESS (active) and existing services in the frequency bands 8 700-9 300 MHz and 9 900-10 500 MHz, and unwanted emissions from stations operating in the EESS (active) in these bands into stations operating within the frequency bands 8 400-8 500 MHz and 10.6-10.7 GHz.

During the study cycle for WRC-07, studies were performed by ITU-R under WRC-07 agenda item 1.3 to investigate the conditions for the extension of the EESS (active) allocation by 200 MHz above or below the former allocation 9 500-9 800 MHz (prior to WRC-07). Based on the results and conclusions in Report ITU-R RS.2094, WRC-07 decided to extend the allocation to 9 300-9 900 MHz. This was possible because the overall sharing conditions were found to be acceptable if certain conditions are obeyed. These conditions are regulated in Nos. 5.475A, 5.476A, 5.477, 5.478, 5.478A, and No. 5.478B to protect other radio services in countries mentioned in the footnotes.

Space-borne radars operating in the EESS (active) in this band have demonstrated their important contributions to a large number of scientific and geoinformation applications, which is also recognized in Resolution 673 (Rev.WRC-12).

The growing demand for higher resolution radar pictures raises the need to further increase the bandwidth used for linear FM chirp radar transmission of the next generation of EESS synthetic aperture radars (SAR) by 600 MHz as explained in Report ITU-R RS.2274.

These European Proposals provide the method for an extension of 100 MHz below and 500 MHz above the current allocation 9 300-9 900 MHz.

ARTICLE 5

Frequency allocations

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

MOD EUR/9A12/1

8 500-10 000 MHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 9 200-9 300 EARTH EXPLORATION-SATELLITE (active) ADD 5.A112  RADIOLOCATION  MARITIME RADIONAVIGATION 5.472  5.473 5.474 ADD 5.B112 ADD 5.C112 ADD 5.D112 | | |
| ... | | |
| 9 900-10 000 EARTH EXPLORATION-SATELLITE (active) ADD 5.A112  RADIOLOCATION  Fixed  5.477 5.478 5.479 ADD 5.C112 ADD 5.D112 ADD 5.E112 | | |

ADD EUR/9A12/2

5.A112 The use of the bands 9 200-9 300 MHz and 9 900-10 400 MHz by the Earth exploration-satellite service (active) is limited to systems requiring necessary bandwidth greater than 600 MHz that cannot be fully accommodated within the 9 300-9 900 MHz band.     (WRC‑15)

**Reasons:** To limit the number of systems as well as the duration of transmission of SAR systems in the extension band.

ADD EUR/9A12/3

5.B112 In the band 9 200-9 300 MHz, stations in the Earth exploration-satellite service (active) shall not cause harmful interference to, nor claim protection from, stations of the radio navigation and radiolocation services.     (WRC‑15)

**Reasons:** The EESS (active) primary allocation is made secondary with regard to radio determination services allocated in these bands, to ensure protection of these services from harmful interference.

ADD EUR/9A12/4

5.C112 Space stations operating in the Earth exploration-satellite (active) service shall comply with Recommendation ITU‑R RS.2066‑0.     (WRC-15)

**Reasons:** It ensures protection of RAS stations in the frequency band 10.6-10.7 GHz.

ADD EUR/9A12/5

5.D112 Space stations operating in the Earth exploration-satellite (active) service shall comply with Recommendation ITU‑R RS.2065‑0.     (WRC-15)

**Reasons:** It ensures protection of SRS systems in the frequency band 8 400-8 500 MHz.

ADD EUR/9A12/6

5.E112 In the frequency band 9 900-10 400 MHz, stations in the Earth exploration-satellite (active) service shall not cause harmful interference to, nor claim protection from, stations of the radiolocation service.     (WRC‑15)

**Reasons:** The EESS (active) primary allocation is made secondary with regard to the RLS allocations in these frequency bands, to ensure protection of stations of these services from harmful interference.

MOD EUR/9A12/7

10-11.7 GHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 10-10.4  EARTH EXPLORATION-SATELLITE (active) ADD 5.A112  FIXED  MOBILE  RADIOLOCATION  Amateur | 10-10.4  EARTH EXPLORATION-SATELLITE (active) ADD 5.A112RADIOLOCATION  Amateur | 10-10.4  EARTH EXPLORATION-SATELLITE (active) ADD 5.A112  FIXED  MOBILE  RADIOLOCATION  Amateur |
| 5.479 ADD 5.C112 ADD 5.D112 ADD 5.E112 | 5.479 5.480 ADD 5.C112 ADD 5.D112 ADD 5.E112 | 5.479 ADD 5.C112 ADD 5.D112 ADD 5.E112 |
| 10.4-10.45  FIXED  MOBILE  RADIOLOCATION  Amateur | 10.4-10.45  RADIOLOCATION  Amateur | 10.4-10.45  FIXED  MOBILE  RADIOLOCATION  Amateur |
|  | 5.480 |  |

**Reasons:** Provides an additional 600 MHz allocation to EESS (active) for high resolution SARs as requested by Resolution 651 (WRC-12) and justified in Report ITU-R RS.2274.

SUP EUR/9A12/8

RESOLUTION 651 (WRC‑12)

Possible extension of the current worldwide allocation to the Earth exploration-satellite (active) service in the frequency band 9 300-9 900 MHz by up to 600 MHz within the frequency bands 8 700-9 300 MHz   
and/or 9 900-10 500 MHz

**Reasons:** This Resolution is no longer necessary.

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