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| **World Radiocommunication Conference (WRC-15) Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| **PLENARY MEETING** | **Addendum 6 to Document 9(Add.1)-E** |
|  | **24 June 2015** |
|  | **Original: English** |
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| European Common Proposals | |
| Proposals for the work of the conference | |
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| 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)**;

European Proposals on no change for allocations to services in Article 5

4 400-4 500 MHz, 4 800-5 000 MHz, 5 925-6 425 MHz

ARTICLE 5

Frequency allocations

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

NOC EUR/9A1A6/1

2 700-4 800 MHz

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| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 4 400-4 500FIXED  MOBILE 5.440A | | |

**Reasons:** The frequency band 4 400-4 500 MHz is heavily used by fixed and mobile (including aeronautical) applications other than IMT applications. In addition studies have not been provided to ITU-R regarding the protection of radio-altimeters in the adjacent band (4 200-4 400 MHz). Also compatibility studies in ITU-R indicate that sharing between aeronautical mobile applications and IMT systems is not feasible.

NOC EUR/9A1A6/2

4 800-5 570 MHz

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| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 4 800-4 990 FIXED  MOBILE 5.440A 5.442  Radio astronomy  5.149 5.339 5.443 | | |

**Reasons:** This band is extensively used for applications in the fixed and mobile services (including aeronautical mobile and military applications) and will not be available even in the long term in many European countries. In addition, the compatibility studies indicate that sharing between aeronautical mobile applications and IMT systems and sharing between radio astronomy and IMT systems are not feasible.

NOC EUR/9A1A6/3

5 570-7 250 MHz

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| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 5 925-6 700 FIXED 5.457  FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B  MOBILE 5.457C  5.149 5.440 5.458 | | |

**Reasons:** The use of the band 5 925-6 425 MHz by the fixed-satellite service and the fixed service is extensive. The use of this band for fixed service is not going to decrease in many countries given that the increase in traffic in the mobile access network will have to be handled in the backhauling network too.

There is neither opportunity for global harmonization nor interest for IMT indoor usage with the e.i.r.p. limit resulting from the sharing studies.

Among all of the services, the impact on fixed-satellite space stations is the most difficult from the point of view of sharing and compatibility studies due to the fact that harmful interference results from simultaneous transmission of multiple IMT stations deployed across different countries and even continents. According to the available studies IMT implementation in this band is only possible with the restriction of maximum EIRP of IMT stations and deployment limited only to indoor. The result of sharing studies and the e.i.r.p. limit to be respected limit the IMT indoor opportunity in this band.

Moreover, the use of this band for fixed service is not going to decrease in many countries given that the increase in traffic in the mobile access network will have to be handled in the backhauling network too. This band is used for interconnecting local concentration nodes (concentrating the traffic of several mobile base stations) to the mobile operator core network. The band allows a path length of 20-80 kilometres with a throughput over 1 Gbps. There are very few alternatives to the use of this band since the other FS bands having comparable characteristics are also congested and since the optical fibre is in many cases not a viable solution. Moreover, currently interferences on fixed service links in this band would be particularly harmful since a single fixed-service link typically aggregates the traffic to and from 20-40 base stations meaning that a huge number of customers are impacted by a single interferer.

In many countries the use of this band for fixed service is not going to decrease given that the increase in traffic in the mobile access network will have to be handled in the backhauling network too. One administration expects that with the roll-out of IMT-Advanced networks it would be impossible to sustain backbone P-P links in low frequency ranges such as 5 925-6 425 MHz and they will be eventually substituted by fibre networks. Furthermore with the densification of P-P links higher bands with larger capacities will be used for shorter range hops.

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