

Deutsche Telekom Comments on the Draft RSPG Opinion on Common Policy Objectives for WRC-15

Introduction

Deutsche Telekom (DT) highly appreciates the opportunity to comment on the draft RSPG opinion on common policy objectives for WRC-15 (RSPG14-578rev1).

DT would like to stress the importance of making additional spectrum available by 2020 in order to meet the growing demand for network capacity in light of the considerable growth of data traffic in mobile networks. Although other countermeasures are constantly being taken by network operators (e. g. deployment of more spectrally efficient mobile technologies, network densification and increased offloading to fixed networks) there will inevitably be an increased need for more spectrum for mobile broadband. In particular, in rural and remote areas there is no alternative way to provide wide area broadband connections in a cost-effective way to European citizens.

Summary

DT supports

- a co-primary mobile allocation for the band 470–694 MHz. This would enable European administrations to timely introduce converged services in a flexible manner without any other decision of another WRC. Moreover a co-primary mobile allocation would provide the flexibility for Member States to use the band 470-694 MHz for WBB downlink as already mentioned in the draft opinion. (AI 1.1)
- the proposal of the RSPG to identify the band 1427-1518 MHz for IMT. Moreover DT would like to propose to also make the band 1350-1400 MHz available for mobile broadband service which could be used for IMT uplink. (AI 1.1)
- the allocation and IMT identification of the band 2700-2900 MHz. As already mentioned in the Commission Report COM (2014) 536 on the RSPG Spectrum Inventory the 2700-2900 MHz band is currently not used efficiently in Europe. DT is of the opinion that possibilities for spectrum sharing of under-utilized bands should be exploited to the maximum extent possible. (AI 1.1)
- the globally harmonized mobile allocation and IMT identification of the “C” band (3.4-3.8 GHz and potentially also 3.8-4.2 GHz). (AI 1.1)
- the European/CEPT agreement on a harmonized 2x30 MHz MFCN frequency arrangement in the band 694-790 MHz. DT strongly supports the RSPG statement regarding GE-06 as the only regulatory basis for coordination with broadcasting. (AI 1.2)
- a future Agenda item addressing the spectrum needs for the 5th generation of mobile networks. (AI 10)

WRC-15 Agenda Item 1.1

- **Mobile allocation in the band 470 – 694 MHz**

Although it is stated in the current draft RSPG opinion that RSPG is of the view that Member States should have the flexibility to use the 470-694 MHz band for WBB downlink, RSPG comes to the conclusion that a mobile allocation in the band 470 – 694 MHz is not supported.

DT is of the opinion that this position is counterproductive to the development of converged mobile broadband/broadcast services and applications. Only an allocation to the mobile service, co-primary to the already existing allocation to the broadcast service, would provide Member States with the flexibility to use the 470-694 MHz band for WBB downlink and/or to introduce converged services in a flexible manner without a decision of another WRC. Europe should not miss the innovation potential of a co-primary allocation, which would foster investment in the development of such converged services and which is likely beneficial for both broadcasting and mobile broadband.

- **1427 – 1518 MHz**

DT supports this proposal which would provide a band of 91 MHz wide for future use by the mobile service. As 91 MHz is rather “narrowband” for the requirements of new “real broadband” spectrum in a competitive environment, DT would like to ask RSPG to also include the band 1350-1400 MHz which may be used in a compatible manner by IMT uplink. The passive service band 1400-1427 MHz needs to be protected.

- **2700-2900 MHz**

As mentioned in the Commission Report COM (2014) 536 on the RSPG Spectrum Inventory, the band 2700-2900 MHz is often only used by radars at specific geographical locations thus providing an opportunity for potential geographical sharing with other services. In some European countries there is no radar use at all. Hence, the band is not used efficiently and is therefore a good candidate for spectrum sharing with IMT applications. DT is of the opinion that these unused possibilities for spectrum sharing (geographical or band segmentation) should be taken into account to the maximum extent possible.

- **3400-3800 MHz (and potentially also 3.8-4.2 GHz)**

DT welcomes the RSPG proposal to identify the band 3400-3800 MHz for IMT on a world-wide basis.

If WRC-15 adopted the proposal this would provide new “real broadband” spectrum to be used with new technologies, such as LTE-Advanced and small cells. There should be no doubt about Europe’s position to fully support a global harmonized use of this band by mobile broadband services, which is already harmonized at EU level.

DT would like to ask RSPG to also support the band 3800-4200 MHz as a candidate band for future mobile use on a shared basis with existing services. DT thinks that unlike in other

parts of the world – in particular tropical regions with heavy rainfall – in Europe satellite use over C-Band can in general be shifted to higher spectrum bands.

Moreover DT would like to propose to include a reference to item 9.1.5:

“Consideration of technical and regulatory actions in order to support existing and future operation of fixed satellite service earth stations within the band 3 400-4 200 MHz, as an aid to the safe operation of aircraft and reliable distribution of meteorological information in some countries in Region 1”

It should be made clear in the RSPG Opinion that item 9.1.5 does not apply to Europe.

WRC-15 Agenda Item 1.2

DT welcomes the European/CEPT agreement on a harmonized 2x30 MHz MFCN frequency channeling arrangement in the band 694-790 MHz. It is important that (for the sake of harmonization) the entire 2x30 MHz FDD sub-band needs to be made available for public cellular mobile service. This solution can ensure partial spectrum harmonization with the Asia-Pacific Region and would increase economies of scale and barrier-free use of mobile devices. Any non-harmonized application using the duplex gap or guard bands of the paired 700 MHz channeling plan needs to protect the harmonized 700 MHz channeling arrangement.

DT strongly supports the RSPG statement regarding GE-06 as the only regulatory basis for coordination with the broadcasting service and the principle of equitable access between mobile service and aeronautical radio navigation services. (AI 1.2)

WRC-15 Agenda Item 1.3

The first choice for any new spectrum for wideband PPDR in Region 1 should be the frequency range of 400 MHz band (380-470 MHz). Unlike the 700 MHz band the 400 MHz band has been already used for narrowband PPDR (e. g. TETRA) and enables cost effective network roll-out.

In any case wideband PPDR must not interfere with nor constrain harmonized mobile broadband service in the 2x30 MHz duplex sub-band of the 700 MHz Digital Dividend 2 band.

WRC-15 Agenda Item 10

DT strongly supports the RSPG proposal to support an agenda item for WRC-18/19 addressing the spectrum needs for the fifth generation of mobile networks (commonly known as 5G).