

UK spectrum policy forum Update of mobile related WRC-23 Agenda items

Alexander Kühn

RSPG SG WRC Co-Chair Head of Section – BNetzA – Germany









WRC-23 Opinion by RSPG



- RSPG provides advice to the Commission on EU positioning.
- Public Consultation until 12th August 2022.
- Final Opinion after November Plenary (22 Nov.)
- Case A: An EU position is required if EU law may be affected by a decision of a WRC.
- Case B: An EU position is desirable if the Member States would like to support an unified position.

The following Agenda items have been identified so far:

1.2, **1.3**, **1.5**, 1.11, 1.14, 1.15, 1.16, 9.1 (topics a, b and d)

Open: AI 9.1 issue Art. 21.5

2

Content

- Agenda Item 1.2 Focus on 6/7 GHz
- Agenda Item 1.3
- Agenda Item 1.5
- Discussions on RR 21.5

WRC-23 AI 1.2 - considerations



- 6 425-7 125 MHz may respond to additional spectrum demand in mid-band
- propagation conditions similar compared to the band 3 400 3 800 MHz,
- studies may indicate possible opportunities for sharing between FSS and IMT, including macro base stations
- FS needs to be addressed later, in a medium term perspective
- allocation situation for the Copernicus sensor CIMR still under review

European strategy should be based on a consideration of a number of questions regarding the best spectrum use for Europe (including):

- spectrum demand for IMT in the short term perspective,
- spectrum demand for WAS/RLAN in the medium term perspective, and
- sharing options between all users, including between both above

EU remains flexible to exercise any relevant options, since the RR provides sufficient options for any use of services and applications

WRC-23 AI 1.2 - continued



- the protection of satellite uplink(s) is intrinsically of international nature
 but this does not relieve the RR obligation for IMT to protect satellite
 receivers in these bands
- protection of receiving earth stations may be ensured at national level and through bilateral cross-border coordination

but long term access for non-GSO feeder links is to be ensured

in support of the objectives of EU space policy (specifically Copernicus)

RSPG Recommendation

still between two options – like CEPT, the RSPG has yet no common view

Option 1: support of an IMT identification, with technical limitations

Option 2: no support of an IMT identification

WRC-23 AI 1.3 - consideration



- 3 600-3 800 MHz is already allocated and used on a primary basis in Europe
- IMT (5G) implementation is currently on-going to reach the objective of uninterrupted coverage in urban areas and on major terrestrial transport paths
- protection and equal access of the incumbents in non-EU countries, will need to be considered in sharing and compatibility studies
- EU-wide usage is considered not dependent on the WRC outcome

but border coordination between EU and non-EU countries is necessary

 upgrade of the band will facilitate coordination negotiations between, especially where neighbouring countries have a different use

WRC-23 AI 1.3 - continued



RSPG Recommendation

update the allocation to primary to facilitate coordination negotiations between EU and non-EU countries at the EU borders, where non-EU neighbouring countries have a different use

taking account of the following:

- similar technical and regulatory conditions as those already adopted for the 3 400-3 600 MHz band
- incumbents should be protected and allowed to continue operations, without undue constraints on their future development
- IMT identification in this band is outside the scope of this agenda item.

The decision and resulting provisions in the RR must allow EU for continuation of the current harmonized use in accordance the Implementing Decision 2019/235EU

WRC-23 AI 1.5 - consideration



- AI allows for regulatory actions in the band 470-694 MHz (or parts thereof)
 those potentially regulatory actions could
 - 1. be changes to the service allocation
 - 2. entail the introduction of an IMT-identification
 - 3. include additional requirements
 - downlink-only, geographical restrictions, or delayed entry into force

BUT: All are complementary to the existing allocations!

Considerations should be based on:

- various spectrum needs, including free-to-air audio-visual multimedia
- technological developments
- changes in consumer behavior
- various political, social, cultural and economic general interest objectives

WRC-23 AI 1.5 - continued



 including, the importance of the RAS for European science policy promoting research and technological development

Any solution should provide sufficient flexibilty to reflect the needs and national situations of the Member States.

RSPG Recommendation

The decision of WRC-23 should be compliant with the Decision 2017/899/EU providing priority to broadcasting and PMSE usage until at least end 2030

This can be achieved by two main options:

- 1. NoC at WRC-23, with a possible agenda item for later WRCs
- 2. co-primary allocation MS/BS to become effective at a later stage

It is to noted that the EU Position should avoid any ambiguity

WRC-23 - Article 21.5



Follow up of decisions on IMT identifications under WRC-19 AI 1.13

- Focused on 26 GHz frequency band for 5G/IMT, ITU-R was instructed to:
 - 1. Verify Art 21.5 for notification of IMT stations using AAS
 - 2. Check applicability of the limit in Art 21.5 for IMT station using AAS
 - 3. Assessment of the need to replace or revise Art 21.5, and
 - 4. Address the possible need for a revision of Table 21-2

Article 21.5 provides partly the necessary protection of satellite reception from interference of terrestrial stations by limiting the power provided to the antenna of a station

but: Assessment shows that IMT BS station using active antenna systems are not comparable to existing terrestrial stations addressed in Art 21.5,

therefore compliance cannot be checked directly.

RSPG expects that WRC-23 will address the issue in response to the Report from the director of the BR.



Thank you very much for your attention!

Alexander Kühn

Federal Network Agency
Head of National and International Spectrummanagement

Alexander.Kuehn@BNetzA.de

+49.228.141250