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AIRBUS response to the RSPG draft opinion On the ITU-R World Radiocommunication Conference 2023 (WRC-23)

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Introduction

AIRBUS wishes to thank the Radio Spectrum Policy Group for having the opportunity to provide inputs to this consultation on the "*Draft RSPG Opinion on the ITU-R World Radiocommunication Conference 2023*", published on the 7th of June 2022.

AIRBUS notes that the RSPG opinion addressing the WRC-23 will be developed in two stages:

- Stage 1: The Interim Opinion identifying the main Agenda Items of WRC-23 where there is an EU policy in place as well as relevant spectrum harmonisation decisions
- Stage 2: based on the results of stage 1, the development of a final Opinion containing information on the main Agenda Items based on emerging results from studies conducted in the overall framework of WRC-23 preparation and advice on common positions for those Agenda Items.

AIRBUS understands that diverging spectrum requirements may exist between users of different services, as well as the necessity for Member States to balance the conditions to access new spectrum resources for emerging technologies and applications in light to the need to ensure the protection and continuation of operation of existing services in the same or adjacent frequency ranges.

AIRBUS notes that a public consultation is planned on the draft Final Opinion in 2022 and that received comments will be considered when elaborating the final Opinion.

Please find hereafter AIRBUS comments on this draft opinion.

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- ***Comment #1*** *regarding WRC-23 Agenda Item 1.2 (IMT mid-band identifications)*

AIRBUS is of the view that incumbent services must be protected, in particular satellite services and radiolocation services, as well as services operating in adjacent bands, such as the aeronautical radionavigation service (see radioaltimeters topic).

As a result, AIRBUS supports the RSPG recommendation to oppose to any IMT identification in the bands 3.3-3.4 GHz and 10-10.5 GHz as a common EU policy approach, as well as the option 2 to not support identification for IMT in the band 6 425 - 7 125 MHz.

AIRBUS supports the review of existing "MFCN" (Mobile/Fixed Communication Networks) harmonized spectrum for suitability for 5G[1] in Europe, taking into account the protection of incumbent services. AIRBUS notes that the ECC has already harmonized more than 1 200 MHz of spectrum for 5G between 694 MHz and 3.8 GHz, corresponding to the existing 2G/3G/4G bands in Europe and considering the benefit it could bring in terms of reduced impact on other services (compared to the identification of new frequency bands). In addition, the EU has recently issued a mandate to the CEPT regarding the use of the 3.8 - 4.2 GHz frequency band by 5G verticals, with potentially 400 MHz of additional 5G spectrum, beyond what ITU is proposing at the WRC-23.

Furthermore, AIRBUS considers that market demand supporting IMT identification has probably been overrated in the past few years. Indeed, some 5G initiatives supported by the RSPG have not been successful marketwise, such as the 26 GHz band; yet considered as "*the pioneer band in Europe above 24 GHz to give ultra-high capacity for innovative new services, enabling new business models and sectors of the economy to benefit from 5G*" in previous RSPG opinions. In 2018, the RSPG adopted "*further recommendations for policymakers on strategic issues related to 5G*" such as "S*ufficiently large portion (e.g. 1 GHz) of the 26 GHz band made available (locally) in response to market demand by 2020*". Considering the very limited use of the 26 GHz band, if any, in the EU as of today, one can legitimately question the market forecasts drawn up to support this initiative, and challenge the current market demands that the mobile industry continues to promote endlessly for new IMT identifications.

Finally, AIRBUS would like to stress that WAS/RLAN technologies appear to be more convenient in term of sharing with incumbent services than IMT systems. As far as we can observe, there is few if no example of sharing with IMT systems in low/mid frequency bands. This limitation should be duly considered by Member States when addressing the need for more connectivity in the EU.

- ***Comment #2*** *regarding WRC-23 Agenda Item 1.3 (MS 3 600-3 800 MHz)*

AIRBUS believes that the existing allocation to the aeronautical mobile service in Region 1, as part of the secondary mobile allocation, should be preserved as a secondary allocation. This allocation could support the development of future IMT service, beyond land mobile service, if and only if compatible with existing uses in this frequency band and bands adjacent to it.

AIRBUS supports the proposition of the RSPG to take proper account of the existing primary services in the 3 600-3 800 MHz band (FSS and FS), which should be protected and allowed to continue operations, without undue constraints on their future development. AIRBUS notes that it has not been

[1] https://cept.org/ecc/topics/spectrum-for-wireless-broadband-5g

the case in many European countries so far, including in France, where satellite earth stations licenses are no more delivered in this frequency band and bands adjacent to it since 2019.

AIRBUS believes that incumbent services must be protected, and the conditions of their future development ensured, including services operating in adjacent bands, such as the aeronautical radionavigation service (see radioaltimeters topic).

- ***Comment #3*** *regarding WRC-23 Agenda Item 1.5 (UHF Review – i.e. 470-960 MHz in R1)*

AIRBUS supports the introduction of a primary allocation to the mobile service in 470-694 MHz in Region 1 in order to fulfil spectrum needs for future governmental mobile applications.

- ***Comment #4*** *regarding WRC-23 Agenda Item 1.11 (GMDSS)*

AIRBUS has no specific opinion regarding this Agenda Item, as long as compatibility with incumbent services is ensured, and especially with aeronautical services.

- ***Comment #5*** *regarding WRC-23 Agenda Item 1.14 (EESS (passive) 250 GHz)*

AIRBUS supports the RSPG recommendation for an EU position to provide the relevant frequency spectrum to monitor the Earth's environment in support of the European Copernicus programme.

- ***Comment #6*** *regarding WRC-23 Agenda Item 1.15 (GSO ESIM Ku-band)*

AIRBUS supports the RSPG recommendation to Member States to support a regulatory framework and technical requirements for operation of earth stations on aircraft and on vessels in the frequency band 12.75-13.25 GHz (Earth-to-space), while protecting the services currently allocated in this frequency band and bands adjacent to it and avoiding any impact on Appendix 30B procedures and existing rights.

- ***Comment #7*** *regarding WRC-23 Agenda Item 1.16 (Non-GSO ESIM Ka-band)*

AIRBUS supports the RSPG recommendation to Member States to support the development of an international regulatory framework to allow NGSO ESIMs to use the FSS frequency bands considered, while taking due account of the following conditions:

- GSO systems and other services operating in the same and adjacent frequency bands should be protected;
- Passive services in general, and EESS (passive) sensors in the 18.6-18.8 GHz frequency band, should be adequately protected;
- In particular, global protection of the European satellite system Copernicus should be ensured.

- ***Comment #8*** *regarding* WRC-23 Agenda Item 9.1 topic a (Protection of space weather sensors)

AIRBUS supports the RSPG recommendation to Member States to support as a common policy approach:

- The recognition of space weather sensors at WRC 23 through an appropriate definition in the Radio Regulations (RR)

- An Agenda item at WRC-27 in order to study relevant spectrum allocation in Article 5 for relevant priority frequency bands used to provide critical data for space weather forecasts/warnings.

- ***Comment #9*** *regarding WRC-23 Agenda Item 9.1. topic b (RNSS protection from Amateur service at 1 300 MHz)*

AIRBUS supports the protection of RNSS systems, and Galileo in particular.

- ***Comment #10*** *regarding Studies in relation with RR Article 21*

AIRBUS supports sustainable conditions of operation for satellite systems, in particular:
- Existing limits in 21.5 to protect satellite services from terrestrial services must also apply to terrestrial services with Active Antenna Systems (AAS)
- For AAS, limits must be based on a relevant metric such as the Total Radiated Power (TRP)
- Satellite Services in the Q/V frequency bands must be added to the services and frequency bands indicated in Table 21-2 of Article 21, Section II (Power limits for terrestrial stations)

Conclusion

AIRBUS thanks the Radio Spectrum Policy Group for giving the opportunity to provide comments on this consultation and hope that these suggestions will be valuable to the RSPG for the drafting of the final opinion on the ITU-R WRC-23.