

## RESOLUTION 411 (WRC-23)

**Consideration of appropriate regulatory actions to update Appendix 26  
in support of modernization of high-frequency spectrum  
use in the aeronautical mobile (OR) service**

The World Radiocommunication Conference (Dubai, 2023),

*considering*

- a)* that digital aeronautical high-frequency (HF) systems need to coexist with existing aeronautical analogue voice and data HF systems without causing harmful interference;
- b)* that characteristics of HF propagation enable long distance communication for aircraft;
- c)* that aeronautical analogue voice and narrowband digital HF systems are some of the current means of communication with aircraft in remote and oceanic areas;
- d)* that there exist modern HF systems that can enhance the HF communication capability of aircraft,

*recognizing*

- a)* that the modernization of aeronautical HF communications will not require any changes to Article 5;
- b)* that the frequencies 3 023 kHz and 5 680 kHz are designated for search and rescue in Appendix 15;
- c)* that for the purpose of this Resolution, the term “wideband” in HF communications may refer to a combination of emissions wider than 3 kHz channels;
- d)* that wideband operation can be achieved by single- or multi-carrier emissions;
- e)* that wideband operation may be achieved by contiguous or non-contiguous channel aggregation for multi-carrier emissions;
- f)* that the use of existing frequency and area allotments in the frequency bands allocated to the aeronautical mobile (OR) service between 3 025 kHz and 18 030 kHz is governed by the provisions of Appendix 26,

*resolves to invite the ITU Radiocommunication Sector to complete in time for the 2027 world radiocommunication conference*

1 studies on the introduction of new technologies that enhance performance, including, but not limited to, new classes of emission, wideband systems (see *recognizing c), d) and e)*), etc., to the aeronautical mobile (OR) service systems in the frequency ranges considered in Appendix 26;

2 in order to undertake *resolves to invite ITU Radiocommunication Sector to complete in time for the 2027 world radiocommunication conference 1*, the definition of the relevant technical and operational characteristics and conduct sharing and compatibility studies with existing aeronautical mobile (OR) service systems and with other incumbent services that are allocated on a primary basis in the same or adjacent frequency bands;

3 based on ITU Radiocommunication Sector (ITU-R) studies, the identification of any potential modifications to Appendix 26, without modifying the existing area allotments in *recognizing f)*, and while taking into account that the current use of the narrowband systems shall remain unchanged and shall not be impacted nor precluded by the revision of Appendix 26,

*invites administrations*

to participate actively in the studies and provide the information required for the studies listed in *resolves to invite the ITU Radiocommunication Sector to complete in time for the 2027 world radiocommunication conference* by submitting contributions to ITU-R,

*invites the 2027 world radiocommunication conference*

to consider necessary changes, as appropriate, to Appendix 26, on the basis of the studies conducted under *resolves to invite the ITU Radiocommunication Sector to complete in time for the 2027 world radiocommunication conference* above.