

RESOLUTION 363 (REV.WRC-23)

Improving the utilization of the VHF maritime mobile band

The World Radiocommunication Conference (Dubai, 2023),

considering

- a) that the ITU Radiocommunication Sector (ITU-R) is conducting ongoing studies on improving efficiency in the use of the VHF maritime mobile band, including the use of digital technologies to respond to the emerging demands for new maritime uses and to ease congestion;
- b) that transitional arrangements from analogue voice to digital voice VHF radios may take a long time and needs effective transitional solutions;
- c) that use of existing maritime mobile service (MMS) allocations, where practicable, for ship and port security and enhanced maritime safety would be preferable, particularly where international interoperability is required;
- d) that any changes made in Appendix 18 should not prejudice the future use of these frequencies or the capabilities of systems or new applications required for use by the MMS;
- e) that ensuring resilient positioning, navigation and timing (PNT) data is particularly important for safe navigation at sea;
- f) that ranging mode (R-Mode), which uses VHF data exchange system (VDES), is a maritime radionavigation system that provides independent resilient terrestrial PNT data,

recognizing

- a) that Appendix 18 identifies frequencies to be used for distress and safety communications and other maritime communications on an international basis;
- b) that some frequencies in the bands used by the MMS in Appendix 18 are allocated to the fixed and mobile services on a co-primary basis;
- c) that a need exists to protect existing and planned in-band and adjacent-band services with no additional regulatory or technical constraints on these co-primary incumbent services when considering any potential modifications to MMS channelling arrangements;
- d) that it is desirable to enhance maritime safety and ship and port security via spectrum-dependent systems;

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e) that ITU and relevant international organizations have initiated related studies on the use of digital technologies for maritime safety and ship and port security;

f) that studies will be required to provide a basis for considering possible regulatory provisions to improve maritime safety and ship and port security, which may need access to spectrum for experimental use;

g) that administrations' and some relevant international organizations' efforts to continue the development of R-Mode to support the implementation of e-navigation may require a review of the Radio Regulations,

noting

a) that WRC-12, WRC-15 and WRC-19 reviewed Appendix **18** to improve use and efficiency for data communication using digital systems, e.g. for the introduction of VDES;

b) that maritime on-board communication systems have implemented digital technologies for voice communication as described in Recommendation ITU-R M.1174 to improve efficient use of the frequency band 450-470 MHz;

c) that digital systems have been implemented in the land mobile service,

resolves to invite the ITU Radiocommunication Sector to complete in time for the 2031 world radiocommunication conference

1 studies on sharing and compatibility with incumbent services that are allocated on a primary basis in the same and adjacent frequency bands and studies on spectrum needs, transitional arrangements and possible changes to the VHF maritime mobile band, in order to advance digital voice and data technologies in the MMS, taking into account *recognizing b) and c)*;

2 compatibility studies, limited to frequencies identified in Appendix **18** for VDES, for a new allocation of the maritime radio navigation service under Article **5** and within the existing MMS to implement R-Mode,

invites administrations

to participate actively in the studies as described in *resolves to invite the ITU Radiocommunication Sector to complete in time for the 2031 world radiocommunication conference* and provide the information required for the studies by submitting contributions to ITU-R,

invites the 2031 world radiocommunication conference

1 to consider, based on the results of studies, and within the Radio Regulations, excluding new allocations under Article **5**, possible regulatory changes to advance digital voice and data technologies in the MMS within the VHF maritime mobile band;

2 to consider, based on the results of studies, possible revisions to the Radio Regulations, including new allocations under Article **5**, limited to frequencies identified in Appendix **18** for VDES, for implementation of R-Mode as a new maritime radionavigation service,

invites relevant international organizations

to participate actively in the studies by providing requirements and information that should be taken into account in ITU-R studies,

instructs the Secretary-General

to bring this Resolution to the attention of the International Maritime Organization, International Association of Marine Aids to Navigation and Lighthouse Authorities, Comité International Radio-Maritime and other concerned international and regional organizations.