

## RESOLUTION 363 (WRC-19)

**Considerations to improve utilization of the VHF maritime frequencies in Appendix 18**

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

*considering*

- a)* that Appendix **18** identifies frequencies to be used for distress and safety communications and other maritime communications on an international basis;
- b)* that congestion on Appendix **18** frequencies requires consideration of efficient new technologies;
- c)* that the ITU Radiocommunication Sector (ITU-R) is conducting ongoing studies on improving efficiency in the use of Appendix **18**;
- d)* that the use of digital technologies will make it possible to respond to the emerging demand for new uses and ease congestion;
- e)* 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;
- f)* that 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;
- g)* that the International Maritime Organization (IMO) has initiated a regulatory scoping exercise for the use of maritime autonomous surface ships (MASS);
- h)* that the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) is developing ranging mode (R-Mode), which is a radionavigation system that is intended to provide a contingency system in case of temporary global navigation satellite system (GNSS) disruption, to support e-navigation,

*recognizing*

- a)* that it is desirable to enhance maritime safety and ship and port security via spectrum-dependent systems;
- b)* that ITU and relevant international organizations have initiated related studies on the use of digital technologies for maritime safety and ship and port security;
- c)* 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;
- d)* that, in order to provide worldwide interoperability of equipment on ships, there should be harmonized technologies, or interoperable technologies, implemented under Appendix **18**;
- e)* 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,

**RES363-2**

*noting*

- a) that WRC-12, WRC-15 and this conference have reviewed Appendix **18** to improve use and efficiency for data communication using digital systems;
- 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,

*noting further*

that WRC-12, WRC-15 and this conference have reviewed Appendix **18** to improve efficiency and introduce frequency bands for new digital technology for data communication, e.g. for the introduction of the VHF data exchange system (VDES),

*resolves to invite the 2027 World Radiocommunication Conference*

- 1 to consider possible changes to Appendix **18** in order to enable use in the MMS for future implementation of new technologies, for improving efficient use of the maritime frequency bands;
- 2 to consider possible changes to the Radio Regulations 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,

*invites the ITU Radiocommunication Sector*

to conduct studies to determine the necessary regulatory provisions and spectrum needs according to *resolves to invite the 2027 World Radiocommunication Conference,*

*instructs the Secretary-General*

to bring this Resolution to the attention of IMO and other international and regional organizations concerned.