# RES363

# 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**;

# RES363

*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,

#### 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.