

## RESOLUTION 361 (WRC-15)

**Consideration of regulatory provisions for modernization of the  
Global Maritime Distress and Safety System and  
related to the implementation of e-navigation**

The World Radiocommunication Conference (Geneva, 2015),

*considering*

- a)* that there is a continuing need in the Global Maritime Distress and Safety System (GMDSS), on a global basis, for improved communications to enhance maritime capabilities;
- b)* that the International Maritime Organization (IMO) is considering GMDSS modernization;
- c)* that advanced maritime MF/HF/VHF data systems and satellite communication systems may be used to deliver Maritime Safety Information (MSI) and other GMDSS communications;
- d)* that IMO is considering additional global and regional GMDSS satellite service providers;
- e)* that WRC-19 will have commenced regulatory actions in regard to modernization of the GMDSS;
- f)* that IMO is in the process of implementing e-navigation, defined as the harmonized collection, integration, exchange, presentation and analysis of marine information on board and ashore by electronic means to enhance berth-to-berth navigation and related services for safety and security at sea and protection of the marine environment;
- g)* that GMDSS modernization may be influenced by the development of e-navigation,

*noting*

- a)* that WRC-12 reviewed Appendix 17 and Appendix 18 to improve efficiency and introduce frequency bands for new digital technology;
- b)* that WRC-12 has reviewed the regulatory provisions and spectrum allocations for use by maritime safety systems for ships and ports,

*further noting*

that WRC-12 and this conference have reviewed Appendix 18 to improve efficiency and introduce frequency bands for new digital technology,

*recognizing*

- a) that advanced maritime communication systems may support the implementation of GMDSS modernization and e-navigation;
- b) that IMO efforts to implement GMDSS modernization and e-navigation may require a review of the Radio Regulations to accommodate advanced maritime communication systems;
- c) that, due to the importance of these radio links in ensuring the safe operation of shipping and commerce and security at sea, they must be resilient to interference,

*resolves to invite the 2023 World Radiocommunication Conference*

- 1 to take into consideration the activities of IMO, as well as information and requirements provided by IMO, in order to determine the regulatory actions to support GMDSS modernization;
- 2 to consider possible regulatory actions, including spectrum allocations based on the ITU Radiocommunication Sector (ITU-R) studies, for the maritime mobile service, supporting e-navigation,

*invites ITU-R*

to conduct studies taking into consideration the activities of IMO, in order to determine spectrum needs and regulatory actions to support GMDSS modernization and the implementation of e-navigation,

*invites*

- 1 IMO to actively participate in the studies by providing requirements and information that should be taken into account in ITU-R studies;
- 2 the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), the International Civil Aviation Organization (ICAO), the International Electrotechnical Commission (IEC), the International Hydrographic Organization (IHO), the International Organization for Standardization (ISO) and the World Meteorological Organization (WMO) to contribute to these studies,

*instructs the Secretary-General*

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