

## MOD

## RESOLUTION 361 (REV.WRC-19)

**Consideration of possible regulatory actions to support modernization of the  
Global Maritime Distress and Safety System and  
the implementation of e-navigation**

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

*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 this conference has 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 may be influenced by the development of e-navigation in the future,

*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 reviewed the regulatory provisions and spectrum allocations for use by maritime safety systems for ships and ports;
- c) that IMO may evaluate new applications to recognize satellite systems as new GMDSS satellite providers during the WRC-23 study cycle, and that this may also need to be addressed, as appropriate,

*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 communications,

*recognizing*

- a) that advanced maritime communication systems may support GMDSS modernization and the implementation of e-navigation;
- b) that IMO efforts to modernize the GMDSS and implement 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 safety at sea, they must be resilient to interference;
- d) that IMO is evaluating an application to recognize the existing geostationary-satellite system operating on 1 610-1 626.5 MHz (Earth-to-space) and 2 483.5-2 500 MHz (space-to-Earth) as a new GMDSS satellite provider,

*resolves to invite the 2023 World Radiocommunication Conference*

- 1 to consider possible regulatory actions, based on ITU Radiocommunication Sector (ITU-R) studies, taking into consideration the activities of IMO, as well as information and requirements provided by IMO, to support GMDSS modernization;
- 2 to consider possible regulatory actions, including spectrum allocations based on ITU-R studies, for the maritime mobile service, supporting e-navigation;
- 3 to consider regulatory provisions, if any, based on the results of ITU-R studies referred to in *invites the ITU Radiocommunication Sector* below, to support the introduction of additional satellite systems into the GMDSS,

*invites the ITU Radiocommunication Sector*

to conduct studies, taking into consideration the activities of IMO and other relevant international organizations, in order to determine spectrum needs and regulatory actions to support GMDSS modernization and the implementation of e-navigation, including the introduction of additional satellite systems into the GMDSS,

*instructs the Secretary-General*

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