### Resolution A.811(19)

adopted on 23 November 1995 (Agenda item 10)

# PERFORMANCE STANDARDS FOR A SHIPBORNE INTEGRATED RADIOCOMMUNICATION SYSTEM (IRCS) WHEN USED IN THE GMDSS

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

RECALLING ALSO regulations IV/6 and 14 of the 1988 amendments to the International Convention for the Safety of Life at Sea (SOLAS), 1974, concerning radiocommunications for the global maritime distress and safety system (GMDSS), which require, respectively, that every ship be provided with radio installations and that all the equipment in these installations shall conform to appropriate performance standards not inferior to those adopted by the Organization,

RECOGNIZING the need to take into account the human element in identifying measures to increase the effectiveness and efficiency of the human performance by designing equipment that is more suited to the operators who use it,

RECOGNIZING ALSO that increased effectiveness and efficiency in the use of GMDSS equipment would be achieved by integrating the radiocommunication equipment into a shipborne integrated radiocommunication system, thereby providing simpler procedures for operators,

RECOGNIZING FURTHER the need to prepare performance standards for such a shipborne integrated radiocommunication system to ensure that the functional requirements of SOLAS regulation IV/4 are met,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its sixty-fifth session,

- 1. ADOPTS the Recommendation on Performance Standards for a Shipborne Integrated Radio-communication System (IRCS) when used in the GMDSS set out in the annex to the present resolution;
- 2. RECOMMENDS Governments to ensure that a shipborne Integrated Radiocommunication System (IRCS) when used in the GMDSS conforms to performance standards not inferior to those specified in the annex to this resolution;
- 3. REQUESTS the Maritime Safety Committee to keep these Performance Standards under review and to adopt amendments thereto, as necessary.

#### Annex

## RECOMMENDATION ON PERFORMANCE STANDARDS FOR A SHIPBORNE INTEGRATED RADIOCOMMUNICATION SYSTEM (IRCS) WHEN USED IN THE GMDSS

#### 1 INTRODUCTION

- 1.1 The IRCS is a system in which individual radiocommunication equipment and installations are used as sensors, i.e. without the need for their own control units, providing outputs to and accepting inputs from the operator's position, called workstations.
- **1.2** Such workstations are called "GMDSS workstations" if they include control and monitoring of all equipment and installations provided on a ship for the GMDSS which are also suitable for general radiocommunications.
- **1.3** The IRCS, in addition to meeting the general requirements set out in resolution A.694(17), should comply with the following performance standards.

#### 2 GENERAL

- 2.1 The IRCS should comply with the applicable functional requirements of the GMDSS. All functional requirements of the item of radiocommunication equipment and installations integrated into the IRCS should be available. The functional requirements for a specific item of radiocommunication equipment or installation should not impair the availability of any other functional requirement for any other item of radiocommunication equipment or installation integrated into the IRCS.
- **2.2** All functional requirements of the equipment integrated into the IRCS should conform to the appropriate provisions of the performance standards for that equipment.
- **2.3** No single fault should impair the operation of more than one radiocommunication sensor or more than one workstation at any time.

### 2.4 The IRCS should:

- .1 comprise at least two GMDSS workstations each connected to each GMDSS radiocommunication sensor over a network or connecting system;
- .2 comprise at least two printers;
- .3 have facilities for automatically updating ship's position and time data in addition to the provision for manual input of this data;
- .4 have a power supply arrangement which ensures that it is not possible inadvertently to switch off any part of the IRCS;
- .5 include detecting facilities such that failure of any part of the IRCS activates an alarm; and
- **.6** be protected against the effects of computer viruses.

#### **2.5** The GMDSS workstations should:

- .1 have an identical user interface and an identical access to each function for different sensors;
- .2 be capable of being operated independently of each other;
- .3 be capable of allowing simultaneous operation of at least two GMDSS radiocommunication sensors; and

- .4 be capable of transmitting distress alerts. The distress alert should only be initiated by means of a dedicated button for each GMDSS sensor; the button should not be used for any other purpose. Each button should be clearly identified, protected against inadvertent operation, require two independent actions to initiate the distress alert and produce an indication that the distress alert has been activated. Each distress alerting button should be electrically separate from the IRCS network or connecting system. It should be possible to interrupt or initiate the distress alert at any time.
- 2.6 Integration of the VHF radiotelephone required for navigational safety should only be permitted if it does not prevent compliance with SOLAS regulation IV/6.3.
- **2.7** Additional workstations intended only for general radiocommunications should not have access to the distress alerting functions; neither should they impair or slow down the distress alerting and alarm functions. The GMDSS workstations should have priority access over additional workstations.
- **2.8** Additional sensors not required for the GMDSS should neither impair nor slow down the distress alerting and alarm functions.