WWNWS WWNWS4/4/2A
Meeting 4 1 August 2012
Agenda Item 4.2

## **IMO ASSEMBLY TECHNICAL RESOLUTION 705(17)**

## Submitted by IHB

### **SUMMARY**

Executive Summary: This document is the Final Draft version of Assembly TR 705(17)

Action to be taken: Paragraph 2.

Related documents: None

1. See attached document.

2. The Sub-Committee is invited to approve the document provided.

## RECOMMENDATION ON THE PROMULGATION OF MARITIME SAFETY INFORMATION

#### 1 INTRODUCTION

- **1.1** The purpose of this Recommendation is to set out the organization, standards and methods which should be used for the promulgation and reception of maritime safety information.
- 1.2 The maritime safety information service of the Global Maritime Distress and Safety System (GMDSS) is the internationally and nationally co-ordinated network of broadcasts containing information which is necessary for safe navigation, received in ships by equipment which automatically monitors the appropriate transmissions, displays information which is relevant to the ship and provides a print capability. This concept is illustrated in Figure 1.

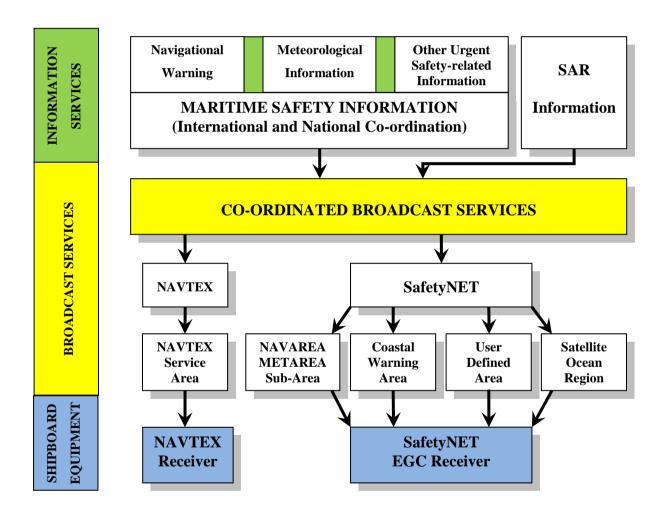


Figure 1 – The maritime safety information service of the Global Maritime Distress and Safety System

1.3 Maritime safety information is of vital concern to all ships. It is therefore essential that common standards are applied to the collection, editing and dissemination of this information. Only by doing so will the mariner be assured of receiving the information they need, in a form which they understand, at the earliest possible time.

#### 2 **DEFINITIONS**

- **2.1** For the purposes of this Recommendation, the following definitions apply:
  - .1 Coastal warning means a navigational warning or in-force bulletin promulgated as part of a numbered series by a National Co-ordinator. Broadcast shall be made by the International NAVTEX service to defined NAVTEX service areas and/or by the International SafetyNET service to coastal warning areas. (In addition, Administrations may issue coastal warnings by other means).
  - .2 Coastal warning area means a unique and precisely defined sea area within a NAVAREA/METAREA or Sub-Area established by a coastal state for the purpose of coordinating the broadcast of coastal maritime safety information through the SafetyNET service.
  - .3 Global Maritime Distress and Safety System (GMDSS) means the global communications service based upon automated systems, both satellite and terrestrial, to provide distress alerting and promulgation of maritime safety information for mariners.
  - **.4** *HF NBDP* means High Frequency narrow-band direct-printing, using radio telegraphy as defined in Recommendation ITU-R M.688, as amended.
  - .5 In-force bulletin means a list of serial numbers of those NAVAREA, Sub-Area or coastal warnings in force issued and broadcast by the NAVAREA Co-ordinator, Sub-Area Co-ordinator or National Co-ordinator during at least the previous six weeks.
  - **.6** International NAVTEX service means the co-ordinated broadcast and automatic reception on 518 kHz of maritime safety information by means of narrow-band direct-printing telegraphy using the English language<sup>1</sup>.
  - .7 International SafetyNET service means the co-ordinated broadcast and automatic reception of maritime safety information via the Inmarsat Enhanced Group Call (EGC) system, using the English language, in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.
  - **.8** *Maritime safety information*  $(MSI)^2$  means navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages broadcast to ships.
  - **.9** Maritime safety information service means the internationally and nationally coordinated network of broadcasts containing information which is necessary for safe navigation.
  - .10 *METAREA* means a geographical sea area<sup>3</sup> established for the purpose of coordinating the broadcast of marine meteorological information. The term METAREA followed by a roman numeral may be used to identify a particular sea area. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

as defined in regulation IV/2 of the 1974 SOLAS Convention, as amended.

as set out in the IMO NAVTEX Manual.

which may include inland seas, lakes and waterways navigable by sea-going ships.

- .11 *Meteorological information* means the marine meteorological warning and forecast information in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.
- .12 National NAVTEX service means the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy using frequencies other than 518 kHz and languages as decided by the Administration concerned.
- .13 National SafetyNET service means the broadcast and automatic reception of maritime safety information via the Inmarsat EGC system, using languages as decided by the Administration concerned.
- .14 NAVAREA means a geographical sea area<sup>3</sup> established for the purpose of coordinating the broadcast of navigational warnings. The term NAVAREA followed by a roman numeral may be used to identify a particular sea area. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.
- .15 Navigational warning means a message containing urgent information relevant to safe navigation broadcast to ships in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.
- .16 NAVTEX means the system for the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy.
- .17 NAVTEX coverage area means an area defined by an arc of a circle having a radius from the transmitter calculated according to the method and criteria given in IMO Res A.801(19) annex 4.
- .18 NAVTEX service area means a unique and precisely defined sea area, wholly contained within the NAVTEX coverage area, for which maritime safety information is provided from a particular NAVTEX transmitter. It is normally defined by a line that takes full account of local propagation conditions and the character and volume of information and maritime traffic patterns in the region, as given in IMO Res A.801(19) annex 4.
- .19 Other urgent safety-related information means maritime safety information broadcast to ships that is not defined as a navigational warning, or meteorological information. This may include, but is not limited to, significant malfunctions or changes to maritime communications systems, and new or amended mandatory ship reporting systems or maritime regulations affecting ships at sea.
- **.20** SafetyNET means the international service for the broadcast and automatic reception of maritime safety information via the Inmarsat EGC system. SafetyNET receiving capability is part of the mandatory equipment which is required to be carried by certain ships in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.
- .21 SAR information means distress alert relays and other urgent search and rescue information broadcast to ships.

which may include inland seas, lakes and waterways navigable by sea-going ships.

- .22 Sub-Area means a sub-division of a NAVAREA/METAREA in which a number of countries have established a co-ordinated system for the promulgation of maritime safety information. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.
- .23 User defined area means a temporary geographic area, either circular or rectangular, to which maritime safety information is addressed.
- .24 World-Wide Navigational Warning Service (WWNWS)<sup>4</sup> means the internationally and nationally co-ordinated service for the promulgation of navigational warnings.
- .25 In the operating procedures *co-ordination* means that the allocation of the time for data broadcast is centralized, the format and criteria of data transmissions are compliant as described in the Joint IMO/IHO/WMO Manual on Maritime Safety Information and that all services are managed as set out in resolutions A.705(17), as amended, A.706(17), as amended, and A.1051(27).

#### 3 BROADCAST METHODS

- **3.1** Two principal methods are used for broadcasting maritime safety information in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended, in the areas covered by these methods, as follows:
  - .1 NAVTEX: broadcasts to coastal waters; and
  - .2 SafetyNET: broadcasts which cover all the waters of the globe except for Sea Area A4, as defined by resolution A.801(19), Annex 3, as amended.
- **3.2** Information shall be provided for unique and precisely defined sea areas, each being served only by the most appropriate of the above methods. Although there will be some duplication to allow a ship to change from one method to another, the majority of warnings will be broadcast either on NAVTEX or SafetyNET.
- **3.3** NAVTEX broadcasts shall be made in accordance with the standards and procedures set out in the NAVTEX Manual.
- **3.4** SafetyNET broadcasts shall be made in accordance with the standards and procedures set out in the International SafetyNET Manual.
- **3.5** HF NBDP may be used to promulgate maritime safety information in areas outside Inmarsat coverage (SOLAS regulation IV/7.1.5).
- **3.6** In addition, Administrations may also provide maritime safety information by other means.
- **3.7** In the event of failure of normal transmission facilities, an alternative means of transmission should be utilized. A NAVAREA Warning and a coastal Warning, if possible, should be issued detailing the failure, its duration and, if known, the alternative route for the dissemination of MSI.

## 4 SHIPBOARD EQUIPMENT

as set out in resolution A.706(17), as amended.

- **4.1** Ships are required to be capable of receiving maritime safety information broadcasts for the area in which they operate in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended.
- 4.2 The NAVTEX receiver shall operate in accordance with the technical specifications set out in Recommendation ITU-R M.540, as amended. Performance standards for shipborne equipment, if installed before 1 July 2005, shall meet the standards adopted by the Organization in resolution A.525(13). If installed on or after 1 July 2005, they shall conform to the Organization's resolution MSC.148(77).
- **4.3** The SafetyNET receiver shall conform to the Maritime Design and Installation Guidelines (DIGs), Annex B, issue 6 of April 2008 published by Inmarsat, and meet the performance standards adopted by the Organization in resolution A.664(16), if installed before 1 July 2012. If installed after 1 July 2012, it shall meet the performance standards adopted by the Organization in resolution MSC.306(87).
- **4.4** In sea area A4, outside of the coverage of NAVTEX, where MSI is received using HF NBDP, the HF NBDP receiver shall operate in accordance with the technical specifications set out in Recommendation ITU-R M.688, as amended, and shall meet the performance standards adopted by the Organization by resolution A.700(17), as amended.

#### 5 PROVISION OF INFORMATION

- **5.1** Navigational warnings shall be provided in accordance with the standards, organization and procedures of the WWNWS under the functional guidance of the International Hydrographic Organization (IHO) through its World-Wide Navigational Warning Service Sub-Committee (WWNWS).
- **5.2** Meteorological information shall be provided in accordance with the World Meteorological Organization (WMO) technical regulations, recommendations, and procedures defined for the World-Wide Met-Ocean Information and Warning Service (WWMIWS) monitored and reviewed by the Expert Team on Maritime Safety Services of the Joint WMO/IOC<sup>5</sup> Commission for Oceanography and Marine Meteorology (JCOMM).
- **5.3** SAR information shall be provided by the various authorities responsible for coordinating maritime search and rescue operations in accordance with the standards and procedures established by the Organization.
- **5.4** Other urgent safety-related information shall be provided by the relevant national or international authority responsible for managing the system or scheme.
- **5.5** Relevant national or international authorities shall take into account the need for contingency planning.

#### 6 CO-ORDINATION PROCEDURES

- **6.1** In order to make the best use of automated reception facilities, and to ensure that the mariner receives at least the minimum information necessary for safe navigation, careful coordination is required.
- 6.2 In general, this requirement for co-ordination will be met by the standard operational procedures of the Organization, IHO, WMO, International Telecommunication Union (ITU) and

<sup>&</sup>lt;sup>5</sup> IOC is the Intergovernmental Oceanographic Commission of UNESCO.

the International Mobile Satellite Organization (IMSO). Cases of difficulty should be referred, in the first instance, to the most appropriate parent body.

- **6.3** Administrations broadcasting maritime safety information shall provide details of services to the Organization, which will maintain and publish this as part of the GMDSS Master Plan.
- 6.4 The co-ordination of changes to operational NAVTEX services and of the establishment of new stations is undertaken by the IMO NAVTEX Co-ordinating Panel of the Sub-Committee on Radiocommunications and Search and Rescue on behalf of the Maritime Safety Committee.
- 6.5 The co-ordination of changes to operational SafetyNET services and of the authorization and registration of information providers is undertaken by the International SafetyNET Co-ordinating Panel of the Sub-Committee on Radiocommunications and Search and Rescue on behalf of the Maritime Safety Committee.
- **6.6** Administrations should design their broadcasts to suit specific service areas. The designation of service areas is an important part of the co-ordination process since it is intended that a ship should be able to obtain all the information relevant to a given area from a single source. The Maritime Safety Committee approves NAVAREAs/METAREAs and service areas for the International NAVTEX and SafetyNET service as advised by IHO and WMO.

# 7 PROCEDURE FOR AMENDING THE MARITIME SAFETY INFORMATION SERVICE

- **7.1** Proposals for amendment or enhancement of the maritime safety information service shall be submitted for evaluation by the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR). Amendments will only be adopted after the approval of the Maritime Safety Committee.
- 7.2 The agreement of the IHO, WMO, IMSO and ITU, as appropriate, and the active participation of other bodies shall be sought, according to the nature of the proposed amendments.
- 7.3 Amendments adopted by the Maritime Safety Committee will be notified to all concerned. At least 12 months' notice will be given before implementation and they will come into force on 1 January of the following year.