



ORGANIZACION HIDROGRAFICA INTERNACIONAL

Dossier del BHI No. S3/3084

CIRCULAR No. 104/2007
12 de Noviembre del 2007.

PROMULGACION DE INFORMACIÓN SOBRE LA SEGURIDAD MARITIMA (ISM)
Y SERVICIO MUNDIAL DE RADIOAVISOS A LA NAVEGACIÓN (WWNWS)

Referencias: a) Circular del BHI No. 34/2006 del 27 de Marzo;
b) Circular del BHI No. 28/2007 del 8 de Marzo.

Estimado(a) Director(a),

1. Tal y como se indicó en las Circulares de las referencias, la Comisión sobre la Promulgación de Radioavisos a la Navegación (CPRNW) ha estado revisando toda la documentación relativa al WWNWS. Ha completado ahora el trabajo sobre los dos documentos del nivel superior: La Resolución 705 de la Asamblea de la OMI (A.705(17), según fue enmendada) referente a la "Promulgación de Información sobre la Seguridad Marítima"; y la Resolución 706 de la Asamblea de la OMI (A.706(17) según fue enmendada) referente al "Servicio Mundial de la OMI/OHI de Radioavisos a la Navegación".

2. La CPRNW ha consultado ampliamente sobre la revisión de estas dos resoluciones y, en particular, ha contado con la asistencia activa de la OMI, la OMM, la IMSO e Inmarsat. El objetivo de la revisión era actualizar la información incluida y reorganizarla en una estructura más lógica.

Las resoluciones revisadas se adjuntan a la presente en el Anexo A y el texto de las resoluciones existentes figura en el Anexo B, en Inglés únicamente (la traducción al Francés y al Español será efectuada por la OMI, tras su sumisión). Una vez que estos documentos hayan sido considerados por COMSAR y transmitidos - así lo esperamos - al Comité de la Seguridad Marítima (MSC) para su transmisión consecutiva a la Asamblea de la OMI, la CPRNW empezará el trabajo sobre los otros documentos del WWNWS que se derivan de estas dos resoluciones.

3. Para que el proyecto de Resoluciones revisadas pueda ser considerado durante la próxima reunión del Subcomité de la OMI sobre Comunicaciones y Búsqueda y Salvamento (COMSAR 12), los documentos tienen que ser sometidos a la OMI antes del 4 de Enero del 2008. Teniendo en cuenta el periodo intermedio de fiestas, el BHI desea someter estos documentos a la OMI el 14 de Diciembre. Se ruega pues a los Estados Miembros que proporcionen sus comentarios al BHI **antes del Lunes 10 de Diciembre del 2007.**

En nombre del Comité Directivo
Atentamente,

Vice-Almirante Alexandros MARATOS
Presidente

Anexo A: Resoluciones revisadas; *(en Inglés)*
Anexo B: Resoluciones existentes. *(en Inglés)*

DRAFT REVISED ASSEMBLY RESOLUTION A.705 (17)

PROMULGATION OF MARITIME SAFETY INFORMATION

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 regulation V/4 of the International Convention for the Safety of Life at Sea, 1974, as amended, which establishes the requirement for promulgating information on direct dangers to navigation,

NOTING resolutions A.706(17), as amended on the World-Wide Navigational Warning Service, A.801(19) concerning provision of radio services for the global maritime distress and safety system (GMDSS) and resolution [A...(26)] concerning criteria for the provision of mobile satellite communication systems in the global maritime distress and safety system (GMDSS),

RECALLING FURTHER regulation V/5 of the International Convention for the Safety of Life at Sea, 1974, as amended, which establishes the requirement for promulgating maritime meteorological information,

BEARING IN MIND the 1988 amendments to the International Convention for the Safety of Life at Sea, 1974, concerning radiocommunications for the global maritime distress and safety system (GMDSS),

BEARING IN MIND ALSO the work of the Organization in developing co-ordinated world-wide search and rescue facilities,

NOTING ADDITIONALLY that the Organization has adopted carriage requirements and performance standards for specialized systems for receiving maritime safety information on ships subject to the International Convention for the Safety of Life at Sea, 1974, as amended,

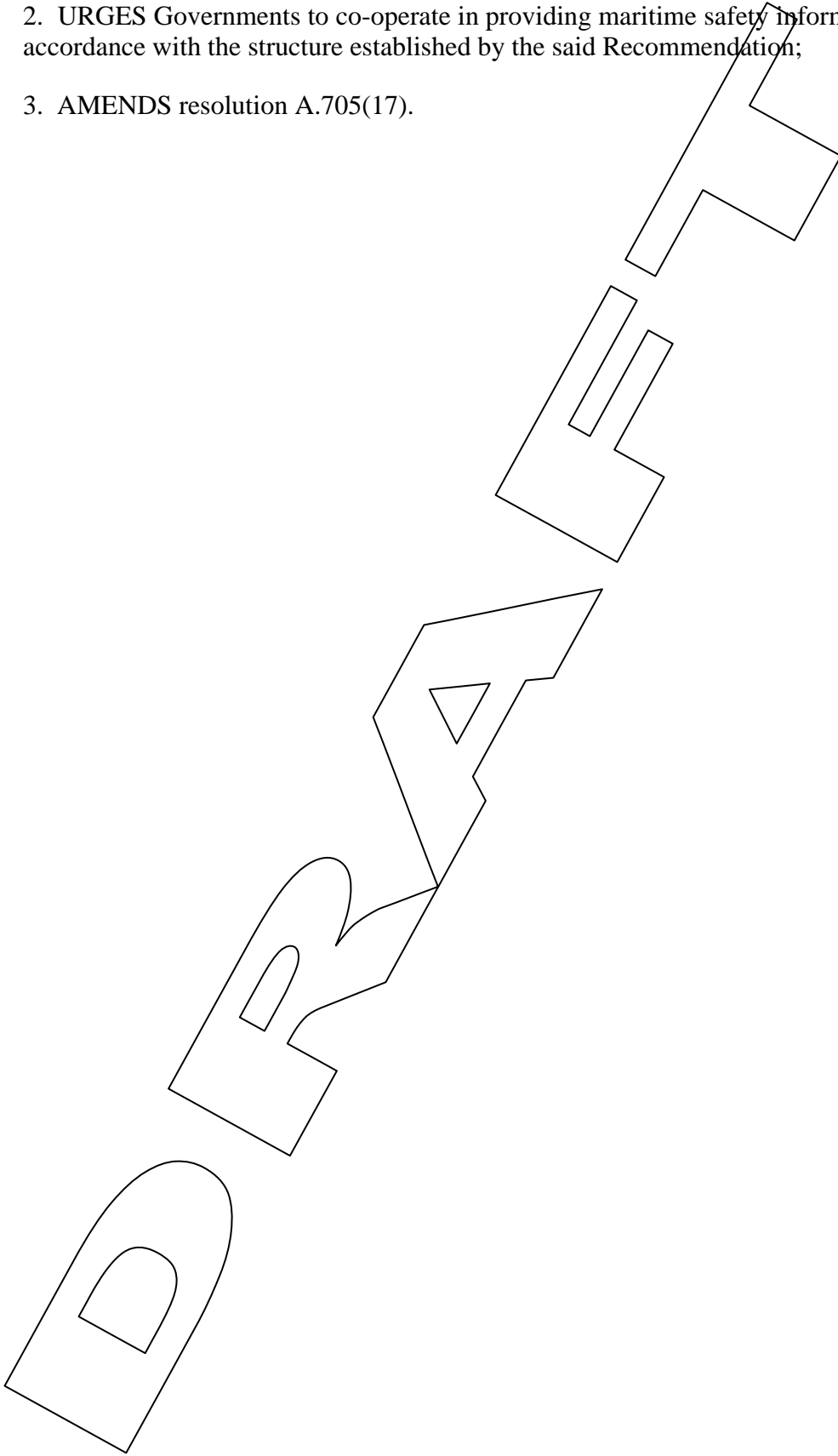
NOTING FURTHER that Governments may, at their discretion, implement and operate other additional means of promulgation of maritime safety information to meet national requirements,

RECOGNIZING that international co-operation and co-ordination are essential for the satisfactory maintenance of maritime safety information services and that such services make a vital contribution to the safety of life at sea,

HAVING CONSIDERED the recommendations made by the Maritime Safety Committee at its [eighty-fourth] session,

1. **RESOLVES** that the procedures for the provision and promulgation of maritime safety information should be in accordance with the Recommendation on the Promulgation of Maritime Safety Information set out in the annex to the present resolution;

2. URGES Governments to co-operate in providing maritime safety information in accordance with the structure established by the said Recommendation;
3. AMENDS resolution A.705(17).



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.

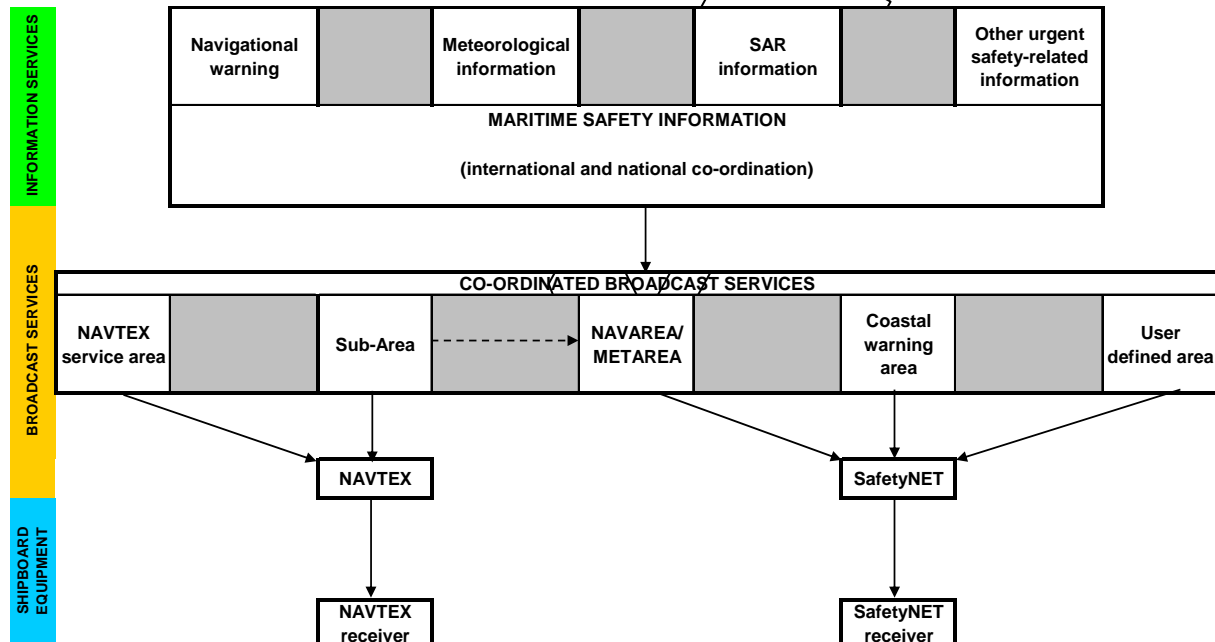


Figure 1 - The maritime safety information service of the Global Maritime Distress and Safety System

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 he needs, in a form which he understands, at the earliest possible time.

2 DEFINITIONS

2.1 For the purposes of this Recommendation, the following definitions apply:

- .1 *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 co-ordinating the broadcast of coastal maritime safety information through the SafetyNET service.
- .2 HF NBDP means High Frequency narrow-band direct-printing, using radio telegraphy as defined in ITU-R recommendation M. 688.
- .3 *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 language¹.
- .4 *International SafetyNET service* means the co-ordinated broadcasting and automated 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.
- .5 *Maritime safety information (MSI)*² means navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages broadcast to ships.
- .6 *Maritime safety information service* means the internationally and nationally co-ordinated network of broadcasts containing information which is necessary for safe navigation.
- .7 *METAREA* means a geographical sea area³ established for the purpose of co-ordinating 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 should not prejudice the delimitation of any boundaries between States.
- .8 *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.
- .9 *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.
- .10 *National SafetyNET service* means the broadcasting and automated reception of maritime safety information via the Inmarsat EGC system, using languages as decided by the Administration concerned.

¹ as set out in the IMO NAVTEX Manual.

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

.11 *NAVAREA* means a geographical sea area³ established for the purpose of co-ordinating 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 should not prejudice the delimitation of any boundaries between States.

.12 *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.

.13 *NAVTEX* means the system for the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy.

.14 *NAVTEX service area* means a unique and precisely defined sea area for which maritime safety information is provided from a particular NAVTEX transmitter.

.15 *Other urgent safety-related information* means maritime safety information broadcast to ships that is not defined as a navigational warning, meteorological information or SAR 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.

.16 *SafetyNET* means the international service for the broadcasting and automatic reception of maritime safety information through 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.

.17 *SAR information* means distress alert relays and other urgent search and rescue information broadcast to ships.

.18 *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.

.19 *User defined area* means a temporary geographic area, either circular or rectangular, to which maritime safety information is addressed.

.20 *World-Wide Navigational Warning Service (WWNWS)*⁴ means the internationally and nationally co-ordinated service for the promulgation of navigational warnings.

3 BROADCAST METHODS

³ which may include inland seas, lakes and waterways navigable by sea-going ships.

⁴ as set out in resolution [A.706(17) as amended].

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, paragraph 4, 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 systems. Although there will be some duplication to allow a ship to change from one system to another, the majority of messages will only be broadcast on one system.

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.

4 SHIPBOARD EQUIPMENT

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 should operate in accordance with the technical specifications set out in Recommendation ITU-R M.540-2, as amended, and should meet the performance standards adopted by the Organization by resolution MSC.148(77), as amended.

4.3 The SafetyNET receiver should conform to the Maritime Design and Installation Guidelines (DIGs) published by Inmarsat, and should meet the performance standards adopted by the Organization by resolution A.664(16).

4.4 In Sea Area A4, outside of the coverage of NAVTEX, where MSI is received using HF NBDP, the HF NBDP receiver should operate in accordance with the technical specifications set out in Recommendation ITU-R M.688, as amended, and should 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 Commission on the Promulgation of Radio Navigational Warnings (CPRNW).

5.2 Meteorological information shall be provided in accordance with the World Meteorological Organization (WMO) technical regulations and recommendations, monitored and reviewed by the Expert Team on Maritime Safety Services of the Joint WMO/IOC⁵ Commission for Oceanography and Marine Meteorology (JCOMM).

5.3 SAR information shall be provided by the various authorities responsible for co-ordinating 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 only that information necessary for safe navigation, careful co-ordination is required.

6.2 In general, this requirement for co-ordination will be met by the standard operational procedures of the Organization, International Hydrographic Organization (IHO), World Meteorological Organization (WMO), International Telecommunication Union (ITU) and 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 should 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 Co-ordinating Panel on NAVTEX Services 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

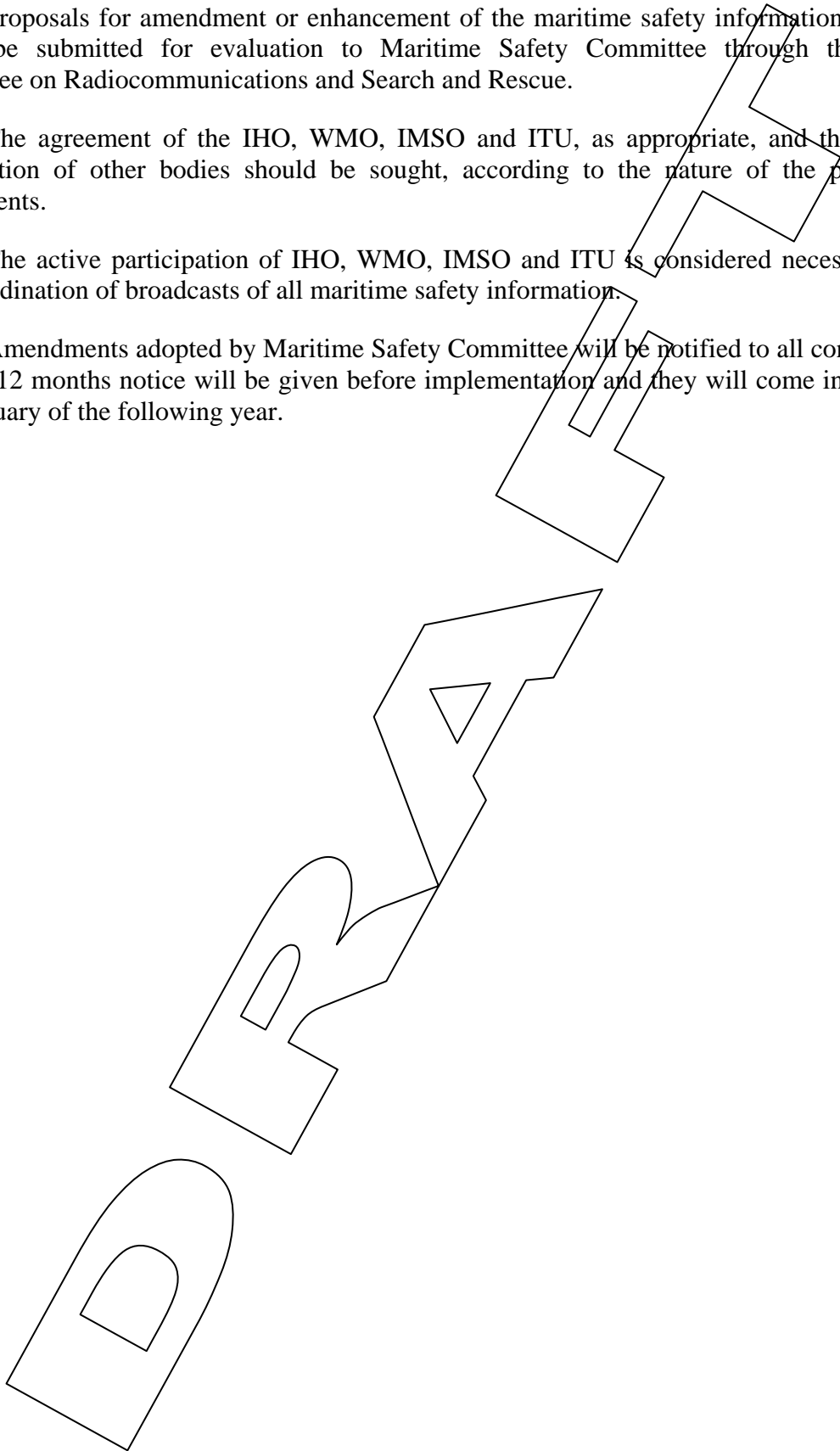
⁵ IOC is the Intergovernmental Oceanographic Commission of UNESCO.

7.1 Proposals for amendment or enhancement of the maritime safety information service should be submitted for evaluation to Maritime Safety Committee through the Sub-Committee on Radiocommunications and Search and Rescue.

7.2 The agreement of the IHO, WMO, IMSO and ITU, as appropriate, and the active participation of other bodies should be sought, according to the nature of the proposed amendments.

7.3 The active participation of IHO, WMO, IMSO and ITU is considered necessary for the co-ordination of broadcasts of all maritime safety information.

7.4 Amendments adopted by 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.



DRAFT REVISED ASSEMBLY RESOLUTION A.706(17)

IMO/IHO World-Wide Navigational Warning Service

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,

BEARING IN MIND the decisions of the XIth International Hydrographic Conference,

NOTING that the world-wide navigational warning service, previously adopted by resolutions A.419(XI) and A.706(17), as amended has successfully been in existence since 1979,

NOTING FURTHER the provisions made for the promulgation of maritime safety information by the 1988 amendments to the International Convention for the Safety of Life at Sea, 1974, concerning radio-communications for the global maritime distress and safety system,

HAVING CONSIDERED the recommendations made by the Maritime Safety Committee at its [eighty-fourth] session,

1. ADOPTS the [revised/amended] IMO/IHO World-Wide Navigational Warning Service Guidance Document, as set out in annex 1 to the present resolution;
2. RECOMMENDS Governments to continue to implement the world-wide navigational warning service;
3. AUTHORIZES the Maritime Safety Committee to amend the world-wide navigational warning service, as may be necessary, in accordance with the procedure set out in annex 2 to the present resolution;
4. REVOKES resolution A706(17), including MSC/Circ.685, MSC/Circ.750 and MSC/Circ.957.

**IMO/IHO WORLD-WIDE NAVIGATIONAL WARNING SERVICE GUIDANCE
DOCUMENT**

1 INTRODUCTION

1.1 The purpose of this document is to provide specific guidance for the promulgation of internationally co-ordinated NAVAREA and coastal warnings. Its guidance does not apply to purely national warning services which supplement these internationally co-ordinated services.

1.2 The original resolution of the tenth International Hydrographic Conference in 1972 recommended the formation of an *ad hoc* joint IMO/IHO Commission to study the "establishment of a co-ordinated, efficient global radio navigational warning service". Subsequently, this became a purely IHO Commission known as the Commission on Promulgation of Radio Navigational Warnings, which nevertheless consulted continuously with IMO. In its report to the eleventh International Hydrographic Conference in 1977, the Commission submitted a Draft Plan for the Establishment of a World-Wide Navigational Warning System, also referred to as Plan for the Establishment of a co-ordinated Radio Navigational Warning Service. The title *World-Wide Navigational Warning Service* or *WWNWS* used for this revised edition of the document reflects the evolution of the system from a proposed action to an effective and fully operational co-ordinated service. This revised edition reflects the evolution of the *WWNWS* since the advent of the Global Maritime Distress and Safety System (GMDSS), as adopted by the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974, on the Global Maritime Distress and Safety System in November 1988, effective on 1 February 1992.

1.3 Future amendments to this guidance document will be considered formally and approved by both IHO and IMO in accordance with the procedures set out in Annex 2. Proposed amendments shall be evaluated by the IHO Commission on the Promulgation of Radio Navigational Warnings, which includes an *ex-officio* representative of the IMO Secretariat, prior to any extensive IHO or IMO consideration.

2 DEFINITIONS

2.1 For the purposes of the *WWNWS*, the following definitions apply:

.1 *Coastal warning* means a navigational warning 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 or Sub-Area established by a coastal state for the purpose of co-ordinating the broadcast of coastal maritime safety information through the SafetyNET service.

.3 HF NBDP means High Frequency narrow-band direct-printing, using radio telegraphy as defined in ITU-R recommendation M. 688.

- .4** *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.
- .5** *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 language¹.
- .6** *International SafetyNET service* means the co-ordinated broadcasting and automated 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.
- .7** *Local warning* means a navigational warning which covers inshore waters, often within the limits of jurisdiction of a harbour or port authority.
- .8** *Maritime safety information (MSI)*² means navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages broadcast to ships.
- .9** *METAREA* means a geographical sea area³ established for the purpose of co-ordinating 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 should not prejudice the delimitation of any boundaries between States.
- .10** *National co-ordinator* means the national authority charged with collating and issuing coastal warnings within a national area of responsibility.
- .11** *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.
- .12** *National SafetyNET service* means the broadcasting and automated reception of maritime safety information via the Inmarsat EGC system, using languages as decided by the Administration concerned.
- .13** *NAVAREA* means a geographical sea area³ established for the purpose of co-ordinating 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 should not prejudice the delimitation of any boundaries between States.
- .14** *NAVAREA co-ordinator* means the authority charged with co-ordinating, collating and issuing NAVAREA warnings for a designated NAVAREA.
- .15** *NAVAREA warning* means a navigational warning or in-force bulletin promulgated as part of a numbered series by a NAVAREA co-ordinator.
- .16** *Navigational warning* means a message containing urgent information relevant to safe navigation broadcast to ships in accordance with the provisions of the

¹ as set out in the IMO NAVTEX Manual.

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

³ which may include inland seas, lakes and waterways navigable by sea-going ships.

International Convention for the Safety of Life at Sea, 1974, as amended.

.17 *NAVTEX co-ordinator* means the authority charged with operating and managing one or more NAVTEX stations broadcasting maritime safety information as part of the International NAVTEX service.

.18 *Sub-Area* means a sub-division of a NAVAREA in which a number of countries have established a co-ordinated system for the promulgation of navigational warnings. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

.19 *Sub-Area co-ordinator* means the authority charged with co-ordinating, collating and issuing Sub-Area warnings for a designated Sub-Area.

.20 *Sub-Area warning* means a navigational warning promulgated as part of a numbered series by a Sub-Area co-ordinator. Broadcast shall be made by the International NAVTEX service to defined NAVTEX service areas or by the International SafetyNET service (through the appropriate NAVAREA co-ordinator.)

3 NAVIGATIONAL WARNING BROADCASTS

3.1 Methods

3.1.1 Two principal methods are used for broadcasting navigational warnings as part of MSI 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, paragraph 4, as amended.

3.1.2 Information shall be provided for unique and precisely defined sea areas, each being served only by the most appropriate of the above systems. Although there will be some duplication to allow a ship to change from one system to another, the majority of messages will only be broadcast on one system.

3.1.3 NAVTEX broadcasts shall be made in accordance with the standards and procedures set out in the NAVTEX Manual.

3.1.4 SafetyNET broadcasts shall be made in accordance with the standards and procedures set out in the International SafetyNET Manual.

3.1.5 HF NBDP may be used to promulgate maritime safety information in areas outside Inmarsat coverage (SOLAS regulation IV/7.1.5).

3.1.6 In addition, Administrations may also provide navigational warnings by other means.

3.2 Scheduling

3.2.1 Automated methods (NAVTEX /SafetyNET)

3.2.1.1 Navigational warnings shall be broadcast as soon as possible or as dictated by the nature and timing of the event. Normally, the initial broadcast should be made as follows:

- .1** for NAVTEX, at the next scheduled broadcast, unless circumstances indicate the use of procedures for VITAL or IMPORTANT warnings; and
- .2** for SafetyNET, within 30 min of receipt of original information, or at the next scheduled broadcast.

3.2.1.2 Navigational warnings shall be repeated in scheduled broadcasts in accordance with the guidelines promulgated in the NAVTEX Manual and International SafetyNET Manual as appropriate.

3.2.1.3 At least two scheduled daily broadcast times are necessary to provide adequate promulgation of NAVAREA warnings. When NAVAREAs extend across more than six time zones, more than two broadcasts should be considered to ensure that warnings can be received. When using SafetyNET in lieu of NAVTEX for coastal warnings, Administrations may need to consider an increase in the number of scheduled daily broadcasts compared with the requirement for NAVAREA warnings.

3.2.2 *Schedule changes*

3.2.2.1 Broadcast times for NAVTEX are defined by the B1 character of the station, allocated by the co-ordinating Panel on NAVTEX Services of the Sub-Committee on Radiocommunications and Search and Rescue.

3.2.2.2 Times of scheduled broadcasts under the international SafetyNET service are co-ordinated through the International SafetyNET co-ordinating Panel.

4 **NAVIGATIONAL WARNINGS**

4.1 **General**

4.1.1 There are four types of navigational warnings: NAVAREA warnings, Sub-Area warnings, coastal warnings and local warnings. The WWNWS guidance and co-ordination are involved with only three of them:

- .1** NAVAREA warnings,
- .2** Sub-Area warnings, and
- .3** Coastal warnings.

4.1.2 Navigational warnings shall remain in force until cancelled by the originating co-ordinator. Navigational warnings should be broadcast for as long as the information is valid; however, if they are readily available to mariners by other official means, for example in Notices to Mariners, then after a period of six weeks they may no longer be broadcast.

4.1.3 The minimum information in a navigational warning which a mariner requires is "hazard" and "position". It is usual, however, to include sufficient extra detail to allow some freedom of action in the vicinity of the hazard. This means that the message should give enough extra data for the mariner to be able to recognize the hazard and assess its effect upon his navigation.

4.1.4 If known, the duration of the event causing a navigational warning should be given in the text.

4.1.5 Some of the subjects for navigational warnings listed in paragraph 4.2.1.3 (e.g. drifting ice, tsunami warnings, negative tidal surges) may also be suitable for promulgation as METAREA forecasts or warnings. In this event, appropriate co-ordination between the relevant NAVAREA co-ordinator and METAREA issuing Service must occur.

4.2 **The four types of navigational warnings are:**

4.2.1 *NAVAREA warnings*

4.2.1.1 NAVAREA warnings are concerned with the information detailed below which ocean-going mariners require for their safe navigation. This includes, in particular, new navigational hazards and failures of important aids to navigation as well as information which

may require changes to planned navigational routes.

4.2.1.2 Coastal warnings are broadcast by the International NAVTEX service, or by the International SafetyNET service when implemented in lieu of NAVTEX. They are not normally rebroadcast as NAVAREA warnings unless deemed of such significance that the mariner should be aware of them before entering a NAVTEX service area. The National co-ordinator will evaluate the significance of the information for consideration as a NAVAREA warning while the NAVAREA co-ordinator will make the final determination.

4.2.1.3 The following subjects are considered suitable for broadcast as NAVAREA warnings. This list is not exhaustive and should be regarded only as a guideline. Furthermore, it presupposes that sufficiently precise information about the item has not previously been disseminated in a Notice to Mariners:

- .1** casualties to lights, fog signals, buoys and other aids to navigation affecting main shipping lanes;
- .2** the presence of dangerous wrecks in or near main shipping lanes and, if relevant, their marking;
- .3** establishment of major new aids to navigation or significant changes to existing ones when such establishment or change, might be misleading to shipping;
- .4** the presence of large unwieldy tows in congested waters;
- .5** drifting hazards (including derelict ships, ice, mines, containers, other large items, etc.);
- .6** areas where search and rescue (SAR) and anti-pollution operations are being carried out (for avoidance of such areas);
- .7** the presence of newly discovered rocks, shoals, reefs and wrecks likely to constitute a danger to shipping, and, if relevant, their marking;
- .8** unexpected alteration or suspension of established routes;
- .9** cable or pipe-laying activities, the towing of large submerged objects for research or exploration purposes, the employment of manned or unmanned submersibles, or other underwater operations constituting potential dangers in or near shipping lanes;
- .10** the establishment of research or scientific instruments in or near shipping lanes;
- .11** the establishment of offshore structures in or near shipping lanes;
- .12** significant malfunctioning of radio-navigation services and shore-based maritime safety information radio or satellite services;
- .13** information concerning special operations which might affect the safety of shipping, sometimes over wide areas, e.g. naval exercises, missile firings, space missions, nuclear tests, ordnance dumping zones, etc. It is important that where the degree of hazard is known, this information is included in the relevant warning. Whenever possible such warnings should be originated not less than five days in advance of the scheduled event and reference may be made to relevant national publications in the warning;
- .14** acts of piracy and armed robbery against ships;

.15 tsunamis and other natural phenomena, such as abnormal changes to sea level; and

.16 World Health Organization (WHO) health advisory information.

4.2.2 Sub-Area warnings

4.2.2.1 Sub-Area warnings broadcast information which is necessary for safe navigation within a Sub-Area. They will normally include all subjects listed in 4.2.1.3 above, but will usually affect only the Sub-Area.

4.2.3 Coastal warnings

4.2.3.1 Coastal warnings broadcast information which is necessary for safe navigation within areas seaward of the fairway buoy or pilot station, and should not be restricted to main shipping lanes. Where the area is served by NAVTEX, it should provide navigational warnings for the entire NAVTEX service area. Where the area is not served by NAVTEX, it is necessary to include all warnings relevant to the coastal waters up to 250 miles from the coast in the International SafetyNET service broadcast.

4.2.3.2 Coastal warnings should include at least the subjects in 4.2.1.3.

4.2.4 Local warnings

4.2.4.1 Local warnings broadcast information which cover inshore waters, often within the limits of jurisdiction of a harbour or port authority. They are broadcast by means other than NAVTEX or SafetyNET, and supplement coastal warnings by giving detailed information within inshore waters.

5 MESSAGE REQUIREMENTS

5.1 Guidance

5.1.1 Operational guidance for handling and formatting navigational warnings is given in the Joint IMO/IHO/WMO Manual on Maritime Safety Information, the NAVTEX Manual and the International SafetyNET Manual.

5.2 Numbering

5.2.1 Navigational warnings in each series shall be consecutively numbered throughout the calendar year, commencing with 0001 at 0000 UTC on 01 January.

5.2.2 Navigational warnings should, as a general rule, be transmitted in reverse numerical order on scheduled broadcasts.

5.3 Language

5.3.1 All NAVAREA, Sub-Area and coastal warnings shall be broadcast only in English in the International NAVTEX and SafetyNET services.

5.3.2 In addition to the required broadcasts in English, NAVAREA, Sub-Area and coastal warnings may be broadcast in a national language using national NAVTEX and SafetyNET services and/or other means.

5.3.3 Local warnings may be issued in the national language and/or in English.

5.4 “No warnings” message

5.4.1 When there are no navigational warnings to be disseminated at a scheduled broadcast time, a brief message shall be transmitted to identify the broadcast and advise the mariner that there is no navigational warning message traffic on hand.

6 CO-ORDINATOR RESOURCES AND RESPONSIBILITIES

6.1 NAVAREA co-ordinator resources

6.1.1 The NAVAREA co-ordinator must have:

- .1** the expertise and information sources of a well established national hydrographic service;
- .2** effective communications, e.g. telephone, e-mail, facsimile, internet, telex, etc., with Sub-Area and National co-ordinators in the NAVAREA, with other NAVAREA co-ordinators, and with other data providers; and
- .3** access to broadcast systems for transmission to the navigable waters of the NAVAREA. As a minimum, this shall include those described in paragraph 3.1.1. Reception should normally be possible at least 700 nautical miles beyond the limit of the NAVAREA (24 hours' sailing by a fast ship).

6.2 NAVAREA co-ordinator responsibilities

6.2.1 The NAVAREA co-ordinator must:

- .1** endeavour to be informed of all events that could significantly affect the safety of navigation within the NAVAREA;
- .2** assess all information immediately upon receipt in the light of expert knowledge for relevance to navigation in the NAVAREA;
- .3** select information for broadcast in accordance with the guidance given in paragraph 4.2.1 above;
- .4** draft NAVAREA warning messages in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information;
- .5** direct and control the broadcast of NAVAREA warning messages, in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended;
- .6** forward NAVAREA warnings and relevant associated information which may require wider promulgation directly to adjacent NAVAREA co-ordinators and/or others as appropriate, using the quickest possible means;
- .7** ensure that NAVAREA warnings which remain in force for more than six weeks are made available immediately to NAVAREA co-ordinators, other authorities and mariners in general, as appropriate;
- .8** ensure that information concerning all navigational warning subject areas listed in paragraph 4.2.1.3 that may not require a NAVAREA warning within their own NAVAREA is forwarded immediately to the appropriate National and NAVAREA co-ordinators affected by the event;
- .9** broadcast in-force bulletins not less than once per week at a regularly scheduled time;
- .10** promulgate the cancellation of NAVAREA warnings which are no longer valid;
- .11** act as the central point of contact on matters relating to navigational warnings within the NAVAREA;
- .12** promote and oversee the use of established international standards and practices in the promulgation of navigational warnings throughout the NAVAREA;

- .13 when notified by the authority designated to act on reports of piracy and armed robbery against ships, arrange for the broadcast of a suitable NAVAREA warning. Additionally, keep the national or regional piracy control centre informed of long-term broadcast action(s);
- .14 when notified by the appropriate authorities, arrange for the broadcast of suitable NAVAREA warnings to promulgate World Health Organization (WHO) health advisory information; and tsunami related information;
- .15 monitor the broadcasts which they originate to ensure that the messages have been correctly broadcast;
- .16 maintain records of source data relating to NAVAREA messages in accordance with the requirement of the National Administration of the NAVAREA Co-ordinator;
- .17 co-ordinate preliminary discussions between neighbouring Member States, seeking to establish NAVTEX services and with other adjacent Administrations, prior to formal application;
- .18 contribute to the development of international standards and practices through attendance and participation in the IHO Commission on the Promulgation of Radio Navigational Warnings (CPRNW) meetings, and also participate in relevant IMO, IHO and WMO fora as appropriate, e.g. Sub-Committee on Radiocommunications and Search and Rescue, Expert Team On Maritime Safety Services and other regional conferences etc. as required ; and
- .19 take into account the need for contingency planning.

6.3 Sub-Area co-ordinator resources

6.3.1 The Sub-Area co-ordinator must have, or have access to:

- .1 the expertise and information sources of a well established national hydrographic service;
- .2 effective communications, e.g. telephone, e-mail, facsimile, internet, telex, etc., with National co-ordinators in the Sub-Area, with the NAVAREA co-ordinator, and with other data providers; and
- .3 access to broadcast systems for transmission to the entire Sub-Area.

6.4 Sub-Area co-ordinator responsibilities

6.4.1 The Sub-Area co-ordinator must:

- .1 endeavour to be informed of all events that could significantly affect the safety of navigation within the Sub-Area;
- .2 assess all information immediately upon receipt in the light of expert knowledge for relevance to navigation in the Sub-Area;
- .3 select information for broadcast in accordance with the guidance given in paragraph 4.2.1 above;
- .4 draft Sub-Area warning messages in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information;
- .5 direct and control the broadcast of Sub-Area warning messages, in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended;

- .6 forward Sub-Area warnings and relevant associated information which may require wider promulgation directly to their own NAVAREA co-ordinator using the quickest possible means;
- .7 broadcast in-force bulletins not less than once per week at a regularly scheduled time;
- .8 promulgate the cancellation of Sub-Area warnings which are no longer valid;
- .9 act as the central point of contact on matters relating to navigational warnings within the Sub-Area;
- .10 promote the use of established international standards and practices in the promulgation of navigational warnings within the Sub-Area;
- .11 monitor the broadcasts which they originate to ensure that the messages have been correctly broadcast;
- .12 maintain records of source data relating to NAVAREA messages in accordance with the requirement of the National Administration of the NAVAREA Co-ordinator;
- .13 contribute to the development of international standards and practices through attendance and participation in relevant IMO/IHO and WMO fora, e.g. Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), CPRNW, Expert Team On Maritime Safety Services, appropriate regional conferences etc.; and
- .14 take into account the need for contingency planning.

6.5 National co-ordinator resources

6.5.1 The national co-ordinator must have:

- .1 established sources of information relevant to the safety of navigation within national waters;
- .2 effective communications, e.g. telephone, e-mail, facsimile, internet, telex, etc., with the NAVAREA/Sub-Area co-ordinator and adjacent National co-ordinators; and
- .3 access to broadcast systems for transmission to their area of national responsibility.

6.6 National co-ordinator responsibilities

6.6.1 The national co-ordinator must:

- .1 endeavour to be informed of all events that could significantly affect the safety of navigation within their area of national responsibility;
- .2 assess all information immediately upon receipt in the light of expert knowledge for relevance to navigation in their area of national responsibility;
- .3 select information for broadcast in accordance with the guidance given in paragraph 4.2.1 above;
- .4 draft coastal warning messages in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information;
- .5 direct and control the broadcast of coastal warning messages, in accordance

with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended;

- .6** forward coastal warning messages and relevant associated information which may require wider promulgation directly to their NAVAREA co-ordinator and/or adjacent National co-ordinators as appropriate, using the quickest possible means;
- .7** broadcast in-force bulletins not less than once per week at a regularly scheduled time;
- .8** promulgate the cancellation of coastal warnings which are no longer valid;
- .9** act as the central point of contact on matters relating to navigational warnings within their area of national responsibility;
- .10** promote the use of established international standards and practices in the promulgation of navigational warnings within their area of national responsibility;
- .11** monitor the broadcasts which they originate to ensure that the messages have been correctly broadcast;
- .12** maintain records of source data relating to NAVAREA messages in accordance with the requirement of the National Administration of the NAVAREA Co-ordinator; and
- .13** take into account the need for contingency planning.

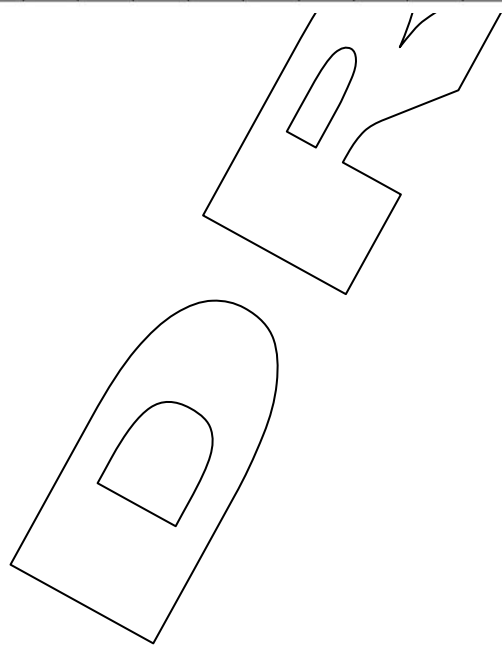
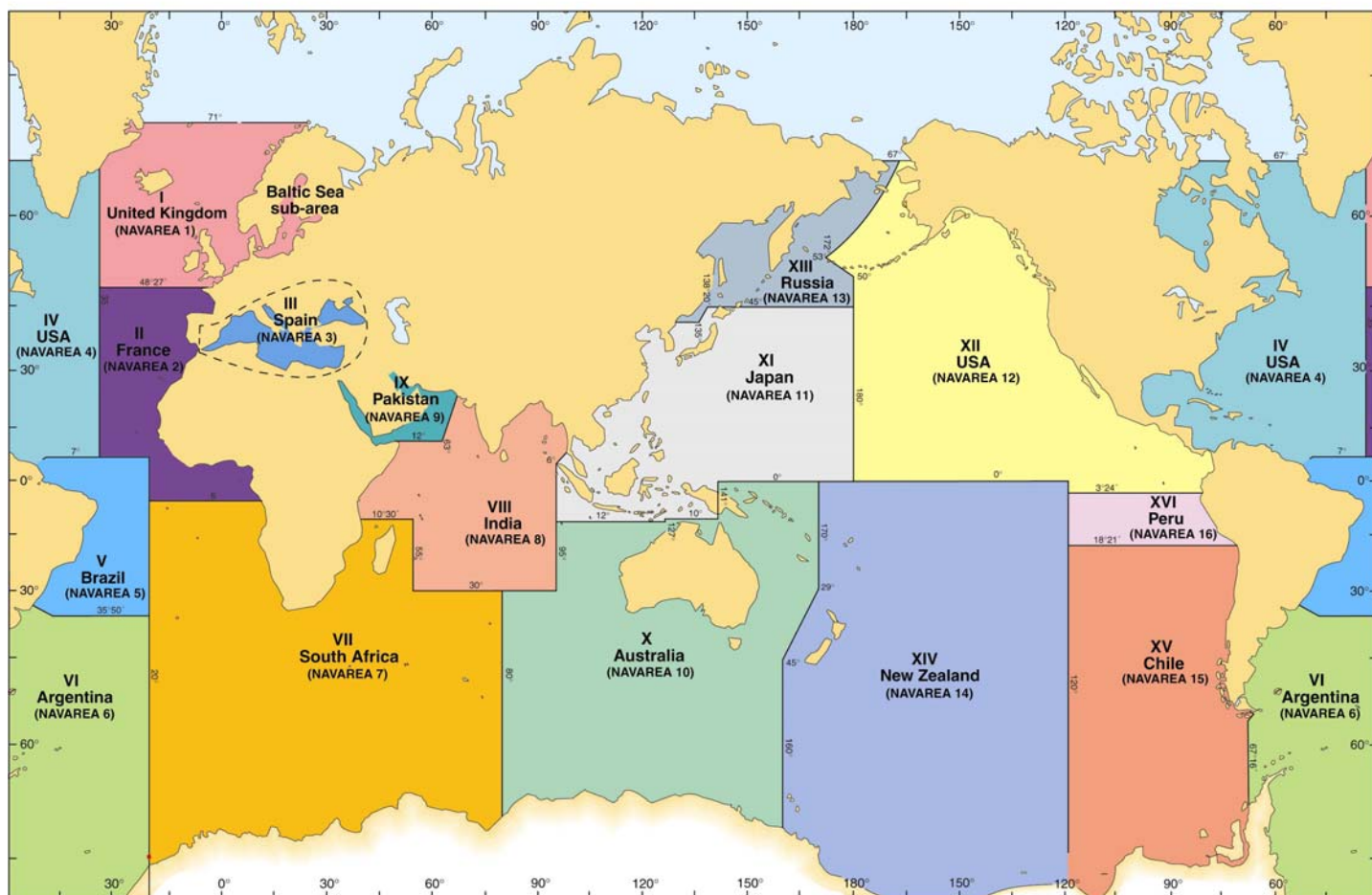
***IMO PROCEDURE FOR AMENDING THE WORLD-WIDE NAVIGATIONAL
WARNING SERVICE***

- 1** Proposed amendments to the world-wide navigational warning service should be submitted to the Maritime Safety Committee for evaluation.
- 2** Amendments to the service should normally come into force at intervals of approximately two years or at such longer periods as determined by the Maritime Safety Committee at the time of adoption. Amendments adopted by the Maritime Safety Committee will be notified to all concerned, will provide at least 12 months notification and will come into force on 1 January of the following year.
- 3** The agreement of the International Hydrographic Organization and the active participation of other bodies should be sought according to the nature of the proposed amendments.
- 4** When the proposals for amendment have been examined in substance, the Maritime Safety Committee will entrust the Sub-Committee on Radiocommunications and Search and Rescue with the ensuing editorial tasks.
- 5** The NAVAREA schedule of broadcast times and frequencies, not being an integral part of the service and being subject to frequent changes, will not be subject to the amendment procedures.

Appendix

Insert diagram

Geographical areas for co-ordinating and promulgating NAVAREA warnings



Resolution A.705(17)

PROMULGATION OF MARITIME SAFETY INFORMATION

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 regulation V/2 of the International Convention for the Safety of Life at Sea, 1974 (SOLAS), which establishes the requirement for promulgating information on direct dangers to navigation,

NOTING resolution A.706(17) on the World-Wide Navigational Warning Service,

RECALLING FURTHER regulation V/4 of the 1974 SOLAS Convention which establishes the requirement for promulgating maritime meteorological information,

BEARING IN MIND the 1988 amendments to the 1974 SOLAS Convention concerning radiocommunications for the global maritime distress and safety system (GMDSS),

BEARING IN MIND ALSO the work of the Organization in developing co-ordinated world-wide search and rescue facilities,

NOTING ADDITIONALLY that the Organization has adopted carriage requirements and performance standards for specialized systems for receiving maritime safety information on ships subject to the 1974 SOLAS Convention, as amended,

NOTING ALSO that some of the present means of transmitting maritime safety information will no longer be effective under the GMDSS,

NOTING FURTHER that Governments may, at their discretion, implement and operate other additional means of promulgation of maritime safety information to meet national requirements,

RECOGNIZING that international co-operation and co-ordination are essential for the satisfactory maintenance of maritime safety information services and that such services make a vital contribution to the safety of life at sea,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its fifty-ninth session,

1. RESOLVES that the procedures for the provision and promulgation of maritime safety information should be in accordance with the Recommendation on Promulgation of Maritime Safety Information set out in the annex to the present resolution;

2. URGES Governments to co-operate in providing maritime safety information in accordance with the structure established by the said Recommendation.

RECOMMENDATION ON PROMULGATION OF MARITIME SAFETY INFORMATION

1 INTRODUCTION

1.1 The maritime safety information service is an internationally co-ordinated network of radio broadcasts containing information which is necessary for safe navigation, received in all ships by equipment which automatically [*] monitors the appropriate frequencies and prints out in simple English only that information which is relevant to the ship. This concept is illustrated in figure 1.

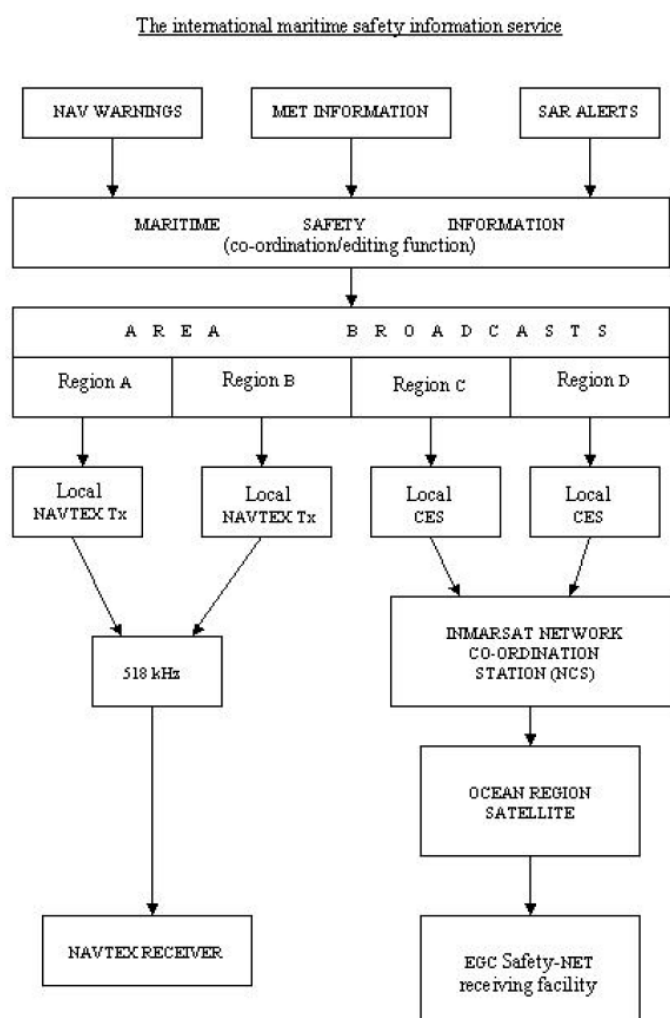


Figure 1

Figure 1 - *The international maritime safety information service*

* The Organization has decided that manual operation will be acceptable for receiving broadcasts of MSI via the operational HF NBDP system (where available) until the full implementation of the GMDSS on 1 February 1999.

Note: HF NBDP systems may be used to provide an additional supplementary equivalent service to EGC SafetyNET.

1.2 Maritime safety information (MSI) is of vital concern to all vessels. 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 he needs, in a form which he understands, at the earliest possible time.

1.3 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.

2 DEFINITIONS

2.1 For the purposes of this Recommendation, the following definitions apply:

- .1 *Maritime safety information (MSI)* means navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages.
- .2 *Maritime safety information service* means the co-ordinated service of navigational and meteorological warnings, meteorological forecasts and distress alerts.
- .3 *World-wide navigational warning service (WWNWS)* means the internationally co-ordinated service for the promulgation of navigational warnings as set out in resolution A.706(17).
- .4 *Meteorological information* means the marine meteorological warning and forecast information described in regulation V/4(b)(i) and (ii) of the 1974 SOLAS Convention.
- .5 *Distress alert* means the initial shore-to-ship distress message broadcast in accordance with the Radio Regulations.
- .6 *NAVTEX service* means the system for the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy.
- .7 *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, as set out in the NAVTEX Manual, published by IMO.
- .8 *National NAVTEX service* means the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy using frequencies and languages as decided by the Administrations concerned.
- .9 *International SafetyNET service* means the area-addressable global broadcast system, provided by INMARSAT, through the geostationary maritime communications satellite network for promulgation of maritime safety information.

3 BROADCAST SERVICES

3.1 Two systems are used for broadcasting maritime safety information. They are provided specifically to serve the requirements of chapter V of the 1974 SOLAS Convention in the areas covered by these systems, as follows:

- .1 the international NAVTEX service transmissions in coastal regions; and
- .2 the international SafetyNET service transmissions which cover all the waters of the globe, except for polar regions.

3.2 Information should be provided for unique and precisely defined sea areas, each being served only by the most appropriate of the above systems. Although there will be some duplication to allow a vessel to change from one system to another, the majority of messages will only be broadcast on one system.

3.3 NAVTEX transmissions should be made in accordance with the standards and procedures set out in the NAVTEX Manual. These transmissions are subject to approval by the Maritime Safety Committee. The means of obtaining this approval is described in the NAVTEX Manual.

3.4 International SafetyNET service transmissions should be made in accordance with the standards and procedures set out in the International SafetyNET Manual. [*]

3.5 Member Governments may also choose to provide supplementary equivalent broadcasts of maritime safety information in other modes using other frequencies. These may include national NAVTEX services on 4,209.5 kHz and 490 kHz and HF NBDP broadcasts.

4 RECEPTION FACILITIES

4.1 Ships are required to be capable of receiving maritime safety information broadcasts for the area in which they operate. This requirement is set out in chapter IV of the 1974 SOLAS Convention, as amended.

4.2 The international SafetyNET service receiving facility should conform to part A of the INMARSAT design and installation guidelines for the EGC SafetyNET equipment and should meet the performance standards adopted by the Organization by resolution A.664(16).

4.3 The NAVTEX receiver should operate in accordance with the technical specifications set out in CCIR Recommendation 540, as amended, and should meet the performance standards adopted by the Organization by resolution A.525(13).

5 PROVISION OF INFORMATION

5.1 Navigational warnings should 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 Commission on Promulgation of Radio Navigational Warnings.

5.2 Meteorological information should be provided in accordance with the technical regulations and recommendations of the World Meteorological Organization (WMO).

5.3 Distress alerts should be provided by the various authorities responsible for co-ordinating maritime search and rescue operations in accordance with the standards and procedures established by the Organization.

6 CO-ORDINATION PROCEDURES

6.1 In order to make the best use of automated reception facilities and to ensure that the mariner receives the minimum information necessary for safe navigation, careful co-ordination is required.

6.2 In general, this requirement for co-ordination will be met by the standard operational procedures of IHO, WMO, International Telecommunication Union (ITU) and INMARSAT.

6.3 Cases of difficulty should be referred, in the first instance, to the most appropriate parent body.

6.4 Member States wishing to provide maritime safety information services should nominate a national co-ordinator for each type of information concerned, informing the Organization of such nominations as they are made. The Organization will maintain and, through the Maritime Safety Committee, publish a list of the nominated co-ordinators.

6.5 The establishment of transmissions in the international NAVTEX service is co-ordinated by the Maritime Safety Committee. Detailed guidance on the provision of NAVTEX services is contained in the NAVTEX Manual.

* Refer to COM/Circ.102/Rev. 1, as it may be amended.

6.6 The use of satellite maritime safety information services is co-ordinated by the Maritime Safety Committee.

6.7 The designation of service areas is an important part of the co-ordination process since it is intended that a vessel should be able to obtain all the information relevant to a given area from a single source. Information co-ordinators should, therefore, design their broadcasts to suit a particular service area. The Maritime Safety Committee will designate service areas for the international SafetyNET service and the international NAVTEX service. In doing so, the Committee will take full account of the character and volume of information and the pattern of maritime traffic in the region and the advice of IHO and WMO.

7 SYSTEM MANAGEMENT

7.1 Proposals for amendment or enhancement of maritime safety information services should be submitted to the Maritime Safety Committee for evaluation.

7.2 The agreement of the IHO, WMO and ITU, as appropriate, and the active participation of other bodies should be sought, according to the nature of the proposed amendments.

7.3 The active participation of IHO, WMO, ITU and INMARSAT is considered necessary for the co-ordination of broadcasts of all maritime safety information.

7.4 Amendments adopted by the Maritime Safety Committee will be notified to all concerned, will provide at least 12 months' notification and will come into force on 1 January of the following year.

IMO RESOLUTION A.706(17), as amended

World-Wide Navigational Warning Service

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,

BEARING IN MIND the decisions of the XIth International Hydrographic Conference,

NOTING that the world-wide navigational warning service, adopted by resolution A.419(XI), has successfully been in existence since 1979,

NOTING FURTHER the provisions made for the promulgation of maritime safety information by the 1988 amendments to the International Convention for the Safety of Life at Sea, 1974, concerning radio-communications for the global maritime distress and safety system,

HAVING CONSIDERED the recommendations made by the Maritime Safety Committee at its fifty-ninth session,

1. ADOPTS the IMO/IHO World-Wide Navigational Warning Service - Guidance Document, as set out in annex 1 to the present resolution;
2. RECOMMENDS Governments to implement the world-wide navigational warning service;
3. AUTHORIZES the Maritime Safety Committee to amend the world-wide navigational warning service, as may be necessary, in accordance with the procedure set out in annex 2 to the present resolution;
4. REVOKES resolution A.419(XI).

ANNEX 1

IMO/IHO World-Wide Navigational Warning Service Guidance Document

1 INTRODUCTION

The original resolution of the tenth International Hydrographic Conference in 1972 recommended the formation of an *ad hoc* joint IMO/IHO Commission to study the "establishment of a co-ordinated, efficient global radio navigational warning service". Subsequently, this became a purely IHO Commission known as the Commission on Promulgation of Radio Navigational Warnings which nevertheless consulted continuously with IMO. In its report to the eleventh International Hydrographic Conference in 1977, the Commission submitted a Draft Plan for the Establishment of a World-Wide Navigational Warning System, also referred to as Plan for the Establishment of a Co-ordinated Radio Navigational Warning Service. The title *World-Wide Navigational Warning Service* or WWNWS used for this revised edition of the document reflects the evolution of the system from a proposed action to an effective co-ordinated service which now has all of its 16 NAVAREA in operation. This revised edition contains changes necessitated by the advent of the Global Maritime Distress and Safety System (GMDSS), as adopted by the Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974, on the Global Maritime Distress and Safety System in November 1988, effective on 1 February 1992.

Future amendments to the guidance document will be considered formally and approved by IHO normally through the use of circular letters and by IMO through its Maritime Safety Committee in accordance with the procedures set out in Annex 2 to this document. Proposed amendments will normally be evaluated by the IHO Commission on Promulgation of Radio Navigational Warnings, which includes as an *ex-officio* member a representative of the IMO Secretariat, prior to any extensive IHO or IMO consideration.

World-Wide Navigational Warning Service (WWNWS)

1 INTRODUCTION

This document provides specific guidance for the promulgation of internationally co-ordinated NAVAREA and coastal warnings via NAVTEX and international SafetyNET services. It includes the situation where international SafetyNET is used in lieu of NAVTEX as the primary means of transmitting coastal warnings. Its guidance does not apply to purely national warning services which supplement those internationally co-ordinated services.

2 DEFINITIONS

2.1 For the purposes of this service, the following definitions apply:

2.1.1 *Navigational warning*: A broadcast message containing urgent information relevant to safe navigation. Types of information suitable for transmission as navigational warnings are described in 4.2.1.3.

2.1.2 *Maritime safety information (MSI)*: Navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages.

2.1.3 *NAVAREA*: A geographical sea area, as shown in the appendix, established for the purpose of co-ordinating the transmission of radio navigational warnings. Where appropriate, the term NAVAREA followed by an identifying roman numeral may be used as a short title. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

2.1.4 *Sub-area*: A subdivision of a NAVAREA in which a number of countries have established a co-ordinated system for the promulgation of coastal warnings. The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

2.1.5 *Region*: The part of a NAVAREA or sub-area established for the purpose of co-ordinating the transmission of coastal warnings by NAVTEX or international SafetyNET broadcast.

2.1.6 *NAVAREA Co-ordinator*: The authority charged with co-ordinating, collating and issuing long range navigational warnings and NAVAREA warnings bulletins to cover the whole of the NAVAREA.

2.1.7 *Sub-area Co-ordinator*: The authority charged with the co-ordination of navigational warnings information within a designated sub-area.

2.1.8 *National Co-ordinator*: The national authority charged with collating and issuing coastal warnings in a region.

2.1.9 *NAVAREA warning*: A navigational warning issued by the NAVAREA Co-ordinator for the NAVAREA.

2.1.10 *NAVAREA warnings bulletin*: A list of serial numbers of those NAVAREA warnings in force issued and broadcast by the NAVAREA Co-ordinator during at least the previous six weeks.

2.1.11 *Coastal warning*: A navigational warning promulgated by a national Co-ordinator to cover a region. (Coastal warnings may also be broadcast by means other than those of the WWNWS as a national option.)

2.1.12 *Local warning*: A navigational warning which covers inshore waters, often within the limits of jurisdiction of a harbour or port authority.

3 BROADCAST SYSTEMS

3.1 Broadcast systems

3.1.1 The radio systems to be used internationally for the promulgation of maritime safety information are laid down in the International Convention for the Safety of Life at Sea, 1974 (SOLAS), as amended. These include:

- .1** NAVTEX: Single frequency time-shared broadcast system with automated reception and message rejection/selection facilities. Use of NAVTEX is regulated by the IMO NAVTEX Manual (IMO publication no. 951); and
- .2** international (enhanced group call) SafetyNET service: Dedicated satellite broadcast system with automated reception and message rejection/selection facilities. Use of this service is regulated by the International SafetyNET Manual (IMO publication no. 908).

3.2 Broadcast scheduling

3.2.1 *Automated systems (SafetyNET/NAVTEX)*

3.2.1.1 Navigational warnings should be transmitted as soon as possible or as dictated by the nature and timing of the event. Normally, the initial broadcast should be made as follows:

- .1** for SafetyNET, within 30 min of receipt of original information; and
- .2** for NAVTEX, at the next scheduled broadcast, unless circumstances indicate the use of procedures for VITAL or IMPORTANT warnings.

3.2.1.2 Navigational warnings should be repeated in scheduled broadcasts in accordance with the guidelines promulgated in the following documents, as appropriate:

- .1** International SafetyNET Manual (IMO publication no. 908); and
- .2** NAVTEX Manual (IMO publication no. IMO-951E).

3.2.1.3 At least two daily transmission times are necessary to provide adequate promulgation of NAVAREA warnings. When NAVAREAs may extend across more than six time zones, more than two broadcasts should be especially considered to ensure that warnings can be received.

3.2.2 *Schedule changes*

3.2.2.1 NAVAREA Co-ordinators should ensure that the times of HF broadcasting do not coincide with those in adjacent NAVAREAs. Times of scheduled broadcasts under the international SafetyNET service should be co-ordinated through the International SafetyNET Co-ordinating Panel.

3.2.2.2 Changes to broadcast schedules should be implemented only after the International Telecommunication Union (ITU) has been given at least three months' notice by the appropriate national authority, unless urgent operational considerations dictate more immediate action.

3.2.2.3 IMO and IHO should be informed of intended changes at the same time as they are

communicated to ITU.

3.2.2.4 Arrangements should be made for informing mariners in good time of all changes.

4 NAVIGATIONAL WARNINGS

4.1 General

4.1.1 There are three types of navigational warnings: NAVAREA warnings, coastal warnings and local warnings. The WWNWS guidance and co-ordination are involved with only two of them: NAVAREA warnings and coastal warnings; of the latter, only with those coastal warnings which are broadcast under the internationally co-ordinated services using NAVTEX, or in lieu of NAVTEX, international SafetyNET service, as their primary means of transmission.

4.1.2 Navigational warnings should normally refer only to the area concerned.

4.1.3 Navigational warnings should be broadcast for as long as the information is valid or until it is made available by other means.

4.1.4 Navigational warnings should remain in force until cancelled by the originating Co-ordinator.

4.1.5 The duration of a navigational warning should be given in the text, if known.

4.2 The three types of navigational warnings are:

4.2.1 *NAVAREA warnings*

4.2.1.1 Generally speaking, NAVAREA warnings are concerned with the information detailed below which ocean-going mariners require for their safe navigation. This includes, in particular, failures of important aids to navigation, as well as information which may require changes to planned navigational routes.

4.2.1.2 Warnings for coastal areas may be provided by NAVTEX or the international SafetyNET service, when implemented in lieu of NAVTEX. From the date a NAVTEX receiver is mandatory on all ships sailing in areas of NAVTEX service (1 August 1993), it is intended that such information not be rebroadcast as a NAVAREA warning unless it is deemed of such significance that the mariner should be aware of it before entering the area of NAVTEX coverage. The national Co-ordinator will evaluate the significance of the information for consideration as a NAVAREA warning while the NAVAREA Co-ordinator will make the final determination (see 6.6.7 and 6.2.3 respectively).

4.2.1.3 The following subject areas are considered suitable for transmission as NAVAREA warnings. This list is not exhaustive and should be regarded only as a guideline. Furthermore, it presupposes that sufficiently precise information about the item has not previously been disseminated in a notice to mariners:

- .1** casualties to lights, fog signals and buoys affecting main shipping lanes;
- .2** the presence of dangerous wrecks in or near main shipping lanes and, if relevant, their marking;
- .3** establishment of major new aids to navigation or significant changes to existing ones when such establishment or change, might be misleading to shipping;
- .4** the presence of large unwieldy tows in congested waters;

- .5** drifting mines;
- .6** areas where search and rescue (SAR) and anti-pollution operations are being carried out (for avoidance of such areas);
- .7** the presence of newly discovered rocks, shoals, reefs and wrecks likely to constitute a danger to shipping, and, if relevant, their marking;
- .8** unexpected alteration or suspension of established routes;
- .9** cable- or pipe-laying activities, the towing of large submerged objects for research or exploration purposes, the employment of manned or unmanned submersibles, or other underwater operations constituting potential dangers in or near shipping lanes;
- .10** establishment of offshore structures in or near shipping lanes;
- .11** significant malfunctioning of radionavigation services and shore-based maritime safety information radio or satellite services;
- .12** information concerning special operations which might affect the safety of shipping, sometimes over wide areas, e.g. naval exercises, missile firings, space missions, nuclear tests, etc. It is important that where the degree of hazard is known, this information is included in the relevant warning. Whenever possible, such warnings should be originated not less than five days in advance of the scheduled event. The warning should remain in force until the event is completed;* and
- .13** acts of piracy and armed robbery against ships.

4.2.1.4 NAVAREA warnings bulletins should be transmitted not less than once per week at a regularly scheduled time.

4.2.1.5 Arrangements should be made for the text of NAVAREA warnings in force to be available at port offices and, where appropriate, for their eventual inclusion in a generally available printed form.

4.2.2 *Coastal warnings*

4.2.2.1 Coastal warnings promulgate information which is necessary for safe navigation within a given region. Coastal warnings should normally provide sufficient information for safe navigation to seaward of the fairway buoy or pilot station and should not be restricted to main shipping lanes. Where the region is served by NAVTEX, it should provide navigational warnings for the entire IMO approved service area of the NAVTEX transmitter. Where the region is not served by NAVTEX, it is necessary to include all warnings relevant to the coastal waters up to 250 miles from the coast in the international SafetyNET service transmission.

4.2.2.2 Coastal warnings should include, at a minimum, the types of information required for NAVAREA warnings in 4.2.1.3.

* The Maritime Safety Committee is authorized to review the provisions of this paragraph and, if appropriate, to provide for exemptions from this requirement, under special circumstances.

4.2.3 *Local warnings*

4.2.3.1 Local warnings supplement coastal warnings by giving detailed information within inshore waters including the limits of a harbour or port authority on aspects which the ocean-going ship normally does not require.

5 INFORMATION CONTROL

5.1 Message numbering

5.1.1 Navigational warnings in each series should be consecutively numbered throughout the calendar year, commencing with 0001 at 0000 UTC on 01 January.

5.1.2 Navigational warnings should, as a general rule, be transmitted in reverse numerical order on scheduled broadcasts.

5.1.3 At the beginning of every navigational warning scheduled broadcast for which there are no warnings to be disseminated, a brief message should be transmitted to identify the broadcast and advise the mariner that there is no navigational warning message traffic on hand.

5.2 Priority message handling

5.2.1 The guidelines for the handling of navigational warnings are promulgated, as appropriate, in the following documents:

- .1** International SafetyNET Manual (IMO publication no. 908); and
- .2** NAVTEX Manual (IMO publication no. IMO-951E).

5.3 Language

5.3.1 All NAVAREA and coastal warnings must be transmitted in English in the internationally co-ordinated services.

5.3.2 In addition, NAVAREA warnings may be broadcast in one or more of the official languages of the United Nations.

5.3.3 Coastal warnings may also be broadcast in the national language, and local warnings may be issued only in the national language as a national service.

6 CO-ORDINATOR RESOURCES AND RESPONSIBILITIES

6.1 NAVAREA Co-ordinator resources

6.1.1 The NAVAREA Co-ordinator must have:

- .1** the expertise and information sources of a well established national hydrographic service;
- .2** effective communication links, e.g. telex, facsimile, e-mail, etc., with sub-area and national Co-ordinators in the NAVAREA and with other NAVAREA Co-ordinators; and
- .3** access to effective facilities for transmission to the entire NAVAREA. Reception normally should be possible 700 miles beyond the limit of the NAVAREA (24 hours' sailing by a fast ship).

6.2 NAVAREA Co-ordinator responsibilities

6.2.1 The NAVAREA Co-ordinator must:

- .1** endeavour to be informed of all events that could significantly affect the safety of navigation within the NAVAREA;
- .2** immediately upon receipt, assess all information in the light of expert knowledge for relevance to navigation in the NAVAREA;
- .3** select information for broadcast in accordance with the guidance given in 4.2.1 above;
- .4** draft NAVAREA warning messages in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information (MSI) for standardization of texts and message drafting;
- .5** direct and control the broadcast of NAVAREA warning messages, making full and efficient use of national broadcast facilities in keeping with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended;
- .6** pass NAVAREA warnings which warrant further promulgation in adjacent areas directly to the appropriate NAVAREA Co-ordinators, using the quickest possible means;
- .7** ensure that written copies of NAVAREA warnings likely to remain in force for more than six weeks are made available to those NAVAREA Co-ordinators or national authorities requesting them. Immediate transmission by telex, facsimile, or by high-speed communications is recommended in the absence of an alternative appropriate delivery arrangement, subject to agreement between the Co-ordinators concerned;
- .8** as soon as possible after the receipt of information concerning scheduled underwater operations as described in 4.2.1.3.9, or other scheduled operations such as in 4.2.1.3.3 and 4.2.1.3.10, pass such information to those national Co-ordinators in its

own NAVAREA and other NAVAREA Co-ordinators who maintain a notices to mariners service covering the affected area and who have requested such information;

- .9 transmit periodical NAVAREA warnings bulletins;
- .10 promulgate the cancellation of NAVAREA warnings which contain information which is no longer valid;
- .11 arrange for the text of NAVAREA warnings in force to be available at port offices and, where appropriate, for their eventual inclusion in a generally available printed form;
- .12 act as the central point of contact on matters relating to navigational warnings within the NAVAREA;
- .13 promote the use of established international standards and practices in the promulgation of navigational warnings within the NAVAREA;
- .14 when notified by the authority designated to act on reports of piracy and armed robbery against ships, arrange for the broadcast of a suitable NAVAREA warning. Additionally, keep the national or regional piracy control centre informed of long-term broadcast action(s);
- .15 monitor the broadcasts which they originate to ensure that the messages have been correctly broadcast; and
- .16 co-ordinate preliminary discussions between Member States seeking to establish NAVTEX services and neighbouring Administrations, prior to formal application.

Note: Although arrangements made by the NAVAREA Co-ordinator should enable all ships to receive messages in force for an area either before reaching or on entering an area, nevertheless it should be possible, in exceptional cases, for ships to obtain, on request, texts of messages in force but not included in the current scheduled broadcasts.

6.3 Sub-area Co-ordinator resources

6.3.1 The sub-area Co-ordinator must have, or have access to:

- .1 expertise and information resources of a well established national hydrographic service;
- .2 effective communication links with national Co-ordinators in the sub-area; and
- .3 effective communication links with the NAVAREA Co-ordinator.

Note: Normally a sub-area Co-ordinator will serve also as a national Co-ordinator.

6.4 Sub-area Co-ordinator responsibilities

6.4.1 The sub-area Co-ordinator must:

- .1 endeavour to be informed of all events that could significantly affect the safety of navigation within the sub-area;
- .2 inform the NAVAREA Co-ordinator of any events in the sub-area which warrant the promulgation of a NAVAREA warning;
- .3 co-ordinate and promote the exchange of information between national Co-ordinators in the sub-area and the NAVAREA Co-ordinator;
- .4 act as the central point of contact on matters relating to navigational warnings within the sub-area;
- .5 promote the use of established international standards and practices in the promulgation of navigational warnings within the sub-area; and
- .6 monitor the broadcasts which they originated to ensure that the messages have been correctly transmitted.

6.5 National Co-ordinator resources

6.5.1 The national Co-ordinator must have:

- .1 established sources of information relevant to the safety of navigation within national waters;
- .2 effective communication links with the sub-area/NAVAREA Co-ordinator and adjacent national Co-ordinators; and
- .3 access to effective facilities for the transmission of navigational warnings to the region.

6.6 National Co-ordinator responsibilities

6.6.1 The national Co-ordinator must:

- .1 endeavour to be informed of all events that could significantly affect the safety of navigation within his region or national area of responsibility;
- .2 immediately upon receipt, assess all information in the light of expert local knowledge for relevance to safety of navigation in his area of responsibility;
- .3 select information for broadcast in accordance with the guidance given in paragraph 4.2.1.3 above;
- .4 draft coastal warnings in accordance with established international standards;
- .5 direct and control the broadcast of coastal warnings by a broadcast system adopted for the WWNWS;
- .6 arrange to receive NAVAREA warnings broadcast for its area of responsibility and, where appropriate, coastal warnings from other national Co-ordinators;

- .7** include relevant warnings in NAVTEX/SafetyNET broadcasts and, if appropriate, in notices to mariners;
- .8** arrange for the texts of NAVAREA warnings and relevant coastal warnings to be available at port offices and, where appropriate, for their eventual inclusion in a generally printed form and/or notice to mariners;
- .9** inform the NAVAREA Co-ordinator or, where established, the sub-area Co-ordinator of any events in his area of responsibility which warrant the promulgation of a NAVAREA warning;
- .10** act as the central point of contact on matters relating to navigational warnings within his area of responsibility;
- .11** pass coastal warnings that warrant further promulgation in adjacent regions to the appropriate national Co-ordinators;
- .12** when notified by the authority designated to act on reports of piracy and armed robbery against ships, arrange for the broadcast of a suitable NAVAREA warning. Additionally, keep the national or regional piracy control centre informed of long-term broadcast action(s); and
- .13** monitor the broadcasts which they originate to ensure that the messages have been correctly broadcast.

ANNEX 2

IMO PROCEDURE FOR AMENDING THE WORLD-WIDE NAVIGATIONAL WARNING SERVICE

- 1** Proposed amendments to the world-wide navigational warning service should be submitted to the Maritime Safety Committee for evaluation.
- 2** Amendments to the service should normally come into force at intervals of approximately two years or at such longer periods as determined by the Maritime Safety Committee at the time of adoption. Amendments adopted by the Maritime Safety Committee will be notified to all concerned, will provide at least 12 months notification and will come into force on 1 January of the following year.
- 3** The agreement of the International Hydrographic Organization and the active participation of other bodies should be sought according to the nature of the proposed amendments.
- 4** When the proposals for amendment have been examined in substance, the Maritime Safety Committee will entrust the Sub-Committee on Radiocommunications and Search and Rescue with the ensuing editorial tasks.
- 5** The NAVAREA schedule of broadcast times and frequencies, not being an integral part of the service and being subject to frequent changes, will not be subject to the amendment procedures.