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**REVISED JOINT IMO/IHO/WMO MANUAL ON
MARITIME SAFETY INFORMATION (MSI)**

1 The Maritime Safety Committee (MSC), at its eighty-sixth session (27 May to 5 June 2009), noted and approved the revised Joint IMO/IHO/WMO Manual on Maritime Safety Information (MSI), as prepared by WMO and IHO and agreed by the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR), at its thirteenth session (19 to 23 January 2009).

2 MSC 86 noted that section 7 provides extensive guidance and examples on the structure and text to be used in navigational warnings and that, to ensure greater uniformity, this section would be provided in the English language in an additional annex in the circulars and publications in the Spanish and French languages.

3 The Committee was of the opinion that the widest possible use of the manual should be encouraged and invited Member Governments to bring the annexed Joint IMO/IHO/WMO Manual to the attention of mariners and those involved in the promulgation of navigational warnings and meteorological forecasts and warnings.

4 This circular supersedes COMSAR/Circ.15.

5 The Committee decided that the amendments will come into force on 1 January 2011.

ANNEX

PREFACE

SOLAS regulation IV/12.2 states that “Every ship, while at sea, shall maintain a radio watch for broadcasts of maritime safety information on the appropriate frequency or frequencies on which such information is broadcast for the area in which the ship is navigating”.

At the request of the Sub-Committee on Radiocommunications, the International Hydrographic Organization (IHO) and the World Meteorological Organization (WMO), a joint document on the drafting of maritime safety information broadcasts was produced (the Joint IMO/IHO/WMO Manual on Maritime Safety Information). The document was circulated to IHO Member States under IHB CL 10/1994 and as COMSAR/Circ.4 by the Sub-Committee on Radiocommunications and Search and Rescue (COMSAR) after its first session in February 1996, which action was endorsed by the Maritime Safety Committee at its sixty-sixth session in May/June 1996.

The publication contained sections from IMO resolution A.706(17), “World-Wide Navigational Warning Service”, as amended, and relevant sections of the WMO Publication “Manual on Marine Meteorological Services”.

At its seventh meeting in September 2005, the IHO’s Commission on the Promulgation of Radio Navigational Warnings (CPRNW) established a Working Group to review all World-Wide Navigational Warning Service (WWNWS) documentation. The Working Group included representation from the WMO and prepared at first, revisions to IMO as amended resolutions A.705(17), “Promulgation of Maritime Safety Information” and A.706(17), “World-Wide Navigational Warning Service”. The proposed revisions of the resolutions were circulated to IHO Member States under IHB CL 104/2007, endorsed by COMSAR at its twelfth session in April 2008 and subsequently approved by the Maritime Safety Committee at its eighty-fifth session in November/December 2008.

The IHO CPRNW Working Group then prepared the revised Joint IMO/IHO/WMO Manual on Maritime Safety Information incorporating the revised information from resolutions A.705(17), as amended and A.706(17), as amended. The revised text of the Joint IMO/IHO/WMO Manual on Maritime Safety Information was circulated to IHO Member States under cover of IHB CL 70/2008, endorsed by COMSAR at its thirteenth session in January 2009 and subsequently approved by the Maritime Safety Committee at its eighty-sixth session in May/June 2009.

Although this is an IMO publication, it is intended that the responsible organizations will maintain their respective sections of this Joint IMO/IHO/WMO Manual.

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1 – GENERAL INFORMATION

This manual provides a practical guide for anyone who is concerned with drafting navigational warnings or with the issuance of meteorological forecasts and warnings under the Global Maritime Distress and Safety System (GMDSS). Maritime Safety Information (MSI) is promulgated in accordance with the requirements of IMO resolution A.705(17), as amended. Navigational warnings are issued under the auspices of the IMO/International Hydrographic Organization (IHO) World-Wide Navigational Warning Service (WWNWS) in accordance with the requirements of IMO resolution A.706(17), as amended. Meteorological forecasts and warnings are issued under the patronage of the World Meteorological Organization (WMO). In order to achieve the necessary impact on the mariner it is essential to present timely and relevant information in a consistent format that is clear, unambiguous and brief. Within this manual, it is particularly intended to provide the best form of words for use in all types of navigational warnings and meteorological forecasts and warnings that are required to be broadcast in the English language¹. Note has been taken of the IMO Standard Marine Communication Phrases (resolution A.918(22)), where appropriate.

This manual cannot provide specimen texts for every type of event which may occur. However, the principles illustrated herein may be applied in general to drafting messages for every kind of navigational warning and covering all types of hazards and for the issuance of meteorological forecasts and warnings.

Resolution A.706(17), as amended on the World-Wide Navigational Warning Service (MSC.1/Circ.1288) at section 5.3.1, requires that “All NAVAREA, Sub-Area and coastal warnings shall be broadcast only in English in the International NAVTEX and SafetyNET services”. Where this manual has been produced in languages other than English then the message examples given in section 7 are also provided in the English language in an additional annex.

¹ See WMO Publication *Manual on Marine Meteorological Services (WMO No 558)*.

2 – PROMULGATION OF MARITIME SAFETY INFORMATION

2.1 Introduction

2.1.1 The maritime safety information service of the GMDSS is the internationally and nationally coordinated 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**.

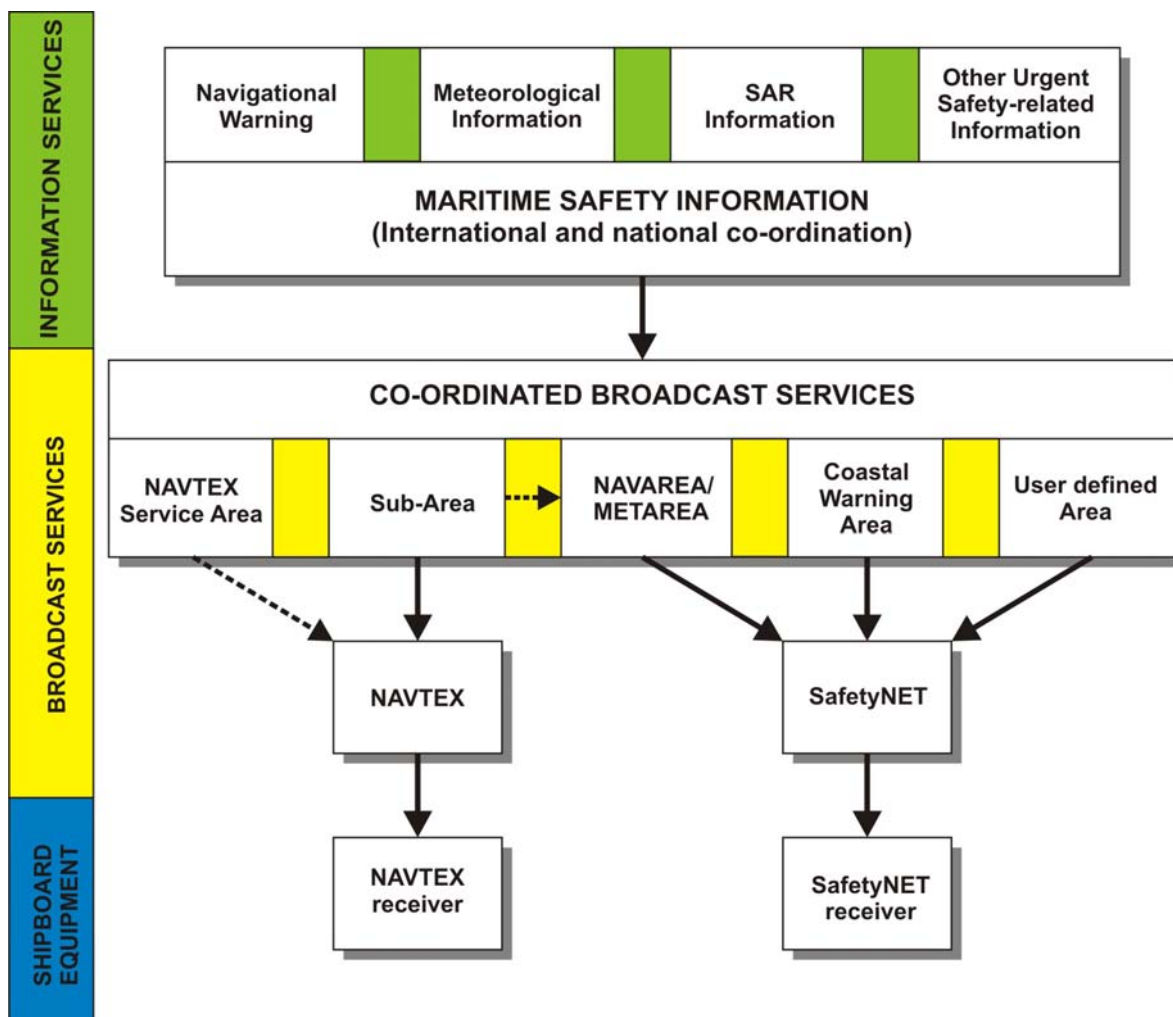


Figure 1 – The maritime safety information service of the Global Maritime Distress and Safety System

2.1.2 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.

2.1.3 The purpose of IMO resolution A.705(17), as amended “Promulgation of Maritime Safety Information” is to set out the organization, standards and methods which should be used for the promulgation and reception of maritime safety information.

2.2 Definitions

2.2.1 For the purposes of this manual, the following definitions apply:

- .1 *Coast Earth Station (CES)* means a fixed terrestrial radio facility acting as a gateway between terrestrial networks and the Inmarsat satellites in the maritime mobile-satellite service. This may also be referred to as a Land Earth Station (LES).
- .2 *Coastal warning* means a navigational warning promulgated as part of a numbered series by a National coordinator. 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.)
- .3 *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.
- .4 *HF NBDP* means High Frequency narrow-band direct-printing, using radio telegraphy as defined in Recommendation ITU-R M.688.
- .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 coordinator, Sub-Area coordinator or National coordinator during at least the previous six weeks.
- .6 *International NAVTEX service* means the coordinated broadcast and automatic reception on 518 kHz of maritime safety information by means of narrow-band direct-printing telegraphy using the English language².
- .7 *International SafetyNET service* means the coordinated 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.
- .8 *Local warning* means a navigational warning which covers inshore waters, often within the limits of jurisdiction of a harbour or port authority.
- .9 *Main Shipping Lanes* means those routes used by international shipping.
- .10 *Maritime safety information (MSI)*³ means navigational and meteorological warnings, meteorological forecasts and other urgent safety-related messages broadcast to ships.
- .11 *Maritime safety information service* means the internationally and nationally coordinated network of broadcasts containing information which is necessary for safe navigation.

² As set out in the IMO NAVTEX Manual.

³ As defined in regulation IV/2 of the 1974 SOLAS Convention, as amended.

- .12** *METAREA* means a geographical sea area⁴ 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.
- .13** *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.
- .14** *National coordinator* means the national authority charged with collating and issuing coastal warnings within a national area of responsibility.
- .15** *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.
- .16** *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.
- .17** *NAVAREA* means a geographical sea area⁴ 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.
- .18** *NAVAREA coordinator* means the authority charged with coordinating, collating and issuing NAVAREA warnings for a designated NAVAREA.
- .19** *NAVAREA warning* means a navigational warning or in-force bulletin promulgated as part of a numbered series by a NAVAREA coordinator.
- .20** *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.
- .21** *NAVTEX* means the system for the broadcast and automatic reception of maritime safety information by means of narrow-band direct-printing telegraphy.
- .22** *NAVTEX service area* means a unique and precisely defined sea area for which maritime safety information is provided from a particular NAVTEX transmitter.

⁴ Which may include inland seas, lakes and waterways navigable by sea-going ships.

- .23** *NAVTEX coordinator* means the authority charged with operating and managing one or more NAVTEX stations broadcasting maritime safety information as part of the International NAVTEX service.
- .24** *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.
- .25** *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.
- .26** *SAR information* means distress alert relays and other urgent search and rescue information broadcast to ships.
- .27** *Sea Area A1* means an area within the radiotelephone coverage of at least one VHF coast station in which continuous DSC⁵ alerting is available, as may be defined by a Contracting Government.
- .28** *Sea Area A2* means an area, excluding sea area A1, within the radiotelephone coverage of at least one MF coast station in which continuous DSC alerting is available, as may be defined by a Contracting Government.
- .29** *Sea Area A3* means an area, excluding sea areas A1 and A2, within the coverage of an Inmarsat geostationary satellite in which continuous alerting is available.
- .30** *Sea Area A4* means an area outside sea areas A1, A2 and A3.
- .31** *Sub-Area* means a sub-division of a NAVAREA/METAREA in which a number of countries have established a coordinated 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.
- .32** *Sub-Area coordinator* means the authority charged with coordinating, collating and issuing Sub-Area warnings for a designated Sub-Area.
- .33** *Sub-Area warning* means a navigational warning promulgated as part of a numbered series by a Sub-Area coordinator. Broadcast shall be made by the International NAVTEX service to defined NAVTEX service areas or by the International SafetyNET service (through the appropriate NAVAREA coordinator.)

⁵ Digital selective calling (DSC) means a technique using digital codes which enables a radio station to establish contact with and transfer information to another station or group of stations and complying with the relevant recommendations of the International Radio Consultative Committee ((CCIR) – “Radiocommunications Bureau of the International Telecommunication Union (ITU)” from 1 March 1993).

- .34 *User defined area* means a temporary geographic area, either circular or rectangular, to which maritime safety information is addressed.
- .35 *UTC* means Coordinated Universal Time which is equivalent to GMT (or ZULU) as the international time standard.
- .36 *World-Wide Navigational Warning Service (WWNWS)*⁶ means the internationally and nationally coordinated service for the promulgation of navigational warnings.
- .37 In the operating procedures *coordination* 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 IMO resolutions A.705(17), as amended and A.(706)17, as amended.

2.2.2 Delimitation of NAVAREAS

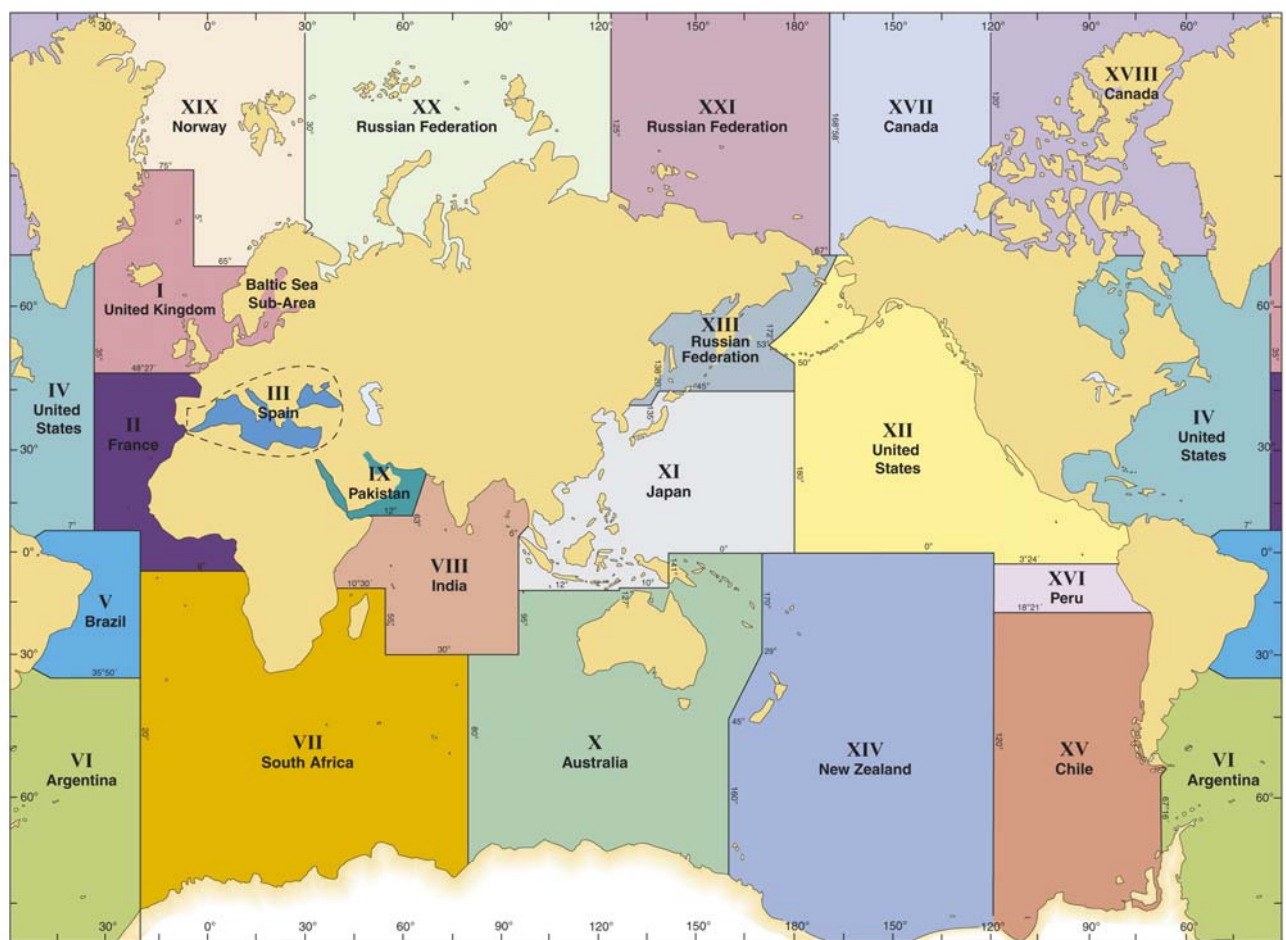


Figure 2 – NAVAREAS for coordinating and promulgating radio navigational warnings under the World-Wide Navigational Warning Service

The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

⁶ As set out in resolution A.706(17), as amended.

2.3 Broadcast methods

2.3.1 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 IMO resolution A.801(19), Annex 3, as amended.

2.3.2 Information should 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 vessel to change from one method to another, the majority of messages will be broadcast either on NAVTEX or SafetyNET.

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

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

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

2.3.6 In addition, Administrations may also provide maritime safety information by other means.

2.3.7 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.

2.4 Scheduling

2.4.1 *Automated methods (NAVTEX/SafetyNET)*

2.4.1.1 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 minutes of receipt of original information, or at the next scheduled broadcast.

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

2.4.1.3 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.

2.4.2 Schedule changes

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

2.4.2.2 Times of scheduled broadcasts under the International SafetyNET service are coordinated through the International SafetyNET coordinating Panel.

2.5 Shipboard equipment

2.5.1 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.

2.5.2 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 IMO resolution MSC.148(77), as amended.

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

2.5.4 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 IMO resolution A.700(17), as amended.

2.6 Provision of information

2.6.1 Navigational warnings shall be provided in accordance with the standards, organization and procedures of the WWNWS under the functional guidelines of the IHO through its Commission on Promulgation of Radio Navigational Warnings. Details of NAVAREA coordinators are maintained on the IHO Web site www.iho.org/committees/ and are also published by an IMO COMSAR circular.

2.6.2 Meteorological information shall be provided in accordance with the WMO technical regulations and recommendations, monitored and reviewed by the Expert Team on Maritime Safety Services of the Joint WMO/IOC⁷ Commission for Oceanography and Marine Meteorology (JCOMM).

⁷ IOC is the Intergovernmental Oceanographic Commission of UNESCO.

2.6.3 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 IMO.

2.6.4 Other urgent safety-related information shall be provided by the relevant national or international authority responsible for managing the system or scheme.

2.6.5 Relevant national or international authorities shall take into account the need for contingency planning.

2.7 Coordination procedures

2.7.1 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.

2.7.2 In general, this requirement for coordination will be met by the standard operational procedures of IMO, IHO, WMO, International Telecommunication Union (ITU) and International Mobile Satellite Organization (IMSO). Cases of difficulty should be referred, in the first instance, to the most appropriate parent body.

2.7.3 Administrations broadcasting maritime safety information should provide details of services to the IMO, which will maintain and publish this as part of the GMDSS Master Plan.

2.7.4 The coordination of changes to operational NAVTEX services and of the establishment of new stations is undertaken by the Coordinating Panel on NAVTEX Services of the Sub-Committee on Radiocommunications and Search and Rescue on behalf of the Maritime Safety Committee.

2.7.5 The coordination of changes to operational SafetyNET services and of the authorization and registration of information providers is undertaken by the International SafetyNET Coordinating Panel of the Sub-Committee on Radiocommunications and Search and Rescue on behalf of the Maritime Safety Committee.

2.7.6 Administrations should design their broadcasts to suit specific service areas⁸. The designation of service areas is an important part of the coordination 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.

⁸ Coordination of HF NBDP broadcasts in the Arctic should be undertaken by relevant MSI Service Providers.

3 – COORDINATOR RESOURCES AND RESPONSIBILITIES

3.1 NAVAREA coordinator resources

3.1.1 The NAVAREA coordinator 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 coordinators in the NAVAREA, with other NAVAREA coordinators, 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 2.3.1. Reception should normally be possible at least 300 nautical miles beyond the limit of the NAVAREA (24 hours sailing by a fast ship).

3.2 NAVAREA coordinator responsibilities

3.2.1 The NAVAREA coordinator 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;
- .4** draft NAVAREA warnings in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information;
- .5** direct and control the broadcast of NAVAREA warnings, 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 coordinators and/or others as appropriate, using the quickest possible means;
- .7** ensure that NAVAREA warnings which may remain in force for more than six weeks are made available immediately to NAVAREA coordinators, other authorities and mariners in general, as appropriate;

- .8 ensure that information concerning all navigational warning subject areas listed in paragraph 4.2.2 that may not require a NAVAREA warning within their own NAVAREA is forwarded immediately to the appropriate National and NAVAREA coordinators 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 with respect to 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 warnings in accordance with the requirement of the National Administration of the NAVAREA coordinator;
- .17 coordinate preliminary discussions between neighbouring Member States, seeking to establish or amend 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 (COMSAR), Expert Team on Maritime Safety Services (ETMSS) and other regional conferences, etc., as required; and
- .19 take into account the need for contingency planning.

3.3 Sub-Area coordinator resources

3.3.1 The Sub-Area coordinator 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 coordinators in the Sub-Area, with the NAVAREA coordinator, and with other data providers; and
- .3 access to broadcast systems for transmission to the entire Sub-Area.

3.4 Sub-Area coordinator responsibilities

3.4.1 The Sub-Area coordinator 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;
- .4 draft Sub-Area warnings in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information;
- .5 direct and control the broadcast of Sub-Area warnings, 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 coordinator 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 Sub-Area warnings in accordance with the requirement of the National Administration of the Sub-Area coordinator;

- .13 contribute to the development of international standards and practices through attendance and participation in the IHO CPRNW meetings, and also participate in relevant IMO, IHO and WMO fora as appropriate, e.g., COMSAR, ETMSS, and other regional conferences, etc., as required; and
- .14 take into account the need for contingency planning.

3.5 National coordinator resources

3.5.1 The National coordinator 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 coordinator and adjacent National coordinators; and
- .3 access to broadcast systems for transmission to their area of national responsibility.

3.6 National coordinator responsibilities

3.6.1 The National coordinator 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;
- .4 draft coastal warnings in accordance with the Joint IMO/IHO/WMO Manual on Maritime Safety Information;
- .5 direct and control the broadcast of coastal warnings, in accordance with the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended;
- .6 forward coastal warnings and relevant associated information which may require wider promulgation directly to their NAVAREA coordinator and/or adjacent National coordinators 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 coastal warnings in accordance with the requirement of the National Administration of the National coordinator; and
- .13** take into account the need for contingency planning.

4 – NAVIGATIONAL WARNINGS FOR THE WORLD-WIDE NAVIGATIONAL WARNING SERVICE

4.1 General

4.1.1 Navigational warnings are issued in response to SOLAS regulation V/4 and carry information which may have a direct bearing on the safety of life at sea. It is the fundamental nature of navigational warnings that they will often be based on incomplete or unconfirmed information and mariners will need to take this into account when deciding what reliance to place on the information contained therein.

4.1.2 In order to achieve the necessary impact on the mariner it is essential to present timely and relevant information in a consistent format that is CLEAR, UNAMBIGUOUS and BRIEF. This is ensured by using structured messages in standard formats, as shown in sections 6 and 7 of this manual.

4.1.3 The resources employed by administrations and the mariner are extremely limited. Thus only information which is vital to the safe conduct of vessels should be transmitted. Notices to Mariners and other means exist for passing less urgent information to ships after they have reached port. Information of a purely administrative nature should never be broadcasted on the regular international navigational warning schedules.

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

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

4.1.5 Navigational warnings shall remain in force until cancelled by the originating coordinator. 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.

4.1.6 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.

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

4.1.8 Some of the subjects for navigational warnings listed in paragraph 4.2.2 (e.g., drifting ice, tsunami warnings, negative tidal surges) may also be suitable for promulgation as METAREA forecasts or warnings. In this event, appropriate coordination between the relevant NAVAREA coordinator and METAREA Issuing Service must occur.

4.2 NAVAREA warnings

4.2.1. 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.

4.2.2 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 vessels, 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;
- .16 World Health Organization (WHO) health advisory information; and
- .17 security-related requirements⁹.

4.3 Sub-Area warnings

4.3.1 Sub-Area warnings broadcast information which is necessary for safe navigation within a Sub-Area. They will normally include all subjects listed in **4.2.2** above, but will usually affect only the Sub-Area.

4.4 Coastal warnings

4.4.1 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.

4.4.2 Coastal warnings should include at least the subjects in **4.2.2**.

4.5 Local warnings

4.5.1 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.

⁹ In accordance with the requirements of the International Ship and Port Facility Security Code only.

5 – THE STRUCTURE OF NAVIGATIONAL WARNINGS

5.1 Numbering

5.1.1 Navigational warnings in each series shall be consecutively numbered throughout the calendar year, commencing with 1/YY at 0000 UTC on 01 January.

5.1.2 Navigational warnings shall be transmitted in reverse numerical order on scheduled broadcasts.

5.2 Language

5.2.1 All NAVAREA, Sub-Area and coastal warnings shall be broadcast only in English in the International NAVTEX and SafetyNET services in accordance with IMO resolution A.706(17), as amended.

5.2.2 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.

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

5.3 “No warnings” message

5.3.1 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.

5.4 Standard elements of messages

5.4.1 The minimum information which a mariner requires to avoid danger is:

HAZARD + POSITION

It is usual, however, to include amplifying remarks in order to provide sufficient extra details to clearly identify the significance of the hazard and to assist mariners in recognizing and assessing its effect upon their navigation. The time, date and duration of the event shall be included if known.

5.4.2 A message can have up to three parts: Preamble, Warning, and Postscript. Sections 6 and 7 of the Manual give guidance on the correct way of phrasing each part of the warning to achieve maximum impact with minimum broadcast time.

5.4.3 The text of a navigational warning shall contain specific message elements, identified and ordered by the reference numbers shown in **Figure 3** and expanded in Section 6. The format and structure of a message should ensure that each message element begins on a new line.

5.4.4 The first words of the text of every warning message shall always be the message series identifier, followed by the consecutive number; this may be preceded on a separate line by the time of origin of the message.

5.5 Message Elements Table

MESSAGE ELEMENTS TABLE		
Part	Reference No.¹⁰	Message Elements
Preamble	1	Message series identifier
	2	General area
	3	Locality
	4	Chart number
Warning	5	Key subject
	6	Geographical position
	7	Amplifying remarks
Postscript	8	Cancellations details

Figure 3 – Message Elements Table showing standard elements for each part of a message

¹⁰ Reference number is NOT to be included as part of the message text.

6 – MESSAGE FORMAT OF NAVIGATIONAL WARNING

Part 1 – PREAMBLE

Standard Message Element Reference 1 – MESSAGE SERIES IDENTIFIER

The first words of the text of every warning message shall always be message series identifier followed by the consecutive number (N/YY)

NAVAREA WARNING:

NAVAREA III 496/09;
NAVAREA VII 42/09

SUB-AREA WARNING:

BALTIC SEA NAV WARN 009/09

COASTAL WARNING:

AVURNAV TOULON 1015/09;
WZ 345/09

Notes:

- 1) The consecutive number re-starts each calendar year at 1/YY (Leading zeros are not mandatory).
- 2) For coastal warnings the consecutive number is not the same as the NAVTEX Number B₃B₄.

Standard Message Element Reference 2 – GENERAL AREA

The general area shall be sufficient to identify which broad geographic region the message affects. The geographical name which is selected for the general area should be one that can be found on charts and in nautical publications.

NAVAREA WARNING:

“NORTH SEA” or “MALACCA STRAIT” would be correct; “NORTH AMERICA, EAST COAST” is too general.

SUB-AREA WARNING:

GULF OF FINLAND

COASTAL WARNING:

BAY OF BISCAY;
CANTABRICO

Notes:

- 1) If appropriate the established meteorological forecast areas as defined in WMO publication No. 9 Volume D and also published in various nautical publications may be used.
- 2) For a NAVAREA-wide event, e.g., failure of satellite or terrestrial positioning systems, a navaid identification acronym “GPS”, “LORAN”, etc., shall be used instead of a general area.

Standard Message Element Reference 3 – LOCALITY

The locality shall be stated in terms which allow the mariner to identify warnings which affect his passage without having to plot them. Locality will only need to be stated when it is considered necessary to refine the general area. The geographical name which is selected as locality should be one that can be found on charts and in nautical publications.

NAVAREA WARNING:
NORTHERN GRAND BANKS;
PINANG APPROACH

SUB-AREA WARNING:
STORA MIDDELGRUND

COASTAL WARNING:
BARRA DE PARANAGUA – CANAL DA GALHETA

Note:

- 1) If appropriate the established meteorological forecast areas as defined in WMO publication No. 9 Volume D and also published in various nautical publications may be used.

Standard Message Element Reference 4 – CHART NUMBER

For charted features, reference shall be made to a national chart (not necessarily the largest scale) identified by the State abbreviation and chart number. Reference shall also be made to an international chart number if one exists;

NAVAREA WARNING:
Chart INDIA 32 (INT 754)

Notes:

- 1) Warnings may refer to an Electronic Navigational Chart (ENC). In such cases, ENC cell numbers may be quoted, e.g., ENC: US3AK7RM
- 2) Chart or ENC cell numbers are not mandatory for coastal warnings which are only broadcast in the vicinity of the hazard.

Part 2 – WARNING

Standard Message Element Reference 5 – KEY SUBJECT

Key subjects referenced in paragraph 4.2.2 are considered suitable for broadcast as NAVAREA, SUB-AREA, or COASTAL Warnings. See examples in Section 7.

Standard Message Element Reference 6 – GEOGRAPHICAL POSITION

Geographical positions shall always be given in Degrees and Minutes or in Degrees, Minutes and decimal minutes in the form:

Latitude: DD-MMN or DD-MMS

Longitude: DDD-MME or DDD-MMW

or

Latitude: DD-MM.mmN or DD-MM.mmS

Longitude: DDD-MM.mmE or DDD-MM.mmW

e.g., 07-08N 039-17W
32-18.65S 165-02.81E

Note that leading zeros shall always be included. Three digits are used for reporting degrees of longitude.

For warnings concerning the presence of dangerous wrecks or newly discovered rocks, shoals and reefs (ref: 4.2.2.2 and 4.2.2.7), the word LOCATED should only be used when the position of the hazard has been confirmed by a hydrographic survey. In all other cases the word REPORTED should be used.

Positions shall only be quoted to the accuracy required. In many cases this will be less than the known accuracy. For example, it will often be sufficient to quote the position to the nearest whole minute of latitude and longitude when indicating the location of a charted feature. The best accuracy available (to a maximum of 0.01 minutes) shall be used when broadcasting the position of new hazards. The same level of accuracy shall always be quoted for both latitude and longitude.

When defining the limits of a polygon, positions should be listed in a clockwise direction starting from the North West corner.

Circular areas should be defined by a radius in nautical miles from a single point.

The use of the word “POSITION” or “POS” is not necessary.

Standard Message Element Reference 7 – AMPLIFYING REMARKS

Amplifying remarks may be used to provide sufficient extra details to clearly identify the significance of the hazard and to assist mariners in RECOGNIZING and ASSESSING its effect upon their navigation.

Distances shall be quoted in Nautical Miles and decimals.

The time, date and duration of the event shall be included if known. The time standard for Navigational Warnings shall always be UTC (ref: 2.2.1.34)

The accepted format for a Date Time Group (DTG) in the text of a message is as follows:

DDHHMM UTC MoMoMo YY; e.g., 231642 UTC JUN 09

Part 3 – POSTSCRIPT

Standard Message Element Reference 8 – CANCELLATION DETAILS	
<p>Cancellation details shall be provided in a message that includes a definitive time frame; the cancellation time shall be one hour after the event completes or one day later if the time is not accurately known.</p> <p>A reason for the cancellation should only be included if it is of benefit to the mariner, and can be stated concisely.</p> <p>Cancellations messages may be “stand alone” and only concern the cancellation of a previous message, as in examples A and B below.</p> <p>When cancellation details relating to the subject of the message are included, it is recommended that paragraph numbers are used in order to clearly distinguish between the subject of the message and the cancellation details, as in example C below.</p> <p>The word “MESSAGE” can be abbreviated to MSG.</p>	
Examples	Comments
<p>A. CANCEL NAVAREA IV 123/09 AND THIS MSG.</p> <p>B. CANCEL ESTONIAN NAV WARN 87/08. ESTONIAN NOTICES TO MARINERS 520/09 REFERS.</p> <p>C. 1. MESSAGE TEXT – EVENT OF KNOWN DURATION. 2. CANCEL THIS MSG DDHHMM UTC MoMoMo YY.</p>	<p>Choose a time for self-cancelling messages (example C) one hour after the event completes or one day later if time is not accurately known.</p>

7 – GUIDANCE AND EXAMPLES FOR NAVIGATIONAL WARNINGS BY TYPE OF HAZARD (AS LISTED IN 4.2.2)

NOTE: All NAVAREA, Sub-Area and coastal warnings shall be broadcast only in English in the International NAVTEX and SafetyNET services in accordance with IMO resolution A.706(17), as amended.

1. Casualties to lights, fog signals, buoys and other aids to navigation affecting main shipping lanes

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 4, 5, 6, 7** identified and ordered, as in Message Elements Table **Figure 3**.

LIGHTHOUSES, BEACONS, LIGHT VESSELS

Standard Remarks	Comments
UNLIT	Use UNLIT in place of: Out, Extinguished, Not Burning, Not Working.
LIGHT UNRELIABLE	Use LIGHT UNRELIABLE in place of: Weak, Dim, Low Power, Fixed, Flashing Incorrectly, Out of Character, Incorrect colour of light, Sector limits unreliable. See Note iv.
DAMAGED	Use only for major damage, e.g., loss of significant functionality. See Note vi.
DESTROYED	Do not use "Temporarily destroyed".
RACON INOPERATIVE	
CHANGED TO FLASH THREE 20 SECONDS 14 METRES 16 MILES	PERMANENT change of character. See Notes v and viii.
TEMPORARILY CHANGED TO QUICK YELLOW 12 MILES	TEMPORARY change. Do not use for listed reserve light. See Note ix
MOVED 0.3 MILES NORTH TO 63-14.8N 022-15.6E	Do not quote former geographical position. Indicate former position by approximate direction and distance. See Note x.
RE-ESTABLISHED	For previously charted or listed as DESTROYED or TEMPORARILY REMOVED. See Note xi.
PERMANENTLY DISCONTINUED	Use for removed
TEMPORARILY REMOVED	Use when an aid is temporarily removed (i.e. for maintenance purposes.)

Notes:

- i) Use CHARTED names, not LISTED names.
- ii) LIGHT LIST number is not required.
- iii) POSITION normally quoted to nearest whole minute for existing lights.
- iv) Due to the fundamental nature of navigational warnings that they will often be based on incomplete or unconfirmed information, the use of "REPORTED" is unnecessary for casualties to lights. If the report is unconfirmed, use LIGHT UNRELIABLE.
- v) Always quote FULL LIGHT CHARACTERISTIC to avoid confusion over what has been changed.
- vi) Damage to DAYMARKS is not usually worthy a navigational warning.
- vii) Do not initiate a navigational warning to request reports on an unwatched light.
- viii) Use light descriptions as given in the LIGHTS – GLOSSARY OF TERMS Table.
- ix) Temporary use of a listed reserve light is to be expected. A warning would only be required due to a change of character, i.e. reduction of Range.
- x) Distances shall be quoted in nautical miles and decimals.
- xi) RE-ESTABLISHED is only appropriate for lights which have previously been CHARTED or LISTED as DESTROYED or TEMPORARILY REMOVED. Navigational Warnings concerning such lights are cancelled when the light is re-established. A new Navigational Warning is only required if the character or position has changed.
- xii) Chart INT 1 Abbreviations for light characters are *only* suitable for NAVTEX or SafetyNET transmissions. Voice broadcasts shall be drafted using the terms for lights in the LIGHTS - GLOSSARY OF TERMS Table.

LIGHTS – GLOSSARY OF TERMS

CLASS OF LIGHT	Description for TEXT broadcasts	Description for VOICE broadcasts	
Fixed (steady light)	F	Fixed	
Occulting (total duration of light longer than total duration of darkness) Single-occulting Group-occulting Composite group-occulting	OC OC(2) OC(2+3)	Occulting Occulting two Occulting two plus three	
Isophase (equal periods light and dark)	ISO	Iso	
Flashing (total duration of light shorter than total duration of darkness) Single-flashing Long-flashing Group-flashing Composite group-flashing	FL LFL FL(3) FL(2+1)	Flash Long flash Flash three Flash two plus one	
Quick (50 to 79 – usually either 50 or 60 flashes per minute) Continuous quick Group quick Interrupted quick	Q Q(3) IQ	Quick flash Quick flash three Interrupted quick flash	
Very quick (80 to 159 – usually either 100 or 120 flashes per minute) Continuous very quick Group very quick Interrupted very quick	VQ VQ(3) IVQ	Very quick flash Very quick flash three Interrupted very quick flash	
Ultra quick (160 or more usually 240 or 300 flashes per minute) Continuous ultra quick Interrupted ultra quick	UQ IUQ	Ultra quick flash Interrupted ultra quick flash	
Morse Code	MO(K)	Morse Kilo	
Fixed and Flashing	FFL	Fixed and flashing	
Alternating	ALWR	Alternating	
ELEVATION in METRES or FEET, e.g., 14 METRES or 21 FEET			
PERIOD in SECONDS, e.g., 15 SECONDS or 15 SEC (Not S)			
RANGE in nautical miles		International abbreviations	RANGE for broadcast
Single range	e.g.	15M	15 MILES
2 ranges	e.g.	14/12M	14 AND 12 MILES
3 or more ranges	e.g.	22–18M	22 TO 18 MILES (Shortest range only will be sufficient)

BUOYS, LANBYS, SUPERBUOYS

Standard Remarks	Comments
UNLIT	<i>Use UNLIT in place of:</i> Out, Extinguished, Not Burning, Not Working. See Note iv.
LIGHT UNRELIABLE	<i>Use LIGHT UNRELIABLE in place of:</i> Weak, Dim, Low power, Fixed, Out of Character, Irregular, Reduced power.
DAMAGED	No action for Topmark or Radar Reflectors. Use only for major damage, e.g., loss of significant functionality.
OFF STATION	Not in charted position, but still in the vicinity of original location. The actual position may be informed, if known.
MISSING	Completely absent from position.
TEMPORARILY CHANGED	
MOVED	Only use for established minor changes of position
PERMANENTLY DISCONTINUED	Use for removed
TEMPORARILY REMOVED	Use when an aid is temporarily removed (i.e. for maintenance purposes).
RE-ESTABLISHED	Use for previously charted or listed as DESTROYED or TEMPORARILY REMOVED. See Note viii.

Notes:

- i) POSITION normally quoted to nearest whole minute for existing buoys, lanbys, superbuoys.
- ii) Use light descriptions as given in the LIGHTS – GLOSSARY OF TERMS Table.
- iii) Do NOT describe the type of buoy, e.g., North Cardinal buoy, Port Hand buoy, unless the buoy is unnamed.
- iv) UNLIT may be used to amplify “DAMAGED” as in “DAMAGED AND UNLIT”.
- v) “LANBY” (Large Automated Navigational Buoy) or “SUPERBUOY” may be used in lieu of “BUOY” where appropriate.
- vi) Chart INT 1 Abbreviations for light characters are *only* suitable for NAVTEX or SafetyNET transmissions. Voice broadcasts shall be drafted using the terms for lights in the LIGHTS – GLOSSARY OF TERMS Table
- vii) The term “REPORTED” may be used for unconfirmed reports regarding buoys.
- viii) RE-ESTABLISHED is only appropriate for buoys which have previously been CHARTED or LISTED as DESTROYED or TEMPORARILY REMOVED. Navigational Warnings concerning such buoys are cancelled when the buoy is re-established. A new Navigational Warning is only required if the characteristics or position has changed.

BUOYAGE – GLOSSARY OF TERMS

IALA BUOYAGE		Comments
PORT HAND BUOY STARBOARD HAND BUOY NORTH CARDINAL BUOY EAST CARDINAL BUOY SOUTH CARDINAL BUOY WEST CARDINAL BUOY ISOLATED DANGER BUOY SAFE WATER BUOY SPECIAL BUOY EMERGENCY WRECK MARKING BUOY		Full description of light and colour not required for IALA standard buoys. “Lightbuoy” may be used to indicate that the buoy is lit.
OTHER BUOYS		
<i>COLOURS</i>	<i>PATTERN</i>	<i>SHAPE/TYPE</i>
RED BLACK WHITE GREEN YELLOW BLUE	CHEQUERED HORIZONTALLY STRIPED VERTICALLY STRIPED	CAN CONICAL (<i>not</i> OGIVAL <i>or</i> NUN) PILLAR SPAR SPHERICAL WRECK CABLE (<i>not</i> TELEGRAPH) MOORING DANGER ZONE ODAS SPM DART

EXAMPLES OF WARNINGS IN SECTION 4.2.2.1

Message Element	Example 1
1. Message series identifier	NAVAREA XIII 145/09
2. General area	SEA OF OKHOTSK.
3. Locality	WESTERN PART.
4. Chart number	CHART ____ (INT ____).
5. Key subject	ISOLATED DANGER BUOY 54-49.9N 142-04.1E MISSING.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA X 346/09
2. General area	AUSTRALIA NORTH EAST COAST.
3. Locality	ARCHER POINT.
4. Chart number	CHART ____ (INT ____).
5. Key subject	LIGHT 15-35.6S 145-19.7E UNRELIABLE.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 3
1. Message series identifier	NAVAREA I 23/09
2. General area	SOUTHERN NORTH SEA.
3. Locality	VICTOR GAS FIELD.
4. Chart number	CHART ____ (INT ____).
5. Key subject	PLATFORM 49/22-JD 53-19.6N 002-21.8E FOG SIGNAL INOPERATIVE.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 4
1. Message series identifier	NAVAREA VII 345/09
2. General area	MOZAMBIQUE CHANNEL.
3. Locality	PORT OF MAPUTO.
4. Chart number	CHART ____ (INT ____).
5. Key subject	BAIXO RIBEIRO LIGHT 25-54.6S 032-48.1E UNLIT.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 5
1. Message series identifier	NAVAREA IX 12/09
2. General area	RED SEA, EGYPT.
3. Locality	GULF OF AQABA, STRAIT OF TIRAN.
4. Chart number	CHART ____ (INT ____).
5. Key subject	WEST CARDINAL BUOY 27-59.4N 034-29.1E RACON INOPERATIVE.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

2. The presence of dangerous wrecks in or near main shipping lanes and, if relevant, their marking

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 4, 5, 6**, identified and ordered, as in Message Elements Table **Figure 3**.

Standard Remarks	Comments
DANGEROUS WRECK REPORTED	Reported position unconfirmed. See Note i.
DANGEROUS WRECK LOCATED	Position confirmed, usually by survey.

Notes:

- i) Position Approximate (PA) is not appropriate since all “reported” hazards will be of this nature by definition.
- ii) Remarks may be amplified e.g.: “. . . MARKED BY SOUTH CARDINAL BUOY 0.2 MILES SOUTHWARD” or “GUARD VESSEL VALIENT STATIONED CLOSE SOUTH EXHIBITING RACON MO(D)”
- iii) The appropriate action to be taken on receipt of wreck information will depend on its location as well as its depth (and therefore relative danger to navigation). Generally, any wreck with a least depth of 30 metres or less will need a navigation warning.
- iv) Only quote position and depth to an accuracy of which you can be confident. For example, a wreck which has been fully surveyed may have its position quoted to two decimal places and depth to 0.1m. On the other hand, in cases of reports of a vessel which has been abandoned (in a known position) and has then sunk some hours later, the position and depth of water may be vague.
- v) The inclusion of the name of the wreck is not necessary; however, details of the type of vessel may be included in the amplifying remarks if it is considered relevant, i.e. Super Tanker or Fishing Vessel with nets, etc.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.2

Message Element	Example 1
1. Message series identifier	NAVAREA III 45/09
2. General area	TUNISIA, EAST COAST.
3. Locality	RADE DE SFAX.
4. Chart number	CHART _____ (INT _____).
5. Key subject	WRECK REPORTED IN VICINITY 34-41.5N 010-54.0E.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA I 110/09
2. General area	SOUTHERN NORTH SEA.
3. Locality	SWARTE BANK.
4. Chart number	CHART _____ (INT _____).
5. Key subject	WRECK LOCATED 53-26.02N 002-08.40E MARKED BY NORTH,
6. Geographical position	SOUTH, EAST AND TWO WEST CARDINAL LIGHTBUOYS, THE MOST
7. Amplifying remarks	WESTERLY ONE FITTED WITH RACON MO(D).
8. Cancellations details	

Message Element	Example 3
1. Message series identifier	NAVAREA XVI 95/09
2. General area	PERU.
3. Locality	PAITA.
4. Chart number	CHART _____ (INT _____).
5. Key subject	WRECK LOCATED 05-04.8N 081-06.7W. EMERGENCY WRECK MARKING
6. Geographical position	BUOY ESTABLISHED 0.25 MILES SOUTH, ALTERNATING OCCULTING
7. Amplifying remarks	BLUE AND YELLOW THREE SECONDS.
8. Cancellations details	

Message Element	Example 4
1. Message series identifier	NAVAREA V 56/09
2. General area	BRAZIL, SOUTH COAST.
3. Locality	APPROACHES TO BAIA DE GUANABARA.
4. Chart number	CHART _____ (INT _____).
5. Key subject	TUG ANGLIAN MONARCH STANDING BY WRECK 23-01.8S 043-08.3W.
6. Geographical position	TUG IS EXHIBITING FLASHING BLUE LIGHT.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 5
1. Message series identifier	NAVAREA VI 16/09
2. General area	ARGENTINA, EAST COAST.
3. Locality	VALDES PENINSULA.
4. Chart number	CHART _____ (INT _____).
5. Key subject	WRECK OF FISHING VESSEL REPORTED 42-05.75S 063-22.00W.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

3. Establishment of major new aids to navigation or significant changes to existing ones when such establishment or change, might be misleading to shipping

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 4, 5, 6**, identified and ordered, as in Message Elements Table **Figure 3**.

Standard Remarks	Comments
ESTABLISHED	The use of the word ESTABLISHED conveys that the position and operation of the new or changed aid has been accurately confirmed by the appropriate competent authority.
RE-ESTABLISHED	For previously charted or listed as DESTROYED or TEMPORARILY REMOVED. See Note ix.

Notes:

- i) Use CHARTED names, not LISTED names.
- ii) LIGHT LIST number is not required.
- iii) POSITION normally quoted to nearest whole minute for existing lights.
- iv) For new lights or changed positions, quote accurate CHARTED position; in degrees, minutes and decimal minutes (maximum 2 decimal places).
- v) Always quote FULL LIGHT CHARACTERISTIC to avoid confusion over what has been changed.
- vi) Damage to DAYMARKS is not usually worthy a navigational warning.
- vii) Use light descriptions as given in the LIGHTS – GLOSSARY OF TERMS Table.
- viii) Distances shall be quoted in nautical miles and decimals.
- ix) RE-ESTABLISHED is only appropriate for aids which have previously been CHARTED or LISTED as DESTROYED or TEMPORARILY REMOVED. Navigational Warnings concerning such aids are cancelled when the aid is re-established. A new Navigational Warning is only required if the characteristics or position has changed.
- x) For new buoys, lanbys, superbuoys or changed positions, quote accurate CHARTED position; in degrees, minutes and decimal minutes (maximum 2 decimal places).
- xi) Chart INT 1 Abbreviations for light characters are *only* suitable for NAVTEX or SafetyNET transmissions. Voice broadcasts shall be drafted using the terms for lights in the LIGHTS – GLOSSARY OF TERMS Table.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.3

Message Element	Example 1
1. Message series identifier	NAVAREA IV 210/09
2. General area	JAMAICA, SOUTHWARDS.
3. Locality	PEDRO BANK.
4. Chart number	CHART 26050
5. Key subject	SOUTHWEST ROCK LIGHT, FL (3) 10 SECONDS 7 METRES 5M
6. Geographical position	ESTABLISHED 16-47.55N 078-11.48W.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA V 23/09
2. General area	BRAZIL, SOUTH COAST.
3. Locality	ILHA RASA SOUTHEASTWARD.
4. Chart number	CHART _____ (INT _____).
5. Key subject	1. EIGHT UNLIT LARGE SPHERICAL ORANGE BUOYS ESTABLISHED
6. Geographical position	WITHIN 1 MILE RADIUS OF 24-17.8S 042-39.8W.
7. Amplifying remarks	EXPLORATION IN PROGRESS WITHIN THIS AREA 15 APR
8. Cancellations details	TO 15 MAY 09. 2. CANCEL THIS MSG 160300 UTC MAY 09.

Message Element	Example 3
1. Message series identifier	NAVAREA X 15/09
2. General area	AUSTRALIA - NORTH WEST COAST.
3. Locality	PORT HEDLAND, NORTHWARDS.
4. Chart number	CHART _____ (INT _____).
5. Key subject	E2 SOUTH CARDINAL LIGHTBUOY ESTABLISHED 20-03.08S 118-
6. Geographical position	32.82E.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 4
1. Message series identifier	NAVAREA I 245/09
2. General area	ENGLAND - WEST COAST.
3. Locality	LIVERPOOL APPROACH.
4. Chart number	CHART _____ (INT _____).
5. Key subject	LIGHTBUOYS ESTABLISHED MARKING BURBO WINDFARM
6. Geographical position	CONSTRUCTION AREA.
7. Amplifying remarks	A. WEST CARDINAL 53-30.21N 003-13.56W.
8. Cancellations details	B. WEST CARDINAL 53-29.70N 003-13.79W. C. SOUTH CARDINAL 53-28.22N 003-11.10W.

4. The presence of large unwieldy tows in congested waters

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 5, 6, 7**, identified and ordered, as in Message Elements Table **Figure 3**.

Standard Remarks	Comments
LENGTH OF TOW	

Notes:

- i) Regular communications should be undertaken with the operators of the tow to ensure that the message is cancelled promptly as soon as the operation has been completed. Particular care should be taken when considering including a cancellation time or date for this category of message due to the many factors which could effect the completion of the operation.
- ii) The name or type of the towing vessel and/or towed object should be included when known.
- iii) Amplifying remarks regarding length and speed of tow need only be included if relevant or significant.
- iv) Amplifying remarks regarding the necessity for "WIDE BERTH" should only be included if specifically requested by the operator as it will always be the case that the towing vessel and towed object will have restricted manoeuvrability.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.4

Message Element	Example 1
1. Message series identifier	NAVAREA VII 58/09
2. General area	SOUTH ATLANTIC OCEAN.
3. Locality	TUG RIG DELIVERER WILL TOW VESSEL AGATE ISLAND FROM
4. Chart number	RECIFE, BRASIL TO CAPE TOWN, COMMENCING 09 JUN 09, ETA
5. Key subject	CAPE TOWN ON 09 JUL 09. LENGTH OF TOW 550 METRES WIDE
6. Geographical position	BERTH REQUESTED.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA XI 76/09
2. General area	KYUSHU - WEST COAST TO EASTERN CHINA SEA.
3. Locality	TUG TOWING DRILLING RIG KURYU NR 3. DEPARTS NAGASAKI KO
4. Chart number	ETD 010100 UTC JUL 09 TO EASTERN CHINA SEA,
5. Key subject	29-37.5N 125-49.8E, VIA 31-45N 128-51E. SPEED 5 KNOTS.
6. Geographical position	ETA 060300 UTC JUL 09. LENGTH OF TOW 1000 METRES.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 3
1. Message series identifier	NAVAREA XIII 34/09
2. General area	SEA OF JAPAN.
3. Locality	PROLIV LAPERUZA AND SAKHALIN NORTH EAST COAST.
4. Chart number	TUG TOWING DRILLING RIG PA-B 04,18 JUN 09 FROM
5. Key subject	34-58.1N 128-48.3E TO 52-55.9N 143-29.9E, VIA
6. Geographical position	45-43.0N 141-58.0E, 45-45.0N 142-30.0E,
7. Amplifying remarks	45-49.0N 143-19.0E, 45-55.0N 143-40.0E,
8. Cancellations details	52-52.0N 143-39.5E, LENGTH OF TOW 1000 METRES SPEED 4.2 KNOTS. ONE MILE BERTH REQUESTED.

Message Element	Example 4
1. Message series identifier	NAVAREA III 65/09
2. General area	BLACK SEA.
3. Locality	ROMANIA.
4. Chart number	GSP KING TOWING PLATFORM JUPITER 060030 UTC AUG 09 FROM
5. Key subject	44-31.9N 029-28.0E TO 44-35.9N 029-21.5E.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 5
1. Message series identifier	NAVAREA I 145/09
2. General area	SCOTLAND - EAST COAST.
3. Locality	NOSS HEAD SOUTH-EASTWARDS TO KITTIWAKE OIL FIELD
4. Chart number	TOW OF SEMI-SUBMERGED PIPELINE BUNDLE IN PROGRESS IN
5. Key subject	VICINITY OF LINE JOINING:
6. Geographical position	58-30N 003-08W, 58-28N 001-51W, 58-16N 000-48W,
7. Amplifying remarks	58-05N 000-28W, 57-43N 000-11W AND 57-32N 000-10E.
8. Cancellations details	

5. Drifting hazards (including derelict vessels, ice, mines, containers, other large items, etc.)

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 5, 6, 7, 8**, identified and ordered, as in Message Elements Table **Figure 3**.

Standard Remarks	Comments
REPORTED	The time of the latest position report shall ALWAYS be included.
ADRIFT	
ADRIFT IN VICINITY	

Notes:

- i) It is recommended that messages concerning drifting hazards should self cancel within 72 hours.
- ii) Drifting objects (with the exception of mines) of less than 6 metres in length are not normally considered to be hazards to navigation and therefore should not be promulgated.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.5

Message Element	Example 1
1. Message series identifier	NAVAREA VIII 35/09
2. General area	INDIA WEST COAST.
3. Locality	OFF MURUD JANJIRA.
4. Chart number	1. LARGE RECTANGULAR PARTIALLY SUBMERGED METALLIC OBJECT
5. Key subject	ADRIFT IN VICINITY 18-16.15N 072-24.05E AT 150830 UTC
6. Geographical position	JUN 09.
7. Amplifying remarks	2. CANCEL THIS MSG 180830 UTC JUN 09.
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA II 78/09
2. General area	PAZENN.
3. Locality	3. SIX CONTAINERS ADRIFT IN VICINITY 47-37N 006-26W AT
4. Chart number	262200 UTC JUL 09.
5. Key subject	4. CANCEL THIS MSG 292200 UTC JUL 09.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 3
1. Message series identifier	NAVAREA I 112/09
2. General area	CELTIC SEA.
3. Locality	CELTIC DEEP.
4. Chart number	1. DERELICT FISHING VESSEL REPORTED ADRIFT
5. Key subject	51-25.5N 006-21.9W AT 132210 UTC NOV 09.
6. Geographical position	2. CANCEL THIS MSG 162210 UTC NOV 09.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 4
1. Message series identifier	NAVAREA IV 75/09
2. General area	MEXICO.
3. Locality	PLAYA DEL CARMEN APPROACH.
4. Chart number	1. DRIFTING MINE REPORTED 20-37.3N 087-03.1W AT 060850
5. Key subject	UTC AUG 09.
6. Geographical position	2. CANCEL THIS MSG 090850 UTC AUG 09.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 5
1. Message series identifier	NAVAREA VI 99/09
2. General area	SOUTH ATLANTIC.
3. Locality	WEST SCOTIA RIDGE, RHINE BANK
4. Chart number	1. ICEBERGS REPORTED AT 250130 UTC JUL:
5. Key subject	A. 55-27.9S 053-35.6W.
6. Geographical position	B. 55-26.2S 053-18.3W.
7. Amplifying remarks	2. CANCEL THIS MSG 280130 UTC JUL 09.
8. Cancellations details	

Message Element	Example 6
1. Message series identifier	NAVAREA IV 55/09
2. General area	WEST INDIES.
3. Locality	MARTINIQUE, SOUTH.
4. Chart number	1. LARGE TRUNK, ELEVEN METRES IN LENGTH, REPORTED IN
5. Key subject	VICINITY 14-14N 060-52W AT 272115 UTC AUG 09.
6. Geographical position	2. CANCEL THIS MSG 302115 UTC AUG 09.
7. Amplifying remarks	
8. Cancellations details	

6. Areas where search and rescue (SAR) and anti-pollution operations are being carried out (for avoidance of such areas)

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 5, 6, 7**, identified and ordered, as in Message Elements Table **Figure 3**.

Standard Remarks	Comments
SAR OPERATION	
ANTIPOLLUTION OPERATIONS	

EXAMPLES OF WARNINGS IN SECTION 4.2.2.6

Message Element	Example 1
1. Message series identifier	NAVAREA XIV 67/09
2. General area	NEW ZEALAND.
3. Locality	COOK STRAIT.
4. Chart number	SAR OPERATION IN PROGRESS CENTRED ON 40-24.5S 173-57.6E.
5. Key subject	ALL VESSELS NOT UNDER INSTRUCTION OF THE SAR MISSION
6. Geographical position	CONTROLLER RCCNZ ARE REQUESTED TO KEEP A WIDE BERTH.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA I 25/09
2. General area	ENGLAND SOUTH COAST.
3. Locality	LYME BAY, BEER HEAD WESTWARDS.
4. Chart number	ANTIPOLLUTION OPERATIONS IN PROGRESS 50-40.0N 003-10.0W.
5. Key subject	A TEMPORARY EXCLUSION ZONE RADIUS TWO MILES HAS BEEN
6. Geographical position	ESTABLISHED CENTRED ON THIS POSITION. VESSELS ARE
7. Amplifying remarks	PROHIBITED FROM ENTERING OR REMAINING WITHIN THIS ZONE.
8. Cancellations details	

Message Element	Example 3
1. Message series identifier	NAVAREA IV 6/09
2. General area	GULF OF MEXICO.
3. Locality	MISSISSIPPI RIVER.
4. Chart number	THE CAPTAIN OF THE PORT, NEW ORLEANS 23-00N 90-00W HAS
5. Key subject	ESTABLISHED A SAFETY ZONE FROM SOUTHWEST PASS BUOY,
6. Geographical position	INCLUDING BAPTISTE COLLETTE, TIGER PASS AND SOUTH PASS TO
7. Amplifying remarks	MM 98, LOWER MISSISSIPPI RIVER, ABOVE HEAD OF PASSES,
8. Cancellations details	EXTENDING THE ENTIRE WIDTH OF THE RIVER. THIS SAFETY
	ZONE IS NEEDED TO PROTECT PERSONS AND VESSELS FROM THE
	HAZARDS ASSOCIATED WITH AN OIL SPILL FROM A COLLISION
	INVOLVING A TANK SHIP AND RED FLAG BARGE.
	ALL VESSELS ARE PROHIBITED FROM ENTERING THIS SAFETY ZONE
	UNLESS THEY HAVE BEEN GRANTED PERMISSION BY THE CAPTAIN
	OF THE PORT, NEW ORLEANS. ALL INBOUND VESSELS BOUND FOR
	BERTHS IN THE AFFECTED ZONE ARE REQUIRED TO STAY OUTSIDE
	SOUTHWEST PASS.
	CONTACT CAPTAIN OF PORT FOR UPDATED INFORMATION.

7. The presence of newly discovered rocks, shoals, reefs and wrecks likely to constitute a danger to shipping, and, if relevant, their marking

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 4, 5, 6**, identified and ordered, as in Message Elements Table **Figure 3**.

Standard Remarks	Comments
LOCATED	The word LOCATED should only be used when the position of the hazard has been confirmed by a hydrographic survey. In all other cases the word REPORTED should be used.
REPORTED	
LESS WATER REPORTED	
SIGNIFICANTLY LESS WATER THAN CHARTED REPORTED	

Notes:

- i) Due consideration should be taken over the inclusion of a specific depth over a newly discovered submerged hazard to navigation. The terms “LESS WATER REPORTED” or “SIGNIFICANTLY LESS WATER THAN CHARTED REPORTED” may be used prior to a report of survey of the area.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.7

Message Element	Example 1
1. Message series identifier	NAVAREA XII 222/09
2. General area	COSTA RICA.
3. Locality	SOUTHWEST COAST.
4. Chart number	CHART ____ (INT ____).
5. Key subject	SHOALS LOCATED:
6. Geographical position	A. 28 METRES 08-17.1N 083-53.1W.
7. Amplifying remarks	B. 13.5 METRES 08-19.2N 083-54.2W.
8. Cancellations details	C. 27 METRES 08-21.8N 083-56.1W.

Message Element	Example 2
1. Message series identifier	NAVAREA IV 231/09
2. General area	NORTH PACIFIC OCEAN.
3. Locality	JASPER SEAMOUNT.
4. Chart number	CHART ____ (INT ____).
5. Key subject	DISCOLOURED WATER WITH SUBMARINE VOLCANIC ACTIVITY
6. Geographical position	REPORTED VICINITY 30-27N 122-40W AT 190110 UTC FEB 09.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 3
1. Message series identifier	NAVAREA VII 48/09
2. General area	ANGOLA.
3. Locality	PORT OF LUANDA.
4. Chart number	CHART ____ (INT ____).
5. Key subject	WRECK LOCATED 08-16.50S 013-16.07E. LEAST DEPTH EIGHT
6. Geographical position	METRES.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 4
1. Message series identifier	NAVAREA I 432/09
2. General area	ORKNEY ISLANDS.
3. Locality	WESTRAY FIRTH.
4. Chart number	CHART _____ (INT _____).
5. Key subject	SHOAL DEPTH 10.9 METRES LOCATED 59-12.979N 002-54.962W.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 5
1. Message series identifier	NAVAREA XVI 98/09
2. General area	PERU.
3. Locality	BAHIA DEL CALLAO.
4. Chart number	CHART _____ (INT _____).
5. Key subject	SIGNIFICANTLY LESS WATER THAN CHARTED REPORTED 11-59.89S 077-17.50W.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

8. Unexpected alteration or suspension of established routes

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 5, 6, 7**, identified and ordered, as in Message Elements Table **Figure 3**.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.8

Message Element	Example 1
1. Message series identifier	NAVAREA I 67/09
2. General area	ENGLAND - EAST COAST.
3. Locality	THAMES ESTUARY NORTHERN APPROACHES.
4. Chart number	WITH EFFECT FROM 010001 UTC JUL 09 EXTENSIVE CHANGES TO ROUTEING AND BUOYAGE WILL BE IMPLEMENTED TO SEAWARD OF
5. Key subject	AND IN THE SUNK AREA 51-50N 001-46E. FOR FULL DETAILS
6. Geographical position	REFER TO ADMIRALTY NOTICE TO MARINERS 534(P)/09 AND
7. Amplifying remarks	RELEVANT NEW EDITIONS OF ADMIRALTY CHARTS PUBLISHED IN
8. Cancellations details	MAY AND JUNE 09. THE CURRENT SUNK VTS IS CANCELLED AT
	010001 UTC JULY UNTIL FURTHER NOTICE. VESSELS REQUIRING A PILOT SHOULD CONTACT SUNK PILOTAGE SERVICE VHF CHANNEL 9.

Message Element	Example 2
1. Message series identifier	NAVAREA X 234/09
2. General area	AUSTRALIA NORTH COAST.
3. Locality	TORRES STRAIT.
4. Chart number	CHART _____ (INT _____).
5. Key subject	COMPULSORY TORRES STRAIT PILOTAGE 10-32S 143-01E.
6. Geographical position	MASTERS OF VESSELS 70 METRES IN LENGTH OVERALL OR
7. Amplifying remarks	GREATER, AND ALL LOADED OIL, CHEMICAL TANKERS OR
8. Cancellations details	LIQUEFIED GAS CARRIERS ARE ADVISED THAT AUSTRALIAN LAW
	HAS BEEN AMENDED TO REQUIRE A LICENSED PILOT TO BE
	ENGAGED WHEN NAVIGATING THE TORRES STRAIT.
	ALL VESSELS WILL BE AUTOMATICALLY CHECKED FOR COMPLIANCE
	AND THE FAILURE TO EMBARK A LICENSED PILOT MAY RESULT IN
	PROSECUTION.
	MASTERS OF VESSELS SHOULD ENSURE CONTACT IS MADE IN A
	TIMELY MANNER WITH A PILOTAGE PROVIDER TO GUARANTEE A
	LICENSED PILOT IS BOOKED.
	THE FOLLOWING ARE THE CONTACT DETAILS OF THE TWO
	COMPANIES THAT CAN PROVIDE LICENSED PILOTS:
	AUSTRALIAN REEF PILOTS PTY LTD.
	OPERATIONS@REEFPILOTS.COM.AU.
	TORRES PILOTS PTY LTD - OPERATIONS@TORRESPILOTS.COM.AU.

Message Element	Example 3
1. Message series identifier	NAVAREA XI 07/09
2. General area	MALAYSIA SOUTH COAST.
3. Locality	SINGAPORE.
4. Chart number	WEST JURONG CHANNEL WILL BE CLOSED FROM 0100 TO 0600 UTC
5. Key subject	DAILY 02 THRU 20 JAN WHILE REPLACING ALL CHANNEL BUOYS.
6. Geographical position	MASTERS OF VESSELS SHOULD CONTACT SINGAPORE PORT
7. Amplifying remarks	OPERATIONS AT LEAST 48 HOURS IN ADVANCE PRIOR TO ENTERING
8. Cancellations details	OR LEAVING THE WEST JURONG CHANNEL TO ENSURE PILOTS ARE
	ENGAGED IN A TIMELY MANNER. CONTACT INFORMATION IS AS
	FOLLOWS. PHONE: 65-62265539, FAX: 65-62279971.

Message Element	Example 4
1. Message series identifier	NAVAREA V 206/09
2. General area	BRAZIL - SOUTH COAST.
3. Locality	1. NAVAL CONTROL EXERCISE 091900 UTC TO 130300 UTC NOV 09 IN AREA BOUNDED BY:
4. Chart number	31-33.00S 051-14.50W, 32-17.50S 050-07.00W,
5. Key subject	33-51.00S 051-33.50W, 33-07.00S 052-38.00W.
6. Geographical position	
7. Amplifying remarks	A. MERCHANT VESSELS SHOULD CROSS MARITIME AREA USING THE FOLLOWING LANES:
8. Cancellations details	<ul style="list-style-type: none"> i) LANE COASTAL-1: (DIRECTION NE-SW) 32-00.00S 050-50.00W AND 33-20.00S 052-03.00W. ii) LANE COASTAL-2: (NC2-PORT RIO GRANDE) 32-38.00S 051-25.00W AND 32-15.00S 051-58.00W. <p>B. WIDTH OF LANE IS SIX NAUTICAL MILES, THREE NAUTICAL MILES ON EACH SIDE OF THE TRACKLINE JOINING:</p> <ul style="list-style-type: none"> i) NC1: 32-00.00S 050-50.00W. ii) NC2: 32-38.00S 051-25.00W. iii) NC3: 33-20.00S 052-03.00W. <p>C. ACCESS AND DEPART RIO GRANDE PORT FROM: 32-15.00S 051-58.00W.</p> <p>D. ACCORDING TO ENTERING POSITION, MERCHANT VESSELS IN THE AREA SHOULD CALL LANE CONTROLLER VESSELS BY VHF CHANNELS 16 AND 10, USING THE FOLLOWING:</p> <ul style="list-style-type: none"> i) NC1 CONTROLLER OF MERCHANT VESSELS ENTERING AND LEAVING BY NORTHEAST OF AREA. ii) NC2 CONTROLLER OF MERCHANT VESSELS REQUESTING AND LEAVING FROM POINT OF ACCESS AND DEPART OF RIO GRANDE PORT. iii) NC3 CONTROLLER OF MERCHANT VESSELS ENTERING AND LEAVING BY SOUTHWEST OF AREA. <p>CAUTION ADVISED. 2. CANCEL THIS MSG 130400 UTC NOV 09.</p>

Message Element	Example 5
1. Message series identifier	NAVAREA IV 351/09
2. General area	NORTH ATLANTIC.
3. Locality	NORTH CAROLINA.
4. Chart number	1. THE PORTS FOR NORTH CAROLINA HAVE BEEN CLOSED UNTIL FURTHER NOTICE IN PREPARATION FOR THE ANTICIPATED IMPACT OF HURRICANE HANNA. ALL INLAND WATERS, COASTAL INLETS AND TERRITORIAL SEAS WITHIN THE CAPTAIN OF THE PORT ZONE, FROM LITTLE RIVER INLET TO THE NORTH CAROLINA - VIRGINIA BOUNDARY HAS BEEN ESTABLISHED. NO VESSEL MAY ENTER, DEPART OR TRANSIT WITHIN THIS SAFETY ZONE WITHOUT THE PERMISSION OF THE CAPTAIN OF THE PORT.
5. Key subject	
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	<ul style="list-style-type: none"> 2. ALL CARGO AND BUNKER HANDLING OPERATIONS MUST CEASE. 3. CONTACT CAPTAIN OF PORT FOR UPDATED INFORMATION.

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

The text of a navigational warning in this category shall contain message elements 1, 2, 3, 5, 6, 7, identified and ordered, as in Message Elements Table **Figure 3**.

Standard Remarks	Comments
CABLE LAYING OPERATIONS IN PROGRESS	
SEISMIC SURVEY IN PROGRESS	
UNDERWATER OPERATIONS	Do not use "SUBMARINE OPERATIONS"
SCIENTIFIC OPERATIONS IN PROGRESS	

Notes:

- i) Regular communications should be undertaken with the operators to ensure that the message is cancelled promptly as soon as the operation has been completed. Particular care should be taken when considering including a cancellation time or date for this category of message due to the many factors which could effect the completion of the operation.
- ii) Use "REQUESTED" when wide berth is for the benefit of the ship which is performing the operation.
- iii) Use "ADVISED" when the operations create a significant hazard.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.9

Message Element	Example 1
1. Message series identifier	NAVAREA VII 256/09
2. General area	ATLANTIC OCEAN.
3. Locality	ANGOLA.
4. Chart number	M/V GECO EMERALD IS CONDUCTING SEISMIC SURVEY OPERATIONS AND TOWING SIX STREAMERS AT 8000 METRE LENGTH WITH ENDS MARKED WITH YELLOW BUOYS AND BLUE FLASHING LIGHTS IN AREA BOUNDED BY 10-55S, 11-21S, 013-20E AND 012-40E. WIDE BERTH REQUESTED, MINIMUM SIX MILE ASTERN AND THREE MILES ABEAM. SURVEY VESSEL STANDING BY ON VHF CH 67 AND 16. GUARD VESSEL ST JOHNS IN ATTENDANCE.
5. Key subject	
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA IX 15/09
2. General area	RED SEA.
3. Locality	GULF OF SUEZ.
4. Chart number	VESSEL TIME BARGE IS WORKING ON HILAL PLATFORM MOORED WITH EIGHT ANCHORS AND BUOYS IN FOLLOWING POSITIONS:
5. Key subject	A. 27-49.98N 033-43.82E.
6. Geographical position	B. 27-50.21N 033-43.67E.
7. Amplifying remarks	C. 27-50.29N 033-43.36E.
8. Cancellations details	D. 27-50.41N 033-43.45E.
	E. 27-50.06N 033-44.41E.
	F. 27-50.18N 033-44.03E.
	G. 27-50.50N 033-43.74E.
	H. 27-50.50N 033-43.61E.
	WIDE BERTH REQUESTED.

Message Element	Example 3
1. Message series identifier	NAVAREA XIII 55/09
2. General area	TATARSKIY PROLIV.
3. Locality	PROLIV LAPERUZA.
4. Chart number	1. CABLE LAYING OPERATIONS IN PROGRESS BY VESSEL SUBARU
5. Key subject	TOWING 2000 METRE CABLE UNTIL 30 JUN 09 ALONG LINE
6. Geographical position	JOINING 45-56.8N 140-00.7E, 46-36.5N 140-53.6E,
7. Amplifying remarks	46-36.6N 141-29.0E, 46-38.9N 141-47.3E, 46-36.5N
8. Cancellations details	141-49.8E. WIDE BERTH REQUESTED.
	2. CANCEL THIS MSG 020001 UTC JUL 09.

Message Element	Example 4
1. Message series identifier	NAVAREA VIII 361/09
2. General area	INDIAN OCEAN.
3. Locality	SONGO AND MAFIA ISLANDS.
4. Chart number	SEISMIC SURVEY IN PROGRESS BY M/V GEO MARINER IN AREA
5. Key subject	BOUNDED BY:
6. Geographical position	A. 07-32S 039-18E.
7. Amplifying remarks	B. 07-37S 040-17E.
8. Cancellations details	C. 06-22S 039-50E.
	D. 06-35S 039-09E.
	VESSEL TOWING FOUR MILE SEISMIC CABLE WITH YELLOW TAIL
	BUOY AND FLASHING LIGHT AT THE END OF THE CABLE.
	SIX MILE BERTH REQUESTED.

Message Element	Example 5
1. Message series identifier	NAVAREA IV 20/09
2. General area	NORTH ATLANTIC OCEAN.
3. Locality	TRINIDAD, EASTWARDS.
4. Chart number	1. PIPELAYING OPERATIONS IN PROGRESS UNTIL 31 JUL 09 BY
5. Key subject	M/V SOLITAIRE AND M/V HIGHLAND NAVIGATOR ALONG TRACK
6. Geographical position	BETWEEN 10-02.28N 060-15.08W AND 10-06.08N
7. Amplifying remarks	060-17.81W. WIDE BERTH REQUESTED.
8. Cancellations details	2. CANCEL THIS MESSAGE 010001 UTC AUG 09.

10. The establishment of research or scientific instruments in or near shipping lanes

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 4, 5, 6**, identified and ordered, as in Message Elements Table **Figure 3**.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.10

Message Element	Example 1
1. Message series identifier	NAVAREA X 77/09
2. General area	AUSTRALIA WEST COAST.
3. Locality	EXMOUTH PLATEAU.
4. Chart number	CHART _____ (INT _____).
5. Key subject	SUBSEA MOORING BUOY ESTABLISHED 21-26S 114-04E. BUOY
6. Geographical position	MARKED WITH MOORING LINE AND SMALL FLOAT. WIDE BERTH
7. Amplifying remarks	REQUESTED.
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA VII 321/09
2. General area	MADAGASCAR.
3. Locality	PORT OF MAJUNGA.
4. Chart number	CHART _____ (INT _____).
5. Key subject	TWO TIDE GAUGES AND A CURRENT METER MOORED IN AREA
6. Geographical position	BOUNDED BY:
7. Amplifying remarks	15-32.70S, 15-33.03S, 046-11.77E AND 046-11.53E.
8. Cancellations details	

Message Element	Example 3
1. Message series identifier	NAVAREA IV 333/09
2. General area	NORTH ATLANTIC OCEAN.
3. Locality	GRAND BANKS OF NEWFOUNDLAND.
4. Chart number	CHART _____ (INT _____).
5. Key subject	DART BUOY ESTABLISHED 44-04.58N 055-12.80W.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 4
1. Message series identifier	NAVAREA III 55/09
2. General area	IONIAN SEA.
3. Locality	CENTRAL.
4. Chart number	CHART _____ (INT _____).
5. Key subject	ODAS BUOY ESTABLISHED 38-25.59N 18-20.65E.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 5
1. Message series identifier	NAVAREA XI 66/09
2. General area	NORTH PACIFIC OCEAN.
3. Locality	CAROLINE ISLANDS AND NGULU ATOL SOUTH-WESTWARDS.
4. Chart number	CHART _____ (INT _____).
5. Key subject	ODAS BUOY ESTABLISHED IN VICINITY 07-39.0N 136-41.9E.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

11. The establishment of offshore structures in or near shipping lanes

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 5, 6**, identified and ordered, as in Message Elements Table **Figure 3**.

Note:
i) It is not necessary to number or alphabetizes the list of structures.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.11

Message Element	Example 1
1. Message series identifier	NAVAREA IX 5/09
2. General area	RED SEA.
3. Locality	GULF OF SUEZ, TOR BANK.
4. Chart number	CHART _____ (INT _____).
5. Key subject	MOBILE RIG ESTABLISHED IN 28-12.8N 033-24.1E.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA VII 117/09
2. General area	SOUTH ATLANTIC OCEAN.
3. Locality	ANGOLA, CONGO, IVORY COAST AND NAMIBIA.
4. Chart number	RIG LIST:
5. Key subject	05-08.58S 011-55.15E PRIDE CAPINDA.
6. Geographical position	05-33.08S 011-27.08E PRIDE VENEZUELA.
7. Amplifying remarks	06-03.81S 011-05.86E GSF RIG 140.
8. Cancellations details	06-19.02S 011-03.23E KIZOMBA A.
	06-20.15S 011-18.01E PRIDE SOUTH PACIFIC.
	06-20.92S 011-09.22E KIZOMBA B.
	07-40.05S 011-45.08E PRIDE AFRICA.
	07-43.00S 011-43.00E PRIDE ANGOLA.
	35-08.86S 022-31.81E PRIDE SOUTH SEAS.
	35-13.99S 021-29.89E ORCA.
	FOUR MILE EXCLUSION ZONE ABOUT RIGS DUE TO PRESENCE OF UNLIT ANCHOR MARKING BUOYS.

Message Element	Example 3
1. Message series identifier	NAVAREA VIII 244/09
2. General area	INDIA.
3. Locality	WEST COAST.
4. Chart number	1. PRESENT POSITION OF OIL RIGS AND DRILL SHIPS:
5. Key subject	20-43.00N 072-19.06E ABAN V.
6. Geographical position	20-18.23N 070-00.03E BADRINATH.
7. Amplifying remarks	19-54.20N 071-18.95E FRONTIER ICE.
8. Cancellations details	19-29.72N 071-22.89E NOBLE ED HOLT.
	19-11.99N 072-11.00E RON TAPPEMEYER.
	19-40.14N 072-00.33E SAGER RATNA.
	19-25.23N 071-16.98E TRIDENT-12.
	19-18.23N 072-02.75E ENSCO-50.
	19-32.70N 071-13.98E SUNDOWNER-7.
	WIDE BERTH REQUESTED.
	2. CANCEL NAVAREA VIII 236/09.

Message Element	Example 4
1. Message series identifier	NAVAREA I 220/09
2. General area	1. RIGLIST. CORRECT AT 040600 UTC AUG 09.
3. Locality	
4. Chart number	SOUTHERN NORTH SEA. 51N TO 55N.
5. Key subject	52-54.1N 004-08.5E NOBLE LYNDA BOSSLER. 53-27.7N 002-17.1E ENSCO 100.
6. Geographical position	NEW 53-39.3N 004-16.9E ENSCO 72.
7. Amplifying remarks	53-48.3N 002-50.3E NOBLE JULIE ROBERTSON. 53-57.0N 002-13.5E NOBLE AL WHITE.
8. Cancellations details	NEW 54-16.6N 002-12.6E GSF LABRADOR. 54-19.0N 002-37.2E NOBLE GEORGE SAUVAGEAU.
	NOTES: A. RIGS ARE PROTECTED BY A 500 METRE SAFETY ZONE. B. ACP - ADJACENT TO CHARTED PLATFORM.
	2. CANCEL NAVAREA I 225/09.

Message Element	Example 5
1. Message series identifier	NAVAREA VI 116/09
2. General area	URUGUAY.
3. Locality	MONTEVIDEO.
4. Chart number	CHART _____ (INT _____).
5. Key subject	PLATFORM AJAX ESTABLISHED 35-00N 056-20W.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

12. Significant malfunctioning of radio-navigation services and shore-based maritime safety information radio or satellite services

The text of a navigational warning in this category shall contain message elements **1, 5**, identified and ordered, as in Message Elements Table **Figure 3**.

Standard Remarks	Comments
OFF AIR	Do not use “Until Further Notice” since the fact that the event is complete will always be apparent from the cancellation message.
UNSTABLE	
REDUCED POWER	
INOPERATIVE	
UNUSABLE	
DISCONTINUED	Back-up facility should be included if one is available.

Notes:

- i) Messages concerning long-range electronic navigational aids will not normally need the message elements; General area, Locality or Chart number.
- ii) If a definitive time is quoted for the outage, the message cancels 1 hour after event completes.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.12

Message Element	Example 1
1. Message series identifier	NAVAREA I 55/09
2. General area	GPS SATELLITE SYSTEM.
3. Locality	1. PRN 25 UNUSABLE 231900 UTC TO 241000 UTC APR 09.
4. Chart number	2. CANCEL THIS MESSAGE 241100 UTC APR 09.
5. Key subject	
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA X 81/09
2. General area	AIS.
3. Locality	SOME AIS TRANSPONDERS COMBINED WITH OLDER GPS RECEIVERS
4. Chart number	HAVE STOPPED WORKING WHILE GPS SATELLITE PRN 32 IS IN
5. Key subject	VIEW. HOWEVER, IN SOME INSTANCES VESSELS MAY CONTINUE TO
6. Geographical position	RECEIVE AIS INFORMATION FROM OTHER AIS EQUIPPED VESSELS.
7. Amplifying remarks	ALL VESSELS ARE ADVISED TO CHECK THE PROPER OPERATION OF
8. Cancellations details	THEIR AIS AND GPS EQUIPMENT.

Message Element	Example 3
1. Message series identifier	NAVAREA XIII 66/09
2. General area	NORTH PACIFIC.
3. Locality	LORAN-C.
4. Chart number	RUSSIAN-AMERICAN CHAIN, RATE 5980, UNUSABLE.
5. Key subject	
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 4
1. Message series identifier	NAVAREA I 93/09
2. General area	GMDSS
3. Locality	SHETLAND ISLANDS.
4. Chart number	MRCC SHETLAND. VHF RT AND DSC SERVICES FROM SAXA VORD
5. Key subject	SITE, 60-50N 000-50W, OFF AIR.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 5
1. Message series identifier	NAVAREA IV 43/09
2. General area	INMARSAT-B
3. Locality	JRCC HALIFAX NORTH ATLANTIC OCEAN.
4. Chart number	INMARSAT-B TERMINAL AT JRCC HALIFAX INOPERATIVE. DISTRESS
5. Key subject	MESSAGES CAN BE SENT TO JRCC HALIFAX VIA INMARSAT-C.
6. Geographical position	INMARSAT-B MESSAGES CAN BE DIRECTED TO MCTS HALIFAX
7. Amplifying remarks	01922510.
8. Cancellations details	

- 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**

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 5, 6, 7, 8**, identified and ordered, as in Message Elements Table **Figure 3**.

Note:
 i) Warnings may include reference to relevant national publications and contact information.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.13

Message Element	Example 1
1. Message series identifier	NAVAREA III 199/09
2. General area	BLACK SEA.
3. Locality	UKRAINE.
4. Chart number	1. GUNNERY EXERCISES 0800 TO 1600 UTC DAILY 16 TO 18 JAN
5. Key subject	IN AREA BOUNDED BY:
6. Geographical position	A. 44-43.8N 032-52.2E.
7. Amplifying remarks	B. 44-34.8N 032-37.4E.
8. Cancellations details	C. 44-39.0N 032-11.5E.
	D. 44-48.4N 032-08.2E.
	E. 45-00.2N 032-14.2E.
	F. 44-52.2N 032-41.6E.
	2. CANCEL THIS MESSAGE 181700 UTC JAN 09.

Message Element	Example 2
1. Message series identifier	NAVAREA VIII 62/09
2. General area	INDIA WEST COAST.
3. Locality	MORMUGAO.
4. Chart number	1. FIRING PRACTICE BY NAVAL AIRCRAFT 0230 TO 1230 UTC
5. Key subject	DAILY FROM 01 TO 07 AUG AND 14 AUG TO 21 AUG 09 IN
6. Geographical position	AREA BOUNDED BY 15-13N, 15-11N, 073-57E AND 073-52E.
7. Amplifying remarks	2. CANCEL THIS MESSAGE 211330 UTC AUG 09.
8. Cancellations details	

Message Element	Example 3
1. Message series identifier	NAVAREA XIV 233/09
2. General area	SOUTH PACIFIC OCEAN
3. Locality	1. HAZARDOUS OPERATIONS SPACE DEBRIS. 090600 TO 090845
4. Chart number	UTC MAR IN AREA BOUNDED BY:
5. Key subject	A. 19-30S 120-00W
6. Geographical position	B. 26-30S 120-00W
7. Amplifying remarks	C. 30-00S 123-30W
8. Cancellations details	D. 30-00S 132-00W
	2. CANCEL THIS MSG 090945 UTC MAR 09.

Message Element	Example 4
1. Message series identifier	NAVAREA XI 198/09
2. General area	JAPAN, HONSHU.
3. Locality	NOJIMA SAKI, SOUTHEASTWARD.
4. Chart number	1. HAZARDOUS OPERATIONS ROCKET, FLARE FIRING AND BOMBING
5. Key subject	FROM 041500 TO 071500 UTC AUG, ALTERNATE FROM 071500
6. Geographical position	TO 081500 UTC AUG. AREA BOUNDED BY:
7. Amplifying remarks	A. 34-35.2N 140-16.8E.
8. Cancellations details	B. 34-08.2N 141-01.8E.
	C. 33-44.2N 140-22.8E.
	D. 34-31.2N 140-07.8E.
	2. CANCEL THIS MSG 071600 UTC AUG 09.

Message Element	Example 5
1. Message series identifier	NAVAREA VII 74/09
2. General area	INDIAN OCEAN.
3. Locality	ILES KERGUELEN NORTH-EASTWARDS.
4. Chart number	1. ROCKET LAUNCHING SCHEDULED 0330 TO 0530 UTC 28 APR TO
5. Key subject	03 MAY 09. FOLLOWING RANGE CLEARANCE AREA ESTABLISHED:
6. Geographical position	A. 44-20S 074-45E.
7. Amplifying remarks	B. 44-20S 077-30E.
8. Cancellations details	C. 49-10S 074-45E.
	D. 49-10S 077-30E.
	VESSELS TO REMAIN CLEAR OF THIS AREA.
	2. CANCEL THIS MESSAGE 030630 UTC MAY 09.

14. Acts of piracy and armed robbery against ships

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 5, 6**, identified and ordered, as in Message Elements Table **Figure 3**.

Standard Remarks	Comments
ACT OF PIRACY	
ARMED ROBBERY	

Note:

- i) Add amplifying information if available for example, "Regional Piracy Centre, KUALA LUMPUR, TEL, FAX, E-MAIL":

EXAMPLES OF WARNINGS IN SECTION 4.2.2.4

Message Element	Example 1
1. Message series identifier	NAVAREA IX 99/09
2. General area	GULF OF ADEN.
3. Locality	M/V ALWAYS SAIL REPORTS ACT OF PIRACY/ARMED ROBBERY IN
4. Chart number	VICINITY 11-50N 048-60E AT 120600 UTC AUG 09. TWO ZODIACS
5. Key subject	CARRYING 3-4 MEN EACH APPROACHING FROM ASTERN AT 20 KNOTS
6. Geographical position	AT FIRST LIGHT. ATTEMPTED TO BOARD PORT SIDE AFT.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA XI 60/09
2. General area	MALACCA STRAIT.
3. Locality	PIRACY ATTACKS/ARMED ROBBERY CONCENTRATED IN MALACCA
4. Chart number	STRAIT BETWEEN
5. Key subject	A. 03-50N 099-25E.
6. Geographical position	B. 03-49N 100-19E.
7. Amplifying remarks	C. 03-05N 100-57E.
8. Cancellations details	D. 03-17N 099-50E.
	REPORTED ATTACKS ALWAYS OCCUR AT NIGHT. VESSELS ADVISED
	TO MAINTAIN ANTI-PIRACY WATCHES. ALL SUSPICIOUS OR
	UNEXPLAINED CRAFT MOVEMENTS OR PIRACY ATTACKS SHOULD BE
	REPORTED IMMEDIATELY TO THE NEAREST RCC, NATIONAL OR
	REGIONAL PIRACY CENTRE OR THE NEAREST POINT ON THE COAST
	WITH WHICH THEY CAN COMMUNICATE.

Message Element	Example 3
1. Message series identifier	NAVAREA XV 231/09
2. General area	CHILE.
3. Locality	ISLA SAN AMBROSIO AND ISLA SAN FELIX.
4. Chart number	1. FOUR SPEEDBOATS CARRYING 20 PIRATES, ALL ARMED WITH
5. Key subject	AUTOMATIC WEAPONS, ATTACKED A FISHING BOAT KILLING
6. Geographical position	FOUR PASSENGERS AND INJURING EIGHT OTHERS. THE
7. Amplifying remarks	WOUNDED PASSENGERS WERE SENT TO SHORE FOR MEDICAL
8. Cancellations details	TREATMENT.
	2. CANCEL THIS MSG 140001 UTC JUN 09.

Message Element	Example 4
1. Message series identifier	NAVAREA II 254/09
2. General area	NIGERIA.
3. Locality	BONNY RIVER.
4. Chart number	TUGBOAT HERKULES, HIJACKED 25 JUL. VESSEL WAS HEADED TO
5. Key subject	AKPO OIL FIELD WHEN GUNMEN IN TWO SPEEDBOATS SEIZED THE
6. Geographical position	VESSEL AND ITS 12-MAN CREW. THE GUNMEN LATER RELEASED THE
7. Amplifying remarks	VESSEL AND SEVEN CREW MEMBERS. CREW MEMBERS WERE ROBBED
8. Cancellations details	OF THEIR POSSESSIONS. VESSELS ARE REQUESTED TO MAINTAIN A VIGILANT WATCH.

Message Element	Example 5
1. Message series identifier	NAVAREA V 17/09
2. General area	BRAZIL.
3. Locality	SALVADOR.
4. Chart number	DUTY WATCHMAN ON BOARD A REFRIGERATED CARGO SHIP SPOTTED
5. Key subject	TWO ROBBERS HIDING BEHIND A 40 FOOT CONTAINER. THEY HAD
6. Geographical position	STOLEN SHIPS STORES FROM THE PAINT LOCKER AND LOWERED
7. Amplifying remarks	THEM INTO A WAITING BOAT. WHEN THEY REALIZED THEY WERE
8. Cancellations details	SPOTTED THEY JUMPED INTO THE WATER AND ESCAPED IN A WAITING BOAT.

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

The text of a navigational warning in this category shall contain message elements **1, 2, 5**, identified and ordered, as in Message Elements Table **Figure 3**.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.15

Message Element	Example 1
1. Message series identifier	NAVAREA XI 95/09
2. General area	HOKKAIDO, EAST COAST AND OKHOTSK COAST.
3. Locality	TSUNAMI WARNING AT 130436 UTC JAN 09. DANGEROUS DRIFTING
4. Chart number	OBJECTS, CHANGE OF DEPTH AND DAMAGE OF HARBOUR FACILITIES
5. Key subject	OR NAVIGATIONAL AIDS MAY OCCUR.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA XII 55/09
2. General area	PACIFIC COASTAL AREAS.
3. Locality	TSUNAMI WARNING.
4. Chart number	AN EARTHQUAKE OCCURRED AT 152341 UTC AUG 09. PRELIMINARY
5. Key subject	MAG 7.9. PRELIMINARY LOCATION VICINITY OF PERU COAST
6. Geographical position	13-5S 076-7W. A TSUNAMI WARNING IS IN EFFECT FOR PERU,
7. Amplifying remarks	CHILE, ECUADOR AND COLOMBIA. A TSUNAMI WATCH IS IN EFFECT
8. Cancellations details	FOR PANAMA, COSTA RICA, NICARAGUA, GUATEMALA,
	EL SALVADOR, MEXICO AND HONDURAS. A TSUNAMI ADVISORY IS
	ISSUED FOR THE STATE OF HAWAII EFFECTIVE AT 160020 UTC
	AUG. A TSUNAMI HAS BEEN GENERATED WHICH COULD CAUSE
	DAMAGE TO COASTS AND ISLANDS IN THE PACIFIC AREA. TSUNAMI
	WAVE HEIGHTS CANNOT BE PREDICTED AND MAY BE A SERIES OF
	WAVES WHICH COULD BE DANGEROUS FOR SEVERAL HOURS AFTER
	THE INITIAL WAVE ARRIVAL.

Message Element	Example 3
1. Message series identifier	SUBAREA I 233/09
2. General area	SOUTHERN BALTIC, THE BELTS, THE SOUND.
3. Locality	THE WATER LEVEL IS EXPECTED TO DROP 80 CM BELOW MSL
4. Chart number	AFTERNOON 20 AUG 09. RISING TO ABOUT MSL MORNING
5. Key subject	21 AUG 09.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 4
1. Message series identifier	NAVAREA XVI 05/09
2. General area	PERU.
3. Locality	AN EARTHQUAKE HAS OCCURRED AT 211128 UTC JAN WITH A
4. Chart number	PRELIMINARY MAGITUDE OF 7.6 VICINITY 07-23N 086-49W.
5. Key subject	A TSUNAMI HAS BEEN GENERATED.
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 5
1. Message series identifier	NAVAREA XIV 319/09
2. General area	NEW ZEALAND, NORTH ISLAND, SOUTH ISLAND, EAST COAST.
3. Locality	DUE TO TSUNAMI AFTERMATH ALL AIDS TO NAVIGATION IN NORTH
4. Chart number	AND SOUTH ISLANDS ARE UNRELIABLE.
5. Key subject	
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

16. World Health Organization (WHO) health advisory information

The text of a navigational warning in this category shall contain message elements **1, 2, 3, 5**, identified and ordered, as in Message Elements Table **Figure 3**.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.16

Message Element	Example 1
1. Message series identifier	NAVAREA IV 250/09
2. General area	FLORIDA.
3. Locality	SOUTH COAST.
4. Chart number	THE WORLD HEALTH ORGANIZATION HAS ADVISED THAT AN
5. Key subject	OUTBREAK OF BIRD FLU HAS OCCURRED IN THE VICINITY OF
6. Geographical position	MIAMI. VESSELS THAT VISITED THIS PORT SINCE 20 JAN 09 AND
7. Amplifying remarks	THOSE PLANNING TO VISIT SHOULD CONSULT WWW.WHO.INT FOR
8. Cancellations details	MORE INFORMATION.

17. Security-related requirements

The text of a navigational warning in this category shall contain message elements **1, 2, 5**, identified and ordered, as in Message Elements Table **Figure 3**.

Note:
i) In accordance with the requirements of the International Ship and Port Facility Security Code only.

EXAMPLES OF WARNINGS IN SECTION 4.2.2.17

Message Element	Example 1
1. Message series identifier	NAVAREA II 88/09
2. General area	FRANCE NORTH COAST.
3. Locality	BAIE DE SEINE AND LE HAVRE HARBOUR.
4. Chart number	SECURITY ANNOUNCEMENT. REF: ISPS CODE - SECURITY LEVELS
5. Key subject	IN FRENCH TERRITORIAL WATERS IN THE BAIE DE SEINE AND IN
6. Geographical position	LE HAVRE HARBOUR UPGRADED TO SECURITY LEVEL 3. ALL
7. Amplifying remarks	VESSELS ARE PROHIBITED TO ENTER BAIE DE SEINE AND
8. Cancellations details	LE HAVRE HARBOUR.

Message Element	Example 2
1. Message series identifier	NAVAREA XI 111/09
2. General area	JAPAN.
3. Locality	THE GOVERNMENT OF JAPAN ANNOUNCES PUBLICLY THAT IT SETS
4. Chart number	MARITIME SECURITY LEVEL 1 IN ACCORDANCE WITH THE
5. Key subject	PROVISION OF ARTICLE 3 OF SOLAS XI-2. FOR DETAILS, CALL
6. Geographical position	SOLAS CONVENTION IMPLEMENTATION OFFICE,
7. Amplifying remarks	PHONE: 81-3-5253-8071.
8. Cancellations details	

Message Element	Example 3
1. Message series identifier	SUBAREA I 49/09
2. General area	SWEDEN.
3. Locality	HEIGHTENED ISPS SECURITY LEVEL.
4. Chart number	THE SWEDISH GOVERNMENT HAS DECIDED THAT ALL SHIPS IN
5. Key subject	SWEDISH PORTS OR IN SWEDISH TERRITORIAL WATERS ABOUT TO
6. Geographical position	ENTER A SWEDISH PORT, SHALL APPLY SECURITY LEVEL 2.
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 4
1. Message series identifier	NAVAREA VI 285/09
2. General area	ARGENTINA.
3. Locality	THE ARGENTINIAN GOVERNMENT HAS SET MARITIME SECURITY
4. Chart number	LEVEL 3 FOR ALL PORTS. ALL VESSELS ENTERING ARGENTINA
5. Key subject	WATERS OR PORTS ARE REQUIRED TO MAINTAIN AN ARMED
6. Geographical position	SECURITY WATCH.
7. Amplifying remarks	
8. Cancellations details	

BULLETINS

Message Element	Example 1
1. Message series identifier	NAVAREA I 120/09
2. General area	1. NAVAREA I MESSAGES IN FORCE AT 091000 UTC MAY 09:
3. Locality	2005 SERIES: 402.
4. Chart number	2008 SERIES: 019 035 050 247 251 279 293 329.
5. Key subject	2009 SERIES: 075 078 089 090 096 099 101 102 108 117 118 119 120 121 124 125.
6. Geographical position	NOTES:
7. Amplifying remarks	A. TEXTS OF NAVAREA ONE MESSAGES ARE PRINTED IN WEEKLY EDITIONS OF NOTICES TO MARINERS.
8. Cancellations details	B. NAVAREA ONE MESSAGES LESS THAN 42 DAYS OLD (075/09 ONWARD) ARE CURRENTLY INCLUDED ON RELEVANT SAFETYNET AND/OR NAVTEX BROADCASTS.
	2. CANCEL NAVAREA I 115/09.

Message Element	Example 2
1. Message series identifier	NAVAREA VII 141/09
2. General area	1. NAVAREA VII MESSAGES IN FORCE = 055, 060, 070, 072, 077, 078, 102, 104, 105, 111, 112, 113, 114, 126, 129, 137, 140 OF 2009.
3. Locality	
4. Chart number	2. MESSAGES RE-ISSUED AS NOTICES TO MARINERS = NIL.
5. Key subject	3. MESSAGES ISSUED THIS WEEK = 140, 141 OF 2009.
6. Geographical position	4. MESSAGES CANCELLED THIS WEEK = 141 OF 2009.
7. Amplifying remarks	5. CANCEL THIS MESSAGE.
8. Cancellations details	

Message Element	Example 3
1. Message series identifier	NAVAREA II 265/09
2. General area	NAVAREA II IN FORCE AT 02 SEP 09.
3. Locality	2008: 017 - 112 - 239 - 241 - 254 - 258 - 259 - 260 - 263 - 264 - 265.
4. Chart number	
5. Key subject	1. ONLY THOSE LESS THAN 42 DAYS OLD ARE DAILY BROADCASTED ON SAFETYNET AT 1630 UTC.
6. Geographical position	2. NAVAREA II WARNINGS ARE PRINTED IN WEEKLY EDITIONS OF NOTICES TO MARINERS (SECTION 1.2).
7. Amplifying remarks	
8. Cancellations details	

MISCELLANEOUS

Message Element	Example 1
1. Message series identifier	NAVAREA VII 126/09
2. General area	CANCEL NAVAREA VII 100/09 BAIKO RIBEIRO LIGHT,
3. Locality	NORMAL CONDITIONS RESTORED.
4. Chart number	
5. Key subject	
6. Geographical position	
7. Amplifying remarks	
8. Cancellations details	

Message Element	Example 2
1. Message series identifier	NAVAREA IV 74/09
2. General area	RADIO SERVICES.
3. Locality	1. U.S. COAST GUARD WILL TERMINATE HF RADIOTELEX (SITOR)
4. Chart number	SERVICES FOR COLLECTION OF AMVER SHIP POSITION REPORTS
5. Key subject	AND OF METEOROLOGICAL OBSERVATION FROM:
6. Geographical position	A. COMMUNICATIONS AREA MASTER STATION ATLANTIC
7. Amplifying remarks	(CAMSLANT NMN) AND COMMUNICATIONS STATION KODIAK
8. Cancellations details	(NOJ) EFFECTIVE 312359 UTC MAR 09.
	B. COMMUNICATIONS AREA MASTER STATION PACIFIC (CAMSPAC
	NMC/NMO) AND COMMUNICATIONS STATION GUAM (NRV) WILL
	CONTINUE AT LEAST UNTIL 302359 UTC SEP 09. AMVER
	AND NOAA METEOROLOGICAL REPORTS WILL CONTINUE TO BE
	RECEIVED AT NO CHARGE THRU SHIPCOM HF RADIOTELEX
	(NBDP) SERVICE VIA STATIONS KLB NEAR SEATTLE AND
	WLO NEAR MOBILE, ALABAMA, AND NOAA'S SEAS
	(SHIPBOARD ENVIRONMENTAL (DATA) ACQUISITION SYSTEM)
	PROGRAM THROUGH INMARSAT-C. AMVER REPORTS MAY ALSO
	BE SENT AT NO CHARGE THRU GLOBE WIRELESS. BROADCAST
	OF MARITIME SAFETY INFORMATION BY HF SITOR (HF
	NAVTEX) WILL NOT BE AFFECTED BY THIS ACTION
	2. CANCEL THIS MSG 010001 UTC OCT 09.

Message Element	Example 3
1. Message series identifier	NAVAREA XI 30/09
2. General area	JAPAN, KYUSHU - EAST COAST.
3. Locality	HYUGA NADA AND APPROACHES.
4. Chart number	CHART _____ (INT _____).
5. Key subject	1. SEARCH AND RESCUE EXERCISES BY AIRCRAFT. 2300 TO
6. Geographical position	1200 UTC DAILY 30 JUN, 01, 02, 06 TO 09, 13 TO 16, 21
7. Amplifying remarks	TO 23 AND 27 TO 30 JUL 09 IN AREAS BOUNDED BY:
8. Cancellations details	A. 32-26.20N 131-46.85E,
	32-33.20N 132-09.85E,
	32-11.20N 132-13.85E,
	31-57.21N 132-00.85E,
	31-59.21N 131-35.85E.
	B. 31-23.21N 132-07.85E,
	32-09.21N 132-53.85E,
	32-35.83N 134-00.00E,
	31-52.91N 134-00.00E,
	30-48.21N 132-22.85E,
	31-04.21N 132-07.85E.
	2. CANCEL THIS MSG 301300 UTC JUL 09.

Message Element	Example 4
1. Message series identifier	NAVAREA XV 55/09
2. General area	DUE TO TIME CHANGE CARRIED OUT 300001 UTC MAR 09 CHILEAN
3. Locality	STANDARD TIME HAS CHANGED TO TIME ZONE (UTC+4). VESSELS
4. Chart number	SHOULD COMPLY WITH REGULATIONS OF NATIONAL MARITIME
5. Key subject	AUTHORITY IN THE FOLLOWING WEB SITE: WWW.SHOA.MIL.CL
6. Geographical position	(SERVICIOS/RADIOAVISOS/RADIOWARNINGS/PROVISIONS OF THE
7. Amplifying remarks	NATIONAL MARITIME AUTHORITY). ALL VESSELS ARE REQUESTED
8. Cancellations details	TO SEND IN CLEAR TEXT, WIND, SEA AND ATMOSPHERIC PRESSURE REPORTS, TO CHILREP.

ENC CONCERNS

Message Element	Example
1. Message series identifier	NAVAREA IV 89/09
2. General area	GULF OF MEXICO.
3. Locality	NEW ORLEANS TO JACKSONVILLE.
4. Chart number	DUE TO A PRODUCTION PROBLEM THAT HAS CAUSED DISPLACED
5. Key subject	FEATURES, IT HAS BEEN DETERMINED THAT ELECTRONIC
6. Geographical position	NAUTICAL CHART US2GC12M (NEW ORLEANS TO JACKSONVILLE) IS
7. Amplifying remarks	NOT TO BE USED FOR NAVIGATION OR SITUATIONAL AWARENESS.
8. Cancellations details	A REVIEW IS IN PROCESS TO ADDRESS THIS SITUATION.

AVOIDANCE OF CERTAIN FISHERIES AREAS

Message Element	Example
1. Message series identifier	NAVAREA III 445/09
2. General area	LIGURIAN SEA.
3. Locality	1. FISHING OPERATIONS 031000 UTC THRU 152000 UTC AUG BY
4. Chart number	F/V TRAWLER IN AREA BOUND BY:
5. Key subject	A. 43-20N 009-27E.
6. Geographical position	B. 42-46N 008-40E.
7. Amplifying remarks	C. 43-37N 008-40E.
8. Cancellations details	D. 43-38N 007-53E.
	E. 44-20N 008-53E.
	F. 43-53N 009-27E.
	WIDE BERTH REQUESTED.
	2. CANCEL THIS MSG 152100 AUG 09.

WEB SITE OUT OF SERVICE

Message Element	Example 4
1. Message series identifier	NAVAREA VIII 43/09
2. General area	NAVAREA VIII WEBSITE.
3. Locality	1. NAVAREA VIII WEBSITE UNUSABLE
4. Chart number	122300 UTC TO 132300 UTC NOV.
5. Key subject	FOR URGENT SERVICE, CONTACT NAVAREA VIII,
6. Geographical position	PHONE: 91 135 274 7365,
7. Amplifying remarks	FAX: 91 135 274 8373,
8. Cancellations details	E-MAIL: INHO_MARINESAFETY@DATAONE.IN.
	2. CANCEL THIS MSG 140001 UTC NOV 09.

8 – METEOROLOGICAL WARNINGS AND FORECASTS

8.1 Provision of warnings and weather and sea bulletins (GMDSS application)

8.1.1 The Global Maritime Distress and Safety System (GMDSS) application which is compatible with and required by the radiocommunication provisions of the 1988 SOLAS amendments via the NAVTEX, International SafetyNET and HF MSI services.

Principles

8.1.2 The principles for the preparation and issue of warnings and weather and sea bulletins are as follows:

- .1** For the purpose of the preparation and issue of meteorological warnings and the regular preparation and issue of weather and sea bulletins, the oceans and seas are divided into areas for which national Meteorological Services assume responsibility.
- .2** The areas of responsibility together provide complete coverage of oceans and seas by meteorological information contained in warnings and weather and sea bulletins.
- .3** The issue of meteorological warnings and routine weather and sea bulletins for areas not covered by NAVTEX shall be broadcast by the International SafetyNET Service for the reception of maritime safety information (MSI) in compliance with SOLAS chapter IV “Radiocommunications”, as amended.

Note: In addition, national Meteorological Services may have to prepare and/or issue warnings and routine forecasts for transmission by an HF-direct printing telegraphy maritime safety information service for areas where such a service is provided for ships engaged exclusively on voyages in such areas.

- .4** The preparation and issue of warnings and weather and sea bulletins for areas of responsibility are coordinated in accordance with the procedures mentioned in the Manual on Marine Meteorological Services (WMO No. 558) and the Guide to Marine Meteorological Services (WMO No. 471), and summarized in the following section.
- .5** The efficiency and effectiveness of the provision of warnings and of weather and sea bulletins are monitored by obtaining opinions and reports from marine users.
- .6** Maritime Safety Information broadcasts are monitored by the originating Issuing Service to ensure the accuracy and integrity of the broadcast.

8.2 Procedures

Definitions

8.2.1 A *Preparation Service* is a national Meteorological Service which has accepted responsibility for the preparation of forecasts and warnings for parts of, or an entire, designated Maritime Safety Information (MSI) area in the WMO system for the dissemination of meteorological forecasts and warnings to shipping under the GMDSS and for their transfer to the relevant Issuing Service for broadcast.

8.2.2 An *Issuing Service* is a national Meteorological Service which has accepted responsibility for ensuring that meteorological forecasts and warnings for shipping are disseminated through the Inmarsat and SafetyNET service to the designated area for which the Service has accepted responsibility under the broadcast requirements of the GMDSS. The Issuing Service is responsible for composing a complete broadcast bulletin on the basis of information input from the relevant Preparation Services, and for inserting the appropriate EGC header, as specified in annex 4(b) of the *International SafetyNET Manual*. The Issuing Service is also responsible for monitoring the broadcasts of information to its designated area of responsibility.

Preparation and issue of weather and sea bulletins

8.2.3 Weather and sea bulletins shall include, in the order given hereafter:

- .1 Part I: Storm warnings;
- .2 Part II: Synopsis of major features of the surface weather chart and, to the possible extent, significant characteristics of corresponding sea-surface conditions; and
- .3 Part III: Forecasts.

8.2.4 Weather and sea bulletins may, in addition, include the following parts:

- .1 Part IV: Analysis and/or prognosis in IAC FLEET code form;
- .2 Part V: Selection of reports from sea stations; and
- .3 Part VI: Selection of reports from land stations.

Notes: (1) The reports included in part VI should be for a fixed selection of stations in a fixed order.

(2) Parts IV, V and VI may be issued at a separate scheduled time.

8.2.5 For area(s) for which an Issuing Service has assumed responsibility, the Service should select the appropriate CES to service that area. In particular, the following procedures should be adopted:

- .1 For scheduled broadcasts: These should be issued for broadcast over at least a single nominated satellite, in accordance with a pre-arranged schedule, coordinated by WMO.

- .2** *For unscheduled broadcasts:* These should be issued for broadcast under the SafetyNET Service through all Inmarsat ocean region satellites covering the Issuing Service's area of responsibility.

8.2.6 Weather and sea bulletins shall be prepared and issued at least twice daily.

8.2.7 The issue of the weather and sea bulletins shall be at a scheduled time and be in the following sequence: part I to be followed immediately by part II and then part III. A schedule of transmission start times for these bulletins has been compiled for all MSI areas and the CESs which serve the areas and takes into consideration, *inter alia*, the existing WMO synoptic times for observations, data analysis and forecast production. Additionally, as these broadcast schedules for the International SafetyNET Service have to be coordinated, under the aegis of WMO, with other organizations such as IHO, Issuing Services should not independently change or request WMO to arrange frequent alterations to these coordinated and published schedules.

8.2.8 Issuing Services must ensure that the correct EGC message addressing formats are adhered to for all warning and forecast messages intended for broadcast by a CES.

8.2.9 Warnings shall be given in plain language. Synopses and forecasts should be given in plain language, however some abbreviations may be used, especially when the size of the bulletin needs to be reduced for dissemination by a low bandwidth system, such as the NAVTEX Service (ref: 8.2.13).

8.2.10 Warnings, synopses and forecasts intended for the International SafetyNET and the International NAVTEX Services shall be broadcast in English.

Note: Additionally, if a national Meteorological Service wishes to issue warnings and forecasts to meet national obligations under SOLAS, broadcasts may be made in other languages. These broadcasts will be part of national SafetyNET or NAVTEX Services.

8.2.11 In order to ensure the integrity of the warnings and forecasts being received by mariners, it is essential that Issuing Services monitor the broadcasts which they originate. Monitoring is especially important in a highly automated system which is dependent on careful adherence to procedure and format. This may be accomplished by the installation of an EGC receive-capability at the Issuing Service's facility.

Note: Each Issuing Service may use the EGC receiver to check the following:

- (1) That the message has been broadcast;
- (2) That the message is received correctly;
- (3) That cancellation messages are properly executed; and
- (4) Any unexplained delay in the message being broadcast.

8.2.12 The language of the synopsis should be as free as possible from technical phraseology.

8.2.13 The terminology in weather and sea bulletins should be in accordance with the “Multilingual list of terms used in weather and sea bulletins”, which is available in Appendix I.2 to the Manual on Marine Meteorological Services (WMO No. 558) and in Annex 2.B to the Guide to Marine Meteorological Services (WMO No. 471). Specific guidelines for the NAVTEX Service, including a list of common abbreviations for weather and sea messages, are available in Appendix II.2 to the Manual on Marine Meteorological Services (WMO No. 558). The list of common abbreviations is also given in **8.6** hereto.

8.3 Warnings

8.3.1 Warnings shall be given for gales (Beaufort force 8 or 9) and storms (Beaufort force 10 or over), and for tropical cyclones (hurricanes in the North Atlantic and eastern North Pacific, typhoons in the Western Pacific, cyclones in the Indian Ocean and cyclones of similar nature in other regions).

8.3.2 The issue of warnings for near gales (Beaufort force 7) is optional.

8.3.3 Warnings for gales, storms and tropical cyclones should have the following content and order of items:

- .1** type of warning;
- .2** date and time of reference in UTC,
- .3** type of disturbance (e.g., low, hurricane, etc.) with a statement of central pressure in hectopascals;
- .4** location of disturbance in terms of latitude and longitude or with reference to well-known landmarks;
- .5** direction and speed of movement of disturbance;
- .6** extent of affected area;
- .7** wind speed or force and direction in the affected areas;
- .8** sea and swell conditions in the affected area; and
- .9** other appropriate information such as future positions of disturbance.

Sub-items .1, .2, .4, .6, and .7 listed above shall always be included in the warnings.

8.3.4 When warnings are included for more than one pressure disturbance or system, the systems shall be described in a descending order of threat.

8.3.5 Warnings shall be as brief as possible and, at the same time, clear and complete.

8.3.6 The time of the last location of each tropical cyclone or extra-tropical storm shall be indicated in the warning.

8.3.7 A warning shall be issued immediately the need becomes apparent and broadcasted immediately on receipt, followed by a repeat after six minutes, when issued as an unscheduled broadcast.

8.3.8 When no warnings for gales, storms or tropical cyclones are to be issued, that fact shall be positively stated in part I of each weather and sea bulletin.

8.3.9 Warnings shall be updated whenever necessary and then issued immediately.

8.3.10 Warnings shall remain in force until amended or cancelled.

8.3.11 Warnings issued as part I of a scheduled bulletin do not need to be repeated after 6 minutes.

8.3.12 Warnings for other severe conditions such as poor visibility, severe sea states (such as high swell, risk of abnormal waves, etc.), ice accretion, etc., shall also be issued, as necessary.

8.4 Synopses

8.4.1 The synopses given in part II of weather and sea bulletins shall have the following content and order of items:

- .1** date and time of reference in UTC;
- .2** synopsis of major features of the surface weather chart; and
- .3** direction and speed of movement of significant pressure systems and tropical disturbances.

8.4.2 If possible, significant characteristics of corresponding wave conditions (sea and swell) should be included in the synopsis as well as characteristics of other sea-surface conditions (drifting ice, currents, etc.) if feasible and significant.

8.4.3 Significant low-pressure systems and tropical disturbances which affect or are expected to affect the area within or near to the valid period of the forecast should be described; the central pressure and/or intensity, location movement and changes of intensity should be given for each system; significant fronts, high-pressure centres, troughs and ridges should be included whenever this helps to clarify the weather situation.

8.4.4 Direction and speed of movement of significant pressure systems and tropical disturbances should be indicated in compass points and metres per second or knots respectively.

8.4.5 Units used for speed of movement of systems shall be indicated.

8.5 Forecasts

8.5.1 The forecasts given in part III of weather and sea bulletins shall have the following content and order of items:

- .1** the valid period of forecast;
- .2** name or designation of forecast area(s) within the main MSI area; and
- .3** a description of:
 - (i)** wind speed or force and direction;
 - (ii)** sea state (significant wave height/total sea);
 - (iii)** visibility when forecast is less than five nautical miles; and
 - (iv)** ice accretion, where applicable.

8.5.2 The forecasts should include expected significant changes during the forecast period, significant meteors such as freezing precipitation, snowfall or rainfall, and an outlook for a period beyond 24 hours. In addition, phenomena such as breaking seas, cross seas, and abnormal waves should also be included, where possible.

8.5.3 The valid period should be indicated either in terms of number of hours from the time of issue of the forecast or in terms of dates and time in UTC of the beginning and the end of the period.

8.5.4 The following descriptive terms should be used for visibility:

- (i)** very poor (less than 0.5 nautical miles)
- (ii)** poor (0.5 to 2 nautical miles)
- (iii)** moderate (2 to 5 nautical miles)
- (iv)** good (greater than 5 nautical miles)

8.6 Common abbreviations for International NAVTEX Service

Terminology in full	NAVTEX Abbreviation	Terminology in full	NAVTEX Abbreviation
North or Northerly	N	Slowly	SLWY
Northeast or Northeasterly	NE	Quickly	QCKY
East or Easterly	E	Rapidly	RPDY
Southeast or Southeasterly	SE	Knots	KT
South or Southerly	S	Km/h	KMH
Southwest or Southwesterly	SW	Nautical miles	NM
West or Westerly	W	Metres	M
Northwest or Northwesterly	NW	HectoPascal	HPA
Decreasing	DECR	Meteo...	MET
Increasing	INCR	Forecast	FCST
Variable	VRB	Further outlooks	TEND
Becoming	BECMG	Visibility	VIS
Locally	LOC	Slight	SLGT or SLT
Moderate	MOD	Quadrant	QUAD
Occasionally	OCNL	Possible	POSS
Scattered	SCT	Probability/Probable	PROB
Temporarily/Temporary	TEMPO	Significant	SIG
Isolated	ISOL	No change	NC
Frequent/Frequency	FRQ	No significant change	NOSIG
Showers	SHWRS or SH	Following	FLW
Cold Front	C-FRONT or CFNT	Next	NXT
Warm Front	W-FRONT or WFNT	Heavy	HVY
Occlusion Front	O-FRONT or OFNT	Severe	SEV or SVR
Weakening	WKN	Strong	STRG
Building	BLDN	From	FM
Filling	FLN	Expected	EXP
Deepening	DPN	Latitude/Longitude	LAT/LONG
Intensifying/Intensify	INTSF	Filling	FLN
Improving/Improve	IMPR	Deepening	DPN
Stationary	STNR	Intensifying/Intensify	INTSF
Quasi-Stationary	QSTNR	Improving/Improve	IMPR
Moving/Move	MOV or MVG	Stationary	STNR
Veering	VEER	Quasi-Stationary	QSTNR
Backing	BACK	Moving/Move	MOV or MVG

8.7 Delimitation of METAREAS

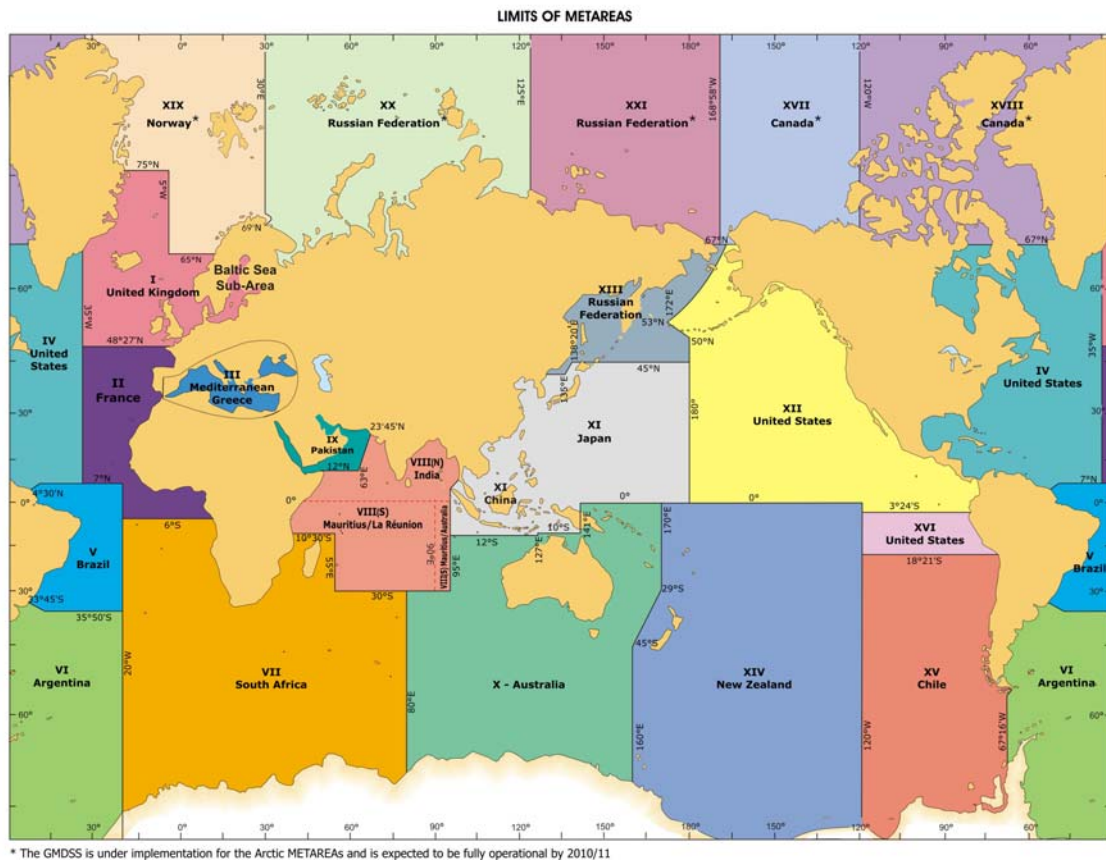


Figure 4 – METAREAS for coordinating and promulgating meteorological warnings and forecasts within the GMDSS

The delimitation of such areas is not related to and shall not prejudice the delimitation of any boundaries between States.

9 – SEARCH AND RESCUE NOTIFICATION

9.1 Communications related to search and rescue operations such as distress alerts, coordination of operations, local communications and positioning signals are never MSI, even when (for some shore-to-ship alerts) they use the International SafetyNET or NAVTEX services which are also used for MSI. This guide, therefore, does not apply to them.

9.2 Search and Rescue operations may, however, involve the broadcasting of MSI in the navigational warning category, described in **4.2.2.6**.

10 – PROCEDURE FOR AMENDING THE JOINT IMO/IHO/WMO MANUAL ON MSI

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

10.2 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.

10.3 The active participation of IHO, WMO, IMSO and ITU is considered necessary for the coordination of broadcasts of all maritime safety information.

10.4 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.
