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AHP-01

**ALLIED WORLDWIDE NAVIGATIONAL INFORMATION SYSTEM
(AWNIS)**

Edition (F) Version (2)

MARCH 2018



NORTH ATLANTIC TREATY ORGANIZATION

ALLIED HYDROGRAPHIC PUBLICATION

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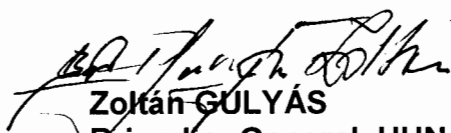
NORTH ATLANTIC TREATY ORGANIZATION (NATO)

NATO STANDARDIZATION OFFICE (NSO)

NATO LETTER OF PROMULGATION

7 March 2018

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Brigadier General, HUNAF

Director, NATO Standardization Office

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RECORD OF RESERVATIONS

CHAPTER	RECORD OF RESERVATIONS BY NATIONS
Chapter 3, Annex A	GBR
Note	
<i>The reservations listed on this page include only those that were recorded at the time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.</i>	

RECORD OF RESERVATIONS

NATION	SPECIFIC RESERVATIONS
GBR	<p><u>Chapter 3, Annex A:</u> The United Kingdom conducts Rapid Port Assessment through the appropriate deployment of qualified Hydrographers, Surveyors and Engineers. United Kingdom AWNIS personnel do not conduct Rapid Port Assessment.</p> <p><u>Chapter 3, Annex A:</u> The United Kingdom does not recognise Google Maps (Figure 3A-1) as an assured mapping source suitable for the conduct of military operations.</p>
<p>Note</p> <p><i>The reservations listed on this page include only those that were recorded at the time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.</i></p>	

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REFERENCES

1. NATO STANDARDISATION COVERING DOCUMENTS

- a. STANAG 1104 NS - Allied Worldwide Navigational Information System (AWNIS).
- b. STANAG 1490 NS - Allied Worldwide Navigational Information System (AWNIS) – Classified Supplement.

2. NATO POLICIES, DIRECTIVES AND GUIDANCE

- a. MC-0376.

3. RELATED DOCUMENTS

- a. AHP-01.1 - Allied Worldwide Navigational Information System (AWNIS) – Classified Supplement (STANAG 1490 NS).
- b. ATP-02 - Naval Cooperation and Guidance for Shipping (NCAGS) Manual (STANAG 1040 NS).
- c. ATP-02.1 - Naval Cooperation and Guidance for Shipping (NCAGS) - Guide to Owners, Operators, Masters and Officers (SRD to STANAG 1040 NS).
- d. ATP-02.2 - Naval Cooperation and Guidance for Shipping (NCAGS) - Organisation, Publications and Documents (SRD to STANAG 1040 NS).
- e. ATP-06 Volume I - Naval Mine Warfare Principles (STANAG 1242 MW).
- f. ATP-06 Volume II - Naval Mine Countermeasures Planning and Evaluation (STANAG 1243 MW).
- g. ATP-24 Volume I - Naval Mine Countermeasures Tactics and Execution (STANAG 1132 MW).

CHAPTER 1 - INTRODUCTION

0101 Aim of the Allied Worldwide Navigational Information System

The aim of the Allied Worldwide Navigational Information System (AWNIS) is to contribute to Freedom of Navigation (FON) by the provision of Safety and Security of Navigation (SASON) information for military and merchant ships in support of maritime operations.

0102 Introduction to AWNIS

1. **General.** There is an international requirement under the Safety of Life at Sea (SOLAS) convention to provide all mariners with early information of incidents that may constitute a danger to both military and merchant ships. Normally this information is disseminated by civilian organisations using recognised products such as Navigational Warnings (NAVWARNS), Notice to Mariners (NtM), SOLAS publications and charts. AWNIS delivers to operational commanders and the merchant marine assurance against the additional risks to SASON information that are associated with maritime operations.

2. Definitions.

a. Throughout this publication the following terms and definitions regarding AWNIS apply.

(1) *Navigational Safety.* The conduct by the master, captain or delegated officer of the vessel to enable the vessel to navigate within specific safety parameters laid down by an appropriate authority.

(2) *Safety of Navigation.* The obligation of international, regional, national, local or military authorities to aid navigational safety and includes the provision of Maritime Safety Information (MSI), charts and publications.

(3) *Security of Navigation.* During operations, the obligation of military authorities to aid Navigational Safety by considering threats or military interaction with shipping specific to the operation.

b. Within maritime operations AWNIS delivers security of navigation and those aspects of navigation for which the designated Operational Commander is either legally obliged to provide or supports the military aim. In this publication the provision of these elements is collectively referred to as SASON. Secondly, in this publication, unless otherwise stated, the term Operational Commander refers to that entity or command element assigned responsibility for the execution of AWNIS.

0103 Concept of AWNIS

1. AWNIS facilitates the cooperation between military and civilian organisations that have maritime safety, navigational and routing responsibilities in peacetime. These procedures enable effective collation, coordination and communication of SASON information.

2. AWNIS uses existing military and commercial communication systems, standards and procedures and does not require ships to adopt unfamiliar procedures during periods of tension or conflict. Sensitive information or classified information which is undesirable to make public is disseminated using procedures described in AHP-01.1 – AWNIS Classified Supplement.

3. Where military authorities assume responsibility for national SOLAS obligations as described in Para 0109, AWNIS procedures should be considered as time limited and every effort should be made to hand back responsibility for SASON information to appropriate civilian authorities as soon as is practical.

0104 Legal Aspects in Support of AWNIS

1. The requirement for AWNIS is supported by certain conventions and documents namely:

- a. SOLAS Chapter 5 Regulation 4 - National obligations for the communication of navigational dangers.
- b. Hague Convention 1907, Articles 3 & 5 - Notification of danger zones and removal of mines post conflict.
- c. San Remo Manual, Articles 98 & 101 - Blockade management and embargoes. Article 106 - Maritime Exclusion Zones.

Note: *In any operational situation, guidance on the applicability of these and other agreements should be obtained from the operational Legal Advisor (LEGAD).*

0105 AWNIS Contribution to Operational Objectives

1. AWNIS contributes in the following ways:

- a. Improved confidence within the merchant and military communities by delivery of SASON information and security message to shipping within the operational area.
- b. A reduction of merchant shipping casualties by providing unclassified SASON information to de-conflict merchant traffic from any known threat within the operational area without compromising operational security.
- c. Meets NATO and national legal obligations and requirements as described in Para 0322 by the collation, coordination and communication of SASON information.
- d. Reduced military casualties and increased operational freedom of manoeuvre by de-confliction of military vessels from any known impediment to safety of navigation within the area of operations.
- e. Contribute to freedom of navigation by providing SASON information to recognised peacetime maritime safety organisations. (see Figure 1-1).

- f. Contribution to post conflict stabilisation within the maritime domain by collation and coordination of SASON information during a military operation and provision of that information to recognised national hydrographic offices for inclusion in charts and publications to enable restoration of maritime trade.

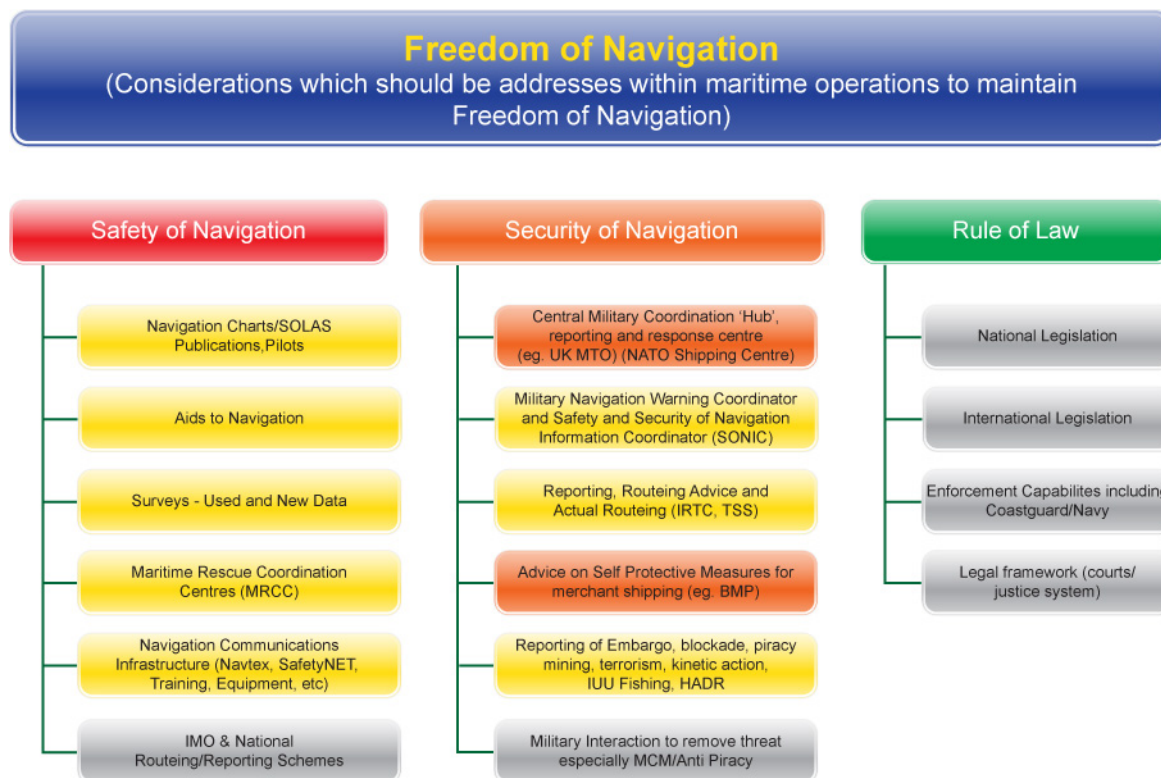


Figure 1-1. Freedom of Navigation Information Overview

- g. Enhance port operations and Civil Military Cooperation (CIMIC) capabilities by provision of safety of navigation and, where appropriate, provides recognised maritime safety infrastructure to merchant and military ships.

- h. Contribution to the effectiveness of all maritime operations by collating, coordinating and communicating appropriate classified and unclassified information to merchant ships and military commanders at sea.

0106 Phases of AWNIS

There are three phases of AWNIS involvement in a maritime operation covering, pre-conflict preparation, the operation itself and post conflict stabilisation (See Figure 1-2). These are further explained Chapters 2 and 3.

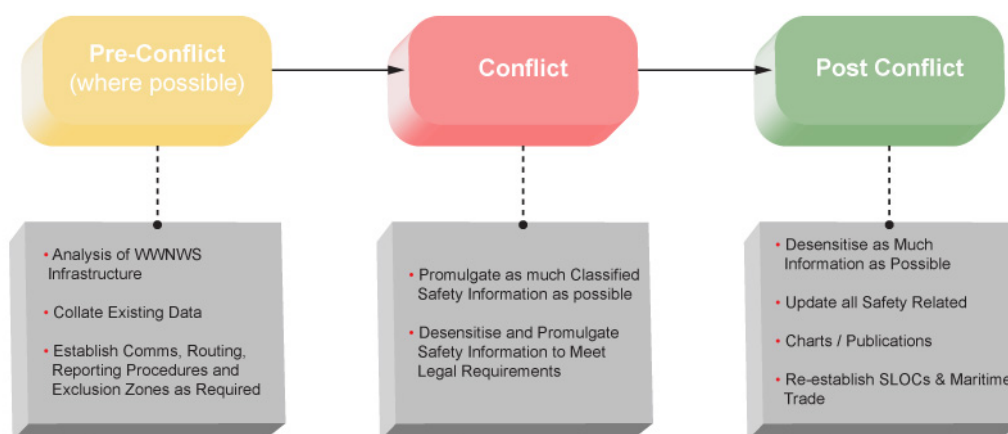


Figure 1-2 - AWNIS Phases of an Operation

0107 Military Requirements in Support of AWNIS

1. As articulated by law, the operational Commander is responsible for ensuring that SASON information from military sources is passed to the appropriate civilian authority (see Para 0322).
2. During military operations, Operational Commanders may find it beneficial to disseminate classified SASON information in order to achieve operational freedom.
3. It should also be considered that safety of navigation is a key element to the success of Maritime Security Operations.

0108 Activation of AWNIS

1. The decision to activate AWNIS in a particular area or region depends on the envisaged threat to military and civilian ships. Activation of AWNIS is included in the NATO Crisis Response System (NCRS) and may be within the NATO Combined Joint Statement of Requirement (CJSOR) process.
2. AWNIS procedures may be used by nations for their own national purposes. In this instance national authorities should inform the NATO Maritime Commander (MARCOM) Northwood.

0109 Application of AWNIS Procedures

1. AWNIS can be used in all maritime operations such as (but not limited to) Maritime Interdiction Operations (MIO), Naval Mine Warfare (NMW), Amphibious Operations (AO), Non-combatant Evacuation Operations (NEO), counter-piracy, counter terrorism, Maritime Security Operations (MSO), blockade and embargo operations.

2. The procedures should be confined to the operational area. However, this should not preclude meeting SOLAS convention obligations or reactions to an incident outside the operating area as deemed necessary by the Operational Commander.
3. AWNIS will be managed by the Safety of Navigation Information Coordinator (SONIC) on behalf of the Operational Commander (See also Chapter 2, para 0202).
4. It must be recognised that AWNIS procedures are both dependant on and may have great significance to other warfare disciplines and organisations. Therefore, close coordination and cooperation is required in the delivery of SASON (see also Chapter 2).

0110 Categories of AWNIS

1. There are three categories of AWNIS that describe the interaction between military and civilian authorities:

a. Cooperation. Cooperation with all civilian authorities with the purpose of delivering both Safety and Security of Navigation. The SONIC will liaise with the appropriate charting and Worldwide Navigational Warning System (WWNWS) authorities and request the promulgation of unclassified information e.g. Cooperation is the category of AWNIS that was used during the NATO Operations UNIFIED PROTECTOR and OCEAN SHIELD.

b. Control. Control of the national civilian SOLAS responsibilities by the military with the purpose of delivering both Safety and Security of Navigation. In an area of operations it is possible that Cooperation AWNIS procedures are in force but Control procedures are also applied to a specific part of the overall area of operations. For Control, AWNIS originates all promulgated safety information; e.g. Control was used during Operation IRAQI FREEDOM where national and Iraqi Port Authorities were absent.

c. Alternative. This category is used where methods outside the existing civilian procedures are utilised to deliver both SASON and security information in order to achieve the AWNIS effect, e.g. this level could be used where the operational area falls within the WWNWS area of a belligerent nation and where WWNWS procedures cannot be used or relied upon or in a disaster response scenario where there is significant damage to the infrastructure.

2. During an operation more than one category may be used in parallel in different geographical areas within an Area of Operations (AOO), or as an operation evolves.
3. The procedures for the management of classified information are the same for all categories.

CHAPTER 2 - ORGANISATION AND PLANNING

SECTION I - ORGANISATION

0201 AWNIS Command and Control

1. The Joint Force Commander will typically delegate responsibility to the appropriate Operational Commander to provide effective Safety and Security of Navigation.
2. The Operational Commander is responsible for ensuring that SASON information from military sources is passed to the appropriate civilian authority. Depending upon the category of AWNIS employed the Operational Commander may also be responsible for the promulgation of SASON information (see Para 0110).

0202 SONIC

1. To fulfil the SASON responsibilities on activation of AWNIS an AWNIS qualified officer is appointed as the SONIC. Once the SONIC has been appointed it is important that appropriate military, international and national authorities are informed of the SONIC authority and areas of responsibility including contact details.
2. The responsibilities of the SONIC include but are not limited to;
 - a. Collecting, processing and disseminating classified and unclassified maritime safety information (see Para 0319.2).
 - b. Providing specialist advice to the command on routing and reporting of merchant ships in support of the operation/mission.
 - c. Liaising with civilian stakeholders to deliver SASON information to merchant shipping, including International Maritime Organisation (IMO), International Hydrographic Organisation (IHO), International Mobile Satellite Organisation (IMSO), International Maritime Bureau (IMB), or appropriate national authorities, etc.
 - d. Liaising with other military forces as required.
 - e. Ensure that (in cooperation with LEGAD) the legal obligations following international legislation are met (see also Para 0104).
3. The SONIC is a staff function and there is only one per operation.

0203 Establishment of an AWNIS Cell

1. **General.**
 - a. Depending upon the nature of the operation, the Operational Commander ideally should have a dedicated AWNIS Cell, set up under the charge of the SONIC responsible to the Operational Commander for the control of AWNIS.

b. AWNIS Cell personnel, including any deployed elements such as the Rapid Port Assessment (RPA) team, under the direction of the SONIC are responsible for the collection, processing and dissemination of all SASON information (see Annex 3A).

2. Equipment. The AWNIS Cell should be co-located with the Operational Commander to enable a broad overview to be available for Command appreciation and decision making process. Table 2-1 lists the equipment typically required by the AWNIS cell and for the deployable elements of the AWNIS cell to other command elements such as Naval Mine Countermeasures (NMCM), and Naval Cooperation and Guidance for Shipping (NCAGS) deployed elements etc.

EQUIPMENT	HQ	RPA	Co-location with NMCM	Co-location with deployed NCAGS
NAVTEX	✓	✓		✓
Mobile Earth Station	✓	✓		✓
VHF (with DSC)		✓		✓
Mobile Voice (VHF/Mobile phone)		✓		✓
GPS		✓		
Binoculars		✓		✓
Digital Camera		✓		
Laptop (Rugged)		✓		
Laptop	✓		✓	✓
Unclassified Email	✓	✓	✓	✓
Classified Communication	✓	✓	✓	
Updateable Charts (paper or electronic)	✓	✓	✓	✓
SOLAS Publications	✓	✓	✓	✓
Personal Protective Clothing		✓		✓
Flashing Amber Light (for vehicle)		✓		✓
Personal Locator Beacon		✓		
Laser Range Finder		✓		

Table 2-1. Suggested Equipment Required for an AWNIS Cell and Deployable Elements

3. Documents. The following documents are required for an AWNIS Cell. This list is not exhaustive.

a. Engagement Matrix. A matrix of internal and external stakeholders of which AWNIS would interact (see Table 2-2). Prior approval from the higher authority will be required before communications with listed stakeholders.

- b. Narrative Incident Log (FORMEX 101).** A record of all incidents, decisions and the rationale behind the decision listed in chronological order.
- c. Signal Log.** A record of all AWNIS signal messages received, sent and saved.
- d. Signals Spreadsheet.** A summary spreadsheet listing the signals in Date Time Group (DTG) or type order, and used for cross referencing.
- e. Request for Information (RFI) Log.** A comprehensive record of incoming requests for information.
- f. Key Performance Indicator (KPI) Log.** A list of measures of performance used to evaluate the critical effectiveness of the AWNIS Cell and the associated processes.
- g. Task List.** A list of tasks to be completed by the various functions of an AWNIS Cell.
- h. Risk Register.** A list of risks and the mitigating factors in place to reduce the risk.

0204 Relationship between AWNIS and NCAGS

It is recognised that both AWNIS and NCAGS deal with issues associated with civilian shipping. However, SONIC remains responsible for the collection, coordination and promulgation of all SASON related information and for the safety related communications.

0205 Relationship between AWNIS and NMW

NMW poses inherent risks to shipping. Accordingly, close cooperation between the NMC M Commander and SONIC is essential to mitigate these risks to enhance SASON. This coordination may require an AWNIS element to be co-located with the MW Commander.

0206 Relationship between AWNIS and Civil Military Cooperation

AWNIS is recognised as a contributor to Civil Military Cooperation (CIMIC). For this reason the SONIC in the headquarters and deployed elements of the AWNIS Cell must engage with their equivalent CIMIC elements. (see also AJP-03.4.9 - CIMIC).

SECTION II - PLANNING

0207 Role of AWNIS in Operational Planning

1. Operational planning must take into account the requirement for AWNIS from the earliest stages. This is normally undertaken by the permanent staff of officer responsible for AWNIS within the relevant Operational Command.
2. The following paragraphs detail the internal and external planning considerations to be addressed when establishing AWNIS for the Area of Operations (AOO). Both the internal and external considerations should be carried out in parallel and in conjunction with other warfare disciplines.

0208 Planning Considerations

1. Internal Considerations.

- a. **Threat.** The impact of the threat or potential threat on navigational safety. This must be identified first as it will significantly drive the external planning considerations.
- b. **Contribution.** The actions that need to be taken in order for AWNIS to contribute to achieving the required objective(s) on behalf of the Operational Commander (see Chapter 1, Para 0105).
- c. **Command and Control (C2).** Establishment and size of the AWNIS organisation in order to deliver the contribution described at para b above.
- d. **Capability Assessment and Delivery.** The methods of communicating/providing the required outputs to specific elements of the intended audience as required by the Operational Commander.
- e. **Post Conflict Stabilisation.** SASON information required to enable the continuance of normal maritime trade.
- f. **RPA.** Port infrastructure, safety and capabilities to meet or be used for military or post conflict objectives. (See Annex 3A).
- g. **Spoofing.** The ability of the opposing forces (OPFOR) to manipulate SASON information and infrastructure as a means of disinformation.

2. External Considerations.

- a. **Points of Contact.** The working relationships with the Points of Contact (POC) at the relevant WWNWS authorities.
- b. **WWNWS Coverage.** The elements of WWNWS communications coverage (particularly NAVTEX) within the AOO. This includes assessment of the infrastructure to deliver the required effects looking at factors such as:

- (1) *Political Situation.* The political will of a nation to support the operation and allow its infrastructure to be used.

(2) *Monitoring Maritime Safety Information (MSI) Broadcasts.* Monitoring MSI broadcasts is key to the verification of the content and timeliness of requested Navigational warnings. The ability to monitor is dependant on the geographical location of the equipment in relation to the appropriate satellite or NAVTEX covering the AOO. See Figure 2-1 for SafetyNET satellite coverage and Para 0319.b.

(3) *Financial.* Increased transmissions over communication systems such as SafetyNET will incur additional costs. Funding of the additional use may be an issue for the affected nation/organisation and may influence the delivery of the required effects.

(4) *Type of Information.* The type of information and its suitability for transmission over the different elements of WWNWS.

(5) *Identification of Other Users.* Users of WWNWS authorized to send out information over SafetyNET e.g. the IMB. This information is available from the IHO WWNWS sub-committee.

c. Maritime Rescue Coordination Centres (MRCC). MRCCs are an integral part of the Global Maritime Distress Safety System (GMDSS) whose function is to coordinate the response to distress alerts from merchant ships. The following points should be considered:

(1) The identity and capabilities of MRCCs within the AOO.

(2) The means by which working relationships with the MRCCs can be established.

(3) The means by which the necessary cover can be provided in circumstances where the MRCC capabilities are insufficient or non-operational. When assuming MRCC responsibilities, the primary aim should be to coordinate and ensure that the correct subject matter experts are engaged for the tasks.

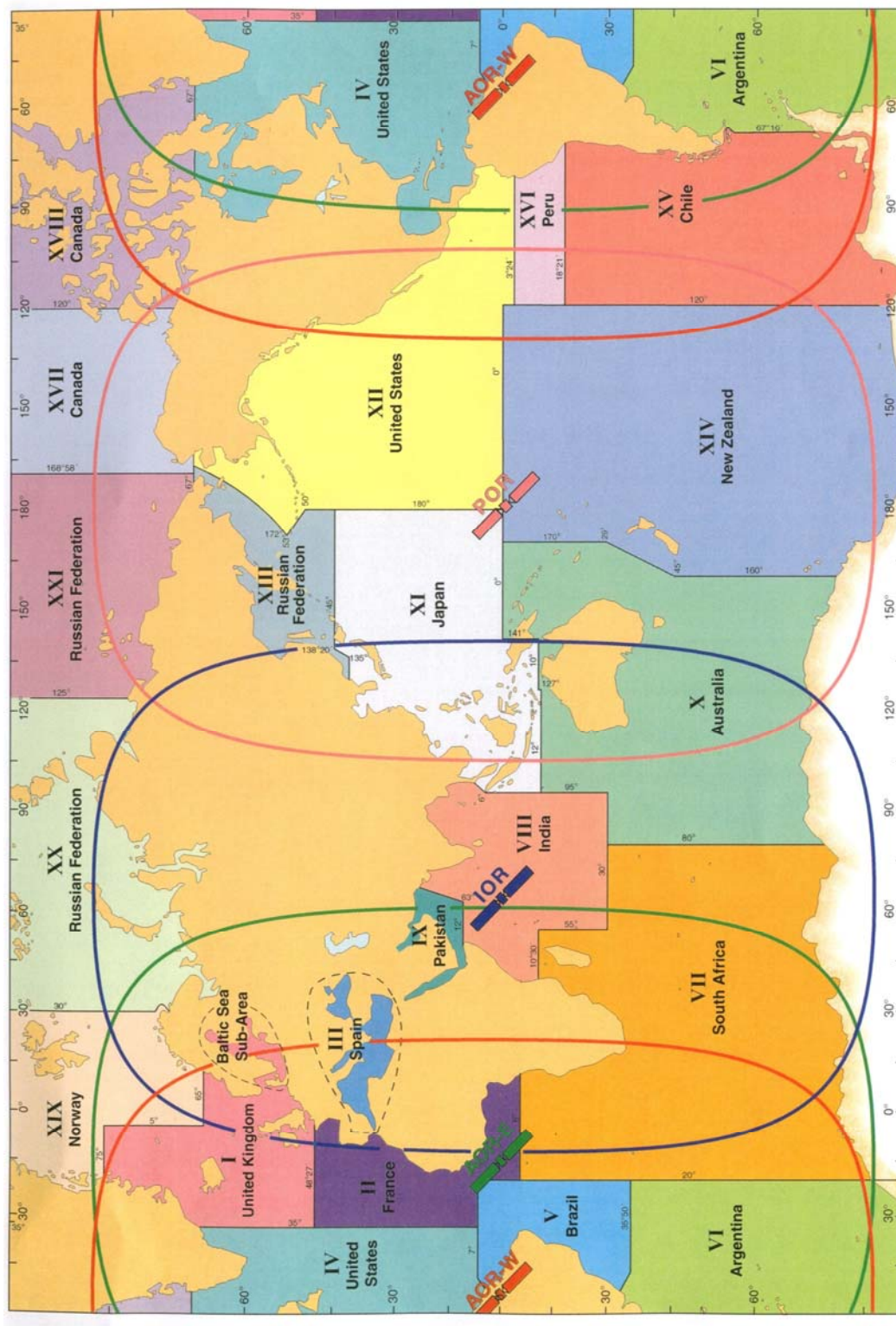
d. SOLAS Charts and Publications. SOLAS Charts and publications for the area of operations for the following:

(1) All ports and waterways in the area of operations affected by AWPIS procedures.

(2) Availability and suitability for the delivery of the required effects.

(3) Accuracy and currency of the information to the maximum possible extent.

e. Military Navigational Warning Coordinator. As recommended by IMO Resolution MSC.305(87), naval or military authorities wishing to provide information on acts of piracy and piracy counter-measure operations for broadcast should nominate a Military Navigational Warning Coordinator (MNWC). This role should be fulfilled by the SONIC.



0209 AWNIS Planning Tasks

1. The following paragraphs list the tasks to be undertaken prior to and after the activation of AWNIS Procedures.

a. Prior to Activation of AWNIS.

(1) Identify and establish cooperation with the relevant civilian authorities i.e. NAVAREA National Coordinators and Port Authorities to identify the best method to disseminate information and to determine the category of AWNIS required (see Chapter 1, Para 0110). For all AWNIS categories this will include determining the appropriate boundaries for each. This process must be assisted by having AWNIS requirements reflected in the CIMIC Engagement Plan as shown in the example at Table 2-2.

(2) Engage with internal authorities e.g. NCAGS, CIMIC, SUBOPAETH, Info Ops, AW, Political Advisor (POLAD), LEGAD, NMW and others as appropriate to determine the threat and required actions.

(3) Engage with external authorities e.g. IMO, IHO and national hydrographic offices and agencies as appropriate to support the determined category of AWNIS procedures.

(4) Establish the AWNIS organisation and deployment plan and the OPTASK AWNIS (see Chapter 5, Section II).

(5) The following should be addressed when activating AWNIS:

(a) Co-location with the Operational Commander who has Operational Control (OPCON) of the maritime forces. This is particularly important for effective interaction with other warfare disciplines.

(b) Availability of qualified AWNIS personnel, resources, and logistic facilities.

Note. Where an officer has completed a NATO or equivalent national AWNIS Course.

(c) Access to suitable military and commercial communication facilities and equipment to achieve the aim (see also Para 0203.2 and Table 2-1).

(d) Requirement for RPA.

(e) Post Conflict stabilisation (see Chapter 3, Para 0309).

(6) The SONIC (see Para 0202) must ensure that all allied naval forces are made aware of their obligations to report SASON information within the AOO.

b. Following Activation of AWNIS.

(1) Activate the AWNIS organisation and deployment plan.

(2) Promulgate and implement the OPTASK AWNIS detailing the arrangements for the provision of SASON information within the relevant area of operations.

	Maritime Commander SONIC	AWNIS RPA Team	AWNIS LO with MCM CTG	AWNIS LO with NCAGS Element	NATO Shipping Centre	Army Maritime Unit	CIMIC Staff Officer
International Organisations							
IMO Maritime Safety Committee	X				(X)		
IMO Head of Maritime Security	X				(X)		
IHO WWNWS SC	X				(X)		
Regional Organisations							
NAVAREA Coordinator	X				(X)		
Regional Maritime Engagement Meeting	(X)			(X)	X		(X)
National Organisations							
National Coordinator	(X)	X					
National Maritime Information Centres	(X)				X		
National Shipping Engagement Groups	(X)	(X)			X		
Local Organisations							
Port Authority	(X)	X		(X)		(X)	
Harbour Master	(X)	X		(X)		(X)	
Pilot	(X)	X		(X)		(X)	

X is the lead for relationship / liaison.

(X) Indicating liaison exists but is not the lead.

Table 2-2. Example of AWNIS Requirements for CIMIC Engagement Plan

CHAPTER 3 - EXECUTION OF AWNIS

SECTION I - GENERAL

0301 Introduction

1. AWNIS is executed using the Navigational Information Cycle which is the sequence of activities whereby data is obtained, assembled, converted into SASON information and then disseminated.

2. **Sequence.** The sequence comprises the following four phases:

a. Direction - Determination of safety of navigation requirements, planning the collection effort, issuance of orders and/or requests to military and civilian sources/organisations.

b. Collection - The exploitation of sources and the delivery of the information obtained to the SONIC for use in the production of SASON information.

c. Processing - The conversion of information into SASON information through collation, evaluation and validation.

d. Dissemination - The timely conveyance of SASON information, in an appropriate form and by the most suitable means, to those who need it.

SECTION II - DIRECTION, COLLECTION AND PROCESSING OF NAVIGATIONAL INFORMATION**0302 Introduction**

1. This section deals with the direction, collection and processing of SASON information within an area of operations. This information may be available from a wide range of sources, both military and civilian, classified and unclassified. Where there is a lack of information or where the source is considered to be unreliable, proactive efforts should be made to obtain the required information and to verify the content in order to disseminate accurate SASON information.

2. **Security.** Every care must be taken with regard to Operational Security (OPSEC) when requesting information for a specific geographical area from any source.

3. **Information Source Validation.** On receipt of information its source should be checked for authenticity and the detail of the information validated, preferably by corroboration with a second authentic source.

4. **Records.** As a competent safety authority it is paramount that precise records are maintained for each stage of the process for all incidents and actions taken (see Para 0203.3).

0303 Direction

The OPTASK AWNIS and the AWNIS appendix in the OPLAN will provide the Operational Commander's direction for the initiation of the navigational information cycle. SONIC will be responsible for providing further direction to AWNIS cells and deployed elements.

0304 Collection of Information

1. **Preparation.** It will be necessary to visit or contact relevant sources in order to collect the required information. In order to identify and track the sources it is recommended that an AWNIS Engagement matrix is developed and maintained (see Chapter 2, Table 2-2).

2. **Equipment Requirements.** It will be necessary to have access to appropriate equipment in order to collect the information (See Annex 3A).

3. **Sources.** The following paragraphs list some of the potential military and civilian sources of navigational information. The list is not exhaustive and other sources should be considered.

a. **NAVAREA and/or National Coordinators.** MSI broadcast by WWNWS will be an important source of information with reference to safety and security. In addition to this the NAVAREA/National coordinator will potentially be in possession of further amplifying data on a specific event e.g. piracy attack. While they are not obliged to pass this information to the SONIC, SONIC should develop a cooperative approach of mutual trust whereby appropriate information can flow freely.

b. United States America Long Range System. In addition to NAVAREA warnings, promulgated under WWNWS, the USA issues a series of HYDROLANT, HYDROPAC and HYDROARC navigational warnings. The HYDROLANT series of warnings cover the Atlantic Ocean and Mediterranean Sea, excluding NAVAREA IV; the HYDROPAC series covers the Indian and Pacific Oceans, excluding NAVAREA XII. The limits of the areas are shown at Figure 3-1. HYDROARC Warnings are issued for the Arctic region not covered by HYDROLANT or HYDROPAC messages. Full details of the service are given in national hydrographic publications where information on times of transmission, frequencies, and other relevant information will be found.

c. Allied and Other Government Hydrographic Offices. Information that is held in hydrographic databases but not published on charts or in other hydrographic products.

d. Regional NAVAID Service. National or regional civilian or government organisations responsible for the management of navigational aids and marks.

e. Local Coordinator/Port Authorities. Local knowledge of the area, environmental conditions and other local sensitivities.

f. MRCCs. Alerts or distress calls within the area of operations. Knowledge of navigational hazards and other dangers within the area of operations.

g. Other Non-National Holders of SafetyNET Certificates.

h. Coastguard, Customs and Border Control Authorities. Local knowledge of the coastline, policing responsibilities, dangers and environment. In some cases the coastguard is responsible for the management of navigational aids and marks.

i. Vessel Traffic Services (VTS). Local knowledge of routing and dangers.

j. Pilot Services. Port entry requirements and procedures.

k. Military Sources.

- (1) Immediate Command Chain.
- (2) Naval Mine Warfare Cell.
- (3) N2, J2 Including Geospatial Intelligence (GEOINT).
- (4) Shipping Liaison/NCAGS.
- (5) Submarine Operational Authority (SUBOPAETH).
- (6) Air.
- (7) Auxiliary Units.
- (8) Army Maritime Units.

- (9) Amphibious Forces.
- (10) Naval Units/Forces.
- (11) POLAD and LEGAD.
- (12) CIMIC.
- (13) Information Operations.
- (14) Media Operations.
- (15) Hydrographic and Survey Vessels.
- (16) Special Forces (SF) Operations.

I. **RPA.** RPA provides the status of a port infrastructure, its safety and capability to meet or be used for military or post conflict objectives.

4. Responsibilities of Military Assets to Report Information to the SONIC. It is important that all military assets report any SASON related information to the SONIC using the H Note (see Annex 3E) for unclassified information and Q-Message Request for classified information (see AHP-01.1, Chapter 3). The contact details will be included in the OPTASK AWNIS.

0305 Processing

1. This stage is the conversion of collected information into SASON information through validation, collation and evaluation.

2. Source. Establishing the primary source of the information with regard to a particular incident is vital in establishing its authenticity. Wherever possible the information should be corroborated with the appropriate military or civilian agency. However, the need to corroborate information does not relieve the Operational Commander of the obligation to meet SOLAS requirement in a timely manner.

3. Positional Information. Accuracy and precision of positional data should be considered when processing and reporting navigational information.

a. Accuracy. Accuracy is defined as how close a measured value is to the actual (true/correct) value. In navigational terms this means how close a reported position is to the correct location. Accuracy of positional information is dependent upon:

- (1) Scale of Original Survey.
- (2) Type and Age of Survey.
- (3) Compilation Scale of Chart.



Note: HYDROARC Warnings are issued for the Arctic region not covered by HYDROLANT or HYDROPAC messages.

Figure 3-1. Long Range Navigational Warnings Issued by the United States

(4) The recognised NATO standard geodetic datum is WGS 84. When processing positional information the output should normally be expressed in relation to WGS 84, unless the position is referenced to a specific chart where the horizontal datum is not WGS 84. However, when disseminating classified or unclassified MSI, where a position refers to a specified chart, the position must be reported using the same horizontal datum as that chart.

(5) Fixing method / Sensor.

(6) Environmental Factors.

(7) Time sensitive information.

b. Precision. The definition of precision is how close the measured values are to each other. In navigational terms this is a gauge of whether the reported positions lie within miles, cables or metres of one another. It does not attempt to describe the truth or correctness of a reported position. The degree of reported precision is a matter of judgement based on a number of factors including; scale of hydrographic survey, chart compilation scale, position measuring technique and size of the object being reported. The level of stated precision is dependant upon the number of decimal places used to report/record the positional information.

4. Spoofing. It must be recognised that opposing forces can gain a degree of tactical advantage by using 'spoofing' techniques whereby false or misleading information is broadcast. These techniques can be applied to all aspects of SASON information. For this reason the appropriate equipment to monitor the WWNWS is required by the SONIC and any suspect information must be treated with caution until its origin and accuracy can be validated and or confirmed.

0306 Evaluation of Wrecks

If a vessel sinks the wreck may cause a considerable hazard, particularly if it lies in the entrance to a harbour, port or shipping route. Although the precise location and the depth of water available about a wreck can only be confirmed by a survey, there are many instances when it is desirable to publish as much detail as there is available on a wreck prior to a survey being conducted. However, during periods of crisis or conflict reported casualties, sinkings and wrecks may be considered to be sensitive information that should not be divulged to the opposing forces. Annex 3B provides guidance for processing wreck associated navigational safety information during crisis or conflict situations.

0307 Mine Threat Warnings

Details of threat warnings and the associated self protective Naval Mine Warfare Degrees of Readiness are stated in ATP-01, Volume I. There may be occasions when enemy mining, and actions to be taken, are covered by an appropriate classified mines threat warning. Consideration of a corresponding suitably worded unclassified warning may also be required.

0308 Management of Mine Danger Areas (MDA)

During a conflict or operation which involves the use of sea mines, a MDA is established by the authorised Operational Commander. Post conflict or on completion of the operation the ongoing responsibility for management of the established MDA(s) will need to be addressed

to ensure that the following management process is overseen to its completion. Close liaison between the AWNIS and the MW Cell is imperative. It is recommended that this post conflict peacetime responsibility is passed to Allied Command Operations (ACO) or other authority appointed by ACO (e.g. a Mine Warfare Data Centre (MWDC)). Further information on the management of MDAs is contained in AHP-01.1, Chapter 2.

0309 Facilitating Post Conflict Stabilisation

The collection and processing of SASON information during a conflict play an important role in freedom of navigation, securing Sea Lines of Communication (SLOC) and enabling maritime trade post conflict. For these reasons it will be necessary to ensure that the collection and processing of information is continued to conclusion. This may require the information to be handed over to civilian authorities.

0310 Routing and De-confliction

1. Introduction

a. In AWNIS the terms below have the following meanings:

(1) *Routing*. Routing is advising ships where to go.

(2) *De-confliction*. De-confliction is advising ships where not to go.

(3) *Freedom of Navigation (FON)*. FON is the ability of ships to manoeuvre freely without hindrance or constraint IAW International Law.

b. The ability to de-conflict or route ships to avoid a threat or a series of threats to enable Freedom of Manoeuvre (FOM) and provide FON, is an important element of maritime operations.

c. In all aspects the objective should be to achieve FON. It is acknowledged, however, that FON is not always achievable in the short term and that measures are required to maintain safety of navigation which may result in temporary limitations to FON.

d. Routing and de-confliction must be the product of multi discipline effort which cannot happen in isolation. They should always be considered as an interim solution and every effort should be made to limit them in both time and space.

e. AWNIS factors should be included in the planning and decision making process for routing and de-confliction. It is the responsibility of SONIC to advise the command about the options, methods and possible consequences of imposing restrictions to navigation. SONIC should also indicate the probable extent and duration of the restriction and a plan for its eventual cancellation or removal. In order to correctly and formally establish the output of the planning process, it is essential that AWNIS factors are considered and that the appropriate means of promulgation are employed and recorded.

SECTION III - DISSEMINATION OF UNCLASSIFIED SASON INFORMATION**0311 Introduction**

Dissemination is the timely conveyance of SASON information, in an appropriate form and by the most suitable means, to those who need it. The level of danger or hazard involved will determine the content, the sensitivity, the method of dissemination and the urgency. A range of methods is available to the SONIC to disseminate SASON information to ships at sea. This section deals with the unclassified methods available and AHP-01.1 Chapter 3 deals with the classified methods.

0312 Summary of Methods Available

1. Primary Methods. The content and precedence (urgency) of the SASON information will determine the method of dissemination. A further consideration is the life expectancy of the hazard or danger. This is an important factor because even long term information i.e. a wreck which will eventually appear on a chart, will need to be promulgated urgently by a short term method. Life expectancy does not decrease the importance or urgency of information. Table 3-1 lists the SOLAS methods for disseminating information with respect to life expectancy and urgency.

SHORT TERM	MEDIUM TERM	LONG TERM
Navigational Warnings (WWNWS). SECURITÉ Message (VHF). AIS Safety Related Messages. Synthetic AIS.	Notice to Mariners.	Charts. SOLAS Publications.

Table 3-1. SOLAS Methods for Promulgation of Information

2. Other Methods. Additional methods listed in Table 3-2 are available for the dissemination of SASON information to ships. However it is important to note that these additional methods can be used as well as but not as an alternative to those listed in Table 3-1. This is because these methods will not reach all ships within the area of operations and not all ships will have the capability to receive information via these means.

SHORT TERM	MEDIUM TERM	LONG TERM
Internet. Email. FleetNet. Voice.	Sailing Information (NCAGS). Verbal Briefings. Best Practice Document.	Maritime Industry Liaison.

Table 3-2. Other Methods for Promulgation of Information

0313 WWNWS

1. WWNWS is a co-ordinated global service for the promulgation of unclassified navigational warnings. WWNWS is used by the SONIC to disseminate navigational safety information and routing instructions to allied and neutral shipping in an area of conflict without divulging sensitive information. Navigational warnings promulgated by WWNWS are of four types:

- a. NAVAREA Warnings.
- b. Sub-Area Warnings (see note).
- c. Coastal Warnings.
- d. Local Warnings.

Note. *Not to be confused with the historical use of 'sub-area' in AWNIS classified warnings.*

2. The management, content and structure of unclassified navigational warnings are contained in the Joint IMO, IHO, WMO Special Publication No. 53 (S53), IMO Resolutions A.705(17) - Promulgation of Maritime Safety Information, as amended, and A.706(17) - Worldwide Navigational Warning Service, as amended, including the use of standardised texts and message formats. A description of each type of navigational warning is given in the following paragraphs.

3. The IHO Special Publication No. 53 (S53) does not contain examples or guidance on the content of navigational warnings covering military operations. Therefore these examples are provided at Annex 3E.

0314 NAVAREA Warnings

For the purposes of the WWNWS the world is divided into 21 geographical sea areas termed NAVAREAS which are identified by Roman numerals, with a sub-area covering the Baltic Sea as part of NAVAREA I. The authority charged with collating and issuing long-range navigational warnings to cover the whole of an area is called the NAVAREA Co-ordinator. The limits of the NAVAREAS are shown at Figure 3-2, and details of the Area Co-ordinators can be found in the appropriate SOLAS publications. NAVAREA Warnings normally refer only to the area concerned and are transmitted in English. NAVAREA Warnings are concerned with information which ocean going mariners require for safe navigation, including in particular, failures of and changes to important aids to navigation, as well as information which may affect changes to planned navigational routes. During a live exercise SONIC will be required to manage real-world NAVAREA Warning Requests and Warnings whilst simultaneously creating 'for exercise' NAVAREA Warning Requests and Warnings. There is very real risk of confusion leading to accidental release of 'for exercise' Navigation Warning Requests to WWNWS. In order to reduce this risk, exercise NAVAREAs are to be created with the same geographical coordinates as the real-world NAVAREA but numbered sequentially from 31 onwards. For example, where exercise play occurs in real-world NAVAREAs II and III, then SONIC will create exercise NAVAREAs XXXI and XXXII. These constructs should be noted in the EXPLAN and established by OPTASK AWNIS. The following header is to be used in all 'for-exercise' NAVAREA and Coastal messages and requests: *'NOT FOR TRANSMISSION BY WWNWS'*.

0315 Sub-Area Warnings

A Sub-Area is a sub division of a NAVAREA in which a number of countries have established a coordinated system for the promulgation of maritime safety information. Currently there is only one Sub-Area namely the Baltic Sea which is a sub-area of NAVAREA I. Sub-Area Warnings are navigational warnings promulgated by the Sub-Area Coordinator.

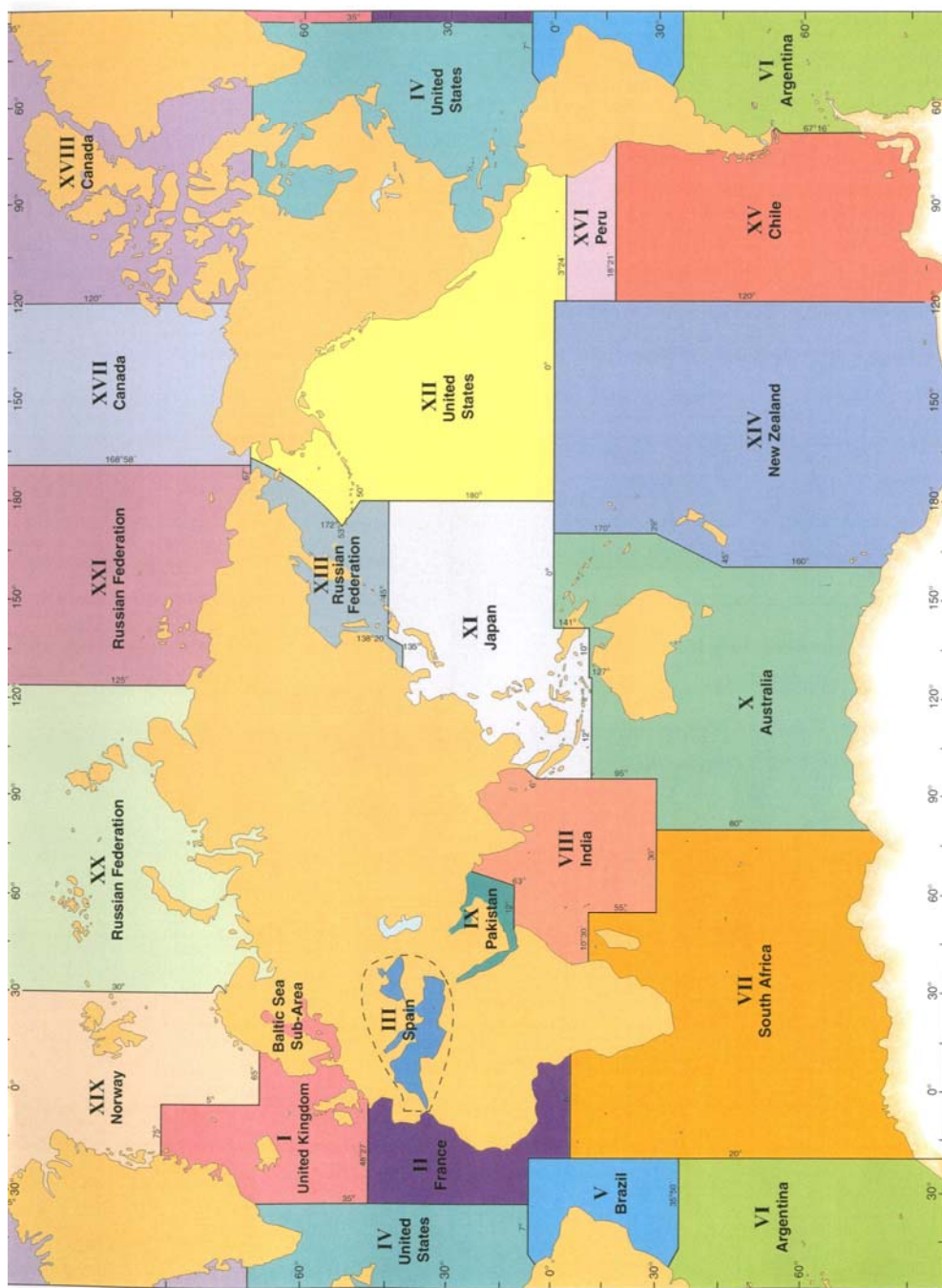


Figure 3-2. WWNWS and Limits of NAVAREAs

0316 Coastal Warnings

1. Coastal Warnings promulgate information which is necessary for safe navigation within a particular coastal region. The authority charged with collating and issuing coastal warnings within a region is called the National Co-ordinator (see note). Coastal Warnings should normally provide sufficient information for safe navigation to seaward of the fairway buoy or pilot station and should not be restricted to main shipping lanes. They are generally transmitted more frequently than NAVAREA warnings, and only to the sea area surrounding the hazard. Coastal Warnings for all parts of the world are broadcast from the country of origin in English and the language of the originating nation.

Note. *Not all countries with a coastline have provision for promulgating SASON information which must be taken into account during operational planning.*

2. Where the region is served by NAVTEX (see Para 0319.a), it should provide navigational warnings for the entire service area of the NAVTEX transmitter. Where the region is not served by NAVTEX, it is desirable to include all warnings relevant up to 250 miles from the coast in the SafetyNET Service transmission (see Para 0319.b).

3. Particulars of Coastal Warnings are given in national Radio Aids publications and International Telecommunications Union (ITU) publications where information on times of transmission, frequencies, and other relevant information will be found.

4. In certain circumstances the Medium Frequency (MF) capability of a national coordinator to broadcast over NAVTEX may be compromised due to damage from a natural disaster or from military action. In such circumstances it may be necessary for the military authority to assist the national coordinator in promulgating navigational warnings or to find alternatives until normal procedures can be resumed.

0317 Local Warnings

1. Local Warnings supplement the coastal warning service by giving detailed information within inshore waters including the limits of a harbour or port authority. They are often originated by coastguard, port or pilotage authorities and may be issued in the national language only. There is no format or predetermined method for issuing local warnings. The use of VHF, AIS and AIS Synthetic may be used to broadcast Local Warnings.

2. In certain circumstances the capability of a Port Authority to promulgate SASON information may be compromised due to damage from a natural disaster or from military action. In such circumstances it may be necessary for the military authority to assist the Port Authority in promulgating navigational warnings on their behalf or in extreme circumstances take on this responsibility until normal procedures can be resumed. See Annex 3A for further details. For an example and the procedure for a local warning see Annex 3E.

0318 Subjects Suitable for Transmission as Unclassified Navigational Warnings

1. The following subject areas are considered suitable for transmission as either NAVAREA or Coastal Warnings. The list is not exhaustive and should only be regarded as a guideline.

- a. Casualties to lights, fog signals and buoys affecting main shipping lanes.
 - b. The presence of dangerous wrecks in or near main shipping lanes and, if relevant, their marking.
 - c. Establishment of major new aids to navigation or significant changes to existing ones when such establishment or change might be misleading to shipping.
 - d. The presence of large unwieldy tows in congested waters.
 - e. Drifting mines.
 - f. Areas where search and rescue (SAR) and anti-pollution operations are being carried out (for avoidance of such areas).
 - g. The presence of newly discovered rocks, shoals, reefs and wrecks likely to constitute a danger to shipping and, if relevant, their marking.
 - h. Unexpected alteration or suspension of established routes.
 - i. Cable or pipe laying activities, the towing of large submerged objects for research or geophysical exploration, the employment of manned or unmanned submersibles, or other underwater operations constituting potential dangers in or near shipping lanes.
 - j. Establishment of offshore structures in or near shipping lanes.
 - k. Significant malfunctioning of radio-navigation service and shore-based safety information radio or satellite service.
 - l. Information concerning special operations which might affect the safety of shipping, sometimes over wide areas, e.g. naval exercises, missile firings, space missions, nuclear tests etc. It is important that where the degree of hazard is known this information is included in the relevant warning. Whenever possible, such warnings should be originated not less than five days in advance of the scheduled event. The warning should remain in force until the event is completed.
 - m. Establishment of Exclusion Zones.
 - n. Establishment of Merchant Ship Reporting Procedures with the area of operations.
 - o. Establishment of Embargo Operations.
 - p. Piracy and Armed Robbery.
2. In addition to the above-mentioned subject measures, it is the responsibility of the commander afloat to ensure that air, surface and subsurface threat warnings are promulgated via AWNIS by unclassified means as well as classified, in order to ensure that merchant shipping is advised of possible dangers.

0319 Methods of Promulgating Maritime Safety Information

1. General. Methods used to promulgate unclassified radio navigational warnings are governed by international agreements. Navigational warnings form an element of Maritime Safety Information (MSI), which also includes meteorological warnings, meteorological forecasts, and other safety related messages. Maritime Safety Information is to be promulgated by one of the following methods:

a. NAVTEX. Narrow-Band Direct Printing (NBDP) telegraphy service for transmission of navigational and meteorological warnings and urgent information to ships. The service provides shipping with the latest urgent information on Navigational, weather warnings, and initial distress messages by automatic print-out from a dedicated NAVTEX receiver. Carriage of a NAVTEX receiver is mandatory in all ships over 300 Gross Registered Tonnage (GRT) under the SOLAS convention. Full details of NAVTEX stations and broadcasts are promulgated in national hydrographic publications.

b. International SafetyNET Service. A satellite broadcast of maritime safety information via the INMARSAT satellites covering all non-polar waters of the globe (approx 76 degrees North to 76 degrees South). Carriage of a SafetyNET reception facility is mandatory for all ships over 300 GRT under SOLAS, however ships which remain entirely within NAVTEX cover are not subject to this requirement. Full details of SafetyNET transmissions are promulgated in national hydrographic publications.

c. Medium Frequency (MF) Voice. One of the traditional methods of promulgating maritime safety information is by MF voice. Information on times of transmission, frequencies and other relevant information is listed in national hydrographic publications.

d. Very High Frequency (VHF) Voice. Maritime VHF may be used for the promulgation of Local and Coastal Warnings. NAVAREA Warnings will not be promulgated by VHF voice.

2. Maritime Safety Information Broadcast Policy. IMO/IHO policy is that all maritime safety information for international and territorial waters will be broadcast via the International NAVTEX and SafetyNET service. The flow of maritime safety information depicting this policy is shown at Figure 3-3. The SONIC information management process is shown at Figure 3-4.

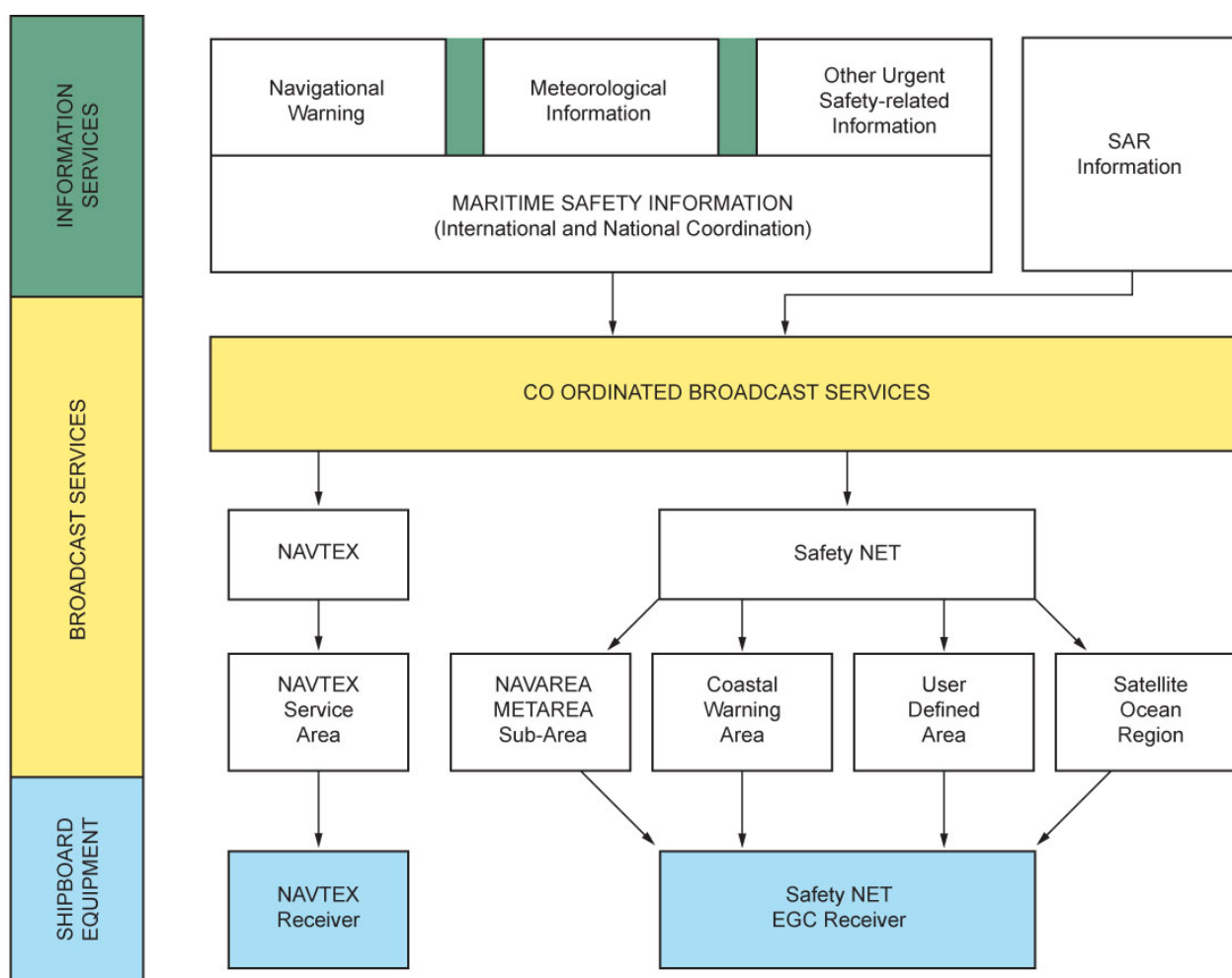


Figure 3-3. The Maritime Safety Information Service of the Global Maritime Distress and Safety System

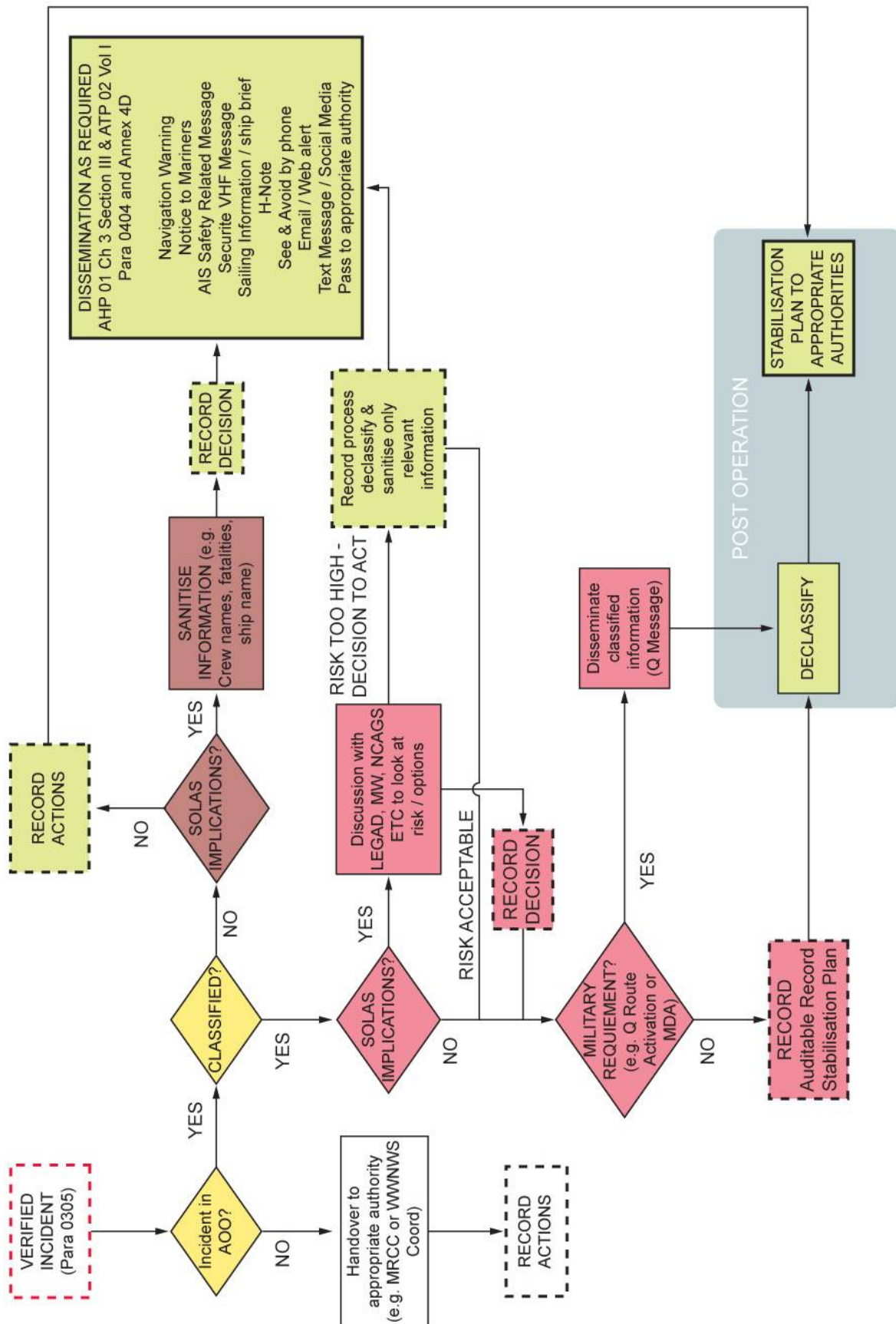


Figure 3-4. The SONIC Information Management Process

0320 Nautical Charts

1. Navigation Charts. The requirements for the carriage of nautical charts are laid down in SOLAS Chapter V, Regulation 27 specifies the requirement to keep charts and publications up to date.

a. A nautical chart is defined by SOLAS Chapter V Regulation 2.2 as a special purpose map, book or specially compiled database from which such a map or book is derived and designed to meet the requirements of marine navigation. They are officially issued by, or on the authority of, a Government authorised hydrographic office or other relevant government institution.

b. It is the responsibility of SONIC, on behalf of the Operational Commander, when aware of hazards and threats that compromise safety of navigation, to promulgate that information in an appropriate manner. Enduring hazards and threats will require nautical charts to be updated by Notice to Mariners (NM) (see Para 0321).

c. Where existing SOLAS charts and publications are insufficient to describe threats and hazards in an operational area, SONIC on behalf of the Operational Commander should recommend to the appropriate authority or authorities the requirement to create a specific chart or publication in support of delivering the AWNIS actions described at Chapter 1.

2. Security Planning Charts. These are bespoke charts issued by charting authorities to provide specific long term security information to mariners.

0321 Notices to Mariners

1. Standard NMs. Standard NMs contain information that enables mariners to keep charts and other SOLAS publications up to date.

2. Security NMs. These provide complex and medium term security of navigational information and enable updates to bespoke security charts. This type of NM can be particularly effective where the NAVAREA Coordinator is a belligerent.

0322 Legal Implications of Disseminating SASON Information

1. Unclassified navigational warnings are promulgated in peacetime and during conflicts or operations to meet international legal obligations (see Chapter 1, Para 0104), and as such form an essential element of AWNIS. Neutral shipping must, as far as practicable, be safeguarded. The SONIC must consider whether or not to originate an unclassified version of a Navigational warning on every occasion that a classified warning is released.

2. Unclassified navigational warnings may have wide military, political, and economic implications during crisis or conflict and staff legal advisors should be involved, as necessary, in the context of international law and Law of the Sea. The Operational Commander must be able to justify actions legally, both for political reasons and to protect them from monetary reparation or forcible responses in kind.

3. In addition to promulgating clearly defined danger areas, or alterations to navigational aids, unclassified navigational warnings are to be used to promulgate details of

exclusion zones and general routing information to keep shipping away from operationally dangerous or sensitive areas.

4. Treaty obligations to protect neutral shipping do not oblige Operational Commanders to disclose information in a form which is of assistance to the enemy. SASON information to ships can be used to guide and influence neutral shipping to achieve AWNIS objectives (see Chapter 1, Para 0105).

SECTION IV - DISSEMINATION OF CLASSIFIED SASON INFORMATION**0323 Introduction**

In times of crisis or conflict there is a requirement to promulgate rapidly SASON information of a classified nature. To achieve this classified navigational warnings are promulgated by signal message. However, the content of the warning where possible will meet civilian standards.

0324 Classified Navigational Warnings

1. The purpose of the classified navigational warnings is to provide for the dissemination of SASON information that it is undesirable to make public. This will reduce military casualties and give the Operational Commander greater operational freedom. The SONIC is responsible for promulgation of classified navigational warnings within the area of operations.

2. The Q-Message System, based on the Q-Zones (see AHP-01.1 Figure 3-1) which cover the entire area of operations, is the only method for promulgating classified SASON information (see also AHP-01.1 Chapter 3). There are four types of classified messages used by AWNIS;

- a. Q-Messages.
- b. OPTASK AWNIS.
- c. Q-Message Request
- d. Q-Message Summary.

0325 Dissemination of Classified Navigational Information

1. Classified navigational warnings are disseminated in a similar manner to other military classified messages. The content of navigational warning messages may have a direct bearing on safety of life at sea and are therefore 'time sensitive'. It is the responsibility of the SONIC to determine the addressees of the messages and identify the most appropriate method of dissemination. It is imperative that the Subject Indicator Codes (SIC), JPL and LTL are used on all AWNIS signal messages to ensure correct distribution of the messages.

2. It is important that the SONIC maintains a good liaison with the SUBOPAUTH and Operational Commander in order to disseminate the necessary information to all units. It remains the responsibility of the SUBOPAUTH to ensure that relevant warnings are passed on to submarines.

3. Ships under military charter or requisitioned for military purposes will require an NCAGS or Naval Liaison Officer embarked if classified information is to be provided.

4. Merchant vessels are not, as a general rule, included as addressees in classified navigational messages; they have neither the cryptographic systems nor facilities to protect the information. NCAGS authorities having routeing or sailing responsibilities will receive all relevant classified navigational warnings and are responsible for ensuring that merchant vessels are provided with sufficient details in their sailing information/sailing order. Mined areas and other dangers, discovered after merchant ships have sailed, are to be avoided by deconfliction procedures in conjunction with NCAGS authorities.

ANNEX A TO CHAPTER 3 - RAPID PORT ASSESSMENT R**3A01 Introduction**

1. RPA is a method designed to assess a port's navigational infrastructure, safety and capabilities to meet or be used for military or post conflict objectives. The process requires a comparison between navigational information available to the mariner through standard navigational references and additional information that may be revealed by physical investigation of the port. This assessment is coordinated by the appointed SONIC and can involve working with civilian authorities or other military organisations.

2. RPA is one of the phases in maritime port enabling and should not be conducted in isolation but as part of the broader military activity which includes:

- a. Assessment (Remote).
- b. RPA.
- c. Survey.
- d. Management.
- e. Stabilisation.

3. Standard navigational references are those sources of information that flag states require their ships to carry in compliance with SOLAS regulations. They include but are not limited to charts, chart updates, radio navigation warnings, Sailing Directions, List of Lights and List of Radio Signals, or equivalents.

4. The Operational Commander may direct RPA to be conducted to assess the safety of navigation of a port and its approaches for a variety of reasons including:

- a. Changes to port infrastructure caused by environmental events or military activity.
- b. Uncertainty of port infrastructure and/or management.
- c. Assessment of confidence in navigational publications such as Port Guides and Pilots.
- d. Legal requirements (see Chapter 1, Para 0104).

5. The output from an RPA is a assessment of the navigational safety of a port which may enable continued access to the port or lead to recommendation for further work such as a survey, the output of which is data.

6. An RPA does not replace a survey but maybe a precursor to one.

3A02 Process

1. In the RPA process, previously unknown navigational hazards in a port area are identified and promulgated in a time of military operations.
2. The AWNIS Officer appointed by SONIC to conduct the RPA should;
 - a. Remain in that port, or a key port within that region, to ensure that correct local AWNIS procedures are being followed for the promulgation of SASON information to ships intending to use the port.
 - b. Maintain close links with the NCAGS organisation, if activated, and provide them with information that can be disseminated via Sailing Information or during ship briefings. In a port where there are significant safety issues the RPA AWNIS Officer should accompany the NCAGS team briefing masters of ships.
 - c. Proactively take appropriate actions in collaboration with other military or civilian authorities to reduce/remove any hazards to the safety of navigation.
3. The method for revealing new information about hazards in a port will depend on whether the port authority is fully functional or if it has been degraded in any way. A full RPA comprises four phases:

a. Phase 1 - Preparation.

(1) *Research.* Research of navigational publications to determine what information is available to the mariner using the material listed in Para 3A01.2 above.

(2) *Pre-Deployment Considerations.* Before deploying an RPA Team the following must be considered:

- (a) Port Access Requirements.
- (b) Equipment Required. (see Chapter 2, Table 2-1).
- (c) Force Protection.
- (d) Communications.
- (e) Relevant current SOLAS Publications and charts.
- (f) Delegation of Authority to the RPA Team to promulgate SASON information via OPTASK AWNIS or FRAGO..

b. Phase 2 – Investigation. Investigation of the port area to reveal unknown or un-promulgated hazards.

(1) In a fully functioning port it may be sufficient to identify the stakeholders (Port Authority, Pilots, Customs, Coastguard, Police, VTS, etc) to discuss the prevailing condition of the port area relative to the published information. For this level of investigation to be successful, the RPA team must be diplomatic and sensitive to local politics and culture while constantly reviewing confidence in the quality and reliability of information received.

(2) In more adverse conditions there may be limited or no port authority capability. In these circumstances it will be necessary to investigate the condition of the navigational infrastructure. This scenario may evolve into a CIMIC-Maritime operation and stabilisation beyond the scope of an RPA.

c. Phase 3 – Record.

(1) Record new navigational features using an up to date chart as the base reference. The chart may then be annotated using hand drawn amendments, the use of geo-referenced photographs or other appropriate means.

(2) The compiler of this information should take in to account the prevailing horizontal and vertical datum, the scale of the chart, the accuracy and precision of the positional fixing methods and the age and method of the original survey.

(3) If significant discrepancies are found they are to be recorded immediately into a Hydrographic Note.

d. Phase 4 – Report.

(1) Any observations, events or relevant information (see Para 3A03) is reported to the SONIC using the H-Note format (see Annex 3D).

(2) SONIC may authorise the promulgation of this information by employing the full spectrum of reporting tools available from immediate radio navigational warnings through to chart and publication updates. SONIC must bear in mind both the appropriate recipients for this information and the method of communications.

(3) *Reporting of Urgent Information.* If authorised, the RPA team may achieve immediate reporting of urgent information by using SECURITÉ messages on VHF (see Para 3E09).



Figure 3A-1. Rapid Port Assessment Process

3A03 Observations and Events

1. An RPA team should investigate changes to, or observations on the following and include any findings in the RPA report. This list is not exhaustive and can be expanded as necessary to account for the type of operation or port being assessed.

- a. Conspicuous objects/landmarks/transits.
- b. Buoyage.
- c. Lights/Characteristics (including leading lights).
- d. Berthing arrangements including contact information and numbering of berths (note different berths for different types of ships).
- e. Port services.

- f. Contact information for Harbour Master/Pilots/Tugs/Vessel Traffic Service (VTS) etc including reporting procedures.
- g. Hazardous areas.
- h. New or programmed local events (including holidays).
- i. Construction or changes to ports or infrastructure.
- j. Removal of port infrastructure or capability.
- k. Depth of water as a result of silting or dredging.
- l. Anchorages.
- m. Tidal information.
- n. Dangers.
- o. Routing for transiting vessels.
- p. Obstructed berths.

3A04 Immediate Actions

1. In the process of port investigation, the RPA Team may be able to identify and repair non-functioning NAVAIDS or to easily mitigate the impact of some hazards by individual action or in cooperation with others to affect an immediate solution.
2. Where the RPA team identifies a potential future hazard, mitigating action should be taken to prevent the risk becoming an issue.

ANNEX B TO CHAPTER 3 - WRECKS

3B01 General

This Annex provides the necessary guidance for processing wreck associated SASON information during maritime operations.

3B02 Assessing the Approximate Position

1. When a vessel sinks it can be extremely difficult to predict the final resting place of the vessel on the sea bed with any degree of accuracy.
2. Experience has shown that in shallow water the vast majority of wrecks settle on the seabed within 2.5nm of the last visible position of the vessel. In deeper water where a wreck is unlikely to pose any threat to surface shipping, experience is the same. It is however standard practice to chart all wrecks as Position Approximate (PA) until a survey has been conducted by a competent authority. Thus the notation 'PA' shown against a wreck on a chart indicates that the wreck could be anywhere within a 2.5nm radius of the charted position.
3. The position of all wrecks reported by AWPIS on the basis of a sinking report, shall be annotated 'PA' until they have been positively located and accurately marked.

3B03 Assessing the Safe Clearance Depth of Water

1. In addition to identifying the position of a wreck, it is important to give an indication of the likely safe depth of water over the wreck at lowest astronomical tide. To estimate the safe depth the following procedure should be used:
 - a. Obtain from the most appropriate chart the charted depth in the reported position of the wreck. If not known the shallowest depth within a two and a half mile radius from the sighted sinking position should be used.
 - b. Determine the probable maximum height of the wreck from its keel to masthead based on its tonnage and type and using the data at Table 3B-1 (see Note).
 - c. Determine the probable depth by subtracting b from a above.

Note. Table 3B-1 is to be used as a guide where exact details of the vessel are not known. It is advisable to liaise directly with NCAGS to obtain exact details of the vessel involved.

2. The above procedure provides the estimated least depth of water over the wreck. When the estimated least depth is **30 metres or less** the wreck should be described as **dangerous**. Depths greater than 30 Metres will not pose a threat to surface shipping but may be a considerable hazard to submarines and devices towed by surface ships or other underwater operations, e.g. deployment of Autonomous Underwater Vehicles (AUV) (see Para 3B06).

3B04 Wreck Reporting Responsibilities

1. Upon activation of AWNIS, SONIC has responsibility for the collection, processing and dissemination of wreck information to ensure the safety of navigation for surface and sub surface vessels. SONIC is also responsible for maintaining a complete record of all new wrecks within the area of operations; on completion of the conflict all wreck records will be required by civil authorities to assist with clearing dangers to navigation.
2. Any military unit that witnesses, or sights, a sinking vessel shall report the fact to the SONIC including, when possible, the following:
 - a. Position and Time of last sighting.
 - b. Name of Vessel.
 - c. Type of vessel.
 - d. Tonnage of vessel.
 - e. Cargo of vessel - especially if of a hazardous nature.
 - f. Any other amplifying remarks.
3. Where a sinking is reported by a civilian authority/person, as much of the above information as is possible should be gleaned from the witness.

3B05 AWNIS Wreck Reporting Procedures

1. The need to raise an immediate warning for a new wreck together with the problems associated with determining whether or not the information is sensitive is best solved by treating all new wrecks as classified incidents at the outset. Detailed information may be declassified at a later stage when all the implications have been considered by the Operational Commander.
2. The first action is to promulgate the position of the wreck by Q-H Message (see AHP-01.1 Chapter 3). This warning should contain the following:
 - a. Is the wreck dangerous - 30 metres or less?
 - b. Reported position - normally PA.
 - c. Estimated least depth of water over the wreck in metres.
3. If the wreck poses a danger to surface ships or fishing vessels the SONIC must also consider the promulgation of a suitably worded unclassified navigational warning.
4. **Post Conflict.** To enable charting action to be initiated as part of post conflict stabilisation, the following information is required by the SONIC from the originator of the wreck report:

- a. Is the wreck dangerous - 30 metres or less?
 - b. Reported position - normally PA.
 - c. Least depth of water over wreck.
 - d. Name of vessel.
 - e. Type of vessel.
 - f. Tonnage of vessel.
 - g. Cargo of vessel - especially if of a hazardous nature.
 - h. Amplification/Remarks on points a to g.
5. Navigational warnings reporting wrecks should include one of the following:
- a. Located (normally used following a survey).
 - b. Reported (normally used following a sinking).
 - c. Removed.

3B06 Submarine Navigational Dangers

By virtue of their operations in a unique environment and with limited communication facilities, submarines require a different navigational warning system to that of the surface ship counterparts. Although a wreck with a least depth of water in excess of 30 metres will not pose a threat to surface shipping it is precisely the area in which the interest of the submariner lies. It is therefore important that details of all wrecks are promulgated as a Q-H Message by the SONIC. Submarine Operating Authorities (SUBOPAUTH), who are addressees of navigational warnings, are responsible for taking any necessary action to inform submarines of the hazard.

3B07 Media Interest in Wrecks

By nature of modern maritime operations together with the need to promulgate SASON information, the loss of any military or merchant vessels is likely to draw media interest. All media interest in any wrecks should be directed to the Public Information Officer (PIO).

Type of Vessel	Tonnage (grt)	Tonnage (dwt)	Height (Metres)
Bulk Carrier	16000	29000	38
Bulk Carrier	24000	44000	38
Bulk Carrier	53000	88000	48
Bulk Carrier/Container	17000	28000	42
Tanker	9000	25000	40
Tanker	20000	36000	40
Tanker	31000	50000	38
Tanker	48000	90000	41
Tanker/VLCC	58000	101000	39
Tanker/VLCC	69000	136000	55
Tanker/ULCC	92000	213000	53
Tanker/ULCC	140000	284000	59
Tanker/ULCC	179000	362000	60
Tanker/ULCC	274000	550000	73
Ore Carrier	44000	74000	49
Ore Carrier	89000	165000	51
Ore/Bulk/Oil Carrier	40000	73000	48
Ore/Bulk/Oil Carrier	56000	105000	37
Ore/Bulk/Oil Carrier	84000	164000	47
Container	19100	19100	45
Container	37500	34300	42
Container	57500	48000	50
Cargo/Container	12200	14700	38
Cargo/Container	15900	21300	42
Passenger	6700	3700	39
Passenger	18600	10400	46
Passenger	38200	-	57
Passenger	66300	14000	67
RORO	1600	3050	33
RORO	6500	7900	43
RORO	8700	4500	38
RORO	12300	6200	48
Cargo	5000	7400	30
Cargo	8000	9700	38
Cargo	12800	15000	42
Cargo/Passenger	4700	8500	32
Cargo/Passenger	10900	11000	40

Table 3B-1. Wrecks - Vessel Type Listings

Type of Vessel	Tonnage (grt)	Tonnage (dwt)	Height (Metres)
Cargo/Refrigeration	3000	3000	35
Cargo/Refrigeration	6400	8600	37
Cargo/Refrigeration	9900	12500	40
Cargo/Refrigeration	11400	12800	37
Coaster	1000	-	23
Trawler	500	-	21
Fishing Vessel (Length 34M)	-	-	18
Fishing Vessel (Length 18M)	-	-	13
Fishing Vessel (Length 16M)	-	-	11
Fishing Vessel (Length 14M)	-	-	10
Fishing Vessel (Length 11M)	-	-	10
RFA	18600	22400	43
Destroyer/Frigate	-	-	36
MCM Vessel	-	-	20
Nuclear Submarine	-	-	23
Diesel Submarine	-	-	15

Table 3B-1. Wrecks - Vessel Type Listings (Contd)

ANNEX C TO CHAPTER 3 - SUPPORT TO CIVILIAN AUTHORITIES FOR THE DELIVERY OF SASON INFORMATION

3C01 Introduction

1. In certain circumstances the Medium Frequency (MF) capability of a national coordinator to broadcast over NAVTEX may be compromised due to damage from a natural disaster or from military action. In such circumstances it may be necessary for the military authority to assist the national coordinator by promulgating navigational warnings on their behalf or in extreme circumstances take on this responsibility until normal procedures can be resumed. This may be achieved using;

- a. The existing civilian infrastructure. This is the preferred method. Engagement with other regional WWNWS authorities will enable the continuation of navigational warnings.
- b. A vessel fitted with the appropriate communications outfit. It is likely that this equipment will need to be retro-fitted.
- c. A deployable capability.

2. Regardless of the circumstance this is done for SOLAS and to assist in the stabilisation of the port or region.

3. Such a responsibility cannot be assumed in isolation and must be carried out in conjunction with the civilian authorities concerned including the national coordinator of the nation, IMO, IMSO and the IHO.

3C02 Considerations

The following must be considered although their application will vary on the circumstances.

- a. Co-locate the National Coordinator with the military authority.
- b. Notifying civilian organisations where to send navigational warning requests and Maritime Safety Information.
- c. Ensure that properly trained AWWNS staff are available to manage the warning system.
- d. That the designated vessel or capability has the necessary equipment.
- e. The vessel or capability must be stationary when MF broadcasts are made.
- f. Broadcasting over NAVTEX will only be effective in an area where it existed prior to military intervention; otherwise merchant ships will not know of its existence and will rely on SafetyNET for the receipt of Maritime Safety Information.

ANNEX D TO CHAPTER 3 - HYDROGRAPHIC NOTES (H.NOTES)

3D01 Hydrographic Note H.102

1. The Hydrographic Note H.102 (see Figure 3D-1) is the preferred method for submission of information relating to charts and publications.
2. Accurate position or knowledge of positional error is of great importance. Latitude and longitude should only be used to specifically position geographical features when they have been fixed by terrestrial fix, GNSS (e.g. GPS), or astronomical observations. A full description of the method, equipment, time, estimated error and datum (where applicable) used should be given. When position is defined by sextant angles or bearings (true or magnetic to be specified), more than two should be used in order to provide a redundancy check. Where position is derived from Electronic Position Fixing (e.g. LORAN) or distances observed by radar, the raw readings of the system in use should be quoted wherever possible. Where position is derived after the event, from other observations and/or Dead Reckoning, the methodology for deriving the position should be included.
3. **Paper Charts:** A cutting from the largest scale chart is the best medium for forwarding details, the alterations and additions being shown thereon in red. When requested, a new copy will be sent in replacement of a chart that has been used to forward information, or when extensive observations have involved defacement of the observer's chart. If it is preferred to show the amendments on a tracing of the largest scale chart (rather than on the chart itself) these should be in red as above, but adequate details from the chart must be traced in black ink to enable the amendments to be fitted correctly.
4. Completed forms should be forwarded to national Hydrographic Offices as appropriate.

3D02 Hydrographic Note H.102A

1. The Hydrographic Note H.102A (see Figure 3D-2) is the preferred method for submission of information relating to ports and harbours and should be accompanied by a Form H.102.
2. The form has been designed for use as an aide-memoire as well as providing the necessary information required for Sailing Directions.
3. Reports which cannot be confirmed or are lacking in detail should not be withheld. Notations should be made indicating any shortcomings and any firm expectations of when the information may be confirmed.

HYDROGRAPHIC NOTE	H.102
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Forwarding information for Charts, Electronic Nautical Charts (ENC) and Nautical Publications and reporting ENC display issues

Date		Ref. Number	
Name of ship or sender			
Address			
Tel/Fax/Telex/E-mail address of sender			
General Locality			
Subject			
Position (see Para 3D01)	Latitude		Longitude
	GPS	Datum	Accuracy
Charts affected		Edition	
Latest Weekly Edition of Notice to Mariners held			
Replacement copy of Chart No	IS/IS NOT required; (see Para 3D01)		
ENCs affected			
Latest Update disk held	Week		
Publications affected (Edition No.)			
Date of latest supplement, page & Light List No. etc			
Details:			
Signature of observer/reporter			
Tick box if not willing to be named as source of this information <input type="checkbox"/>			

Figure 3D-1 Hydrographic Note H.102

HYDROGRAPHIC NOTE	H.102A
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Date		Reference Number	
Name of ship or sender			
Address			
Tel/Fax/Telex/E-mail address of sender			
General Locality			

1. NAME OF PORT	
2. GENERAL REMARKS Principal activities and trade. Latest population figures and date. Number of ships or tonnage handled per year. Maximum size of vessel handled. Copy of Port Handbook <i>(if available)</i> .	
3. ANCHORAGES Designation, depths, holding ground, shelter afforded.	
4. PILOTAGE Authority for requests. Embark position. Regulations.	
5. DIRECTIONS Entry and berthing information. Tidal streams. Navigational aids.	
6. TUGS Number available.	

Figure 3D-2 Hydrographic Note H.102A

7. WHARVES Names, numbers or positions & lengths. Depths alongside.	
8. CARGO HANDLING Containers, lighters, Ro-Ro etc.	
9. REPAIRS Hull, machinery and underwater. Shipyards. Docking or slipping facilities. <i>(Give size of vessels handled or dimensions.)</i> Divers.	
10. RESCUE AND DISTRESS Salvage, Lifeboat, Coastguard, etc.	
11. SUPPLIES Fuel. <i>(with type, quantities and methods of delivery)</i> Fresh water. <i>(with method of delivery and rate of supply)</i> Provisions.	
12. SERVICES Medical. De-ratting. Garbage and slops. Ship chandlery, compass adjustment, tank cleaning, and hull painting.	
13. COMMUNICATIONS Nearest airport or airfield. Port radio and information service. <i>(with frequencies and hours of operating)</i>	

Figure 3D-2 Hydrographic Note H.102A (Continued)

14. PORT AUTHORITY Designation, address, telephone, e-mail address and website.	
15. VIEWS Photographs (where permitted) of the approaches, leading marks, the entrance to the harbour etc.	
16. ADDITIONAL DETAILS	
Signature of observer/reporter	

Figure 3D-2 Hydrographic Note H.102A (Continued)

ANNEX E TO CHAPTER 3 - EXAMPLES OF UNCLASSIFIED NAVIGATIONAL WARNINGS COVERING MILITARY OPERATIONS & EXERCISES

3E01 Introduction

1. This Annex provides examples of unclassified navigational warnings for use by the SONIC during military operations and exercises. See Chapter 3, Para 0313 for the policy on the drafting requirements of the unclassified navigational warnings.
2. Some of the following examples are GBR coastal warnings which use the WZ identifier. This should be substituted with the appropriate identifier for the area.

3E02 Embargo and Maritime Interdiction Operations

NAVAREA III 001/18
MEDITERRANEAN SEA WESTERN PART
CHART BA 4301
SARDRUS EMBARGO

1. A GENERAL EMBARGO ON DELIVERIES OF WEAPONS, MUNITIONS, MILITARY SUPPLIES AND PRODUCTS ORIGINATING FROM OIL PRODUCTION OR REFINEMENT IN KAMON HAS BEEN INTRODUCED IN ACCORDANCE WITH UNITED NATIONS SECURITY COUNCIL RESOLUTIONS (UNSCR) 4128.
2. NATO MARITIME FORCES RESERVE THE RIGHT TO CONDUCT EMBARGO ENFORCEMENT OPERATIONS WITHIN THE TERRITORIAL WATERS OF SARDRUS AND AN AREA OF THE HIGH SEAS BOUNDED BY:
 - A. 39-10N 008-00E
 - B. 30-10N 010-10E
 - C. 37-50N 010-10E
 - D. 37-50N 008-00E
3. SHIPS INTENDING TO ENTER THE EMBARGO ENFORCEMENT AREA SHOULD CONTACT THE NATO SHIPPING CENTRE PHONE: 44 1923 843 789.
4. ALL SHIPPING EITHER BOUND FOR KAMON OR TRANSMITTING THE EMBARGO ENFORCEMENT AREA MAY BE LIABLE FOR INTERROGATION, INTERCEPTION, BOARDING OR INSPECTION BY MARITIME FORCES.
5. FURTHER DETAILS CAN BE FOUND IN SECURITY NOTICE TO MARINERS 123.

Note. *In a situation where a large amount of information pertaining to the embargo needs to be issued to the mariner, the use of a Security Notice to Mariners should be considered. This will allow inclusion of graphical information and keep the navigational warning short and concise.*

3E03 Exclusion Zones

NAVAREA III 001/18
MEDITERRANEAN SEA WESTERN PART
CHART BA 4301
SARDRUS MARITIME EXCLUSION ZONE

1. **[A NATION]** HAS DECLARED A MARITIME EXCLUSION ZONE EFFECTIVE FROM 150001 UTC DEC 2018 IN AN AREA BOUNDED BY:

- A. 39-10N 008-00E
 - B. 30-10N 010-10E
 - C. 37-50N 010-10E
 - D. 37-50N 008-00E
2. NEUTRAL SHIPPING BOUND FOR A PORT WITHIN THE EXCLUSION ZONE SHOULD CONTACT **[CONTACT DETAILS]**.

Note. Additional examples of Exclusion Zones are contained in S53.

3E04 Piracy

NAVAREA IX 001/18
ARABIAN SEA
CHART BA 4071
PIRACY

- 1. MV ATTACKED VICINITY 18-21N 057-05E AT 1400 UTC 06 JAN 18.
- 2. VESSELS ARE ADVISED TO EXERCISE EXTREME CAUTION.
- 3. REPORTS TO **[CONTACT DETAILS OF MILITARY COORDINATING AUTHORITY]**

Or

NAVAREA XI 002/18
MALACCA STRAITS
CHART BA 4509
PIRACY

- 1. POSSIBLE MOTHERSHIP ACTIVITY IN VICINITY 16-00N 062-26E ON 15 FEB 18.
- 2. VESSELS ARE ADVISED TO EXERCISE EXTREME CAUTION
- 3. REPORTS TO **[CONTACT DETAILS OF MILITARY COORDINATING AUTHORITY]**
- 4. CANCEL THIS MSG 19 FEB 18.

3E05 Establishment of Communication Reporting Gates

NAVAREA III 001/18
MEDITERRANEAN SEA WESTERN PART
CHART BA 4301

ESTABLISHMENT OF A VOLUNTARY REPORTING SCHEME

- 1. NATO MILITARY FORCES ACTING UNDER UNSCR 123 HAVE ESTABLISHED A VOLUNTARY REPORTING SCHEME FOR ALL MERCHANT VESSELS TRANSITTING THE WESTERN MEDITERRANEAN.
- 2. COMPLIANCE WITH THIS SCHEME WILL FACILITATE AN UNHINDERED PASSAGE.
- 3. WESTBOUND VESSELS SHOULD REPORT WHEN CROSSING 005-00W AND AT 007-00W. EAST BOUND VESSELS SHOULD REPORT AT 007-00W AND AT 005-00W.
- 4. VESSELS DESTINED FOR PORTS WITHIN THIS AREA SHOULD REPORT UPON ARRIVAL AND ON DEPARTURE IN ADDITION TO THAT DESCRIBED AT PARA 3
- 5. THE FOLLOWING INFORMATION WILL BE NEEDED:

- A. VESSEL NAME.
- B. IMO NUMBER.
- C. INMARSAT AND EMAIL CONTACT DETAILS.
- D. CURRENT POSITION.
- E. INTENDED MOVEMENTS.
- 6. THIS INFORMATION IS TO BE SENT TO [CONTACT DETAILS OF MILITARY COORDINATING AUTHORITY].
- 7. FURTHER DETAILS CAN BE FOUND IN SECURITY NOTICE TO MARINERS 123.

3E06 Areas Dangerous to Shipping (Including Mining and Other Potential Threats)

NAVAREA III 001/18
MEDITERRANEAN SEA SARDRUS
APPROACHES TO SARDRUS CITY
CHART BA 4301

- 1. AREA HAZARDOUS TO SHIPPING DUE TO [REASON] EXISTS IN AREA BOUNDED BY:
 - A. 9.8N 012-34.25E
 - B. 56-49.8N 012-00.00E
 - C. 57-15.0N 011-33.00E
 - D. 57-15.0N 012-05.00E
- 2. INBOUND VESSELS REMAIN CLEAR AND CONTACT [CONTACT DETAILS OF MILITARY COORDINATING AUTHORITY] FOR ROUTEING ADVICE.

Notes:

- 1. Para 1 may be expanded to include the reason for the danger subject to OPSEC.
- 2. Para 2 may refer to a fixed geographical area, point, radius about a point, range and bearing from a fixed point, distance off a coastline, or as required based on the type of threat.

3E07 Military Operations and Exercises

- WZ 241/18
SCOTLAND, NORTH MINCH
- 1. GPS JAMMING EXERCISE 061400 UTC TO 061500 UTC APR 18 CENTRED ON 57-52N 005-41W RADIUS 35 NAUTICAL MILES.
 - 2. CANCEL THIS MSG 061600 UTC APR 18.

Or

NAVAREA I 003/18

NORTH ATLANTIC OCEAN AND WESTERN NORTH SEA.

CHART BA 2

1. MAJOR NAVAL EXERCISE INVOLVING SHIPS, SUBMARINES AND AIRCRAFT WILL TAKE PLACE 120800 UTC TO 221500 UTC APR 17 IN AREA BOUNDED BY ARDNAMURCHAN POINT 56-43N 006-14W, 56-00N 012-00W, 61-00N 000-00W, THEN TO ARDNAMURCHEN POINT
2. WARSHIPS MAY CONDUCT IDENTITY CHALLENGES ON VHF, MARINERS ARE REQUESTED TO CO-OPERATE.
3. CANCEL THIS MSG 221600 UTC APR 18.

Or

1. EXERCISE BRILLIANT MARINER 18 IS A MULTINATIONAL NATO EXERCISE INVOLVING NUMEROUS NAVAL VESSELS 12 TO 22 APRIL 2017 IN THE EASTERN PART OF THE NORTH SEA, INCLUDING THE TERRITORIAL WATERS OF DENMARK, GERMANY, NORWAY, AND THE KATTEGAT AND SKAGERRAK.
2. FOR FURTHER INFORMATION CONTACT THE NATO SHIPPING CENTRE ON WWW.SHIPPING.NATO.INT.
3. CANCEL THIS MESSAGE 230100 UTC APR 18.

3E08 Port Closures

WZ 233

ENGLISH CHANNEL, DOVER STRAITS

CHART BA 16

1. PORT OF DOVER CLOSED ON 181000 UTC JAN 18 TO 181200 UTC JAN 18 WHILST ESSENTIAL OPERATIONS ARE UNDERTAKEN.
2. MARINERS SHOULD CONTACT MRCC DOVER FOR ADVICE.
3. CANCEL THIS MSG 181200 UTC JAN 18.

3E09 Local Warning

Local Warnings are broadcast using VHF Digital Select Calling (DSC) which is transmitted on VHF Channel 70 or Channel 16 for voice calls. Alternatively VHF Channel 13 (inter-ship navigational safety channel) may be used instead of Channel 16 for navigational safety warnings.

Example

SECURITÉ, SECURITÉ, SECURITÉ.

ALL STATIONS, ALL STATIONS, ALL STATIONS,

THIS IS MEDWAY PORT AUTHORITY, MEDWAY PORT AUTHORITY, MEDWAY PORT AUTHORITY.

A LARGE RED CONTAINER IS REPORTED ADRIFT 54-10N 003-20E AT 1030 UTC. VESSELS KEEP A SHARP LOOKOUT AND REPORT SIGHTINGS TO MEDWAY PORT AUTHORITY CHANNEL 16.

MEDWAY PORT AUTHORITY OUT.

CHAPTER 4 - Q-ROUTES, SEARCHED CHANNELS AND ANCHORAGES

0401 Introduction

1. **Purpose of Q-Routes.** It would be impossible to search all mineable waters in which ships normally navigate. For this reason pre-planned, dormant, channels, routes and Q-Anchorage, known as 'Q-Routes', are surveyed during peacetime, and details are issued in the AHP-07 series of Allied Publications. Although they are not routes in the strictest sense, Q-Anchorage, in view of their importance to shipping, and for the fact they may be subject to mine countermeasures, are categorised as Q-Routes.

2. Full details of Q-Routes are given in AHP-01.1 Chapter 3, ATP-06 Vol. II, Chapter 1, and AHP-07 Vols. I-VI.

3. **Authorities Responsible for Planning Q-Routes.** ATP-06 Vol. II details the authorities responsible for the planning and publication of dormant Q-Routes.

0402 Activation and Mandatory Use of Routes

1. Operational Commanders with OPCON, having assessed the threat from mines and all other arms, may activate all, some, or sections of Q-Routes in their areas by Q-R message (see AHP-01.1, Chapter 3). The routes will normally be dormant routes published in AHP-07 or OOA/Exercise routes published in Operation Orders. Additional Q-Routes or diversions, promulgated by Q-R message are to be activated in a similar manner.

2. While it is generally desirable to reduce the risk from mines before activating a Q-Route, it may be necessary to activate a route before any MCM operations have taken place and the activation of a route does not imply that it is free of mines. In the absence of Active MCM this Passive MCM technique may be the only way to reduce the cumulative risk to shipping.

3. Once a Q-Route has been activated warships and other military vessels are to be routed along activated Q-Routes whenever operationally feasible. Similar advice may be given to merchant ships as decided by the Operational Commander. In the early stages of a conflict the volume of traffic might be so great in certain areas that the delays entailed in restricting the routing and movement of ships would be unacceptable.

0403 Diversions, Channels and Q-anchorage

1. The policy and considerations for establishing Diversion Routes are contained in ATP-06 Vol II Chapter 1. If a mine is discovered on a Q-Route a Mine Danger Area (MDA) (See Para 0308) is established and will be promulgated in the normal manner using a Q-Y Message (see AHP-01.1, Chapter 3).

2. The portion of the Q-Route containing the MDA is considered unsafe until either a diversion around the MDA, or a swept channel through the MDA is established. Details of a cleared channel shall be promulgated by the SONIC as a Q-S message (see AHP-01.1, Chapter 3) thus the MDA and the cleared channel through it are superimposed on the Q-Route.

3. If geographical conditions allow, MCM units will conduct reconnaissance and exploratory operations around the MDA to determine the route for a diversion. Diversions on Q-Routes shall, whenever practicable, start and finish at the most convenient Route Waypoints on the affected route. Diversions are to be treated as new Q-Routes and the details promulgated by Q-R message (see AHP-01.1, Chapter 3).

4. Diversions promulgated as new Q-Routes are activated in the normal manner.

5. A searched Q-Anchorage is an area that has been searched or swept for mines by MCM units, wholly or partly (partly if appropriate, and particularly in the case of large zones) and maintained as such. It may be considered safer than before, but cannot be guaranteed to be clear of mines. Searched Q-Anchorage are promulgated using a Q-S Message (see AHP-01.1, Chapter 3).

0404 Gaps Through Allied or National Minefields

A cleared channel should not be confused with gaps or secret channels through allied or national protective or defensive minefields which have not necessarily been searched or swept for mines. Details of gaps and secret channels through own minefields will often be more sensitive than searched channels through hostile minefields and details shall be signalled by either Q-X or Q-Y message (see AHP-01.1, Chapter 3).

0405 Detailed Promulgation of Q Routes and Anchorages

See AHP-01.1 and AHP-07 Vols. I - VI.

CHAPTER 5 - TYPES OF CLASSIFIED MESSAGES

SECTION I - THE Q-MESSAGE SYSTEM

0501 General

In maritime operations, there is a requirement for allied nations rapidly to exchange SASON information of a classified nature. The method must be worldwide in coverage and simple in application. The method used in AWNIS to disseminate classified navigational information to allied nations and commands is the Q-Message System. Details of the Q-Message System can be found in AHP-01.1.

0502 Purpose of the Q-Message System

The purpose of the Q-Message System is to disseminate classified SASON information during maritime operations.

0503 Classified AWNIS Messages

Examples of various types of classified AWNIS messages can be found in AHP-01.1, Chapter 3.

CHAPTER 6 – AWNIS ROLES AND RESPONSIBILITIES

0601 Purpose

The purpose of this chapter is to outline AWNIS roles and responsibilities to assist planners of operations in establishing the appropriate manning requirements.

0602 Underlying Principles

In order to support the operational commander's mission in the most effective way, AWNIS manning must be tailored and flexible. Depending on the operational requirements, the roles described and the numbers of personnel can be tailored to fit the requirement, or to establish a watch system. If required, assistants can be established at all levels without the need to describe these roles here.

0603 AWNIS Functions

1. The Safety of Navigation Information Coordinator (SONIC) is normally located with the operational commander. SONIC provides the operational commander with advice on all aspects of Safety and Security of Navigation (SASON) as well as managing the navigational safety picture and is responsible for the dissemination of SASON information to both military and civil units. SONIC will normally need to be supported by an AWNIS Officer (AO) and an AWNIS Information Management Operator (AWNIS IM OP).
2. The AO, under the direction of SONIC, delivers advice to all warfare disciplines lines on tactics, techniques and procedures associated with SASON, as well as being responsible for the collection, recording and dissemination of safety information.
3. The AWNIS IM OP supports the SONIC and AO by collecting, processing and recording information related to SASON.
4. All the above roles are considered to be essential to any operation in the maritime environment.

0604 AWNIS Roles and Responsibilities

1. SONIC – OF3 - 4 Navy.

Reports To: Operational Commander.

Role: The SONIC fulfils the responsibilities of SASON.

Principal Tasks:

- Be the Subject Matter Expert (SME) to the operational commander by advising on all aspects of SASON,
- Manage the AWNIS organisation,
- Draft and maintain the OPTASK AWNIS,

- Manage the complete navigational safety picture (civilian and military SASON),
- Cooperate with Legal Advisor (LEGAD) to ensure that the legal obligations following international legislation are met,
- Disseminate classified and unclassified maritime safety information to operational units,
- Liaise with civil actors to deliver SASON information to merchant shipping,
- Be the Military Navigational Warning Coordinator (MNWC) for all matters related to the release and coordination of Maritime Safety information (MSI) for broadcast via WWNWS.

2. AO – OF1 - 3 Navy.

Reports To: SONIC.

Role: The AO supports SONIC in fulfilling the responsibilities of SASON.

Principal Tasks:

- Collect, process and record SASON information with direction from SONIC,
- Disseminate information in accordance with direction from SONIC,
- Provide advice on all tactics, techniques and procedures associated with SASON to all warfare disciplines.

3. AWNIS IM OP – OR2 – 9 Navy.

Reports To: AO.

Role: The AWNIS IM OP is responsible for the collecting and processing of information.

Principal Tasks:

- Conduct searches of external databases and other sources of information on merchant shipping as required,
- Ensure that records are kept up to date as directed,
- Maintain plots as directed.

LEXICON**ACRONYMS AND ABBREVIATIONS****A**

AAP	Allied Administrative Publication
ACO	Allied Command Operations
ACT	Allied Command Transformation
AHP	Allied Hydrographic Publication
AJP	Allied Joint Publication
AO	Amphibious Operations
AOO	Area of Operations
ATP	Allied Tactical Publication
AUV	Autonomous Underwater Vehicle
AWNIS	Allied Worldwide Navigational Information System

B**C**

CIMIC	Civil Military Cooperation
CJSOR	Combined Joint Statement of Requirement
CRM	Crisis Response Manual

D

DWT	Dead Weight Tonnage
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E

ENC	Electronic Nautical Chart
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F

FMA	Former Mined Area
FOM	Freedom of Manoeuvre
FON	Freedom of Navigation

G

GEOINT	Geospatial Intelligence
GMDSS	Global Maritime Distress Safety System
GRT	Gross Registered Tonnage

H**I**

IHO	International Hydrographic Organisation
IMB	International Maritime Bureau
IMO	International Maritime Organisation
IMSO	International Mobile Satellite Organisation

ITU International Telecommunications Union

J

JOA Joint Area of Operations

K

KPI Key Performance Indicators

L

LEGAD Legal Advisor

M

MC Maritime Commander

MCM Mine Countermeasures

MCMV Mine Countermeasures Vessel

MDA Mine Danger Area

MF Medium Frequency

MIO Maritime Interdiction Operations

MLN Mine Lay Number

MNWC Military Navigational Warning Coordinator

MRCC Maritime Rescue Coordination Centre

MRN Mine Reference Number

MSO Maritime Security Operations

MSI Maritime Safety Information

MW Mine Warfare

MWDC Mine Warfare Data Centre

N

NATO North Atlantic Treaty Organisation

NAVAIDS Navigation Aids

NAVWARNS Navigational Warnings

NCAGS Naval Cooperation and Guidance for Shipping

NCRS NATO Crisis Response System

NEO Non-combatant Evacuation Operations

NGA National Geospatial Agency

NM Notice to Mariners

NMCM Naval Mine Countermeasures

NMP Not Multi-national Publication

NMW Naval Mine Warfare

NSO NATO Standardization Office

NtM Notice to Mariners

O

OOA Out of Area

OPCON Operational Control

OPCOM Operational Command

OPFOR Opposing Forces

P

PA	Position Approximate
PIO	Public Information Officer
POLAD	Political Advisor

Q**R**

RFI	Request for Information
RPA	Rapid Port Assessment

S

SAR	Search and Rescue
SASON	Safety and Security of Navigation
SF	Special Forces
SIC	Subject Indicator Code
SLOC	Sea Lines of Communication
SOLAS	Safety of Life at Sea
SONIC	Safety of Navigation Information Coordinator
STANAG	Standardisation Agreement
SUBOPAUTH	Submarine Operating Authority

T**U****V**

VHF	Very High Frequency
VTs	Vessel Traffic Services

W

WWNWS	World-Wide Navigational Warning System
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X**Y****Z**