

## MSI Self Assessment NAVAREA X

Submitted by Australia (Australian Maritime Safety Authority)

### SUMMARY

Executive Summary: Annual report by NAVAREA X for period July 2015 to June 2016.

Action to be taken: Paragraph 12.

Related documents: Nil.

## 1. Background

1.1 NAVAREA X extends from the Antarctic coast at longitude 080° E thence,

30° 00 S 080° 00 E	30° 00 S 095° 00 E	12° 00 S 095° 00 E
12° 00 S 127° 00 E	10° 00 S 127° 00 E	10° 00 S 141° 00 E
00° 00 S 141° 00 E	00° 00 S 170° 00 E	29° 00 S 170° 00 E
45° 00 S 160° 00 E		

thence to the coast of the Antarctic continent at longitude 160° 00 E.

Outline maps of NAVAREA X are available from the Australian Annual Notices to Mariners and the UK Hydrographic Office publication ALRS Volume 5.

1.2 NAVAREA X broadcasts are made via the satellite service provider, Inmarsat, through Burum LES. Messages are transmitted to Burum LES using XOT (X.25 over TCP) and messages are received from Burum via TCP/IP. MSI messages are transmitted in a non-interactive manner to Burum LES for broadcast over SafetyNET via the IOR and POR satellites.

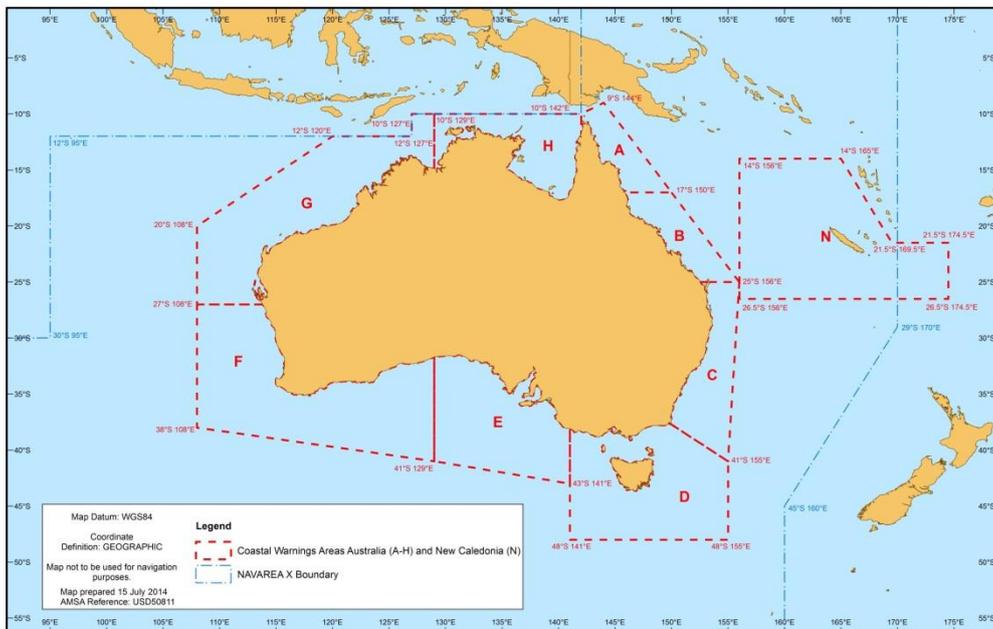
1.3 NAVAREA X has contractual arrangements with its SafetyNET provider, requiring an availability of 99.5% per calendar month. The availability of the service for July 2015 to June 2016 is provided in Table 1 and averaged 99.96%.

Month	IOR/POR Availability
July 2015	99.92
Aug 2015	100.00
Sep 2015	99.59
Oct 2015	100.00
Nov 2015	100.00
Dec 2015	100.00

Jan 2016	100.00
Feb 2016	100.00
Mar 2016	100.00
Apr 2016	100.00
May 2016	100.00
Jun 2016	99.99

1.4 All navigational warnings (NAVAREA X, coastal and local warnings) are transmitted via SafetyNET on the IOR and POR satellites at the scheduled times of 0700 and 1900 UTC. Messages are also transmitted within 30 minutes of receipt of the information.

1.5 Coastal warnings are transmitted via SafetyNET to nine defined coastal areas. These coastal areas are identified by the letters A to H clockwise around the Australian coast (see Figure 1 below) and area N around New Caledonia. New Caledonia scheduled broadcasts are at 0140 and 1340 UTC.



**Figure 1: Coastal Warnings Areas**

The above information is included in the Annual Australian Notices to Mariners, which is available from the web site <http://www.hydro.gov.au/n2m/about-notices.htm>

1.6 Weather broadcasts for METAREA X are the responsibility of the Australian Bureau of Meteorology. Details of the SafetyNET broadcasts can be obtained from the website: <http://www.bom.gov.au/marine/radio-sat/bureau-inmarsat.shtml>

1.7 The number of SafetyNET messages promulgated for METAREA X:

2013-2014	13,202
2014-2015	12,351
2015-2016	13,640

1.8 The increase in METAREA X SafetyNET messages in the 2015-2016 period is primarily due to an additional Coastal Forecast area being implemented for the Torres Strait region.

1.9 Operational Points of Contact for National Coordinators within NAVAREA X have been checked and confirmed as follows:

COUNTRY	TELEPHONE	FACSIMILE	EMAIL
New Caledonia	+687 292332	+687 292303	mrcc.nc@lagoon.nc
Papua New Guinea	+675 3213033	+675 3210873	PNGMRCC@nmsa.gov.pg
Solomon Islands	+677 21609	+677 23798	mrcc@solomon.com.sb
Vanuatu	+678 22339	+678 22475	ckalo@vanuatu.gov.vu

**Table 2: Points of Contact for NAVAREA X National Coordinators**

## 2. Comments

2.1 The details for Australia reported in the GMDSS Master Plan (GMDSS.1/Circ.19 dated 8 August 2016) have been checked and are correct.

2.2 Warnings are monitored automatically via a POR (Canberra) and IOR (Fremantle) MES in almost real time using special EGC monitoring software which precludes the need to power down and reboot the MES at regular intervals. MSI traffic received on the POR and IOR by the NAVAREA X EGC monitors is provided to USA and New Zealand authorities in almost real time. The equipment and software is listed below.

Equipment Type	Software Version	Date of Up-date
Thrane & Thrane TT 3022A (Primary) Inmarsat C transceivers with TT3020B (Standby)	EMON Version 1.1	1990

2.3 Over the past three calendar years, the following number of messages regarding MSI matters were received:

2013				2014				2015			
E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text
1031	-	17	-	977	-	18	-	973	-	38	-

2.4 Over the past three calendar years the following number of navigational warnings were issued over SafetyNET with average elapsed times:

2013		2014		2015	
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time
426	12.3 min	439	16.7 min	450	12.6 min

2.5 Specifics of Requests for In-Force bulletins;

2013		2014		2015	
Total	E-mail	Total	E-mail	Total	E-mail
Not issued	Not issued	--	--	2	2

Note that the latest NAVAREA X In-force bulletin is available from the current MSI Web-page or via automated email and is included in the list of current navigational warnings. Figures for accessing MSI via webpage are contained in Section 9 of this report. It is not possible to determine what percentage of users are accessing the web-page specifically for the In-force bulletin.

### 3. NAVTEX Coverage

Australia does not broadcast navigational warnings on NAVTEX and no other National Coordinators use NAVTEX within NAVAREA X. Australian Coastal (AUSCOAST) warnings are broadcast via SafetyNET using the relevant C codes.

### 4. Operational Issues

4.1 Significant IT infrastructure changes designed to tighten security and improve services impacted on the availability of the IOR monitor during the December period. The IOR monitor is being physically relocated to a new address which will result in a period of non-availability. This is currently scheduled for the end of August 2016.

4.2 NAVAREA X issues “In Force warnings” Bulletins.

4.3 NAVAREA X broadcasts navigational warnings until they have been promulgated in Notices to Mariners (NTM). An additional month is allowed, to ensure that mariners have had opportunity to obtain the information. The NTM then becomes the sole source of any information. NTM are available on line and through chart distributors such as Boatbooks or the NTM editions on the web:

<http://www.hydro.gov.au/n2m/notices.htm>

4.4 NAVAREA X continues to engage National Coordinators to enhance the provision of MSI services within the region. It is anticipated that regional MSI Capacity Building training for National Coordinators scheduled for end of August will assist in this process. Course facilitators have been requested to re-enforce the importance of the NAVAREA and National coordinator relationships.

## 5. Quality Management Survey

NAVAREA	ISO 9001 -2008	Promulgate “In-Force” Bulletins	Promulgate “No-Warning” Messages	Monitor Broadcast in almost real time	24/7 contact information provided	Promulgate two scheduled broadcasts	IMO Master Plan updated
X	YES	YES	YES	YES	YES	YES	YES

## 6. Contingency Planning

6.1 The NAVAREA X Coordinator’s primary work place within JRCC Australia in Canberra is supported by a disaster recovery facility (DRF), 13 kilometres north of the primary site. The DRF provides all the functionality of the primary site, including computing and communication systems in an almost “hot standby” state. In the past year, JRCC Australia/NAVAREA X Coordinator duty staff have regularly exercised transfer of systems to the DRF site. Work has continued on the IT infrastructure changes to further enhance business continuity, in the event of a failure at the primary site.

6.2 NAVAREA X Coordinator functionality can also be carried out by the manual submission of MSI information via an authenticated email account direct to Burum LES, using an internet connected laptop/desktop, with webmail functionality. This was exercised during December 2015.

## 7. Capacity Building

7.1 The AUSAID/Australian Department of Foreign Affairs and Trade (DFAT) Project to provide a GMDSS capability in Papua New Guinea (PNG) has continued to encounter difficulties with infrastructure issues, which are beyond the control of the project management team. The latest information indicates that the project will be delivered by September 2016. . It is reported that PNG will then seek approval via the SafetyNET panel for the inclusion of Sub-Area ‘P’ to be initiated, to improve capability for both navigational warnings and search and rescue purposes.

## 8. Other Activities: Meetings, Visits and Courses

### 8.1 South West Pacific Hydrographic Commission (SWPHC) Meeting and Workshop

8.1.1 The 14<sup>th</sup> SWPHC Meeting will be held in Noumea, New Caledonia from 30 November to 2 December 2016. It will be preceded by a 2-day workshop entitled ‘Technical Workshop for \*PICTs in Formulating and Implementing Strategic Development Plans for Hydrography’ A total of 13 participants from nine nations in the region have nominated to attend the workshop. (\*PICTs – Pacific Island Countries and Territories)

### 8.2 SWPHC Capacity Building (CB) Activities

The following CB activities have been carried out in the region as part of the IHO CB Work Programme for 2015:

#### 8.2.1 Technical Implementation Visits to Kiribati and Vanuatu

These visits were carried out in November 2015, to follow up on the earlier IHO Technical Assessment and Advice visits carried out in 2011. The objectives of the visits were to:

- (i) Prepare a prioritised plan for the development of a robust system for MSI promulgation.
- (ii) Identify and prioritise areas requiring hydrographic survey from the hydrography risk assessment
- (iii) Identify suitable available resource to undertake the surveys.

Reports of the visits have been submitted to the IHO.

([http://www.iho.int/mtg\\_docs/CB/Assessment\\_Reports.htm](http://www.iho.int/mtg_docs/CB/Assessment_Reports.htm))

### 8.2.2 Tides & Water Levels Technical Workshop

The workshop was held at the Australian Hydrographic Office, Wollongong, Australia on 26-30 October 2015. A total of 10 participants attended – 8 representatives from the Pacific Islands Countries and 2 from the Secretariat of Pacific Community (SPC), one of which was funded by SPC. In addition to providing participants with a basic knowledge of tides and water level variations; the workshop also trained participants on the application of tides and water levels to hydrographic surveying. The workshop encouraged greater collaboration between Pacific Island States on exchange of tidal information pertaining to the marine environment in the region.

### 8.3 MSI Regional Workshop

8.3.1 A MSI Regional Workshop, part of the IHO 2016 Capacity Building Work Programme, is being held in Wellington, New Zealand on 22-24 August 2016. It is anticipated it will be attended by participants from 13 countries in the SWP region, including all four National coordinators from within NAVAREA X. Trainers will provided by New Zealand and WNWNS Chair. The workshop will involve practical instruction and guidance to personnel involved with MSI and drafting of Navigational Warnings.

### 8.4 AHS to be PCA for Solomon Islands

8.4.1 The Australian Hydrographic Service (AHS) is in the process of taking over the role of ‘Primary Charting Authority (PCA)’ for Solomon Islands from the United Kingdom Hydrographic Office.

## 9. **NAVAREA X Webpage**

Current NAVAREA X MSI can be obtained from the AMSA website at:

<http://www.amsa.gov.au/search-and-rescue/distress-and-safety-comms/msi/>

The webpage allows users to obtain the latest MSI by automatic response on the browser or via an e-mail address. As well as all navigational warnings in force, there is a Summary of Mobile Drilling Rigs locations and a Summary of Special Purpose Vessels, including area of operation, which are no longer available on SafetyNET.

The MSI webpage is updated in almost real time when warnings are issued and cancelled. Otherwise, it updates every 30 minutes. The date and time of the last update is shown on the website and any download.

In total, there were 18,257 unique visitors (non-repeat views) for the year 1 July 2015 to 30 June 2016, with an average time of 3.3 minutes spent on the page.

**10. NAVAREA Contact Information**

No change to that currently promulgated.

**11. Recommendations**

There are no recommendations.

**12. Actions requested**

The Sub-Committee is invited to note the report.

**13. Summary**

The NAVAREA X Self Assessment report highlights MSI activities for the period July 2015 to June 2016.

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