Agenda Item 3.2

MSI Self Assessment NAVAREA X

Submitted by Australia

SUMMARY

Executive Summary: Annual report of NAVAREA X MSI activities, including a METAREA X summary report for the period July 2009 to June

2010.

Action to be taken: Paragraph 12

Related documents: NIL

1. Background

1.1 The limits of NAVAREA X, in general, extend from the Antarctic coast to the equator and from 080 E to 170 E longitudes. The precise coordinates are:

The coast of the Antarctic continent in longitude 80° 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.

The graphics display of NAVAREA X is available from various documents including the UK Hydrographic Office publication ALRS Vol 5.

- 1.2 National coordinators within NAVAREA X are:
 - Australia
 - Papua New Guinea
 - Solomon Islands
 - New Caledonia
 - Vanuatu

The contact numbers for the above National Coordinators were checked in July 2010 and an update to ALRS Vol. 5 was provided to the editor at the UK Hydrographic Office.

1.3 NAVAREA X MSI broadcasts are undertaken through Inmarsat service provider, Stratos and via Burum LES in particular. 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. Publication of NAVAREA X telex numbers have ceased given that telex is no longer supported.

- 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 UTC and 1900 UTC. Messages are also transmitted on receipt of the information. Warnings are monitored automatically via an IOR and POR MES in almost real time using special EGC monitoring software which precludes the need to power down and reboot the MES at regular intervals.
- 1.5 Coastal warnings are transmitted via SafetyNET to nine defined B1 coastal areas. These coastal areas are A to H around the Australian coast and area N around New Caledonia. New Caledonia scheduled broadcasts are at 0140 UTC and 1340 UTC.

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 is the responsibility of the Australian Bureau of Meteorology. Details of the SafetyNET broadcasts can be obtained from the web site, http://www.bom.gov.au/marine/radio-sat/bureau-inmarsat.shtml . A METAREA X summary report is provided at Attachment 1.

2. Comments

2.1 The following numbers of navigational warnings were broadcast via SafetyNET from July to June of each year:

Type/Year	2008 Median Time to issue broadcast		2009 Av. Time to issue broadcast		2010 Av. Time to issue broadcast	
NAVAREA X	28	15 Mins	14	16 Mins	18	9 Mins
AUSCOAST	422		328	8 Mins	314	8 Mins
LOCAL	89		88	13 Mins	88	14 Mins

Table 1: Numbers and Timing of Navigational Warnings

It is noted that several NAVAREA coordinators are reporting the number of NAVAREA warnings to be in excess of 300 per annum which far exceeds the numbers provided in Table 1 above. NAVAREA X follows the principles outlined in the IMO/IHO WWNWS guidance document, A.706(17), in particular sections 4.2.1.1 and 4.2.1.2.

2.2 The Australian MSI provider has contractual arrangements with its SafetyNET provider requiring an availability provision of 99.5% per calendar month. The availability of the service for the July 2009 to June 2010 is provided in Table 2 and averaged 99.96%.

Month	IOR/POR Availability
Jul 2009	100
Aug 2009	100
Sep 2009	99.75
Oct 2009	100
Nov 2009	100
Dec 2009	100
Jan 2010	100
Feb 2010	100
Mar 2010	99.97
Apr 2010	100
May 2010	100
Jun 2010	99.80

Table 2: SafetyNET Provider Availability

- 2.3 All SafetyNET broadcasts issued by the NAVAREA X coordinator and RCC Australia preface the broadcast with SECURITE, PAN PAN or MAYDAY. The end of a SafetyNET broadcast message is indicated by NNNN which leaves no doubt in the reader's mind that the whole message has been received.
- 2.4 Australia provided updates to the IMO Master Plan in December 2009 and these are reflected in the latest edition of the Master Plan, GMDSS.1/Circ.12 dated 30 April 2010. The Inmarsat short access codes (SAC) supported by Australia are shown in Annex 8, The International SafetyNET Service, of the Master Plan.

3. NAVTEX Coverage

Australia does not broadcast navigational warnings on NAVTEX and within NAVAREA X no broadcasts are undertaken using NAVTEX. Coastal warnings are broadcast via SafetyNET using the relevant C codes.

4. Operational Issues

- 4.1 A long term warning concerning "compulsory Torres Strait pilotage" continues to be broadcast by RCC Australia. This warning is not broadcast as a Coastal or NAVAREA X warning and is prefixed with the spoken word *Securité*. The warning was noted to have been broadcast some 80 times over a twelve hour period and the matter was resolved on 13 October 2009, when the warning was cancelled and re-issued.
- 4.2 A request was received from Inmarsat in March 2010 to establish if Tsunami warnings concerning the Chile earthquake had been transmitted on the POR and IOR. The Australian Bureau of Meteorology and RCC Australia had, and the latter issued an urgency broadcast to an area 41+24S 146+24E.
- 4.3 RCC Australia issued a NAVAREA X warning, 005/2010, concerning the possibility of ECDIS not displaying isolated shoal depths when operating in "base or standard display"

mode. The WWNWS guidance document, A. 706(17) at section 4.2.1.3 and the Joint IMO/IHO/WMO Manual on MSI do not include a reference to ECDIS.

- 4.4 On 28 April 2010, at 0230 UTC, MSI monitoring indicated a loss of all NAVAREA X messages on the POR and IOR. Subsequent to internal checks, the LES and Inmarsat were advised. It was subsequently established that the cause was an anomaly at the NCS resulting in all MSI requiring re-submission by the NAVAREA X coordinator and a switch to the standby NCS.
- 4.5 During the period July 2009 to June 2010, Australian marine surveyors undertook 3204 Post State Control ship inspections. There were 83 MSI related deficiencies related to "facilities for reception of maritime safety information."
- 4.6 The density of maritime traffic around Australia for 2009 is provided in Figure 2 below. Each dot represents a ship's position report.

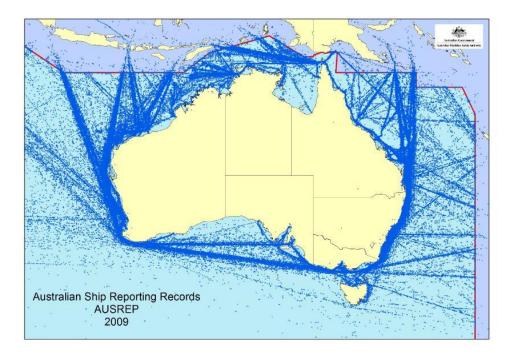


Figure 2: Shipping Traffic Around Australia - 2009

4.7 On 25 July 2009, the NAVAREA XI coordinator queried the content of HYDROPAC 1319/09 concerning a Port Hedland light. The HYDROPAC warning stated:

HYDROPAC 1319/09 Australia- Northwest Coast Port Hedland Light 19-59.6S 118-26.1E Unlit.

NAVAREA XI requested to know the correct name, position and international number of the aid and further requested to know if it was a lighthouse. The HYDROPAC, of which NAVAREA X coordinator had no knowledge, appeared to be a copy of a coastal warning, AUSCOAST 169/29 issued on 23 July 2009 which had all the details as requested by the NAVAREA XI Coordinator.

SECURITE
FM RCC AUSTRALIA 231710Z JUL 2009
AUSCOAST WARNING 169/09
PORT HEDLAND C9 PILE LIGHT K 1676.9 IN POSITION 20 06.49S 118 28.12E
UNLIT
NNNN

5. Quality Management Survey

NAVAREA	ISO 9001 - 2000	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	NO	NO	YES	YES	YES	YES

Table 3: Promulgation of Navigational Warnings per Resolution A.706 (17)

6. Contingency Planning

The NAVAREA X coordinator primary work place is supported by a disaster recovery facility (DRF) some 13 kilometres from the primary site. The DRF site supports all the functionality of the primary site including computing and communication systems in an almost "hot standby" environment. A contingency exercise is planned for 24 August 2010 when the NAVAREA X coordinator along with other RCC staff will operate out of the DRF for a week.

7. Capacity Building

The NAVAREA X coordinator will assist in the provision of MSI training to countries in the Southwest Pacific Hydrographic Commission (SWPHC) in Sydney, in August 2010.

8. Other Activities

- 8.1 Australia is hosting the Second WWNWS Sub-Committee meeting, 9 to 13 August 2010 in Sydney.
- 8.2 Mr Chris Payne of AMSA, at the request of the IHO, attended the WMO Maritime Safety Services Enhancement Workshop in Melbourne, 3-6 May 2010 and hosted by the Australian Bureau of Meteorology. Mr Payne presented the IHO paper on GMDSS matters and provided a status report on NAVAREA X activities. The Workshop took note of the NAVAREA practice to include an end-of-message indicator (NNNN) in MSI broadcasts and the need to document national Inmarsat short address codes (SAC).

9. NAVAREA Website

9.1 Current MSI can be obtained from the web site at: http://www.amsa.gov.au/search_and_rescue/Distress_and_Safety_Communications/Maritime_Safety_Information.asp

9.2 The website is updated in almost real time when warnings are issued and cancelled.

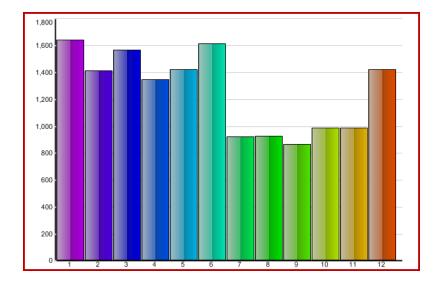




Figure 2: Number of MSI Hits on the AMSA Web Site, July 2009 to June 2010

10. NAVAREA Contact Information

No change to that currently promulgated.

11. Recommendations

It is suggested that the quality management survey table be amended to state "ISO 9001:2008", given that this is the latest ISO standard.

12. Actions requested

The Sub-Committee is invited to note the comment in sub-section 2.1 concerning the very limited number of NAVAREA X unique warnings issued. Given that some NAVAREA coordinators have reported in excess of 300 warnings being broadcast annually, Australia requests the matter be discussed to try and explain the difference.

13. Synopsis

The NAVAREA X self-assessment report highlights MSI activities for the period July 2009 to June 2010. Non-compliance in respect of promulgation of "in-force" bulletins and "no warning" messages as per the quality management survey have been explained in previous

reports. An action has been requested to discuss the disparity amongst NAVAREA coordinators in the reporting of the annual number on NAVAREA warnings issued.

ATTACHMENT 1

MSI Self Assessment METAREA X

Submitted by Australia

SUMMARY

Executive Summary: Annual report of METAREA X MSI activities for the period July 2009 to June 2010.

Action to be taken: NIL

Related documents: NIL

1. Background:

Information for METAREA X has not changed since the last edition of Volume D. http://www.wmo.int/pages/prog/www/ois/Operational_Information/VolumeD/GMDSS/Metarea10/Metarea10.html

Extract from Volume D - METAREA X boundaries

The South Indian and Southern Oceans east of 80°E and south of 30°S to 95°E, to 12°S, to 127°E; thence the Timor Sea, South Pacific and Southern Oceans south of 10°S to 141°E to the equator, to 170°E, to 29°S, thence SW'wards to 45°S in 160°E, then the 160°E meridian.

2. Comments:

Number of SafetyNET messages promulgated for METAREA X:

2006 - 21355

2007 - 20100

2008 - 20492

2009 - 19221

3. NAVTEX Coverage

Not applicable for METAREA X. The Bureau of Meteorology does not provide meteorological messages in NAVTEX format.

4. Operational Issues

No new infrastructure or practices have been introduced in the past year. However, the Bureau of Meteorology is implementing a new computer model during August, 2010 and intends on upgrading its suite of map products provided on the HF radiofax service.

On 30 August, 2010, the Bureau intends to combine the Ocean wind warning products issued by Sydney and Melbourne. New product ID's will be created and the product will be called the Melbourne Ocean wind warning.

5. Quality Management Survey

NAVAREA	ISO 9001 - 2000	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
METAREA X	NO	-	-	-	Yes	Yes	-

The Bureau of Meteorology has been nominated by WMO to conduct a pilot implementation of the ISO 9001 Quality Management framework for its Ocean and Marine Weather Services.

(Paragraphs 6 to 11 are not relevant).

12. Actions requested

That the WWNWS Sub-Committee notes the summary for METAREA X.

13. Synopsis

The METAREA X self-assessment report highlights MSI activities for the period July 2009 to June 2010.