

MSI Self Assessment NAVAREA X

Submitted by Australia

SUMMARY

Executive Summary: Situation report on NAVAREA X MSI endeavours for the period July 2008 to June 2009 including information concerning Tsunami Warnings.

Action to be taken: Paragraph 11 - Decide as appropriate in respect of the comment concerning the reduced number of NAVAREA X broadcasts when compared against other NAVAREAs.

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 080 E thence,

3000S 08000E	3000S 09500E	1200S 09500E	1200S 12700E
1000S 12700E	1000S 14100E	0000S 14100E	0000S 17000E
2900S 17000E	4500S 16000E,		

thence to the coast of the Antarctic continent at longitude 16000E.

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

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.

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.

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>

Tsunami Warnings

1.7 The Joint Australian Tsunami Warning Centre (JATC) is operated by the Bureau of Meteorology (Bureau) and Geoscience Australia (GA). Based in Melbourne and Canberra, it has been established so that Australia has an independent capability to detect, monitor, verify and warn the community of the existence of tsunami in the Australian region and the possible threats to Australian coastal locations and offshore islands.

1.8 The Australian Tsunami Warning System (ATWS) is a national effort involving the Australian Bureau of Meteorology (Bureau), Geoscience Australia (GA) and Emergency Management Australia (EMA) to provide a comprehensive tsunami warning system capable of delivering timely and effective tsunami warnings to the Australian population. The project also supports international efforts to establish an Indian Ocean tsunami warning system, and contributes to the facilitation of tsunami warnings for the South West Pacific.

1.9 The NAVAREA X coordinator will broadcast tsunami warnings to shipping in consultation with the Bureau of Meteorology.

1.10 More information on the Australian tsunami warning infrastructure can be obtained from the web site, <http://www.bom.gov.au/tsunami/index.shtml>

2. Comments:

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

Type/Year	2007		2008		2009	
	Av. Time to issue broadcast		Median Time to issue broadcast		Av. Time to issue broadcast	
NAVAREA X	12	89 Mins	28	15 Mins	14	16 Mins
AUSCOAST	346	37 Mins	422		328	8 Mins
LOCAL	72	24 Mins	89		88	13 Mins

Table 1: Numbers and Timing of Navigational Warnings

It is interesting to note 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, in particular sections 4.2.1.1 and 4.2.1.2 which are copied

below. It would be interesting to establish how many coastal warnings are in fact being re-broadcast as NAVAREA warnings.

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

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

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 2008 to June 2009 is provided in Table 2.

Month	IOR/POR Availability
Jul 2008	100
Aug 2008	100
Sep 2008	100
Oct 2008	100
Nov 2008	99.98
Dec 2008	100
Jan 2009	100
Feb 2009	99.89
Mar 2009	100
Apr 2009	100
May 2009	99.96
Jun 2009	100

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 Subsequent to a hardware failure of the NAVAREA X Inmarsat-C POR MES monitor in Canberra in January 2009, which resulted in the loss of MSI monitoring capability, both the POR and IOR MES were refurbished and new antennae installed. An additional MES has also been refurbished and installed with the special Thrane & Thrane EGC monitoring software. This unit will be used as a spare for any future malfunction of the POR and IOR MES monitors.

2.5 Discussions are in progress about the continued need to promulgate telex numbers. Whilst Inmarsat-C MES are still reliant on telex and a telex number may still be required indications are that the LES can forward the message by other means to the MSI provider regardless of the vessel transmitting the message to a telex number.

3. NAVTEX Coverage:

Australia does not broadcast navigational warnings on NAVTEX and within NAVAREA X no broadcasts are undertaken using NAVTEX.

4. Operational Issues:

4.1 The density of maritime traffic around Australia for 2008 is provided in Figure 1 and shows the routes that are traversed regularly.

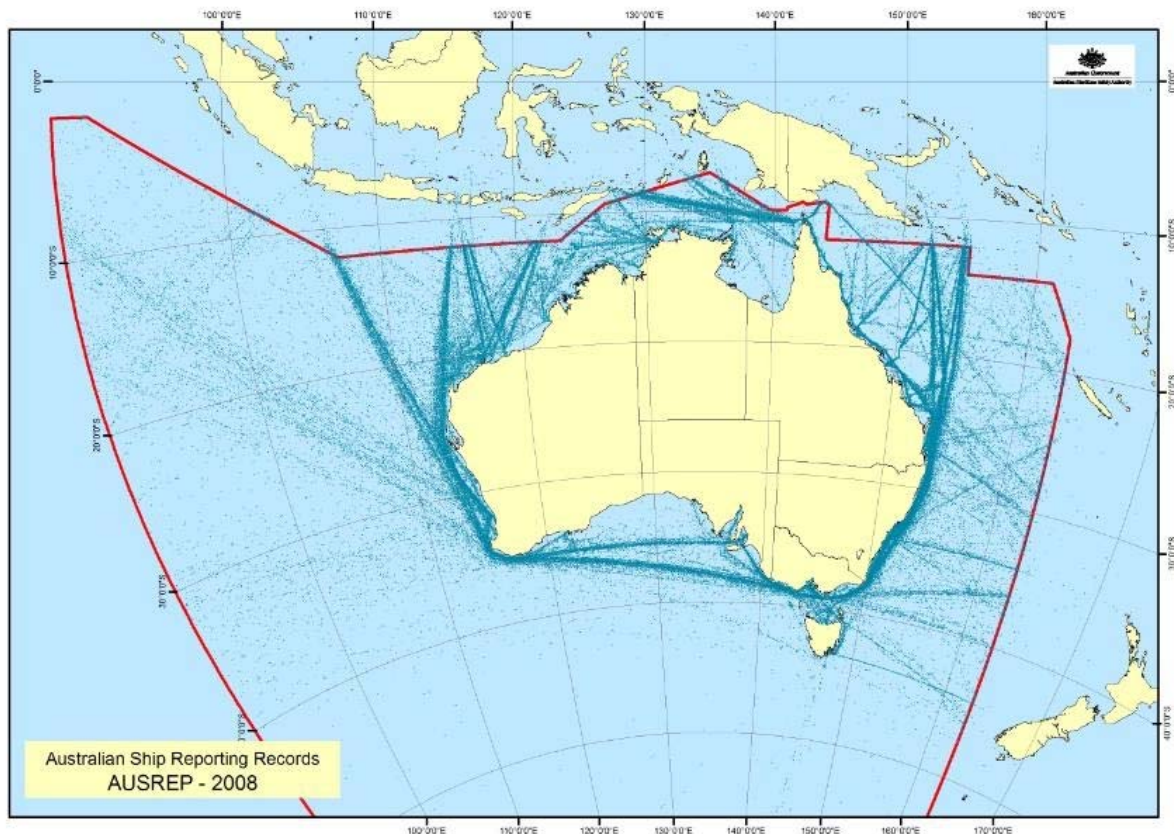


Figure 1: Shipping Traffic Around Australia - 2008

4.2 The Australian Maritime Safety Authority will be relocating to a new headquarters' building during September and October 2009. The NAVAREA X coordinator, co-located with RCC Australia, will move to the operational backup site during the period and will continue to provide full MSI provider functionality.

4.3 During the period July 2008 to June 2009, Australian marine surveyors undertook 2821 port state control inspections (PSC). There were 96 MSI related deficiencies recorded.

These deficiencies are categorised as “facilities for reception of maritime safety information”: under the PSC regime.

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

5.1 Australia does not broadcast “in force” bulletins and “no warning” messages as we believe the mariner, as distinct from an MSI provider, is well served via the SafetyNET system where warnings are repeated at the scheduled broadcast times until cancelled via a broadcast. These warnings are monitored in almost real time and the expectation is that vessels will receive all warnings that are in force given that the MSI provider has received the same on its MES monitors. Furthermore, given Australia broadcasts to eight separate coastal areas, in addition to NAVAREA X, the “in-force” bulletins and “no warning” messages will need to be broadcast some nine times. The broadcast of these types of bulletins and messages on at least a “weekly” basis has questionable value to the mariner who may well have departed the broadcast area.

There have been no complaints from mariners in respect of not transmitting the aforementioned types of broadcasts.

In addition mariners can obtain all NAVAREA X MSI broadcasts from the web site, http://www.amsa.gov.au/search_and_rescue/Distress_and_Safety_Communications/Maritime_Safety_Information.asp

6. Capacity Building:

6.1 Subsequent to the Southwest Pacific Hydrographic Commission (SWPHC) meeting in Port Moresby, Papua New Guinea, in March 2009 the Australian Hydrographic Service intends to contact the Australian Maritime Safety Authority in the near future concerning an MSI workshop in the region.

7. Other Activities:

7.1 In response to an action item from CPRNW10, Agenda item 4.2 and recorded in paper WWNWS1/1/6-2Jul09, concerning the use of DTG in messages, a report will be provided separately.

A search for all NAVAREA messages will be undertaken for the period January to July 2009. Nevertheless Australia maintains the view that it makes good business practice to include the DTG of the message origination in all messages.

8. NAVAREA X Website:

8.1 Current maritime safety information broadcasts can be obtained from the web site at, http://www.amsa.gov.au/search_and_rescue/Distress_and_Safety_Communications/Maritime_Safety_Information.asp

Whenever a warning is cancelled or a new warning issued the web site is updated in almost real time.

8.2 Statistics on the number of visits to the MSI web site is provided in Figures 2 and 3 below.

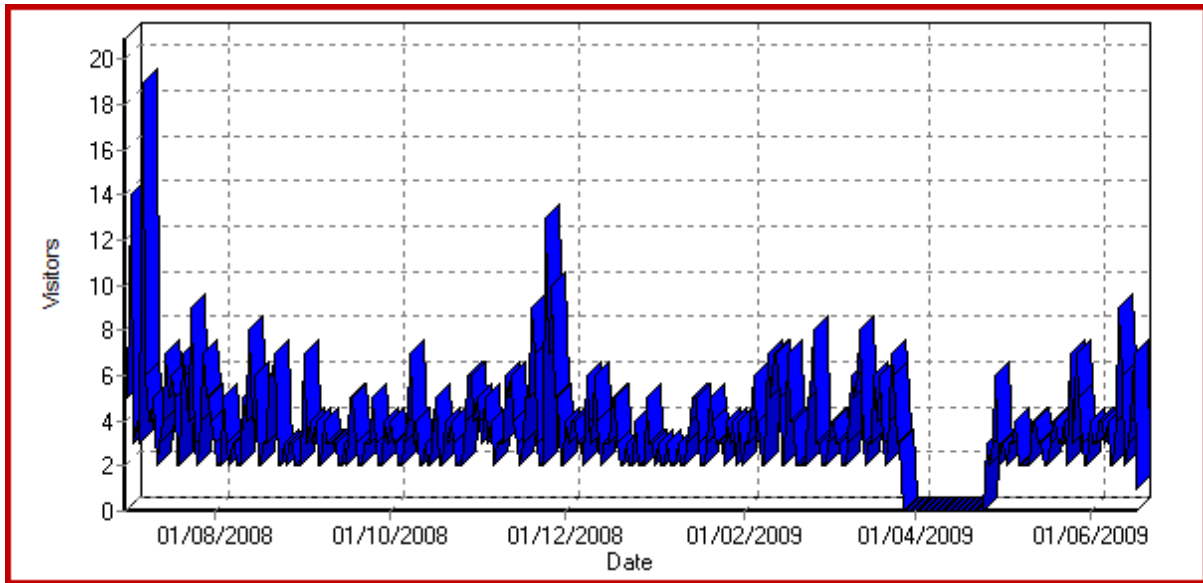


Figure 2: Daily Activity on AMSA MSI Web Link

Hits	
Hits	7,952
Average Hits per Day	22
Average Hits per Visitor	6.67
Incomplete Requests	0
Visitors	
Visitors	1,192
Average Visitors per Day	3
Bandwidth	
Bandwidth	0 B
Average Bandwidth per Day	0 B

Figure 3: Number of Hits to the AMSA MSI Web Link

9. NAVAREA Contact Information:

No change to that currently promulgated.

10. Recommendations:

NIL

11. Actions requested:

The sub-committee is invited to note the report and in particular consider the comment provided in section 2.1 concerning the numbers of NAVAREA messages broadcast and decide as appropriate.

12. Synopsis:

The NAVAREA X report on MSI self-assessment was provided as document WWNWS1/3/2/X. The report highlights MSI activities for the period July 2008 to June 2009 and includes recent information on Australia's initiatives concerning Tsunami Warnings. The report also provided information as to non-compliance in respect of "in force" bulletins and "no warning" messages as per Table 2 and the Quality Management Survey. In addition, the report provided comment on the reduced number of NAVAREA X broadcasts when compared against other NAVAREA reports.