MSI Assessment for NAVAREA XIV

Reporting period from 1st Jan 2023 to 31th December 2023

Submitted by New Zealand

SUMMARY

Executive Summary: Overview of activities undertaken in NAVAREA XIV since WWNWS 15

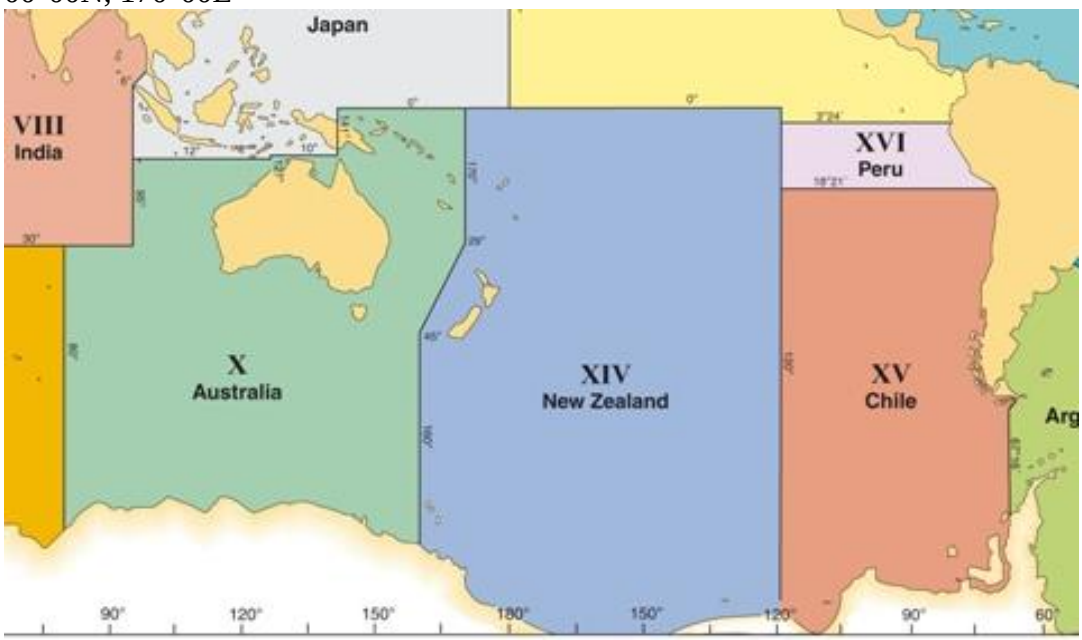
Action to be taken: See Paragraph 13

Related documents: Nil

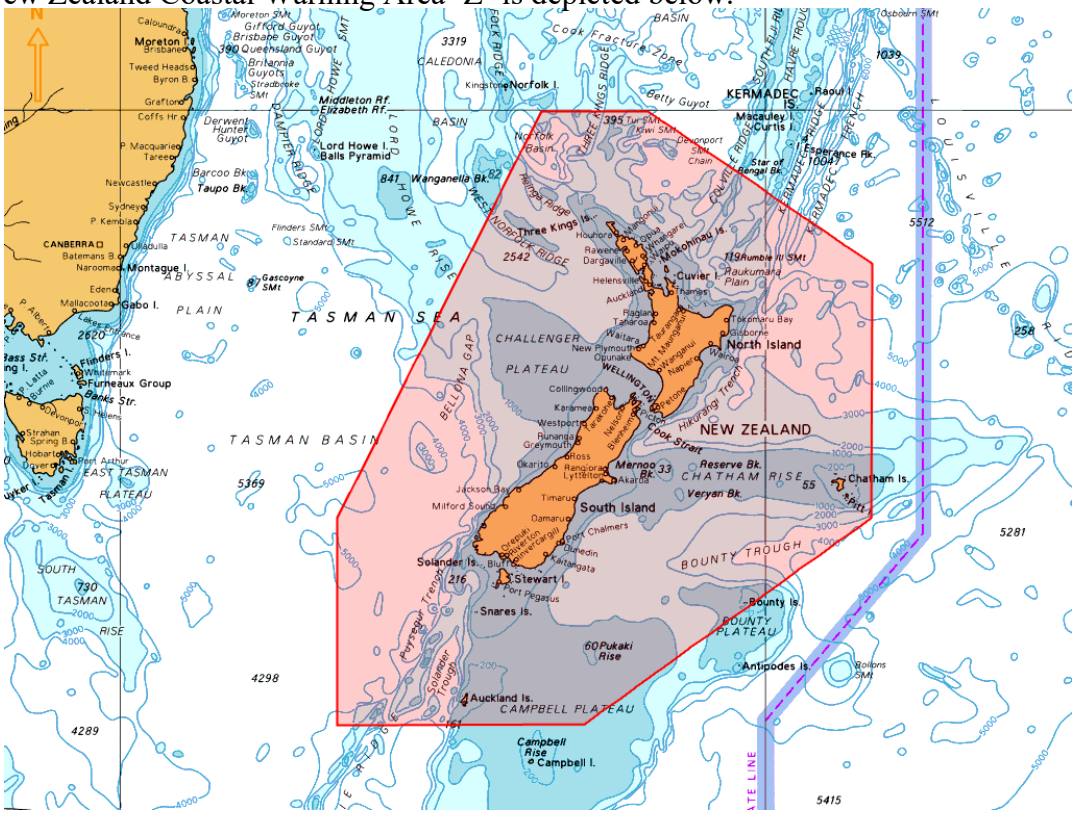
1. General information:

1.1. Geographic Boundaries of the NAVAREA including boundaries for any coastal warning Areas and NAVTEX Stations

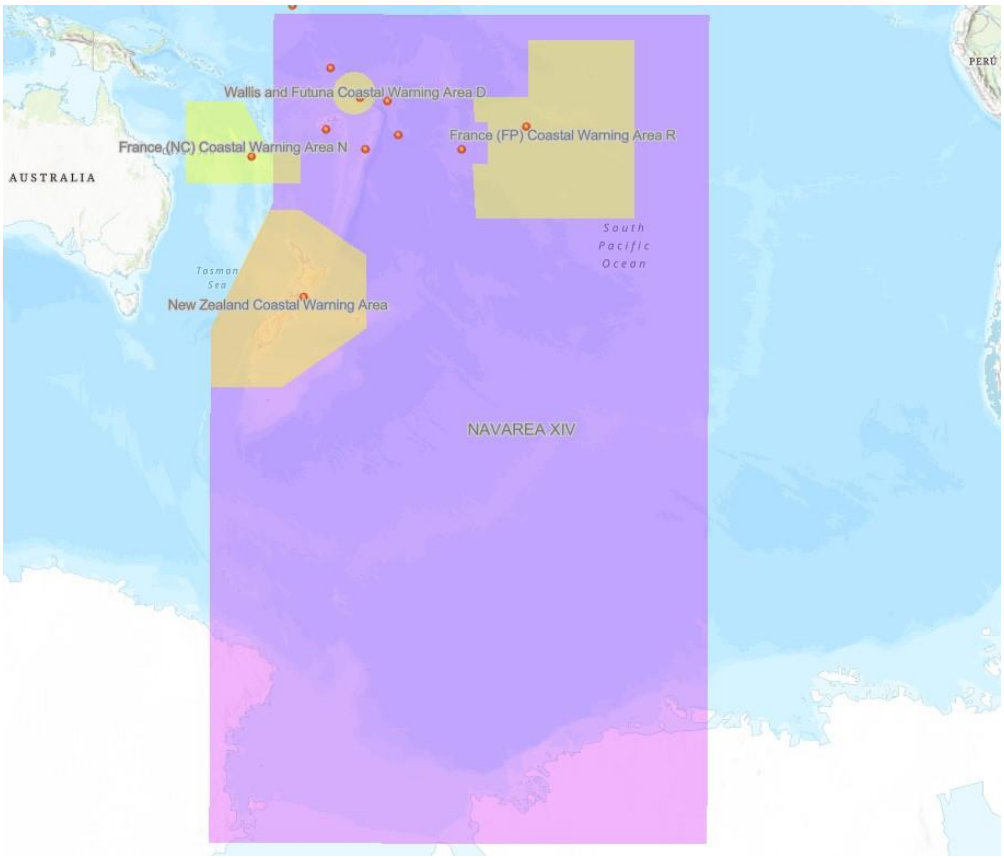
00°00N, 170°00E
00°00N, 120°00W
78°80S, 120°00W
78°80S, 160°00E
45°00S, 160°00E
29°00S, 170°00E
00°00N, 170°00E



New Zealand Coastal Warning Area ‘Z’ is depicted below.



NAVAREA XIV with all Coastal Warning Areas depicted below.



1.2. Operational Points of Contact for National Co-ordinators within the NAVAREA

COUNTRY	INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
Cook Islands	Ministry of Transport	(W) +682 28810 (M) +682 77403		marah.tairi@cookislands.gov.ck MOT.maritime@cookislands.gov.ck
France (FP)	JRCC Tahiti	+689 405 41616	+689 404 23915	contact@jrcc.pf
Fiji	Maritime Safety Authority of Fiji (MSAF)	+679 331 5266		msi@msaf.com.fj skumar@msaf.com.fj
Kiribati	Ministry of Information, Communications and Transport (MICT)	(W) +686 74026003 Ext 232 (M) +686 73022727		eritaia.tauro@mict.gov.ki
France (NC)	MRCC New Caledonia	+687 292121 +687 291870		operations@mrcc.nc
New Zealand	RCCNZ	+64 4 577 8030	+64 4 577 8038	rccnz@maritimenz.govt.nz
Niue	Ministry of Infrastructure	+683 888 6983		Lynsey.Talagi@gov.nu
Samoa	Maritime Division, Ministry of Works, Transport & Infrastructure	(W) +685 21611 (M) +685 7187589	+685 22671	sonny.brown@mwti.gov.ws makerita.atonio@mwti.gov.ws
Tonga, Kingdom of	Ministry of Infrastructure, Marine & Ports Division	(P) +676 22 555 (M) +676 7783878		limatelefoni@gmail.com ktonga20@gmail.com
Tuvalu	Department of Marine and Port Services Ministry of Transport , Energy and Tourism	+688 20055 +688 20656		tmesako@gov.tv nlipine@gov.tv
Wallis & Futuna	MRCC New Caledonia	+687 292121 +687 291870		operations@mrcc.nc

1.3. GMDSS Master Plan:

New Zealand NAV and SAR entries in GISIS are correct and reflect SafetyNET II and SafetyCast services. NAVAREA XIV is engaging with METAREA XIV to validate MET entries

2. NAVAREA EGC broadcast and monitoring equipment or software:

Broadcast Equipment/Software ***Examples***	**Broad cast schedule/Satellite** ***Examples***	**Manufacturer/Location (LES)/Implementation** ***Examples***
SafetyNET II	0900 and 2100	Inmarsat
Iridium SafetyCast	N/A	Iridium Gateway Server/February 2021
Monitoring Equipment/Software		**Manufacturer/Software**
Inmarsat Mini-C		Sailor 6150 (POR only)
Email		Thrane and Thrane / EasyMail V2.02 Build 006
SafetyNET II		Inmarsat
SafetyCast		Iridium

2.1. Details of EGC services:

Inmarsat SafetyNET II via the Pacific Ocean Region (POR) and Atlantic Ocean Region West (AOR-W) satellites, through the Inmarsat Maritime Safety Servers for broadcast to Inmarsat C and Mini C via the Network Control Station (NCS) and to Fleet Safety via the Broadband Global Area Network Satellite Access Station (BGAN SAS). Warnings broadcast on receipt and scheduled at 0900 and 2100 UTC, and

Iridium SafetyCast via the Iridium Gateway Server through all satellites covering the New Zealand areas of responsibility.

Broadcasts are monitored as follows:

<u>Inmarsat</u>

Following every MSI broadcast - All broadcast transmissions are monitored via the SafetyNET II interface, which provides system confirmation of message status and text display of the message sent.

Monitoring of broadcast reception via the POR satellite continues via the existing INM-C EGC receiver.

Once per month Quality Assurance Check - A ship in the eastern part of NAVAREA XIV, under the AOR-W footprint is identified via Satellite AIS (S-AIS), requested to confirm message reception and provide a copy of MSI received. Since inception, all responding ships have confirmed 100% of messages broadcast were received without error.

The Australian Maritime Safety Authority (AMSA) also assists New Zealand in monitoring repeat EGC transmissions via an EGC supervisory system.

Iridium

All broadcasts are monitored by:

SafetyCast web interface

- Step-by-step data input provides error checking at every step to ensure the correct use of parameters
- On successful completion the General tab of Message Details displays all parameters and text entered and is checked again.
- The Status tab shows Managed indicating the message has been broadcast.
- The Status tab will change to Delivered if a GMDSS terminal is within the addressed area and has received the message

Following broadcast, an email is received from Iridium providing all input values for the broadcast message (addressing, timing etc.) and text of the message that has been broadcast.

Once per month Quality Assurance Check – Making use of the RCC SafetyCast RCC Map function, a vessel fitted with an Iridium SES within NAVAREA XIV is contacted, requested to confirm message reception and provide a copy of MSI received. Since inception, all responding ships have confirmed 100% of messages broadcast were received without error.

2.1.1 EGC services provided by other coastal states in NAVAREA XIV:

France (New Caledonia)
Coastal Warnings for Coastal Warning Areas N and D (Wallis & Futuna) are broadcast via Inmarsat SafetyNET II (Inmarsat LES) at scheduled broadcast times 0140 and 1340 UTC, and 0030 and 1230 UTC respectively. Warnings are broadcast while in force or until promulgated by other means.

France (French Polynesia)
Coastal Warnings for Coastal Warning Area R are broadcast via Inmarsat SafetyNET II at scheduled broadcast times 0250 and 1450 UTC.

2.2. NAVTEX:
New Zealand does not broadcast coastal warnings via NAVTEX. The maritime areas around New Zealand have been designated GMDSS Sea Area A3.

2.3. Other methods of promulgation:
New Zealand
NAVAREA warnings are broadcast via HF voice at broadcast schedules published in national publications and relevant ALRS volumes.

New Zealand Coastal Navigation Warnings are broadcast via VHF and HF voice at broadcast schedules published in national publications and relevant ALRS volumes.

All warnings are published on the web.

France (New Caledonia)
France (New Caledonia) broadcasts Coastal Warnings via VHF at four scheduled broadcasts per day and publishes warnings on their new interactive website: www.mrcc.nc.

Fiji
Fiji broadcasts Coastal Warnings via HF and VHF, and publishes warnings on their website: https://www.msaf.com.fj/category/alerts-notices/coastal-warnings/

3. NAVAREA Metrics

3.1. Coastal Warnings issued by International NAVTEX or EGC coastal warning area:

				2023			
Country	NAVTEX station name	B1 Character or Coastal Warning Area	Broadcast schedule times UTC (only for EGC)	Total number of warnings broadcast	Number of warnings broadcast with a vital priority (NAVTEX) or urgent priority (EGC)	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes
New Zealand	N/A	Z	0900, 2100	292	2*	1306	0.40
France (NC)	N/A	N	0140, 1340	21	**	**	**
Wallis and Futuna	N/A	D	0030, 1230	1	**	**	**
France (FP)	N/A	R	0250, 1450	90	**	**	**

*Two New Zealand coastal navigation warnings broadcast at Urgency priority for tsunami messages.
**Data not available.

3.2. NAVAREA Warnings broadcasts:

	2021			*2022*			*2023*		
Provider	Total number of warnings issued	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes	Total number of warnings broadcast	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes	Total number of warnings broadcast	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes
SafetyNet	232	-	-	270			224	2788**	0.79**
SafetyCast	186	-	-	270	-	-	224	-	0.29**

** 2023 estimate based on 160 days of data calculations from SafetyNET Usage spreadsheet.

3.3. Urgent EGC Warnings:
2 Coastal warnings – Tsunami threat messages
9 NAVAREA warnings – Tsunami threat messages

3.4. VITAL Coastal Warnings:
Not applicable, New Zealand does not offer NAVTEX services.

3.5. In-force warnings.
3.5.1. In-force bulletins issued:

In Force warnings are broadcast once per week on Mondays at 0900 UTC. Text of In Force Warnings are available on our website www.maritimenz.govt.nz/navarea

3.5.2. Requests for In-force warnings:

2021	**2022**	**2023**
Total	Total	Total
9	4	4

3.6. Arctic navigational warnings broadcast by HF NBDP.
NAVREA XIV is not within the arctic region.

4. Operational Issues:
The New Zealand RMSS EGC API has been operational for over 12 months and feedback from the users has been very positive. The API experienced non service impacting synchronisation issues due to 90 day message retention limitation on one RMSS server. The issue affected the operator display only and was resolved between the New Zealand service developers and the affected RMSS API developers.

5. National Co-ordinator Communication:
5.1. IRCC Strategic Performance Indicator:

Nil

5.2. Procedures

The NAVAREA XIV Coordinator conducts six monthly communications checks with the nine identified National Coordinators (outside of New Zealand). Since inception, the response rate has been 100%. The last communications check identified changes required for four National Coordinators.

6. Contingency Planning:

Technical
Maritime New Zealand (Kordia/Taupo Maritime Radio) uses an API interface, with the Inmarsat SafetyNET II and Iridium SafetyCast web interfaces as back-up options, to broadcast Navigational Warnings and SAR Information via the International EGC Service.
The versatility of using the API interface, with individual RMSS web portals as back-up, in addition to Kordia having back-up servers, reduces the risk of a New Zealand-based single point of failure. In the event of a total system failure at Kordia, web access is available via RCC New Zealand, which also has back-up servers and multiple redundant systems in place.

Physical
In the event of a building failure (fire, etc.) RCC New Zealand has full remote access capability to operate from any location and continue the provision of WWNWS.

7. S-124 Navigational Warnings Development:

Maritime New Zealand and Land Information New Zealand (LINZ) are engaged in a joint Maritime Digital Transformation (MDT) initiative to implement the suite of S-100 products within New Zealand's areas of responsibility. Maritime New Zealand is intending to implement a navigational warning service that integrates new (S-124) and existing (S-53) products. As an initial element of the project, responses to Requests For Information (RFI) have been received from industry, which will inform the business case that will be submitted to Treasury, seeking funding for this project.

In parallel, following a New Zealand document to MSC 108 that sought to understand how the Organisation envisaged the real time exchange of all S-100 product, including S-124 navigational warnings, New Zealand and Australia established an informal correspondence group with a number of IMO Member States and interested organizations, to collaborate on the development of a new work output proposal for presentation to MSC 109 to develop guidance and recommendations, as appropriate, to implement a framework for data distribution and global IP-based connectivity to realize the full potential of the S-100 capable Electronic Chart Display and Information System (ECDIS).

8. Capacity Building:
The Fiji Hydrographic Office hosted a Maritime Safety Information (MSI) training course in Nadi, Fiji, under the SPWHC framework, supported by the IHO capacity building fund. The course, jointly led by NAVAREA XIV and NAVAREA X, was attended by 20 participants.

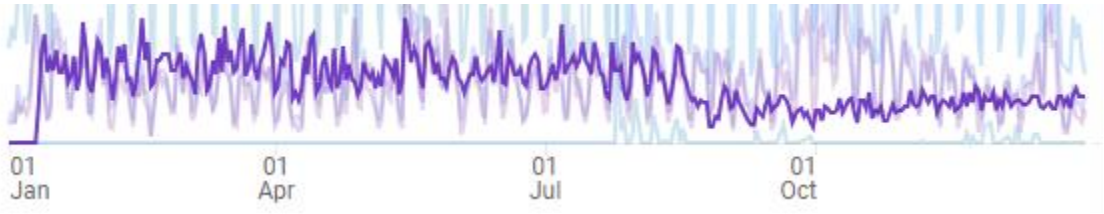
The future direction of regional MSI training courses is being discussed, particularly considering current funding challenges. There is also a need to explore alternative delivery models that might enhance the effectiveness of these capacity-building activities within NAVAREA X and XIV. Due to competing priorities and the complexities of coordinating funding, the planned MSI capacity building training event for 2025 will now be deferred to 2026.

9. Other Activities:

NAVAREA XIV has actively participated in meetings of the IHO DRWG, SWPHC, and IMO MSC, NCSR and EGC Coordinating Panel.

10. NAVAREA Website:

NAVAREA XIV warnings in force: www.maritimenz.govt.nz/navarea
During 2023 the NAVAREA XIV web page received 23323 page views.



11. NAVAREA Contact Information:
No change to contact details for NAVAREA XIV

12. Recommendations:

Nil

13. Actions requested:
The Sub-Committee is requested to note the information provided.

14. Summary:
The NAVAREA XIV self-assessment report provides MSI statistics for the 2023 calendar year and highlights the MSI-related activities since WWNWS 15.

New Zealand is actively involved with several IMO and IHO Sub-Committees and Working Groups; and capacity building in the SWP region for MSI, charting and hydrography.

The New Zealand RMSS EGC API has been operational for over 12 months and feedback from the users has been very positive.

Due to scheduling conflicts and funding issues, NAVREA XIV and X are considering rescheduling their MSI capacity building course from 2025 to 2026.

New Zealand government agencies are collaborating on a project to implement S-100 products. As part of this project, NAVAREA XIV intends to implement an integrated navigational warning service to produce S-124 and S-53 navigational warnings..

Annex(es):

A. Self Assessment Spreadsheet *[Only for NAVAREAs with multiple coastal states]*