

MSI Assessment for NAVAREA XIV

Reporting period from 1st Jan 2021 to 31th December 2021

Submitted by New Zealand

SUMMARY

Executive Summary: *Overview of activities undertaken in NAVAREA XIV since WWNWS13*

Action to be taken: *See paragraph 12*

Related documents: Nil

1. General information:

1.1 The limits of NAVAREA XIV are:

69° 37'S, 160° 00'E (Antarctic coast) to

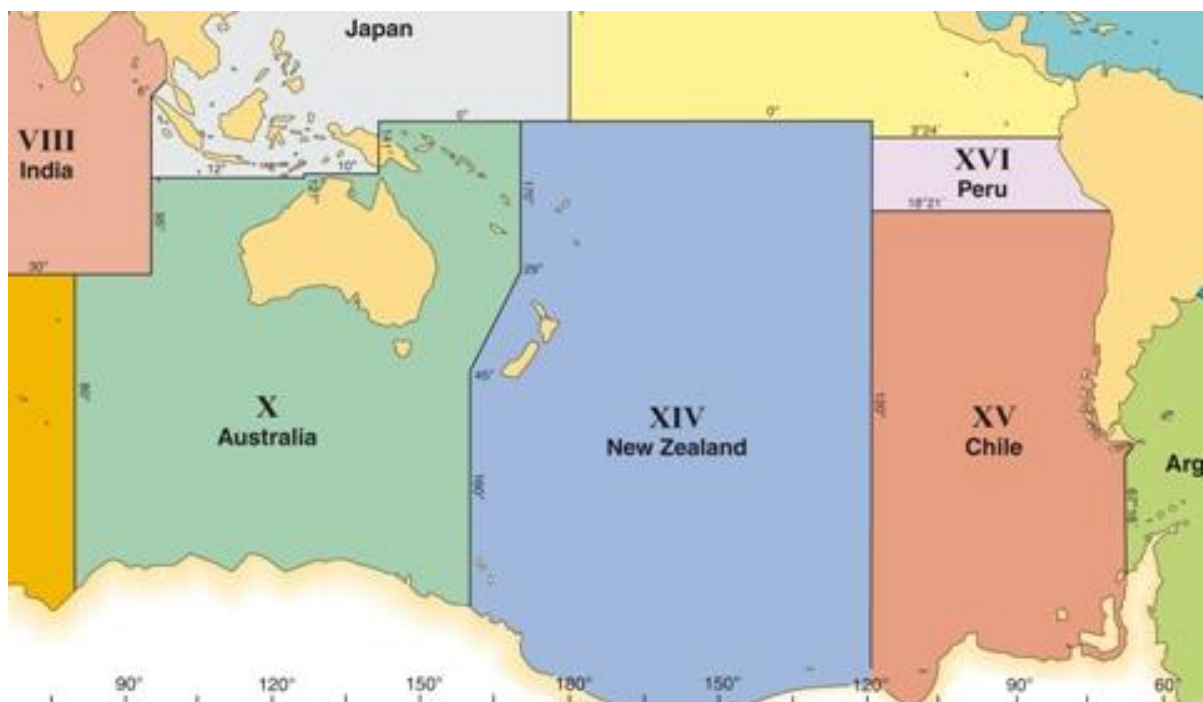
45° 00'S, 160° 00'E to

29° 00'S, 170° 00'E to

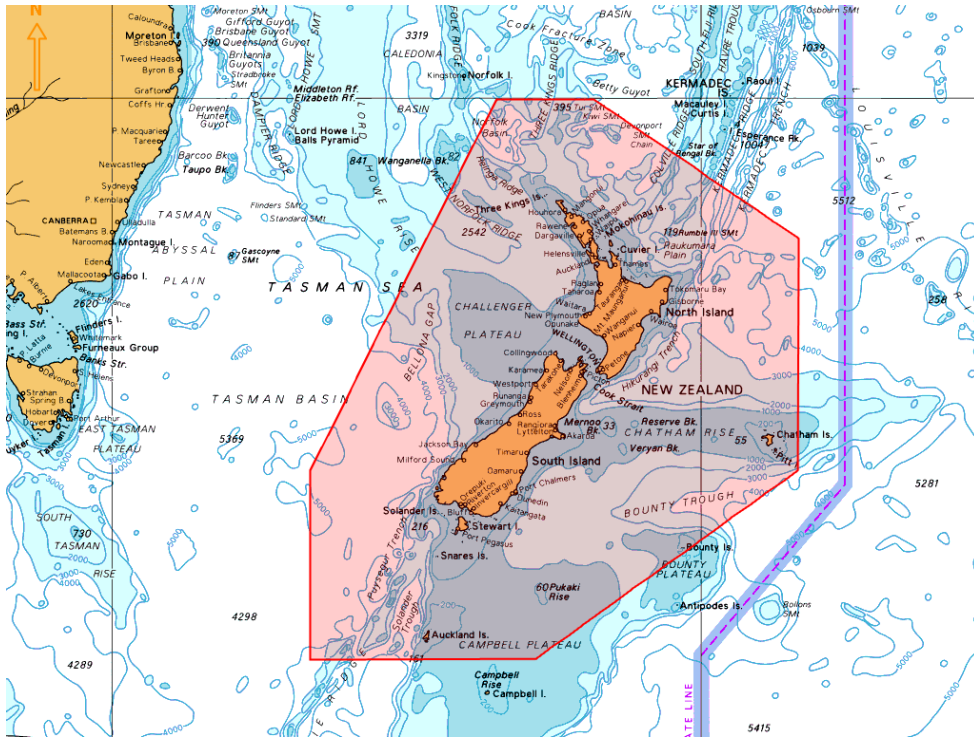
00° 00'N, 170° 00'E to

00° 00'N, 120° 00'W to

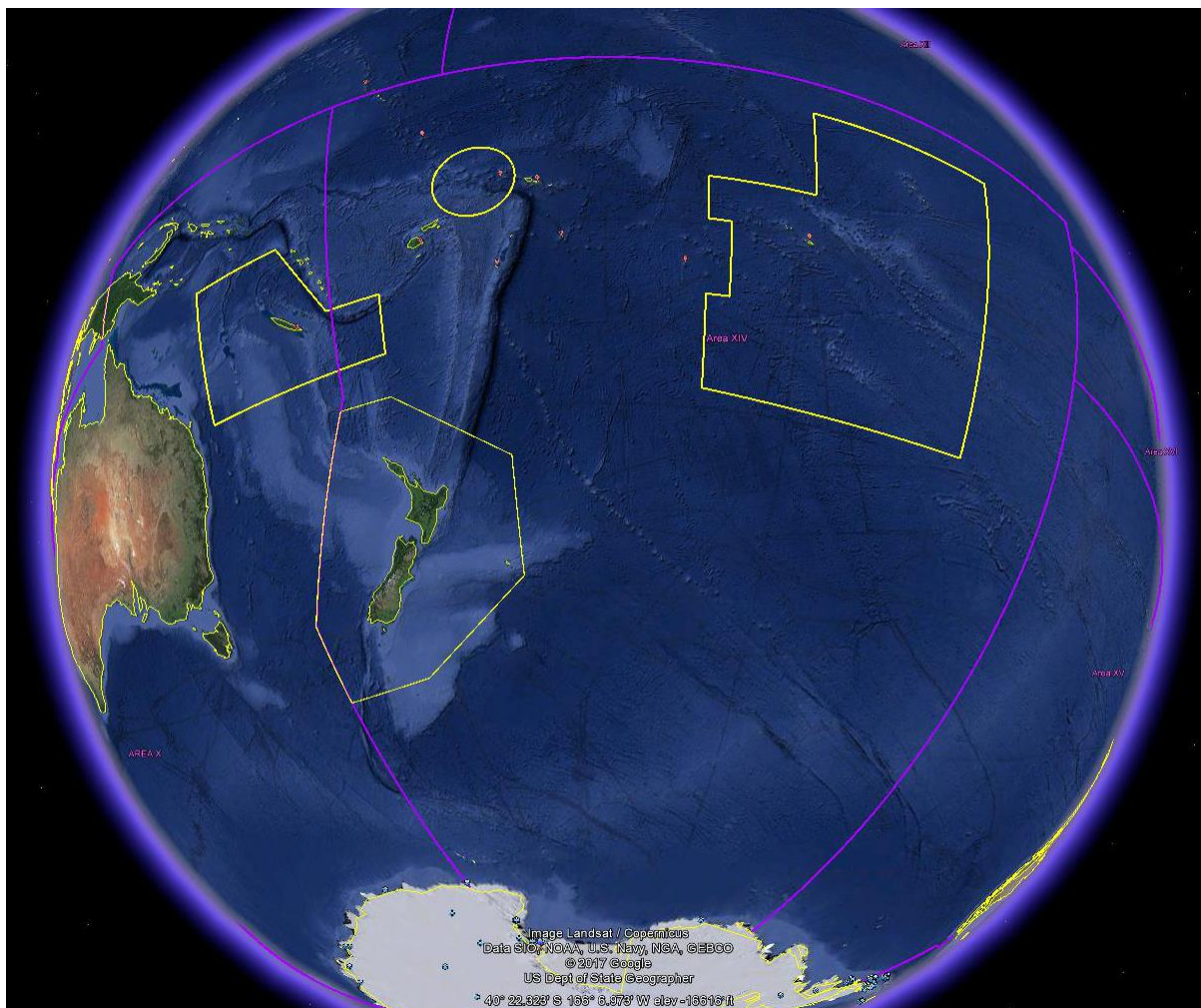
73° 50'S, 120° 00'W (Antarctic coast)



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	+682 77403		marah.tairi@cookislands.gov.ck
French Polynesia	JRCC Tahiti	+689 40541616	+689 404 23915	contact@jrcc.pf
Fiji	Maritime Safety Authority Fiji	+679 331 5266	+679 331 3127	msi@msaf.com.fj ; skumar@msaf.com.fj
Kiribati	Ministry of Information Communication Transport and Tourism Development	(W) +686 74026003 Ext 232 (M) +686 73022727		eritaia.tauro@mict.gov.ki
New Caledonia	MRCC New Caledonia	+687 292121	+687 292 303	operations@mrcc.nc
New Zealand	RCCNZ	+64 4 577 8030	+64 4 577 8038	rccnz@maritimenz.govt.nz
Niue	Ministry of Transport	+683 888 6983		lynsey.talagi@mail.gov.nu
Samoa	Ministry of Works, Transport & Infrastructure	(W) +685 21611 (M) +685 718 7589	+685 22671	hoe.viali@mwti.gov.ws makerita.atonio@mwti.gov.ws sonny.brown@mwti.gov.ws ioane.efeso@mwti.gov.ws
Tonga, Kingdom of	Ministry of Infrastructure, Marine & Ports Division	(W) +676 22 555 (M) +676 7786157	+676 42 467	sioeli.fifita@moi.gov.to marineport@moi.gov.to
Tuvalu		+688 20055		taasi.pitoi@gmail.com TPitoi@gov.tv
Wallis & Futuna	MRCC New Caledonia	+687 292121	+687 292 303	operations@mrcc.nc

1.3 GMDSS Master Plan:

Updated via GISIS 14 August 2022

2. NAVAREA EGC broadcast and monitoring equipment or software:

Broadcast Equipment/Software	Broadcast schedule/Satellite	Manufacturer/Location (LES)/Implementation
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 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:

Inmarsat

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:

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.

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.

New Caledonia

New Caledonia broadcasts Coastal Warnings via VHF at four scheduled broadcasts per day, and publishes warnings on their 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-notice/coastal-warnings/>

3. NAVAREA Metrics

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

				2021			
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 urgent priority (EGC) or vital (NAVTEX)	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes
New Zealand	N/A	Z	0900,2100	241	4	No data available	No data available
New Caledonia	N/A	N	0140,1340	14	Unknown	No data available	No data available
Wallis&Futuna	N/A	D	0030,1230	0	Unknown	No data available	No data available
French Polynesia	N/A	R	0250,1450	90	Unknown	No data available	No data available

				2022			
Country	NAVTEX station name	B1 Character or Coastal Warning Area	Broadcast schedule times (UTC)	Total number of warnings broadcast	Number of warnings broadcast with urgent priority (EGC) or vital (NAVTEX)	Total number of warnings broadcast, including repetitions	Broadcast data in megabytes
New Zealand	N/A	Z	0900, 2100	159*	0	2891**	841**
New Caledonia	N/A	N	0140,1340				
Wallis&Futuna	N/A	D	0030,1230				
French Polynesia	N/A	R	0250,1450				

* As at 16 August 2022

**2022 estimate based on 36 days of data calculations from SafetyNET Usage spreadsheet

3.2 NAVAREA Warnings broadcasts:

Provider	2020			2021			2022		
	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	225	-	-	232	-	-	174*	12022**	4023**
SafetyCast	-	-	-	186	-	-	174*	-	-

* As at 16 August 2022

**2022 estimate based on 35 days of data calculations from SafetyNET Usage spreadsheet

3.3 Urgent EGC Warnings:

2021

15 NAVAREA Warnings – Tsunami Threat messages

4 Coastal Navigation Warnings – Tsunami Threat messages

3.4 VITAL Coastal Warnings:

N/A, New Zealand does not use NAVTEX

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:

2020	2021	2022 (up to 16 Aug)
Total	Total	Total
8	9	4

4. Operational Issues:

Nil

5. National Co-ordinator Communication:

5.1 IRCC Strategic Performance Indicator:

NAVAREA XIV has not identified the Coastal States listed below in our list of Operational Points of Contact for National Co-ordinators and these are not included in the communications checks described at 5.2.

- American Samoa
 - A National MSI Coordinator has not been identified in American Samoa. The United States Coast Guard has an office in Pago Pago, American Samoa and this office has some maritime functions, however New Zealand is unsure if that role could be undertaken by USCG. No communications have been attempted at this time but this will be attempted and reported to WWNWS 15.
- Pitcairn Islands
 - A National MSI Coordinator has not been identified in Pitcairn. Only one of the islands in the Pitcairn Group is inhabited, with a population of 50. The NAVAREA XIV Coordinator has recently attempted to contact the Mayor of Pitcairn, who is also noted as the Harbour Master. There has been no reply as yet but the outcome will be reported to WWNWS 15.
- Tokelau
 - A National MSI Coordinator has not been identified in Tokelau. The Tokelau group consists of three small, very remote coral atolls that are only accessible by sea. No communications have been attempted at this time but this will be attempted and reported to WWNWS 15.

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 three National Coordinators.

6. Contingency Planning:

Technical

Maritime New Zealand (Kordia/Taupo Maritime Radio) uses the Inmarsat SafetyNET II and Iridium SafetyCast web interfaces to broadcast Navigational Warnings and SAR Information. The versatility of using web portals, 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 access to a remote Disaster Recovery site where the provision of WWNWS can continue.

Assistance to METAREA XIV

Inmarsat has made meteorological products available as a MSI Type through the SafetyNET II system for access by the NAVAREA XIV Coordinator. This allows the NAVAREA XIV Coordinator to provide contingency planning assistance to the METAREA XIV Coordinator.

Assistance to other National Coordinators in NAVAREA XIV

The NAVAREA XIV Coordinator has access, via SafetyNET II, to all Coastal Warning Areas within NAVAREA XIV and can, on request, broadcast navigational warnings on behalf of these National Coordinators.

7. Capacity Building:

IHO Capacity Building Sub-Committee funding has been approved to support a SWPHC Maritime Safety Information (MSI) Regional Workshop in 2023. Preliminary scoping discussions have been held with NAVAREA XIV, NAVAREA X, Maritime Safety Authority Fiji and the SWPHC CB Coordinator. Fiji is assessing their capacity to host this workshop, but if unable it is likely that NAVAREA X will host in Australia, with instructional support from NAVAREA XIV and the Fiji National MSI Coordinator.

8. Other Activities:

NAVAREA XIV has actively participated in meetings of the IHO DRWG, SWPHC, and IMO MSI and SAR Correspondence Group, MSC 105, NCSR 9 and EGC Coordinating Panel.

9. NAVAREA Website:

NAVAREA XIV warnings in force: www.maritimenz.govt.nz/navarea
During 2021 the NAVAREA XIV web page received 26 414 page views.
The website is updated daily.
The date and time of the last update is displayed.

10. NAVAREA Contact Information:

No change.

11. Recommendations:

Nil.

12. Actions requested:

The sub-committee is requested to note the information provided.

13. Summary:

The NAVAREA XIV self-assessment report highlights MSI activities for the period since WWNWS13. New Zealand is actively involved with a number of IMO and IHO Sub-Committees and Working Groups; and capacity building in the SWP region for MSI, charting and hydrography. New Zealand has declared to IMO all GMDSS services (MET, NAV and SAR) “Operational” via all recognized mobile satellite services.

Annex(es):

A. Self-Assessment Spreadsheet