MSI Self Assessment NAVAREA XIV

Submitted by New Zealand

SUMMARY

Executive Summary: Overview of activities undertaken in NAVAREA XIV since

WWNWS12

Action to be taken: See paragraph 12

Related documents: None

1. Background:

1.1 The limits of NAVAREA XIV are:

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

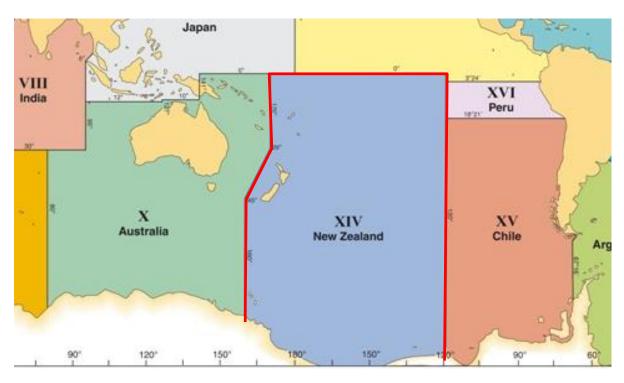
45° 00'S, 160° 00'E to

29° 00'S, 170° 00'E to

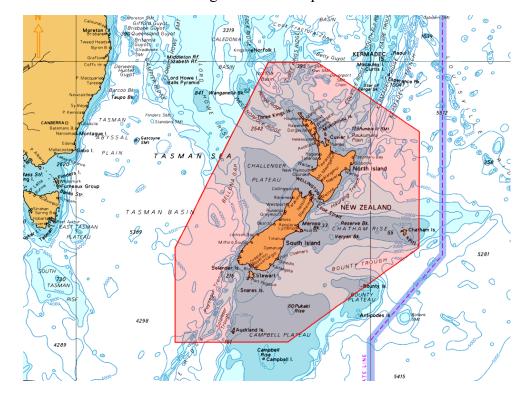
 $00^{\circ} 00$ 'N, $170^{\circ} 00$ 'E to

 $00^{\circ} 00$ 'N, $120^{\circ} 00$ 'W to

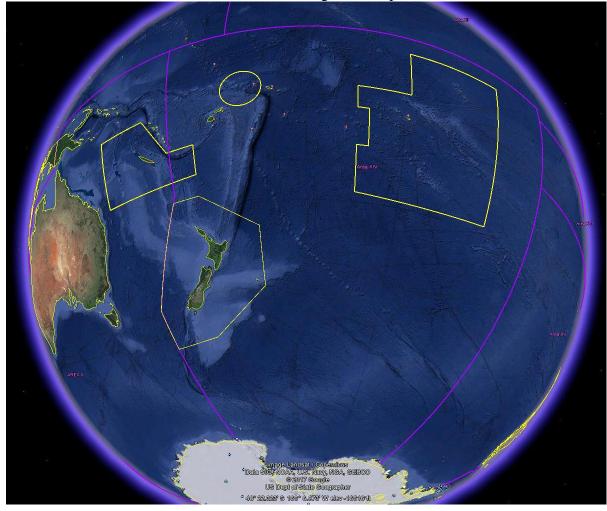
73° 50'S, 120° 00'W (Antarctic coast)



1.2 New Zealand Coastal Warning Area 'Z' is depicted below.



1.3 NAVAREA XIV with all Coastal Warning Areas depicted below.



- 1.4 NAVAREA XIV and New Zealand Coastal Warnings are broadcast through:
- 1.4.1 Taupo Maritime Radio ZLM (Radio Telephony) at the first scheduled time following receipt and then at the scheduled times as per ALRS Vol 3(2) whilst the warnings are in force or until they have been promulgated by other means, and

1.4.2 EGC

- 1.4.2.1 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
- 1.4.2.2 Iridium SafetyCast via the Iridium Gateway Server through all satellites covering the New Zealand areas of responsibility.
- 1.4.3 Broadcasts are monitored as follows:

Inmarsat

- 1.4.3.1 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.
- 1.4.3.2 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.
- 1.4.3.3 The Australian Maritime Safety Authority (AMSA) also assists New Zealand in monitoring repeat EGC transmissions via an EGC supervisory system.

Iridium

- 1.4.3.4 All broadcasts are monitored by:
- a) 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
- b) 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 there are operational Iridium GMDSS terminals within NAVAREA XIV, New Zealand will include Iridium with the monthly Inmarsat QA checks.

- 1.5 New Caledonia broadcasts Coastal Warnings for Coastal Warning Areas N and D (Wallis & Futuna) 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.
- 1.5.1 In addition to EGC, New Caledonia broadcasts warnings via VHF at four scheduled broadcasts per day, and publishes warnings on their website www.mrcc.nc.
- 1.6 French Polynesia broadcasts Coastal Warnings for Coastal Warning Area R via Inmarsat SafetyNET II at scheduled broadcast times 0250 and 1450 UTC.
- 1.7 Operational Points of Contact for National Co-ordinators within the NAVAREA

COUNTRY	INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
Cook Islands	Ministry of Transport	+682 57233		peter.graham@cookislands.gov.ck
French Polynesia	JRCC Tahiti	+689 40541616	+689 404 23915	contact@jrcc.pf
Fiji	Maritime Safety	+679 331 5266	+679 331 3127	msi@msaf.com.fj;
	Authority Fiji			skumar@msaf.com.fj
Kiribati	Ministry of	(W) +686		eritaia.tauro@mcttd.gov.ki
	Information	74026003 Ext 232		
	Communication	(M) +686 73022727		
	Transport and			
	Tourism			
	Development			
New Caledonia	MRCC New	+687 292121		operations@mrcc.nc
	Caledonia			
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,	(W) +685 22141	+685 22671	hoe.viali@mwti.gov.ws
	Transport &	(M) +685 761 1225		makerita.atonio@mwti.gov.ws
	Infrastructure			sonny.brown@mwti.gov.ws
				ioane.efeso@mwti.gov.ws
Tonga, Kingdom of	Ministry of	+676 22 555	+676 42 467	sioeli.fifita@moi.gov.to
	Infrastructure, Marine			marineport@moi.gov.to
	& Ports Division			
Tuvalu		+688 20055		taasi.pitoi@gmail.com
Wallis & Futuna	MRCC New	+687 292121	+687 292 303	operations@mrcc.nc
	Caledonia			

- 1.8 In an effort to improve communications and ensure contact details are correct, the NAVAREA XIV Coordinator conducts six monthly communications checks with the nine National Coordinators (outside of New Zealand). Since inception, the response rate has been 100%. The last communications check identified changes in contact details for two National Coordinators.
- 2. Comments:
- 2.1 The GMDSS Master Plan updated via GISIS as at July 2021.

2.2 Equipment and software used by New Zealand to monitor NAVAREA XIV EGC broadcasts are:

	Equipment Type	Software Version	Date of Up- date
Inmarsat	Sailor 6150 Mini-C	Firmware V1.07	
	Thrane & Thrane easyMail	V2.02 Build 006	28/2/2013
	SafetyNET II web interface	N	/A
Iridium	SafetyCast web interface	Version: 32.5.4-release.6 - API Version: 32.10.4- release.6	
	Email	N	r/A

2.3 Information received and reviewed.

NAVAREA XIV

2018			2019			2020					
E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text
612	-	-	1	560	-	1	-	629	-	-	-

2.4 Warnings promulgated by Inmarsat EGC.

NAVAREA XIV

2018	2019	2020
190	161	225

There was an increase in the total NAVAREA XIV Warnings during 2020 mostly as a consequence of COVID19 related notification of border restrictions throughout the South Pacific, and an increase in satellite launching operations by the New Zealand based company Rocket Lab.

NZ Coastal Warning Area 'Z'

2018	2019	2020
253	206	280

2.5 NAVAREA warnings identified as immediate priority.

	2018		2019	2020		
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time	
89	15 Mins	64	18 Mins	75	14 Mins	

- 2.6 NAVAREA XIV holds an EGC certificate of authorization from the IMO EGC Coordinating Panel.
- 2.7 Maritime New Zealand has signed service agreements with Iridium as a MSIP and RCC.
- 2.8 In February 2021 New Zealand declared to IMO all GMDSS services (MET, NAV and SAR) "Operational" via all recognized mobile satellite services.
- 2.8.1 Since declaring Iridium "Operational", New Zealand has broadcast 100 NAVAREA XIV Warnings, 109 Coastal Navigational Warnings and 49 SAR broadcasts via Iridium EGC.
- 2.9 Requests for list of in-force navigation warnings

201	18	20	019	2020		
Total	E-mail	Total	E-mail	Total	E-mail	
68	68	30	30	8	8	

- 3. NAVTEX Coverage:
- 3.1 New Zealand does not broadcast coastal warnings via NAVTEX. The maritime areas around New Zealand have been designated GMDSS Sea Area A3.
- 4. Operational Issues:
- 4.1 MSI Received from Coastal States within NAVAREA XIV

Coastal	Number of	Topics/Subjects of	MSI Courses
State/Country	MSI messages	messages	Attended
Cook Islands	2	AtoNs	2010, 2014, 2016,
COOK ISIAIIUS	2	Atons	2018
		AtoNs, Cable laying ops,	2010, 2014, 2016,
Fiji	36	Pipeline installations,	2018
1'1J1	30	Wrecks, Tropical cyclone	
		damage	
		Military exercises, Space	2010, 2014, 2016,
French Polynesia	60	debris, Drifting hazards,	2018
		AtoNs, COVID restrictions	
New Caledonia	20	Military exercises, Drifting	2010, 2014, 2016,
New Caledollia	20	hazard, COVID restrictions	2018
Niue	4	AtoNs, COVID restrictions	2016, 2018
Samoa	8	AtoNs, Wrecks, COVID	2016, 2018
Samoa	O	restrictions	
Tongo	18	AtoNs, Military exercises,	2010, 2014, 2016,
Tonga	10	COVID restrictions	2018
Tuvalu	0		2016, 2018
Wallis & Futuna	Covered by	COVID restrictions	Covered by New
wanis & rutuna	New Caledonia	COVID lesuictions	Caledonia
Kiribati	1	AtoN correspondence	2016, 2018

- 4.2 In force warnings bulletins are issued.
- 4.3 NAVAREA XIV and NZ Coastal Warnings are broadcast until published in the fortnightly New Zealand Notices to Mariners, or until the subject is no longer a hazard.
- 4.4 The service to mariners provided by the NAVAREA XIV Coordinator was not impacted by COVID-19.
- 5. Quality Management Survey

NAVAREA	ISO 9001 -2008	Promulgate "In-Force" Bulletins	Promulgate "No- Warning" Messages	Monitor Broadcast	24/7 contact information provided	Promulgate two scheduled broadcasts	IMO Master Plan updated
XIV	NO	YES	YES	YES	YES	YES	YES

- 6. Contingency Planning
- 6.1 Technical
- 6.1.1 Maritime New Zealand (Kordia/Taupo Maritime Radio) uses the Inmarsat SafetyNET II/RescueNET 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.
- 6.2 Physical
- 6.2.1 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.
- 6.3 Assistance to METAREA XIV
- 6.3.1 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.
- 6.3.2 Following discussions at the July 2021 meeting of the IMO EGC Coordinating Panel, noting that the respective EGC Certificates for NAVAREA and METAREA XIV did not explicitly provide for this contingency support, New Zealand will, for the purposes of contingency planning, submit a request to the IMO EGC Coordinating Panel to include, on each agencies EGC Certificate, authorisation to broadcast MET and NAV information.
- 6.4 Assistance to other National Coordinators in NAVAREA XIV

6.4.1 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

- 7.1 The global COVID-19 pandemic has significantly limited the opportunities for physical meetings and workshops. In June 2020, the IHO Capacity Building Sub-Committee approved 2021 funding for a SWPHC CB submission which proposed convening a Maritime Safety Information (MSI) Regional Workshop in 2021. Fiji had agreed to host but unfortunately this was not possible.
- 7.2 Noting this, and in liaison with the SWPHC Capacity Building Coordinator, as part of our November 2020 communications checks the NAVAREA XIV Coordinator offered targeted remote training (telephone/video conference etc) to any National Coordinators who identified specific training needs. No training gaps were identified but this continues to be an option.
- 8. Other Activities:
- 8.1 The NAVAREA XIV Coordinator attended the SWPHC18 meeting, held virtually, as an invited observer.
- 8.2 The NAVAREA XIV Coordinator was on the New Zealand delegation to NCSR 8 and both the 102nd and 103rd sessions of MSC, submitting papers and actively participating. In addition, the NAVAREA XIV Coordinator attended meetings and engaged in the work of DRWG 19, ICAO/IMO JWG 27, IHO S124 PT, IHO API CG and the IMO EGC Coordinating Panel.
- 8.3 Since COVID19 New Zealand has undertaken no international travel.
- 9. NAVAREA Website:

NAVAREA XIV warnings in force: www.maritimenz.govt.nz/navarea

During 2020 the NAVAREA XIV web page received 26 400 page views.

10. NAVAREA Contact Information:

NAVAREA XIV Coordinator
Maritime New Zealand
RCCNZ
41 Percy Cameron Street, Avalon Studios Level 1
PO Box 30050
LOWER HUTT 5040
New Zealand

Tel: +64 4 577 8030 (24 hours) FAX: +64 4 577 8038 (24 hours)

E-mail <u>rccnz@maritimenz.govt.nz</u> (24 hours) Website: http://www.maritimenz.govt.nz/navarea

11. Recommendations:

None

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 WWNWS12. 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:

A. Self-Assessment Spreadsheet