MSI Self Assessment NAVAREA XIV

Submitted by New Zealand

SUMMARY

 $Executive \ Summary: \ \textit{Overview of activities undertaken in NAVAREA XIV since}$

WWNWS10

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

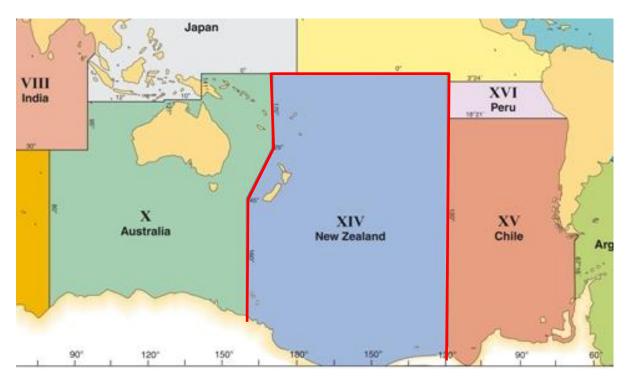
45° 00'S, 160° 00'E to

29° 00'S, 170° 00'E to

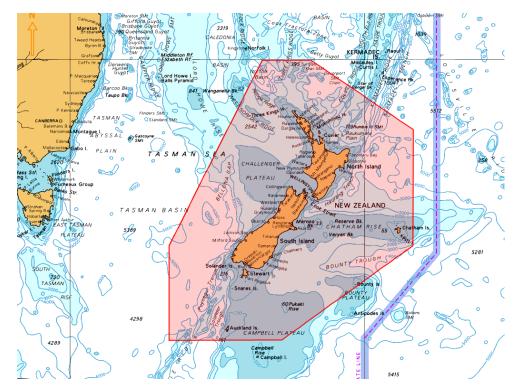
00° 00'N, 170° 00'E to

00° 00'N, 120° 00'W to

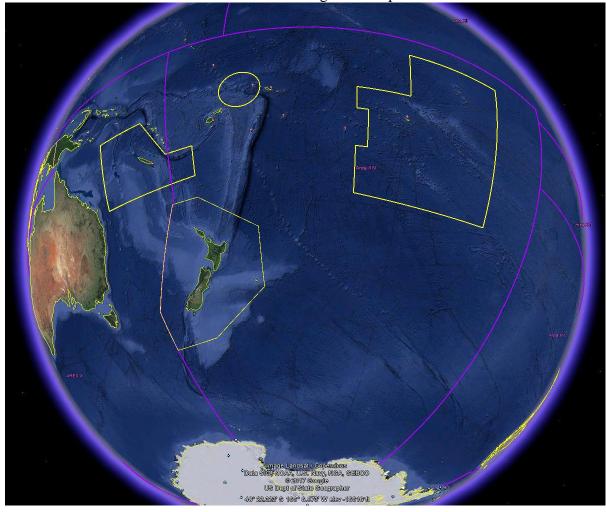
73° 50'S, 120° 00'W (Antarctic coast)



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



1.3 NAVAREA XIV with all Coastal Warning Areas depicted below.



Page 2 of 9

- 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), 2017/2018 Edition whilst the warnings are in force or until they have been promulgated by other means; and
- 1.4.2 EGC 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.
- 1.4.3 Transmission of warnings is monitored via the Inmarsat SafetyNET II web portal. The reception of warnings is monitored as follows:
- 1.4.4 POR through a Mobile Earth Station (MES) with EasyMail software. The Mini-C is sited remotely from the Operations Room where it is difficult to access, so physically powering off the unit (to allow reception of repeat broadcasts) is problematic. Following discussions with Cobham earlier this year a two-step software solution was found. Via EasyMail, the message register is cleared using the command "se –fd 1". A reboot of the antenna is then performed using the command "reboot 42", which enables reception of repeat broadcasts.

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

- 1.4.5 AOR-W In the absence of an EGC receiver within the AOR-W footprint, NAVAREA XIV warnings are monitored by identifying a ship (via S-AIS) within the AOR-W, and outside the POR footprint, and requesting confirmation of messages received. This method of monitoring incurs additional resource costs and Inmarsat user charges.
- 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 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 74530		saungaki.rasmussen@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	+687 292 303	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 if Works,	(W) +685 22141	+685 22671	anastacia.amoa@mwti.gov.ws
	Transport &	(M) +685 770 7794		maritime@mwti.gov.ws
	Infrastructure			tapaga.collins@mwti.gov.ws
Tonga, Kingdom of	Ministry of	+676 22 555	+676 42 467	sioelif@infrastructure.gov.to
	Infrastructure, Marine			
	& 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 six National Coordinators.

2. Comments:

- 2.1 The GMDSS Master Plan is up to date as at July 2019.
- 2.2 Equipment and software used by NZ to monitor NAVAREA XIV EGC broadcasts are:

Equipment Type	Software Version	Date of Up-date	
Sailor 6150 Mini-C	Firmware V1.07		
Thrane & Thrane easyMail	V2.02 Build 006	28/2/2013	

2.3 Information received and reviewed.

NAVAREA XIV

2016			2017			2018*					
E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text	E-mail	Fax	Phone	Text
184	-	-	-	206	-	-	-	612	-	-	-

- * Total correspondence for NAVAREA XIV and NZ Coastal Warnings received and assessed for relevance as navigational warnings. Records do not allow separation into separate media (telephone, email, etc.)
- 2.4 Warnings promulgated by SafetyNET.

NAVAREA XIV

2016	2017	2018	
98	145	190*	

^{*} The increase in NAVAREA XIV Warnings can be attributed to an increase in MSI received from National Coordinators.

NZ Coastal Warning Area 'Z'

2016	2017	2018
298	267	253

2.5 NAVAREA warnings identified as immediate priority and broadcast via SafetyNET:

	2016		2017	2018*		
Total	Total Average elapsed time		Total Average elapsed time		Average elapsed time	
21	21 33 Mins		26 Mins	89	15 Mins	

^{*} Note as of 1 July 2017 Maritime New Zealand, through Rescue Coordination Centre New Zealand (RCCNZ) assumed the role of NAVAREA XIV Coordinator, previously held by LINZ/NZHA

A Certificate of Authorization for NAVAREA XIV – New Zealand to Participate as a TEST and EVALUATOR for Iridium Enhanced Group Call Services was issued in December 2018.

2.6 Requests for list of in-force navigation warnings

201	16	20	017	2018		
Total	E-mail	Total	E-mail	Total	E-mail	
10	10	17	17	68*	68	

^{*} See note above.

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. Given that ships are required to carry equipment appropriate to the area that they are sailing in, carriage of an Inmarsat-C MES is mandatory for SOLAS vessels. Coastal warnings are broadcast using SafetyNET.

4. Operational Issues:

4.1 MSI Received from Coastal States within NAVAREA XIV

Coastal State/Country	Number of MSI messages	Topics/Subjects of messages
Cook Islands	2	Wreck, Drifting Hazard
		Military Exercises, AtoN, Cable
Fiji	36	laying ops, Pipeline
		installations, Wrecks
French Polynesia	19	AtoN, Military exercises, Space
Treffell Foryflesia	19	debris
New Caledonia	18	Drifting hazards, Military
New Caledollia	16	exercises, Grounding
Niue	2	AtoN, Drifting Hazard
Samoa	0	
Tonga	4	Shoaling, AtoN, Wrecks
Tuvalu	1	AtoN
Wallis & Futuna	Covered by New	
wants & Futuna	Caledonia	
Kiribati	3	AtoN

- 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.
- 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 system to broadcast Navigational Warnings and RescueNET to broadcast 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.
- 6.4 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 LINZ and the Ministry of Foreign Affairs & Trade (NZ Aid programme) are working together on the Pacific Regional Navigation Initiative (PRNI) to improve maritime safety throughout the region. Initially a 5 year programme, in January 2018 it was extended by 2 years to 2021. LINZ has a focus on the Cook Islands, Niue, Samoa, Tokelau and Tonga. This project includes; hydrography risk assessments for Niue, Samoa and Tokelau (completed); capacity building to assist PICs reach Phase 1 of the IHO Capacity Building Strategy, in particular, the establishment of a National MSI Coordinator position; and hydrographic surveys in Cook Islands, Niue, Samoa and Tonga to improve chart adequacy and accuracy.
- 7.2 Through the NZ Aid programmes PRNI and PMSP an opportunity was taken to hold a 1-day MSI Workshop during a visit to Niue. The workshop was attended by key stakeholders and provided an outline of the importance of MSI. The training was delivered by NAVAREA XIV Coordinator, LINZ and MSAF National MSI Coordinator.
- 7.3 LINZ and Maritime NZ (NAVAREA XIV Coordinator) hosted the IHO CB funded (CBSC 2018 P-10), SWPHC Capacity Building IHO Maritime Safety Information (MSI) Training Course in Wellington, in August 2018. 13 participants from 12 PICs attended the training, including the Marshall Islands for the first time. Mr Sunil Kumar (MSAF) joined the trainers from NAVAREA XIV and NAVAREA X Coordinators as a direct response to the IHOs goal to build training capacity by appointing MSI trainers from the region. This initiative is being actively encouraged and supported by the IHO as per Actions 2, 3, 4 and 5 of IRCC9 and Action 15 of CBSC15. The IHO and the SWPHC wishes to thank MSAF for releasing Mr Kumar who actively shared his knowledge and experience with the participants.

- 7.4 The SWPHC made three submissions to the IHO CBSC17 meeting of relevance to the WWNWS-SC:
 - 1. to hold a 3-day MSI Training Course in Fiji, August 2020. Mr Sunil Kumar (MSAF) was to have joined the NAVAREA X and XIV Coordinator in delivering the training, and
 - 2. to hold a 2-day workshop before SWPHC17 which will include 'MSI for Managers'. The workshop will assist managers to understand the need and requirements for the provision of MSI; and will include an analysis of MSI for each Coastal State.
 - 3. to provide training to new trainers who have a suitable background and the necessary operational experience.

Due to funding constraints only items 2 and 3 have been approved.

- 7.5 Capacity Building Maritime Safety, Prevention and SAR Coordination/Response.
- 7.5.1 In conjunction with the Maritime New Zealand (MNZ) and Ministry of Foreign Affairs and Trade (MFAT) the Rescue Coordination Centre New Zealand (RCCNZ) continues to deliver Search and Rescue and Maritime Safety and Prevention Training across the Pacific through the Pacific Maritime Safety Programme (PMSP). During 2018, RCCNZ delivered training and coordinated on water SAR exercises in Tonga, Kiribati, Samoa and Tuvalu.

The training being delivered by New Zealand is part of a larger Pacific Community (SPC) capacity building program with a long term view to improve SAR governance, SAR coordination and SAR Response proficiency in the region.

- 8. Other Activities:
- 8.1 In February 2019, LINZ attended the 16th SWPHC meeting held in Niue. Delegates from 14 PIC's attended the meeting, as well as the 2-day IHO technical workshop on *Disaster Response Planning and Data Discovery*, held prior to the commission meeting.
- 8.2 Maritime New Zealand attended NCSR6 at IMO Headquarters in London, UK in January 2019 and the Maritime Safety Committee (MSC) 101st session in June 2019.
- 8.3 Following NCSR6 a Maritime New Zealand delegate remained to attend, for the first time, DRWG17.
- 9. NAVAREA Website:

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

During 2018 the NAVAREA XIV web page received 25,555 page views.

The RCCNZ 24/7 Operations Room now has change-control access to the NAVAREA XIV website, allowing updates in near-real time. The date and time of the last update is displayed on the web site.

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: <u>http://www.maritimenz.govt.nz/navarea</u>

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 WWNWS10. 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 through the Regional Hydrographic Commission and the NZ Aid Programme, PRNI, and maritime safety and SAR through the Pacific Community (SPC) and PMSP.

Annex:

A. Self-Assessment Spreadsheet