

INTERNATIONAL HYDROGRAPHIC ORGANIZATION

NATIONAL REPORT FROM NEW ZEALAND TO THE SWPHC15

Reference: IHO Resolution 2/1997 as amended

Executive summary

1. Hydrographic Office / Service:

- a) Name of the institution: Land Information New Zealand (LINZ)
- b) Description: [General description, including updates for the IHO Yearbook e.g. reorganization]

The National Hydrographer (Adam Greenland) and Group Manager Hydrography (Rebecca McAtamney) lead the New Zealand Hydrographic Authority (NZHA) in partnership. Both positions report to the Deputy Chief Executive Location Information, Jan Pierce.

The NZHA comprises 18 personnel, including three hydrographic surveyors, five nautical cartographers, and a Technical Change Leader who leads a programme of work to move the NZHA to a digital first, data centric environment.

c) Submitted by: Stuart Caie, Senior Hydrographic Surveyor, scaie@linz.govt.nz

Detailed information to update IHO Publication P-5 (Yearbook) is submitted in Annex A.

2. Surveys:

[Describe any significant developments since the last RHC meeting in surveys related to the items below]

a) Coverage of new surveys:

In 2016 LINZ completed the <u>New Zealand Hydrographic Risk Assessment</u> which enabled LINZ to develop and publish a long-term hydrographic survey programme, <u>HYPLAN</u> in April 2017. This formed the basis for a new approach to procuring hydrographic surveying services over a longer contract period, and provided opportunities to partner with other stakeholders with an interest in collecting marine datasets.

After an extensive procurement process, LINZ established a Surpplier Panel in September 2017, comprising of two suppliers.

Survey Number	Area	Completed
HYD-1617-HS51	New Zealand, South Island, North Coast – Queen	June 2017
	Charlotte Sound and Tory Channel ¹	
HYD-1617-HS52	New Zealand, North Island, East Coast – Kawau Bay	June 2017

HYD-1617-HS53	New Zealand, North Island, East Coast – Approaches	June 2017
	to Auckland	
HYD-1617-HS54	New Zealand, North Island, East Coast – Tamaki Strait	June 2017
HYD-1617-HS55	New Zealand, South Island, East Coast – Kaikoura	Jan 2017
	Peninsula, 2016 earthquake response, LiDAR survey ²	
HYD-1617-HS55	Samoa, Upolo and Savai'i Islands ³	May 2017
HYD-1617-HS56	New Zealand, South Island, East Coast – Kaikoura	May 2017
	Peninsula, 2016 earthquake response, SBES survey	
HYD-1718-HS57	New Zealand, South Island, East Coast – Kaikoura	Underway
	Peninsula to Cape Campbell ⁴	
HYD-1718-HS60	Tonga – Tongatapu, Ha'apai Group, Vava'u Group	Underway
	and Nuias ⁵	
HYD-1718-HS61	Cook Islands ⁵	Underway
HYD-1718-HS62	Niue, incl. Beveridge Reef and Antiope Reef ⁵	Underway
HYD-1718-HS63	Tokelau ⁵	Underway

¹ Partnership with Marlborough District Council to collect bathymetry and backscatter data for scientific purposes.

During April and May 2017 the New Zealand Royal Navy (RNZN) deployed to the SWP for Operation CALYPSO. An opportunity was taken to conduct surveys in the Cook Islands at Penrhyn and Rarotonga.

b) New technologies and /or equipment

The NZHA is currently reviewing their specifications for hydrographic surveys (HYSPEC) in line with the move to a digital first, data centric environment. Technologies such as Satellite Derived Bathymetry (SDB) will be investigated, as will the collection of other marine datasets, such as water temperature.

c) New ships

LINZ does not own or operate survey vessels. The annual national survey programme is delivered through the Supplier Panel. Of interest is the proposed use of an Unmanned Surface Vessel (USV) in 2018 to collect bathymetry for a survey in Tonga (see HYD1718-HS60 above)

Detailed information about surveys to update IHO Publications P-5 (*Yearbook*) and C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is submitted in Annexes A and B, respectively.

² The Royal Australian Navy (RAN) Laser Airborne Depth Sounder (LADS) Flight deployed to NZ to conduct survey operations at the request of the New Zealand Government

³ Re-processing of Samoa 2011 LiDAR dataset captured for climate change purposes.

⁴ Partnership with Ministry of Primary Industries to collect bathymetry and backscatter data for scientific purposes.

⁵ Hydrographic surveys comprising SDB, ALB and MBES, funded by NZ Aid programme, Pacific Regional Navigation Initiative (PRNI).

3. New charts & updates:

[Describe any significant developments since the last RHC meeting in charting related to the items below]

a) New Zealand is the Primary Charting Authority (PCA) for five Pacific Island Countries, as below:

Nation	Paper Charts	ENCs	Fathoms/non- WGS84
Cook Islands	4	24	0
Niue	1	3	0
Samoa	7	7	2
Tokelau	1	4	0
Tonga	13	12	5

Through PRNI, LINZ has established a chart improvement programme using new survey data. The proposed production schedule is below:

Nation	Paper Charts		ENCs	
Nation	New Edition	New Chart	New Edition	New Chart
Cook	3 (Jun 18)	-	2 (Jun 17)	-
Islands			19 (Jun 18)	
Niue	-	1 (Mar 19)	2 (May 18)	1 (Mar 19)
Samoa	4 (Feb 18)	3 (Dec 19)*	3 (Sep 17)	7 (Dec 19)*
			3 (Feb 18)	
Tokelau	1 (Mar 19)	-	3 (Mar 19)	-
Tonga	4 (Aug 19)	6 (Aug 19)*	5 (May 19)*	7 (May 19)

^{*} New Charts will replace current fathoms/non-WGS84 charts, enabling production of large scale ENC for the first time.

b) ENCs

To date LINZ has published a total of 300 official New Zealand ENCs.

Detailed information of the full New Zealand ENC folio can be found on the LINZ website at http://www.linz.govt.nz/sea/charts/electronic-navigational-charts-encs and in the ENC Coverage Catalogue available on the IHO website www.iho.int.

c) ENC Distribution method

LINZ is a member of IC-ENC and distributes all New Zealand ENCs through IC-ENC Australia. View the IC-ENC World Catalogue here: http://websig.hidrografico.pt/website/icenc/viewer.htm

LINZ is developing a local New Zealand ENC distribution service, planned to go-live in 2019.

d) RNCs

NZMariner is the product name of New Zealand's Official RNC folio, and is available for download in unencrypted BSB format, at no charge from the LINZ website at http://www.linz.govt.nz/sea/charts/nzmariner-official-raster-navigational-charts-rncs.

LINZ publishes NZMariner annually plus a monthly cumulative update file of corrections published in Notices to Mariners.

e) INT charts

LINZ intends to cancel INT 630 (NZ 14630) and publish NZ 93 as an INT chart. A proposal to this effect will be submitted to the SWPHC International Chart Coordination WG (ICCWG) in due course.

f) National paper charts

New Zealand has a total of 196 paper charts. Detailed information of the full New Zealand chart portfolio can be found on the LINZ website at http://www.linz.govt.nz/sea/charts/paper-charts.

New Zealand Paper Charts published since the SWPHC14 Meeting			
New Zealand	South West Pacific	Antarctica	
Total: 15	Total: 0	Total: 0	
NC: 0			
NE: 15			

New Zealand Paper Charts scheduled for publication in 17/18 FY			
New Zealand	South West Pacific	Antarctica	
Total: 29	Total: 7	Total: 0	
NC: 1	NC: 0		
NE: 28	NE: 7		

Detailed information about charting to update IHO Publications P-5 (*Yearbook*) and C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is submitted in Annexes A and B, respectively.

4. New publications & updates:

[Describe any significant developments since the last RHC meeting in nautical publications related to the items below]

- a) LINZ has a work programme underway to improve publications and access to information. These include:
 - i. Use of CARIS Publication Module to automate and improve efficiency of the production of the fortnightly Notices to Mariners (NtM) edition;
 - ii. Implementation of a workflow management system (WfMS) to achieve efficiencies in the production of the NtM publications; and the
 - iii. Development of a web-based online chart catalogue

b) Updated publications

Publication	Title	Published:	Edition
NZ 202	New Zealand Chart Catalogue	Electronic copy only	Ed 15
NZ 204	New Zealand Nautical Almanac	June 2017	2017/18

c) Means of delivery, e.g. paper, digital The New Zealand Nautical Almanac (NZ 204) is available in hardcopy from chart retailers.

The New Zealand publications are available in whole or part to download from the LINZ website at: http://www.linz.govt.nz/sea.

The New Zealand Chart Catalogue is available for download as a PDF document

Detailed information to update IHO Publication P-5 (Yearbook) is submitted in Annex A.

5. MSI

[Describe the status of Maritime Safety Information (MSI) related to the items below]

a) Existing infrastructure for transmission

LINZ publishes Annual Notices to Mariners (available in the Nautical Almanac and online) and fortnightly Notices to Mariners (NtM) distributed via an email subscription service (http://www.linz.govt.nz/sea/maritime-safety/notices-mariners) and available online at http://www.linz.govt.nz/sea/maritime-safety/notices-mariners.

Copies of New Zealand NtMs can be obtained from LINZ, including PDF format on the LINZ website; Maritime New Zealand; and chart retailers at the major ports of New Zealand.

A dedicated email address has been established for receipt of information pertinent to NtMs, ntm@linz.govt.nz.

Maritime New Zealand is the NAVAREA XIV Coordinator and the New Zealand National MSI Coordinator recnz@maritimenz.govt.nz. Navigational warnings are available from the MNZ website

 $\frac{https://www.maritimenz.govt.nz/commercial/safety/maritime-radio/navigational-warnings.asp}{}$

Operational points of contact for National Coordinators are listed below:

COUNTRY	INSTITUTION	TELEPHONE	FACSIMILE	E-MAIL
Cook Islands	Ministry of Transport	+682 28810	+682 28816	stephen.simpson@cookislands.gov.ck
French	JRCC Tahiti	+689 541 616	+689 404 23 915	contact@jrcc.pf
Polynesia Fiji	Maritime	+679 3315 266	+679 331 3127	msi@msaf.com.fj
	Safety Authority Fiji			
Kiribati		+686 730 34963		marine.officer@mcttd.gov.ki
New Caledonia	MRCC New Caledonia	+687 292 332	+687 292 303	mrcc.nc@lagoon.nc
New Zealand	RCCNZ	+64 4577 8030	+64 4577 8038	rccnz@maritimenz.govt.nz
Samoa	Ministry of Works, Transport &	+685 21 611	+685 28 688	faleniu.alesana@mwti.gov.ws
	Infrastructure			

Kingdom of	Ministry of	+676 22 555	+676 42 467	ktonga@insfrastructure.gov.to
Tonga	Infrastructure,			
	Marine & Ports			
	Division			
Tuvalu		+688 20055		lpaueli@gmail.com
Wallis &	MRCC New	+687 292 332	+687 292 303	operations@mrcc.nc
Futuna	Caledonia			

b) New infrastructure in accordance with GMDSS Master Plan No new infrastructure. The GMDSS Master Plan is up to date as at May 2017.

Detailed information about MSI to update IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is submitted in Annex B. The national self-assessment of MSI is submitted in Annex C.

6. C-55

The table with the latest information to update IHO Publication C-55 (Status of Hydrographic Surveying and Charting Worldwide) is provided in Annex B.

- 7. Capacity Building Offer of and/or demand for Capacity Building [Describe the need for or ability to offer Capacity Building in relation to the items below]
 - a) Training received, needed, offered Through the MFAT NZ Aid Programme, Pacific Regional Navigation Initiative (PRNI) LINZ delivered a 3-day MSI course in Samoa in October 2017. Training was attended by 17 participants from Ministry of Natural Environment, Ministry of Agriculture and Fisheries, Ministry of Police, Samoa Port Authority and National University of Samoas' School of Maritime Training. Niue has requested a similar course.

LINZ has challenges in recruiting experienced staff. With few qualified and/or experienced candidates available and only one IBSC recognized Category B Hydrographic Surveying course in the region, it has been necessary to recruit from further afield. As such, New Zealand sees a real need for Hydrography and Cartography programmes to be developed and delivered in-region.

LINZ and MNZ will host the SWPHC Capacity Building IHO Maritime Safety Information (MSI) Training Course in Wellington, in late 2018, dates to be confirmed.

Immediately prior to the SWPHC14 meeting the SWPHC CB 2-day worshop for PICs in Formulating & Implementing Strategic Development Plans for Hydrography, was held 28th and 29th November 2016, in Noumea, New Caledonia. 14 participants from 11 PICs attended the workshop. The workshop built on the success of previous technical workshops held at SWPHC11, SWPHC13 and SWPHC14. Availability of funds for developing States in the region to attend the RHC meeting is a known barrier to participation in IHO matters. Holding an IHO funded workshop in conjunction with SWPHC meetings ensures Associate and non-member States are able to benefit from CB workshops and attend the RHC meeting.

- b) Status of national, bilateral, multilateral or regional development projects with a hydrographic component. (In progress, planned, under evaluation or study).
 - a. In 2011 LINZ and MFAT NZ Aid agreed an MOU, under the South West Pacific Regional Hydrographic Programme, to accelerate ENC production in the New Zealand area of charting coverage and undertake a risk assessment of PICs to prioritise chart improvements.

The methodology for the Hydrography Risk Assessment as well as risk assessment reports for Vanuatu, Cook Islands, Tonga and Niue are available from the IHO website. Hydrographic Risk Assessments for Samoa and a traffic analysis of vessel traffic in and around Tokelau, were completed in September and October 2017, respectively and are available on the IHO website.

- b. In 2015 a partnership between LINZ, MFAT and SPC continued the above work through the Pacific Regional Navigation Initiative (PRNI), which focuses on navigation-related aspects of maritime safety. It builds on the successes and lessons learned particularly in relation to charting and risk assessment work by:
 - i. discovering relevant hydrographic data within the region
 - ii. undertaking hydrographic risk assessments in additional selected PICs
 - iii. supporting hydrographic capability building initiatives throughout the Pacific
 - iv. implementing hydrographic surveys and updating maritime charts
 - v. supporting the development of a partnership consortium model

The primary focus for LINZ is on assisting those five PICs where New Zealand is the Primary Charting Authority (PCA), namely Cook Islands, Niue, Samoa, Tonga and Tokelau.

To-date:

- Hydrography Risk Assessments for Niue and Samoa have been completed and presented to the respective governments;
- an analysis of vessel traffic in and around Tokelau has been completed and passed to SPC for the basis of their Safety-of-Navigation programme;
- bilateral arrangements with the Cook Islands and Niue have been signed;
- draft bilateral arrangements with Samoa and Tonga are in progress;
- chart improvement programmes for the Cook Islands and Tonga have been agreed, and updaed ENCs and paper charts published for the Cook Islands;
- chart improvement programmes for Niue and Samoa have been agreed, and contract in place to update charts;
- hydrographic survey contract awarded November 2017 to undertake Satellite Derived Bathymetry (SDB) throughout Tonga, Beveridge and Antiope Reefs in Niue; Airborne Laser Bathymetry (ALB) in Tonga and Niue; and Multibeam echo sounder (MBES) survey in Tonga.

- c. In January 2018 MFAT secured a further \$2.2million in funding for PRNI which will see PRNI continue to June 2021.
- c) Description of requests to be considered by the IHO/CBSC Hydrography and Cartography programmes to be developed and delivered in-region.

8. Oceanographic activities

[Describe any significant developments in oceanographic activity since the last RHC meeting related to the items below]

a) General

Within New Zealand there are two Crown Research Institutes involved in oceanographic studies: NIWA, the National Institute of Water and Atmospheric http://www.niwa.co.nz/; and GNS Science http://www.gns.cri.nz/.

Both operate data portals allowing users to discover and access a wide range of geoscience data across New Zealand.

- GNS: http://data.gns.cri.nz/dataportal/
- NIWA: https://marinedata.niwa.co.nz/project-map-sam/

LINZ is establishing a coordinator role to gain access to all ocean datasets collected by UNCLOS Marine Research Vessels within New Zealands EEZ.

New Zealand now has the Ocean Data Network (https://nzodn.nz/) as a node of the Australian Ocean Data Network (AODN https://portal.aodn.org.au/)

b) GEBCO/IBC's activities

Seabed 2030 Mission: Produce the definitive map of the World Ocean floor by 2030 to empower the world to make policy decisions, use the ocean sustainability and undertake scientific research based on detailed bathymetric information of the Earth's seabed

New Zealand is the Regional Data Assembly and Coordination Centre (RDACC) for the South and West Pacific. This is a partnership between NIWA (lead), GNS and LINZ.

c) Tide gauge network

LINZ publishes tide predictions for Standard and Secondary Ports on the web http://www.linz.govt.nz/sea/tides.

LINZ, in partnership with GNS Science, has stablished a network of 18 tide gauges to improve New Zealand's response to tsunami hazards. Further information is available at http://www.linz.govt.nz/sea/tides/sea-level-data.

9. Other activities

[Describe any other significant developments of interest to the RHC since the last RHC meeting related to the items below]

a) Participation in IHO Working Groups

Working Groups since SHPHC14 Meeting	Date
IBSC40	March 2017
IHO General Assembly	April 2017
MSDIWG9	January/February 2018

Future Activities Include:	
S-100 WG	April 2018
TWCWG3	April 2018
CBSC16	May/June 2018
IBSC41	April 2018
IRCC10	June 2018

MSDI Progress

The NZHA is working on a number of initiatives that will enable them to collect, manage and share marine geospatial information for the benefit of New Zealand.

<u>UNCLOS MSR register</u>: Working with the New Zealand Ministry of Foreign Affairs & Trade, LINZ is establishing a coordinator role to access all ocean datasets collected by UNLCOS Marine Science Research vessels within New Zealands EEZ.

Government partnerships: Through HYPLAN, the NZHA has partnered with local and central government bodies to collect marine datasets that will enable partners manage and monitor the marine environment.

<u>Mapping NZ 2025:</u> LINZ has a 10-year programme of work to seamlessly intergrate national datasets from the top of Aoraki / Mount Cook to the edge of the continental shelf.

The former New Zealand Geospatial Office (NZGO) developed a comprehensive work programme for the implementation of a national Spatial Data Infrastructure. More information can be found at http://www.linz.govt.nz/about-linz/our-location-strategy/sdi-and-open-government-data-programme.

LINZ is the Steward of the New Zealand bathymetric dataset. In October 2015 LINZ completed an investigation to gain an understanding of New Zealand bathymetry to inform the future development and coordination of this fundamental data theme. http://www.linz.govt.nz/about-linz/what-were-doing/projects/new-zealand-bathymetry-investigation.

The NZHA has extensive bathymetric data holdings and has the responsibility to; ensure the appropriate data management policies and standards are developed to maintain the data; and ensure the data is available and discoverable. In May 2016 NZHA published a series of indexes to data holdings, allowing users to identify and request bathymetry data through the LINZ Data Service.

10. Conclusions

[Provide a short summary statement that highlights any of the following:

- a) Areas of significant achievement
- b) Areas of particular concern
- c) Any other matters of interest to the RHC

Over the past 14 months NZHA has made progress in moving from a paper centric environment to a digital first, data centric one. A number of business initiatives are under way, including the automation of the Notice to Mariners publication, an on-line chart catalogue and a local ENC distribution.

The NZHA has:

- 1. developed and published a long-term prioritised survey programme, <u>HYPLAN</u>.
- 2. completed a procurement process which has resulted in establishing a Supplier Panel for the delivery of HYPLAN
- 3. provided opportunities to collaborate and partner with other stakeholders.

Recruiting and retaining qualified and experienced staff is a challenge for LINZ. With no education establishment providing FIG/IHO/ICA Category 'A' Hydrographic Surveyor or Category 'B' Nautical Cartographer courses, LINZ needs to recruit outside the region.

New Zealand is the Regional Data Assembly and Coordination Centre (RDACC) for the Seabed 2030 South and West Pacific region.

NZ is committed to hydrography in the SWP region, collaborating with others under the umbrella of the SWPHC, most notably through the MFAT NZ Aid Programe PRNI, working in partnership with SPC. Through PRNI New Zealand has delivered a hydrography risk assessment for Niue and Samoa and an analysis of traffic in and around Tokelau; signed a bilateral arrangement with the Cook Islands and Niue; is progressing chart improvements for the Cook Islands, Niue, Samoa and Tonga; and has engaged a survey contractor to delivery hydrographic surveys in the Cook Islands and Tokelau (SDB); Tonga (SDB, ALB, MBES); and Niue (SDB, ALB).

The next eighteen months will see further initiatives as New Zealand moves from a paper based environment to a digital first, data centric model, with a future focus on coordinating an MSDI for New Zealand.

Input to the IHO Publication P-5 (Yearbook)

Country: New Zealand

Organization: Land Information New Zealand (LINZ)

Contact information/ Informations de contact / Información de contacto				
-National Hydrographer or equivalent -Directeur du service hydrographique ou équivalent -Director del Servicio Hidrográfico o equivalente -Head of the Hydrographic Office (if different from the person indicated above) -Directeur du Service Hydrographique (si différent de la personne indiquée cidessus)	Post: National Hydrographer Name: Adam Greenland Postal address: Level 7, Radio New Zealand House, 155 The Terrace, Wellington 6145, New Zealand Tel: +64 4 460 0110 Email: agreenland@linz.govt.nz Post: Name: Postal address: Tel: Fax: Email:			
-Director del Servicio Hidrográfico (si diferente de la persona indicada anteriormente) -Other point(s) of contact -Autre(s) point(s) de contact -Otros punto(s) de contact				
-Web site -site web -sitio web	www.linz.govt.nz/sea			
Country information	/ Informations sur le pays/ Información sobre el país			
-Declared National Tonnage -Tonnage national déclaré -Tonelaje Nacional Declarado -National day -Fête nationale -Fiesta nacional	Tonnage: 264,853 Date: 2017 6 February			
-Date of establishment and Relevant National Legislation -Date de mise en place et législation nationale pertinente -Fecha de constitución y legislación nacional pertinente	1996			

D . C 1 1110	04/04/4070
-Date first joined IHO	01/01/1959
-Date d'adhésion à l'OHI	
-Fecha de adhesión a la OHI	
-Date ratification	21/12/1967
Convention	
-Date de ratification de la	
Convention	
-Fecha de ratificación de la	
Convención	
-Remarks on membership	Included under 'British Empire' with the UK from 1947
-Remarques sur l'adhésion	included ander British Empire with the OK from 1947
-Comentarios sobre la	
adhesión	
	nformation gyn llaganas/Información gabra la agancia
	nformation sur l'agence/ Información sobre la agencia
-Top level parent	Land Information New Zealand (LINZ)
organisation	
-Organisme mère	
-Organización asocieda de	
nivel superior	
-Principal functions of the	Hydrographic surveys
organisation or the	Tidal services
department	Produce, maintain and distribute official nautical products
-Attribution principales de	and publications
l'organisme ou du	Marine geospatial datasets
département	With the geospatial datasets
-Principales funciones de la	
Organización o	
departamento	
-Annual operating budget	
-Budget annuel	
-presupuesto anual	
	CO7 I INIZ :: 4-4-1
-Total number of staff	627 = LINZ in total
employed	18 = NZHA
-Effectifs totaux	
-Número total de personal	
empleado	
-Number of INT charts	29
published	
-Nombres de cartes INT	
publiées	
-Número de cartas INT	
publicadas	
-Total number of paper	196
charts published-Nombre	
total de cartes papier	
publiées-Número total de	
cartas de papel publicadas	

-Number of ENC cells published -Nombres de cellules ENC publiées -Número de células ENC publicadas -Number of Other charts -Nombre d'Autres cartes -Número de Otras cartas	300			
-Type of publications produced -Type d'ouvrages produits -Tipo de publicaciones producidas	Charts - paper, Nautical Alma Notices to Mar Chart Catalogu Tidal Stream	riners		
-Detail of surveying vessels/ aircraft -Détail des bâtiments hydrographiques / aéronefs -Detalle de los buques hidrográficos / aeronaves	-Name -Nom -Nombre	-Displacement -Déplacement -Desplazamiento	-Date Launched -Date de mise en service -Fecha de botado	-Number of crew -Nombre de l'équipage -Tripulación
	None			
-Other information of interest -Autres informations utiles				
-Otra información de interés				

Input to the IHO Publication C-55 (Status of Hydrographic Surveying and Charting Worldwide) Country: New Zealand

	C-55 Summa	ry for:		Comments on Charts:
Country:	New Zealand			
Country Iso				
Code:	NZ			
Country				
SubCode:				
INT Region:	L			
Country/Depend:				
Last updated:	October 201	.3		
	New Zealan	d Hydrograp	hic	
Provided by:	Authority			
	Passage	Coastal		
Chart coverage	(%)	(%)	Port (%)	
				Comments on Surveys:
				In 2016 LINZ completed the
				New Zealand Hydrographic
				Risk Assessment which enabled
				LINZ to develop and publish a
D.IT.	100	100		long-term hydrographic survey
INT	100	100	na	programme, <u>HYPLAN</u>
RNC	100	100	100	
ENC	100	100	100	
Status of Paper C			Γ	
Paper charts with o		. ,	100	
Paper charts refere	enced to a sate	llite datum	100	
(%)			100	
Status of	Adequate	Resurvey	No survey	
surveys	(%)	(%)	(%)	-
0-200m	78	22	0	-
> 200m	3	9	87	

MSI	Y/N	Comments on MSI:
Local warning	Y	Promulgated by harbour masters
Coastal warning	Y	Promulgated by National Coordinator, NZ Rescue Coordination Center, Maritime New Zealand (MNZ)
Nav warning	Y	Promulgated by NAVAREA XIV Coordinator, Maritime New Zealand (MNZ)
Port warning	Y	
GMDSS	Y/N	Comments on GMDSS:
Master Plan	Y	Coordinated by MNZ
Area A1	N	

Area A2	N	
Area A3	Y	
NAVTEX	N	
SafetyNet	Y	NAVAREA XIV messages broadcast via SafetyNET (POR)

National MSI Self-Assessment

