

**21st MEETING OF THE SOUTH WEST PACIFIC HYDROGRAPHIC COMMISSION
(SWPHC21)
28 February - 1 March 2024**

NATIONAL REPORT FROM NEW ZEALAND TO THE SWPHC21

References:

- A. IHO Resolution 2/1997 as amended (see doc. C3-04.2A, [Appendix to Annex A](#))
- B. IHO Circular Letter 20/2019, The IHO Online Form System for responses to Circular Letters and input to IHO Publications (P-5 and C-55): [link](#)
Online system for P-5 (Yearbook): [link](#)
Online system for C-55 (Status of Surveys and Charting Worldwide): [link](#)
- C. IHO Strategic Plan: [link](#)
- D. IHO IRCC CL 01/2021 IHO Strategic Plan for 2021-2026 – Procedure for measuring the Strategic Performance Indicator (SPI) allocated to IRCC: [link](#)

Executive summary

1. Hydrographic Office / Service:

- a) Name of the institution: Toitū Te Whenua Land Information New Zealand (LINZ).
- b) Description: The National Hydrographer, Adam Greenland, leads the New Zealand Hydrographic Authority (NZHA) at LINZ and reports to the Head of Location Information, Aaron Jordan. The Location Information group is part of the Customer Delivery group, led by Jan Pierce, Kaihautū - Deputy Secretary, Customer Delivery.

The NZHA comprises 16 personnel, including two hydrographic surveyors, four nautical cartographers, one marine geospatial data specialist, three hydrographic systems analysts and a Technical Change Leader who leads a programme of work to deliver the S-100 Roadmap and move the NZHA to a digital first, data centric environment.

- c) Submitted by: Stuart Caie, Manager Hydrographic Survey, scaie@linz.govt.nz

Detailed information to update IHO Publication P-5 (*Yearbook*) is submitted in Annex A (alternatively, use the online system, reference B). Please indicate "no change" in Annex A if this is the case.

2. Surveys:

- a) Coverage of new surveys:

Surveys completed or in progress since SWPHC20 are listed below:

Survey Number	Area	Completed
HYD-2122-HS73	Nelson to Kahurangi Shoals	Feb 2024
HYD-2122-HS74	Western Marlborough Sounds	Feb 2024
HYD-2223-HS76	Approaches to Gisborne	May 2024
HYD-2223-HS81	Port Underwood (undertaken by RNZN)	March 2023



b) New technologies and /or equipment

As part of a wider programme of work, Mapping NZ 2025, LINZ is currently procuring services for a pilot to map a coastal strip along part of the southern coast of the South Island, utilising topographic/bathymetric LiDAR technology. This will inform a larger programme of work (3D Coastal Mapping) to map the coastal zone out to 25m water depth. The data collected through this programme will be used to improve modelling for inundation due to sea level rise, storm surge and tsunamis.

GNS Science has increased its opportunistic scientific data collection by logging sub-bottom profiler data whilst acquiring bathymetry.

c) New ships

LINZ does not own or operate survey vessels; these are operated by its Supplier Panel.

NIWA currently has a new 36m LOA scientific research vessel, the RV *Kaharoa II*, under construction in Vigo, Spain. This vessel will eventually replace the 28m LOA RV *Kaharoa*. The delivery date for the *Kaharoa II* to New Zealand is expected in the middle of 2024. *Kaharoa II* will also continue to support signature projects like Seabed 2030, an international effort to map the world's ocean floor, and the Argo programme, a global ocean monitoring initiative involving more than 30 countries.

d) Crowdsourced and satellite-derived bathymetry - national policy

GNS is evaluating the potential for satellite derived bathymetry over several case study locations, with particular focus on the impact of resolution of coastal bathymetric data on tsunami inundation modelling. The outcomes of this project will be discussed at a workshop planned for April 2024.

Under UNCLOS, New Zealand Government receives and manages Marine Scientific Research (MSR) applications from foreign scientists seeking to undertake MSR in New Zealand's Territorial Sea, EEZ and Continental Shelf. Consents granted to applicants contain conditions, for which LINZ acts as a point of contact and ensures obligations

are met. LINZ has also been authorised by the NZ’s Ministry of Foreign Affairs and Trade to request vessels to activate their seafloor mapping systems whilst transiting NZ’s EEZ, and subsequently transmit the data to LINZ. Data received will be used for the sole purpose of increasing the coverage of the GEBCO grid within NZ’s EEZ.

e) Challenges and achievements

A first depth model of a hydrographic survey has been published on the [LINZ Data Service](#) for direct download. More datasets will become available over the coming months.

In September LINZ launched an online [seafloor mapping coordination tool](#) to visualise areas of interest from across government and other interested parties. The prioritisation process will be managed by the NZ MGI WG.

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 (alternatively, use the online system, reference B). Please indicate "no change" in Annexes A and B if this is the case.

3. New charts & updates:

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

Nation	Paper Charts	ENCs
Cook Islands	3	23
Niue	1	4
Samoa	8	13
Tokelau	1	4
Tonga	12	17

Through the NZ Aid programme, Pacific Regional Navigation Initiative (2015-2023), LINZ established a chart improvement programme using new survey data. The table below shows the number of charts produced. The **bold** text indicates those charts published since SWPHC20:

Nation	Paper Charts		ENCs	
	New Edition	New Chart	New Edition	New Chart
Cook Islands	1 (Jan 2019) 2 (Mar 2019)	3 (Feb 2022)	19 (Jun 2017) 3 (Nov 2018) 6 (Jan 2019)	22 (Jan 2022)
Niue	-	1 (Mar 2021)	2 (May 2018)	4 (Apr 2020)
Samoa	4 (Mar 2018) 1 (Jul 2019)	1 (Jan 2022) 1 (Oct 2022) 1 (Nov 2022) 1 (Feb 2023) 3 (Mar 2023)	1 (Aug 2017) 2 (Oct 2017) 3 (Feb 2018)	1 (Jan 2022) 2 (April 2022) 5 (May 2022) 3 (Feb 2023) 1 (Mar 2023)
Tokelau	1 (Mar 2019)	1 (Feb 2022)	4 (Mar 2019)	4 (Jan 2022)
Tonga	3 (Jan 2019) 2 (Apr 2019) 1 (Jun 2019)	3 (Aug 2020) 1 (Aug 2020) 2 (Aug 2021) 2 (Mar 2023)	1 (Nov 2018) 3 (Dec 2018) 2 (Feb 2019) 1 (Mar 2019) 1 (Jun 2019) 3 (Aug 2021)	3 (Mar 2020) 1 (May 2020) 2 (Mar 2021) 2 (Jun 2021) 8 (Dec 2021) 2 (Mar 2023)
RINT Chart	-	1 (Aug 2019)	-	1 (Jun 2019)

LINZ has rebranded all charts (ENC and paper) for the Cook Islands, Niue, Tokelau, Samoa and Tonga with the two-digit country code.

a) ENC coverage, gaps and overlaps

To date LINZ has published a total of 332 official New Zealand ENCs and has full ENC coverage of New Zealand waters and area of responsibility.

An [on-line spatial viewer](#) provides detailed information of the full New Zealand ENC folio.

The screenshot displays the 'NZ Chart Catalogue - spatial viewer' interface. The main map area shows the New Zealand region with a highlighted ENC area. The right-hand panel provides details for the selected ENC:

- ENC: T0500403
- South Pacific Ocean - Tonga - Ha'afeva and Nomuka
- Completion date: 1999-00-00
- Edition number: 1
- Edition date: August 2017
- Update number: 1
- Update date: April 2022
- Extents: 180° 23' 00" E - 18° 34' 00" S

b) ENC distribution method

i. LINZ is a member of IC-ENC and distributes all New Zealand ENCs through the regional IC-ENC office.

ii. LINZ also distributes ENCs through the NZ ENC Service. Available at <https://www.linz.govt.nz/products-services/charts/nz-enc-service> it comprises eight regional chart packs.

- NZ01 New Zealand - North Island
- NZ02 New Zealand - South Island
- NZ03 New Zealand - North Island - Bay of Islands
- NZ04 New Zealand - North Island - Auckland Zone
- NZ05 New Zealand - Cook Strait
- NZ06 New Zealand - Inland Waters
- NZ07 South West Pacific
- NZ08 Ross Dependency, Antarctica

c) RNCs

As of 8 December 2023, the NZMariner (RNC) service has been permanently withdrawn.

d) INT charts

LINZ currently maintains 25 INT charts in Regions L and M.

The following INT charts were withdrawn December 2023.

Paper Chart	Title	Scale
NZ 21 (INT 641)	Norfolk Island to Cape Egmont	1:1,500,000
NZ 22 (INT 639)	Kermadec Islands to East Cape	1:1,500,000
NZ 23 (INT 640)	North Island	1:1,500,000
NZ 25 (INT 648)	South Island	1:1,500,000

e) National paper charts

New Zealand has a total of 170 paper charts (excl. INT Charts). Detailed information of the full New Zealand chart folio can be found on the [chart catalogue](#).

New Zealand Paper Charts published since the SWPHC20 Meeting			
New Zealand	South West Pacific	Antarctica	INT
Total: 6	Total: 4	Total: 0	Total: 1
NC: 0	NC: 4 ¹	NC: 0	NC: 0
NE: 6	NE: 0	NE: 0	NE:1

New Zealand Paper Charts scheduled for publication in 23/24 FY			
New Zealand	South West Pacific	Antarctica	INT
Total: 7	Total: 0	Total: 0	Total:0
NC: 0	NC: 0	NC: 0	NC:0
NE: 7	NE: 0	NE: 0	NE:0

¹ Charts rebranded with country-code.

- f) Other charts, e.g. for pleasure craft
Nothing to report (NTR)
- g) Create S-10x products to meet future requirements

In response to the new IHO S-100 standard, LINZ has established the Maritime Digital Transformation Programme (MDT) to prepare for the future of maritime transport within the realm of New Zealand. For the first phase of the IHO S-100 Implementation Priorities (Navigational Route Monitoring Mode), LINZ has responsibility in New Zealand for S-101 (Electronic Navigational Charts), S-102 (Bathymetry) and S-104 (Water Level). These products will form the basis of the LINZ minimal viable product, along with the work to streamline/ rationalise existing products and services in preparation for the new products. Further details on the project can be found on the [LINZ website](#).

A promotional Video for MDT has been produced - [LINZ - Maritime Digital Transformation](#) .

- h) Challenges and achievements

Securing funding for additional resources to deliver to the S-100 implementation roadmap.

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 (alternatively, use the online system, reference B). Please indicate "no change" in Annexes A and B if this is the case.

4. New publications & updates:

- a) New Publications
NTR
- b) Updated publications
The New Zealand Nautical Almanac is updated annually and released on 1 July.
- c) Means of delivery, e.g. paper, digital
The New Zealand Nautical Almanac is delivered as a hard copy publication and as a PDF in its entirety and separate sections, available [on-line](#).
- d) Challenges and achievements
As LINZ continue to move to a digital first environment, managing customers' expectations about publications is often a challenge, particular any withdrawal of paper products.

Detailed information to update IHO Publication P-5 (*Yearbook*) is submitted in Annex A (alternatively, use the online system, reference B). Please indicate "no change" in Annex A if this is the case.

5. MSI

a) Existing infrastructure for MSI dissemination

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 (<https://charts.linz.govt.nz/notices-mariners/subscribe>) and available online at <https://www.linz.govt.nz/products-services/maritime-safety/notices-mariners>. The subscription service allows users to select which charts they receive notices for.

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

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

<https://www.maritimenz.govt.nz/commercial/safety/maritime-radio/navigational-warnings.asp>

For further information, refer to [NAVAREA XIV Report to SWPHC21](#).

b) Statistics on work of the National Coordinator

Refer to [NAVAREA XIV Report to SWPHC21](#)

c) New infrastructure in accordance with GMDSS Master Plan

Refer to [NAVAREA XIV Report to SWPHC21](#)

d) Challenges and achievements

Refer to [NAVAREA XIV Report to SWPHC21](#)

Detailed information about MSI to update IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is submitted in Annex B (alternatively, use the online system, reference B). The national self-assessment of MSI is submitted in Annex C. Please indicate "no change" in Annexes B and C if this is the case.

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 (alternatively, use the online system, reference B). Please indicate "no change" in Annex B if this is the case.

7. Capacity Building

a) Offer of and/or demand for Capacity Building

In line with Goal 1 of the IHO Strategic Plan 2021-2026, LINZ has initiated a programme of work (MDT) to implement and adopt S-100. As a small team, the NZHA will seek capacity building activities to enable LINZ to meet the Decade of Implementation.

The Royal New Zealand Navy (RNZN) has a standing offer to contribute towards

capacity building activities in the region, by invitation.

- b) Training received, needed, offered
LINZ has challenges in recruiting experienced staff. With few qualified and/or experienced candidates available it is generally necessary to recruit from further afield.
- c) Status of national, bilateral, multilateral or regional development projects with a hydrographic component. (In progress, planned, under evaluation or study).
The NZHA has bilateral arrangements for delivering hydrographic services with the Cook Islands, Niue, Samoa and Tonga. These have been in place since 2016.

Maritime NZ has delivered the Pacific Maritime Safety Programme (PMSP) since 2012. This programme is a [New Zealand Ministry of Foreign Affairs and Trade \(MFAT\) programme](#), funded through the International Development Cooperation programme. The PMSP is delivered through partnerships with Pacific governments in the Cook Islands, Kiribati, Niue, Samoa, Tokelau, Tonga and Tuvalu. The latest phase of the programme was approved in 2022, with funding of \$12 million, enabling the programme to continue to deliver activities until June 2026.

The aim of the PMSP is for Pacific maritime transport that is safe, reliable and environmentally friendly. The programme works across five broad outputs:

Output 1 – community education and awareness

Output 2 – legislative reform and support for regulatory personnel

Output 3 – maritime training, supporting access to specialist maritime education

Output 4 – domestic vessel safety

Output 5 – search and rescue and oil spill response.

Maritime NZ and LINZ are reviewing a request from Samoa for technical assistance to understand the use of hydrographic data held by Samoa and how to visualise, analyse and re-use the data.

- d) Description of proposals and requests to the IHO CBSC
NTR.

8. Oceanographic activities

a) General

Within New Zealand there are two Crown Research Institutes (CRI) 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 New Zealand marine geospatial data.

- GNS: <https://data.gns.cri.nz/tez/>

- NIWA: <https://data-niwa.opendata.arcgis.com/>

New Zealand operates an Ocean Data Network data portal (<https://nzodn.nz/>), a node of the Australian Ocean Data Network (AODN <https://portal.aodn.org.au/>).

NIWA vessels (RV *Tangaroa* and RV *Kaharoa*) undertook a number of oceanographic

voyages over the last 12 months. These include: a deployment and maintenance of DART tsunami sensors around the SW Pacific; Deep ARGO float trails along the boundary currents of the Kermadec-Tonga trench; and deployments of CTD sensors off the Kermadec Ridge and the east coast of the South Island.

GNS Science has led four voyages around Whakaari/White Island and Tuhua Islands in the Bay of Plenty region of the North Island through the Beneath the Waves programme. During these voyages bathymetry, magnetic, gravity, core and water column data were collected. These voyages took place between 2022 and October 2023, a fifth is planned for March 2024.

b) GEBCO & Seabed 2030

GEBCO's current gridded bathymetric data set, the GEBCO_2023 Grid, is a global terrain model for ocean and land, providing elevation data, in metres, on a 15 arc-second interval grid. It is accompanied by a Type Identifier (TID) Grid that gives information on the types of source data that the GEBCO_2023 Grid is based on.

New Zealand is the Seabed 2030 Regional Data Assembly and Coordination Center (RDACC) for the South and West Pacific Ocean. Formerly called South and West Pacific Data Center, it has now been rebranded as Pacific Center. The Pacific Center is run jointly by NIWA/GNS/LINZ and is hosted by NIWA. The latest data delivery from the Pacific Ocean will be delivered to the Seabed2030 Global Center at the end of February 2024. This data will then be reviewed and combined into a global grid, which will be released by GEBCO as GEBCO_2024 – expected in June 2024.

The Fifth Pacific Regional Mapping Community was held 12-14 July 2023 in Lima, Peru. Over 60 people attended the meeting in person and more than 80 people participated virtually. The meeting included two days of presentations and one day workshop focused on access and use of open data. The next Pacific Regional Mapping Meeting is planned as a hybrid in-person/virtual event to be hosted by the Fijian Navy in Nadi, Fiji for 4-6 November 2024, followed by the GEBCO Guiding committee meetings 7-8 November. Representatives from countries in the South and West Pacific are encouraged to participate in the meeting and open data workshop. Bathymetric data contributions to the Seabed 2030 project are also welcomed and encouraged.

c) Crowdsourced Bathymetry Activities

Two data loggers have been installed in Kiribati on local vessels. One data logger has been delivered to Samoa Maritime Administration. Two data loggers have been delivered to Fiji Navy for testing onboard their vessels. Two data loggers have been delivered to the University of Otago to be installed on board the School of Surveying's boats.

A new model of CSB data logger has been launched this year. NEMO30 devices are under testing procedures and expected to be ready for deployment during 2024.

NZ is actively investigating other CSB opportunities and supporting regional projects through the Pacific Center and encourage any organisation or vessel wishing to participate to contact the [SWPHC CSB/Seabed 2030 Coordinator](#).

The RNZN hydrographic vessel HMNZS MANAWANUI collected multibeam data on passage to Fiji September 2023. The data will be rendered to Seabed 2030.

d) Sea level gauge network

LINZ publishes tide predictions for Standard and Secondary Ports on the web <https://www.linz.govt.nz/products-services/tides-and-tidal-streams/tide-predictions>.

LINZ, in partnership with GNS Science, has established a network of 18 sea level gauges to improve New Zealand's response to tsunami hazards. Further information is available at <https://www.linz.govt.nz/products-services/data/types-linz-data/sea-level-data/sea-level-data-downloads>.

e) New equipment

NTR

f) Challenges and achievements

Joining Land and Sea (JLAS) Project. Since 2018, 92 sea level gauge sites have been installed and calibrated. The project will enable data from terrestrial and marine environments to be more easily integrated, for seamless mapping across land/sea interfaces.

9. Spatial data infrastructures

a) Status of MSDI

LINZ approach to SDI is in line with the UN-GGIM Integrated Geospatial Information Framework (IGIF). Rather than developing one single system, the NZ preference is to follow an integrated approach based on FAIR data principles (findable, accessible, interoperable and reusable), common standards and interoperability.

b) Relationship with the NSDI

The [LINZ Data Service](#) provides free online access to LINZ's most up-to-date land and seabed data. Users are able to discover, view and access to hydrographic and topographic data.

c) Involvement in regional or global MSDI efforts

LINZ regional involvement through:

- i. SWPHC MSDI WG
- ii. AusSeabed
- iii. GEBCO Seabed 2030 Pacific Data Centre

LINZ global involvement through:

- i. IHO MSDI WG
- ii. OGC Marine Domain WG
- iii. UNGGIM Marine Geospatial WG

d) National implementation of the [UN Statement of Shared Guiding Principles for Geospatial Information Management](#) – including any national data policy and impact on marine data. Ref: IHO Strategic Plan, Goal 2, Target 2.3, SPI 2.3.1 Number of HOs reporting success applying the principles in their national contexts.

e) MSDI national portal

New Zealand does not have a single MSDI portal. Several data portals that host NZ MGI were identified as part of the data portal study and their characteristics are described on the [MGI webpage](#).

The NZ MGI WG, supported by LINZ, is currently working on a national MGI inventory and Web App, to support discovery of marine geospatial data collected in New Zealand and facilitate access to data portals.

f) Best practices and lessons learned

LINZ is improving its foundational capabilities in the management, storage, interoperability and sharing of geospatial data to better prepare for our digital future.

g) Challenges and achievements

Key achievements for the NZ MGI WG this year include:

- Fifth annual meeting for the NZ MGI WG. [Recording and meeting minutes](#)
- Engagement and meetings with kaitiaki o te moana (guardians of the sea) to identify challenges and opportunities for Iwi/Māori in accessing and using marine geospatial data
- Support capacity building via online [webinar](#) for Māori trusts and environmental groups working in the marine environment
- Online [library](#) of stories illustrating reuse of marine geospatial information

h) Key challenges:

Lack of committed funding and resources.

10. Innovation

a) Use of new technologies

NTR.

b) Risk assessment

The risk assessment for New Zealand waters has been re-run with AIS traffic data from 2018/19 (pre-COVID). A report with the results will be published shortly. The results will help LINZ plan a future programme of hydrographic surveys.

c) Policy matters

NTR

11. Other activities

a) Participation in IHO meetings

IHO meetings since SWPHC20	Date
3 rd Assembly (A3)	May 2023
IRCC15	June 2023
CSBWG14	August 2023
7th Council Meeting (C7)	October 2023
CSBWGIS01 (Intersessional Meeting)	December 2023
S-102PT16 (VTC)	January 2024
TWCWG8 (VTC)	February 2024

Future activities include:	
HSWG6 (VTC)	February/March 2024
DQWG19 (VTC)	March 2024
CSBWG15	April 2024
S-102PT17 (VTC)	May 2024
8 th Council Meeting (C8)	October 2024
GEBCO Working Week	November 2024
S-100WG9 (2024)	November 2024

b) Meteorological data collection

New Zealand, through its National Meteorological Service (NMS) status, collects ocean surface meteorological data as part of our international obligations to the Global Ocean Observing System (GOOS) co-sponsored by the World Meteorological Organization (WMO), the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO), the United Nations Environment Programme (UN Environment), and the International Science Council (ISC).

Our marine observing network comprises 37 Voluntary Observing Ships – 26 operating in or visiting NZ waters & 11 no longer visiting NZ waters. 45 Active Drifting buoys – 44 drifting, 1 island. 43 of those buoys are owned by NOAA. MetService arrange deployment to fill gaps in the global drifter network around NZ on behalf of NOAA These data are curated through the Data Buoy Cooperation Panel (DBCP), with data collected, and disseminated through the WMO Global Telecommunications System (GTS) for use in weather forecasting, data assimilation and climate studies.

c) Geospatial studies

Refer to section 9.

d) Preparation for responses to disasters

LINZ has an active role in co-ordinating and promoting the use of geographic data to support New Zealand to prepare for and respond to emergencies and climate change events. <https://www.linz.govt.nz/products-services/data/types-linz-data/resilience-and-climate-change>.

LINZ provides geospatial support to other NZ Government agencies who respond to emergency events and help with post-event recovery.

<https://www.linz.govt.nz/news/2023-03/high-resolution-imagery-flood-hit-areas-supports-cyclone-recovery>

e) Environmental protection
NTR

f) Engagement with the Maritime Administration.
LINZ is working with Maritime NZ to plan for the implementation of the S-100 Ecosystem in New Zealand, i.e., the IMO SOLAS S-100 ECDIS performance standards (2026 & 2029) and the IHO Roadmap for the S-100 Implementation Decade (2020-2030). LINZ is focused on the delivery of the S-100 priority products for ECDIS Route Monitoring mode and the impact of these new products and services on our customers, stakeholders, and maritime regulations. As LINZ is sunsetting traditional paper charts there is a need to focus on the implications for the future as LINZ shifts to digital charting for both the SOLAS ECDIS and sub-ECDIS community.

g) Aids to Navigation matters
Maritime NZ are the authority responsible for [Aids to Navigation](#) in NZ.

h) Magnetic and gravity surveys
GNS Science collected magnetic and gravity data as part of the Bay of Plenty voyages mentioned in section 8.a.

i) International engagements

Meetings & conferences since SWPHC20	
IC-ENC Technical Conference	March 2022
Pacific Regional Maritime Transport Officials Meeting (VTC)	May 2023
Fifth Pacific Regional Energy and Transport Ministers' Meeting (VTC)	May 2023
Australasia Community Briefings for the S-5B Students	June 2023
5 th South and West Pacific Regional Mapping Community Meeting (VTC)	July 2023
SWPHC S-100 Workshop (VTC)	November 2023
MFAT Antarctic Officials Coordination Meeting	November 2023
HYDRO23	November 2023
Fifth Arctic-Antarctic and North Pacific Mapping Meeting	November 2023

Future activities include:	
6 th South and West Pacific Regional Mapping Community Meeting	November 2024
GEBCO Working Week 2024	November 2024

12. Conclusions

a) Areas of significant achievement

NZ MGI WG:

- increased effort in supporting Māori/Iwi accessing and reusing MGI,
- imminent release of the NZ MGI Inventory and WebApp, providing access to support discovery of MGI collected in New Zealand and facilitate access to data portals.

S-100:

- LINZ has continued to make significant steps towards the implementation of the new S-100 standard through the Maritime Digital Transformation Project.

Survey & Charting:

- Four INT charts have been withdrawn
- The NZ RNC portfolio has been withdrawn
- Seafloor mapping coordination tool launched
- Hydrographic risk assessment completed
- [Virtual field](#) trip held in Gisborne planned for release June 2024

Regional activities:

- FJ and NZ (online) attended the Fifth Pacific Regional Energy & Transport Minister's Meeting, held in Port Villa, Vanuatu in May 2023. FJ presented an [intervention](#) on behalf of SWPHC and IHO, raising the awareness of the impact and benefits of the S-100 Standard; and the commitment of the SWPHC to engage with IMO, IALA and regional partners to deliver as one the future Safety of Navigation services to achieve a sustainable maritime transport system in the Pacific region.



SWPHC Vice-Chair, Lt Cdr Jervis Robinson

b) Areas of particular concern

- Maritime Digital Transformation
 - Secure funding for resources to deliver to S-100 implementation roadmap
 - Deliver existing digital and paper charting products whilst commencing the production of the next generation electronic navigational charts
 - Meeting the needs of mariners while transitioning source database to S-100
- Recruitment and retention of staff

- Resources available to deliver S-100 for NZHA's area of responsibility (NZ, Pacific, Antarctica).
- c) Any other matters of interest to the SWPHC

Input to the IHO Publication P-5 (*Yearbook*)*Country: New Zealand**Organization: Toitū Te Whenua Land Information New Zealand*

(Please provide the information in English. Consider using the IHO Online Form System, see reference B)

Contact information/ Informations de contact / Información de contacto	
-National Hydrographer or equivalent -Directeur du service hydrographique ou équivalent -Director del Servicio Hidrográfico o equivalente	No change
-Head of the Hydrographic Office (if different from the person indicated above) -Directeur du Service Hydrographique (si différent de la personne indiquée ci-dessus) -Director del Servicio Hidrográfico (si diferente de la persona indicada anteriormente)	No change
-Other point(s) of contact -Autre(s) point(s) de contact -Otros punto(s) de contacto	No change
-Web site -site web -sitio web	https://www.linz.govt.nz/
Country information / Informations sur le pays/ Información sobre el país	
-Declared National Tonnage -Tonnage national déclaré -Tonelaje Nacional Declarado	Tonnage: 281,531 Date: 21/12/2022
-National day -Fête nationale -Fiesta nacional	6 th February. <i>Waitangi Day</i>
-Date of establishment and Relevant National Legislation -Date de mise en place et législation nationale	No change

pertinente -Fecha de constitución y legislación nacional pertinente	
-Date first joined IHO -Date d'adhésion à l'OHI -Fecha de adhesión a la OHI	No change
-Date ratification Convention -Date de ratification de la Convention -Fecha de ratificación de la Convención	No change
-Remarks on membership -Remarques sur l'adhésion -Comentarios sobre la adhesión	No change
Agency information/ Information sur l'agence/ Información sobre la agencia	
-Top level parent organisation -Organisme mère -Organización asociada de nivel superior	No change
-Principal functions of the organisation or the department -Attribution principales de l'organisme ou du département -Principales funciones de la Organización o departamento	No change
-Annual operating budget -Budget annuel -presupuesto anual	
-Total number of staff employed -Effectifs totaux -Número total de personal empleado	>700 (LINZ), 16 NZ Hydrographic Authority
-Number of INT charts published -Nombres de cartes INT publiées -Número de cartas INT publicadas	25

-Total number of paper charts published-Nombre total de cartes papier publiées-Número total de cartas de papel publicadas	170			
-Number of ENC cells published -Nombres de cellules ENC publiées -Número de células ENC publicadas	332			
-Number of Other charts -Nombre d'Autres cartes -Número de Otras cartas	NA			
-Type of publications produced -Type d'ouvrages produits -Tipo de publicaciones producidas	No change			
-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
-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*

(Please provide the information in English. Consider using the IHO Online Form System, see reference B)

C-55 Summary for:				Comments on Charts: As of 8 December 2023, the NZMariner (RNC) service has been permanently withdrawn. As of December 2023, four INT charts have been withdrawn (INT 641 Norfolk Island to Cape Egmont, INT 639 Kermadec Island to East Cape, INT 640 North Island, INT 648 South Island).
Country:	New Zealand			
Country Iso Code:	NZ			
Country SubCode:				
INT Region:	L			
Country/Depend:	C			
Last updated:	Feb 2024			
Provided by:	LINZ			
Chart coverage	Passage (%)	Coastal (%)	Port (%)	Comments on Surveys: Hydrographic surveys carried out in: Gisborne and Tasman region
INT	100	100	0	
RNC	0	0	0	
ENC	100	100	100	
Status of Paper Charts				
Paper charts with depths in meters (%)			100	
Paper charts referenced to a satellite datum (%)			100	
Status of surveys	Adequate (%)	Resurvey (%)	No survey (%)	
0-200m	80	20	0	
> 200m	3	9	88	

MSI	Y/N	Comments on MSI:
Local warning	Y	Promulgated by harbour masters, Meteorological Service of New Zealand Ltd
Coastal warning	Y	Promulgated by National Coordinator (METAREA XIV), NZ Rescue Coordination Center, Maritime NZ (MNZ), Meteorological Service of New Zealand Ltd
Nav warning	Y	NAVAREA XIV Coordinator
Port warning	Y	
GMDSS	Y/N	Comments on GMDSS:
Master Plan	Y	Coordinated by Maritime NZ
Area A1	N	
Area A2	N	

Area A3	Y	
NAVTEX	N	
SafetyNet	Y	NAVAREA and METAREA XIV messages broadcast via Inmarsat SafetyNET and Iridium SafetyCast.

National MSI Self-Assessment

Country: New Zealand

Organization: Maritime New Zealand

Refer to [NAVAREA XIV Report to SWPHC21](#)