22nd MEETING OF THE SOUTH WEST PACIFIC HYDROGRAPHIC COMMISSION (SWPHC22)
3-5 March 2025, Koror, Palau

NATIONAL REPORT FROM NEW ZEALAND TO THE SWPHC22

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.

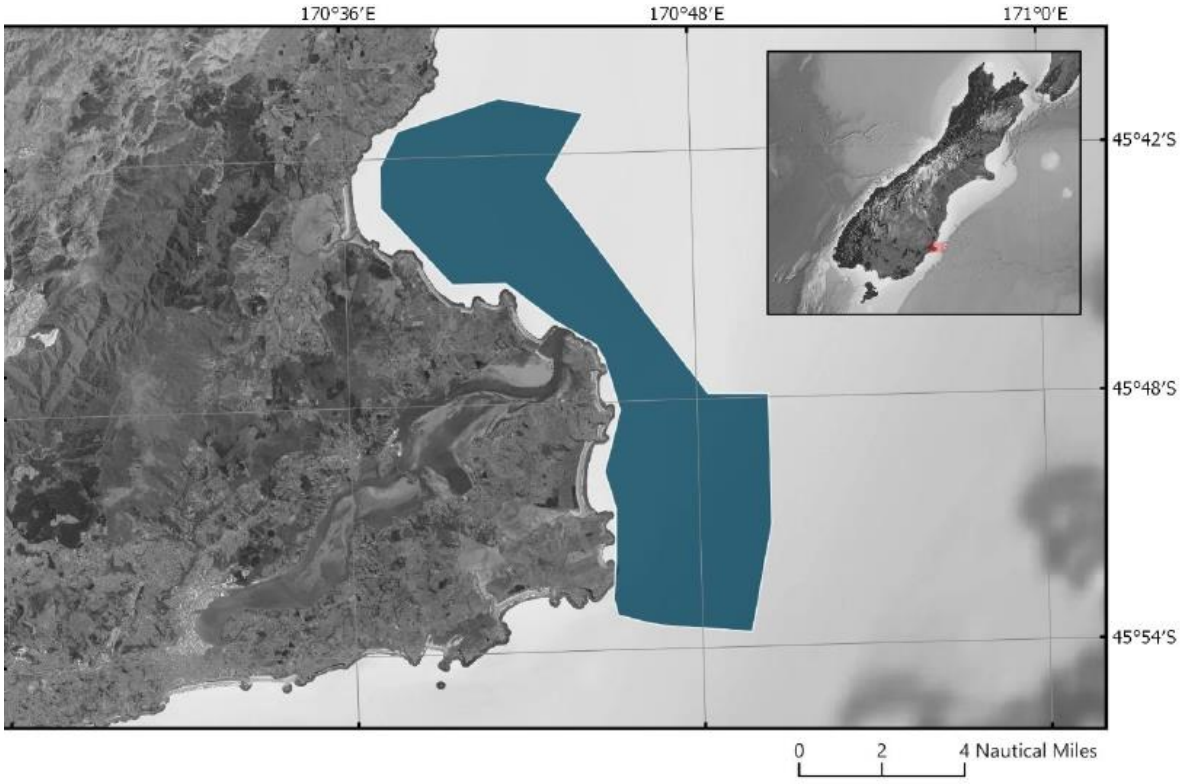
      The NZHA comprises 15 personnel, including four hydrographic surveyors, five nautical cartographers, and a Technical Change Leader who leads a programme of work to deliver the S-100 Roadmap and move the NZHA to a digital first, data centric environment.

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

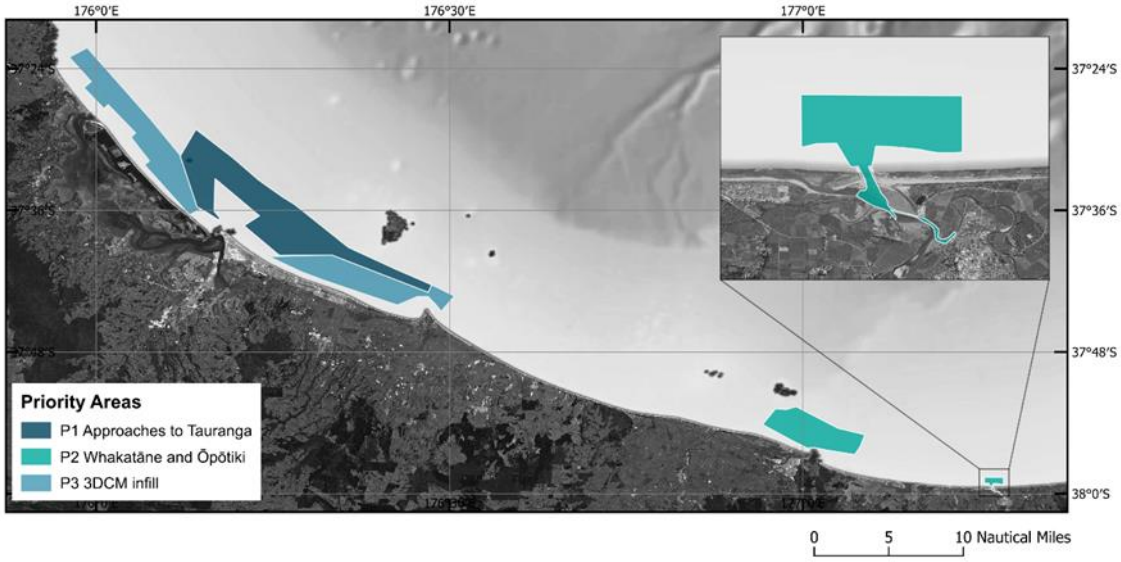
2. Surveys:
   a) Coverage of new surveys:

      Surveys completed or in progress since SWPHC21 are listed below:

Survey Number	Area	Completed
HYD-2425-01 HS78	Approaches to Otago Harbour	Nov 2024
HYD-2425-02-HS79	Bay of Plenty Areas (in progress)	June 2025



Approaches to Otago survey area



Bay of Plenty survey areas

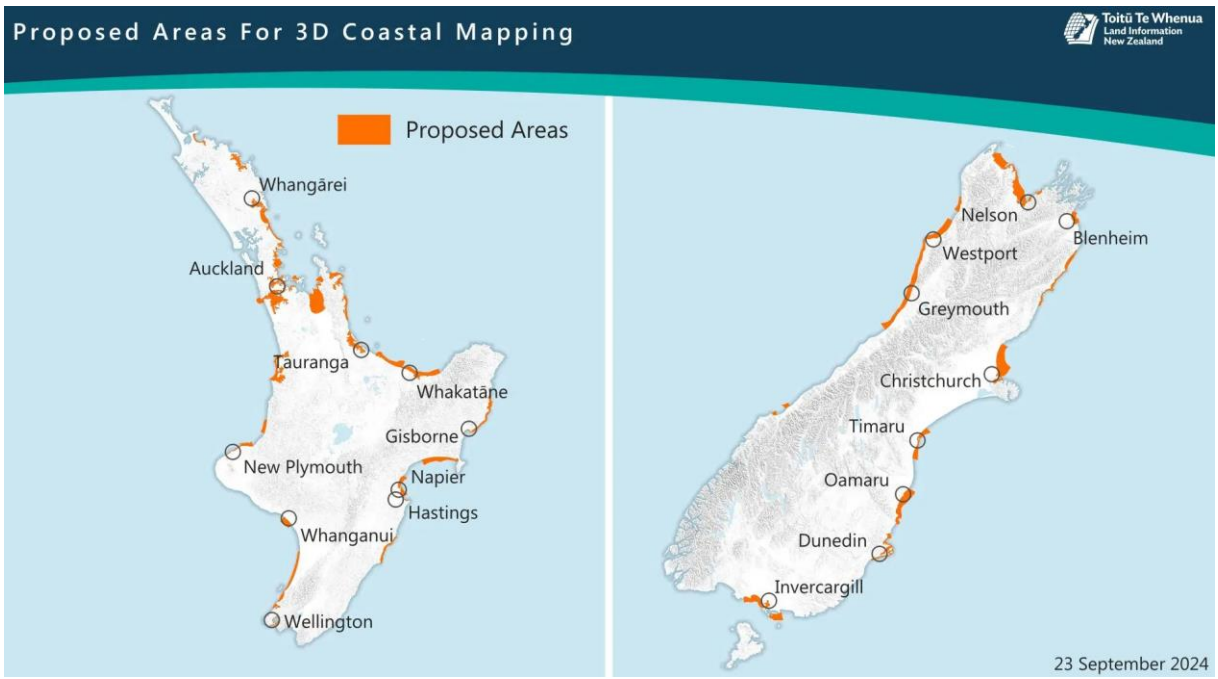
b) New technologies and /or equipment

As part of a wider programme of work, Mapping NZ 2025, LINZ has commenced a 3-year project, 3D Coastal Mapping, to map the coastal zone out to 25m water depth. This will utilise a combination of topographic/bathymetric LiDAR, SDB and intertidal DEMs to improve modelling for inundation due to sea level rise, storm surge and tsunami. It also includes installing new and upgrading existing GNSS receivers at 10 existing tide gauges to improve understanding of vertical land movement.

A trial of topographic/bathymetric lidar technology in a New Zealand setting was conducted between April and July 2024. The trial was originally planned for the Bluff/Southland area however weather conditions during the short trial period forced

the supplier to collect data in another location, Tauranga. Good coverage was achieved in the Tauranga area with a reliable maximum depth of 15m achieved. Being able to relocate between areas demonstrated the need to be flexible with data acquisition to work around environmental conditions, such as turbidity. Work is underway to make the DEM available on the LINZ Data Service with plans to host other data on AWS.

Approximately 40% of the New Zealand coastline is to be mapped by topographic/bathymetric LiDAR, areas displayed below. Two suppliers, Woolpert NZ Limited and NV5 Geospatial will do the data collection over two summer seasons. Data capture commenced in January 2025. Data delivery will be staged based on priority and region with some areas designated a higher priority due to proximity to urban areas.



Areas for 3D Coastal Mapping bathymetric lidar capture

LINZ are investigating the use of other technologies such as SDB and intertidal DEM to extend coverage to a wider area beyond the areas displayed above. It is also envisaged that the technologies will enable change detection when repeated and may inform future plans for repeat LiDAR acquisition in some areas.

All data captured as part of the 3D Coastal Mapping programme will be assessed to update nautical charts.

c) New ships

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

NIWA has just received a new 36m LOA scientific research vessel, the RV *Kaharoa II*. Built in Vigo, Spain, this vessel will eventually replace the 42-year-old 28m LOA RV *Kaharoa*. Currently undergoing gear trails, *Kaharoa II* will 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
NIWA and LINZ have held discussions with a number of NZ organisation regarding crowdsourced bathymetry (CSB).

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
All depth surfaces from LINZ commissioned hydrographic surveys are made available on the LINZ Data Service and all depth data is available on request.

LINZ recently completed a hydrographic risk assessment to identify areas for a future long term survey programme. LINZ are engaging with stakeholder to investigate opportunities to collaborate and partner in mapping the seafloor in common areas of interest. LINZ are also investigating setting up reference surfaces around the coast that could be of use for others, such as research vessel or CSB.

HMNZS MANAWANUI grounded and sank off the coast of Samoa on October 5, 2024 while conducting survey operations. The RNZN is reviewing its hydrographic capability and there is every intent that this will remain. The RNZN are keen to contribute to the region and welcomes all requests for survey through the appropriate official defence to defence channels. For further information contact RNZN Hydrographer, CDR Tim Hall tim.hall@nzdf.mil.nz.

3. New charts & updates:

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

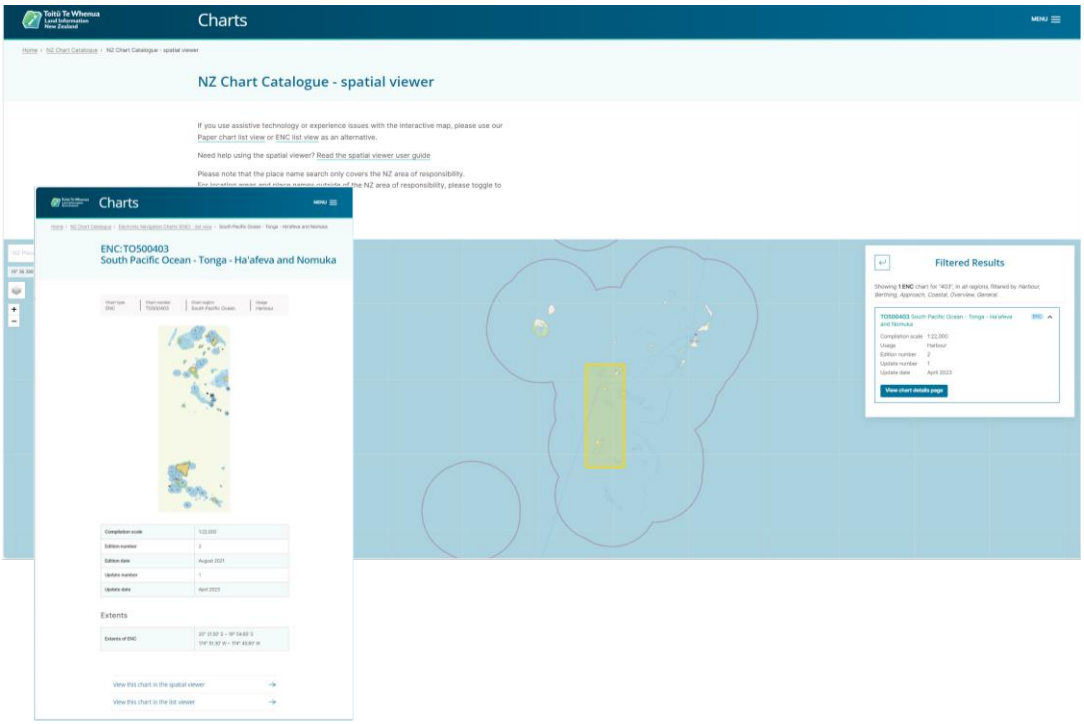
Nation	Paper Charts	ENCs
Cook Islands	3	23
Niue	1	4
Samoa	7	13
Tokelau	1	4
Tonga	13	18

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.



b) ENC distribution method

i. LINZ is a member of IC-ENC and distributes all New Zealand ENCs through the international distribution partners.

ii. LINZ also distributes ENCs through the NZ ENC Service and 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 NZ*Mariner* (RNC) service has been permanently withdrawn.

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

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 SWPHC21 Meeting			
New Zealand Total: 7 NC: 0 NE: 7	South West Pacific Total: 0 NC: 0 NE: 0	Antarctica Total: 0 NC: 0 NE: 0	INT Total: 0 NC: 0 NE:0

New Zealand Paper Charts scheduled for publication in 24/25 FY			
New Zealand Total: 7 NC: 0 NE: 7	South West Pacific Total: 0 NC: 0 NE: 0	Antarctica Total: 0 NC: 0 NE: 0	INT Total:0 NC:0 NE:0

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 New Zealand and PCA PICs. For Phase 1 of the IHO S-100 Implementation Priorities (Navigational Route Monitoring Mode), LINZ has responsibility for S-101 (Electronic Navigational Charts), S-102 (Bathymetry), S-111 (Surface Current) 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

New Zealand established a national S-100 Working Group in June 2024, to support the coordinated implementation of S-10X products. As part of this effort, we are also planning an S-100 test bed to trial different products and assess their benefits.

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

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 regarding publications is often a challenge, particular withdrawal of hardcopy 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 and available online. 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.

      For further information, refer to NAVAREA XIV Report to SWPHC22.

   b) Statistics on work of the National Coordinator
      Refer to NAVAREA XIV Report to SWPHC22

   c) New infrastructure in accordance with GMDSS Master Plan
      Refer to NAVAREA XIV Report to SWPHC22

   d) Challenges and achievements
      Refer to NAVAREA XIV Report to SWPHC22

6. C-55
   C-55 updated via online form 17 January 2025.

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 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) remains open to receiving requests for hydrographic assistance, including capacity building.

   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.

   Current areas of focus for the programme include:
   - Community education programmes in Samoa, Tonga and Niue
   - Legislative reform projects in Samoa and the Cook Islands
   - Aids to Navigation inspection project for Samoa
   - Development and delivery of e-learning training resources in partnership with New Zealand's Public Service Fale, targeting public servants throughout the Pacific
   - Ongoing support for improved use of safety systems management across the domestic and international passenger/cargo vessels operating in PMSP countries.

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 Research and GNS Science.

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, a node of the Australian Ocean Data Network (AODN).

NIWA vessels (RV *Tangaroa,* RV *Kaharoa II* 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; and exploration of the Bounty Trough and Pukaki Rise.

GNS Science led a voyage to the Hunga Tonga-Hunga Ha'apai volcano through the Beneath the Waves programme. Bathymetry, magnetic, gravity, core and water column data were collected.

b) GEBCO & Seabed 2030
GEBCO's current gridded bathymetric data set, the GEBCO_2024 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_2024 Grid is based on.

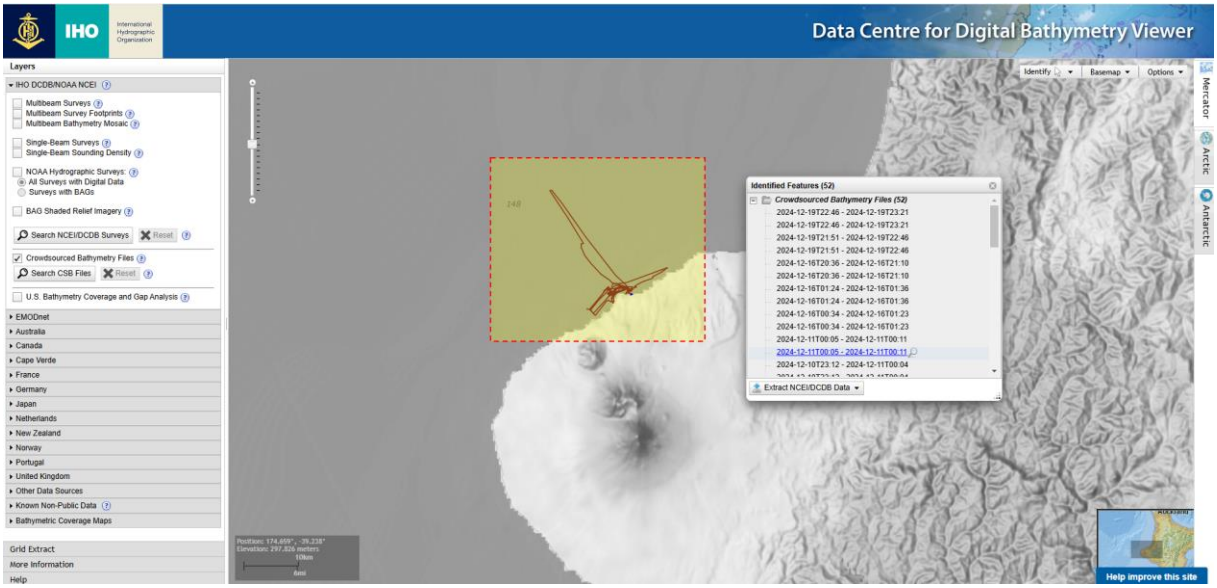
New Zealand is the Seabed 2030 Regional Center for the Pacific Ocean. The Pacific Center is run jointly by NIWA/GNS/LINZ and is hosted by NIWA. The latest data delivery from the Pacific Ocean will be delivered to the Seabed2030 Global Center at the end of February 2025. This data will then be reviewed and combined into a global grid, which will be released by GEBCO as GEBCO_2025 – expected in June 2025.

In November 2024, 90 participants from 27 countries gathered in Nadi, Fiji, for Seabed 2030's 6th Pacific Ocean Mapping Meeting. The event aimed to exchange knowledge, skills, and ideas, showcase regional seabed mapping efforts, foster collaboration, and accelerate progress towards creating a comprehensive, open-access global seabed map by the end of the decade. Inspiring keynote addresses from The Nippon Foundation, IHO, IOC-UNESCO, and the Fijian government, alongside an introduction by the Chair of the GEBCO Guiding Committee, set the tone for a dynamic and productive gathering. This meeting was particularly significant as it coincided with the 41st GEBCO Guiding Committee Meeting, also held in Nadi. This dual event highlighted the Pacific region's pivotal role within the GEBCO community, emphasising its importance in global ocean mapping initiatives.

c) Crowdsourced Bathymetry Activities

Through NIWA and LINZ, a partnership has been established between Seabed 2030 and the Spirit of Adventure Trust, a renowned not-for-profit youth development organisation based in New Zealand. The collaboration leverages the Spirit of Adventure Trust's role in promoting youth development through the marine environment and maritime experiences, alongside Seabed 2030's mission of highlighting the importance of a fully mapped seafloor, to enhance our understanding of the ocean. The trusts training vessel, the *Spirit of New Zealand*, has had a CSB data logger installed and active since August 2024 and bathymetry data will be published through the IHO Data Center for Digital Bathymetry (IHO DCDB).

The Department of Conservation of the New Zealand Government, is trialling a CSB data logger from Orange Force Marine (OFM) in the Taranaki region. The logger was installed in December 2024 with bathymetry data being published by OFM to the IHO DCDB (see image below).



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 Pacific Center at pacific@seabed2030.org.

In the wider region, 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.

d) Sea level gauge network

LINZ publishes tide predictions for Standard and Secondary Ports on the web.

LINZ, in partnership with GNS Science, has established a network of 21 sea level gauges to improve New Zealand's response to tsunami hazards. Further information is available here.

e) New equipment
NTR

f) Challenges and achievements
Joining Land and Sea (JLAS)
Since 2018, 96 temporary sea-level gauge sites were installed and calibrated. The JLAS project will enable data from terrestrial and marine environments to be more easily integrated, for seamless mapping across land/sea interface. A major challenge for JLAS is in connecting tide surfaces (MSL, MHW, LAT) to land control points and sea-level gauge datums to ensure the correct datum separation(s) are determined. This component is critical to enable the seamless mapping and combining land and sea datasets.

The **3D Coastal Mapping Project** includes the installation of GNSS receivers at 10 sea-level gauge sites. These will improve the data on vertical land movement to better understand the impact of sea-level rise.

CSB
Partnership established between Seabed 2030 and the Spirit of Adventure Trust; and installation of data logger on the training vessel *Spirit of New Zealand*.

Installation of data logger on DOC vessel and data published on IHO DCDB.

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.

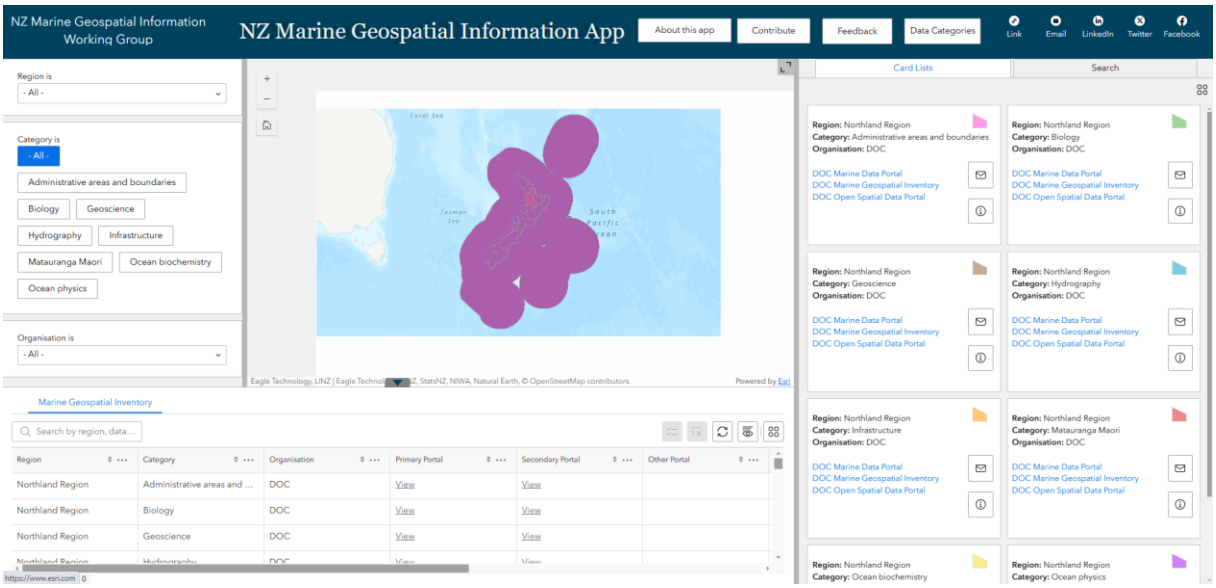
   c) Involvement in regional or global MSDI efforts
   LINZ regional involvement through:
      i. SWPHC MSDI WG
      ii. AusSeabed
      iii. GEBCO Seabed 2030 Pacific Data Center

   LINZ global involvement through:
      i. OGC Marine Domain WG
      ii. 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 Marine Geospatial Information (MGI) were identified as part of the data portal study and their characteristics are described on the MGI webpage.

The NZ Marine Geospatial Information (NZ MGI) WG has published a national New Zealand Marine Geospatial Information 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
After an internal review of work priorities and core business, LINZ made the decision to withdraw from the leadership of the NZ MGI WG and leading the Steering Group (SG) mid 2024. The SG is in the process of re-evaluating the work programme to ensure realistic expectations of timelines and SG members' capacity. A priority will be to rehouse NZ MGI WG material (use cases, meeting minutes, MSDI portal) to a non-agency specific website. Nominations for Chair and Vice-Chair are underway, along with provision of secretariate activities. All SG members indicate significant constraints on ability to increase commitment of time.

h) Key challenges:
Lack of committed funding and resources.

10. Innovation
a) Use of new technologies
As part of 3D Coastal Mapping, LINZ is investigating the creation of an intertidal DEM,

similar to the suite of products produced by Geoscience Australia's Digital Earth Australia.

b) Risk assessment
The risk assessment for New Zealand waters has been re-run with AIS traffic data from 2018/19 (pre-COVID). All risk assessment reports are available online. 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 SWPHC21	**Date**
DQWG19 (VTC)	March 2024
CSBWG15 (VTC)	April 2024
IRCC Workshop of Crowdsourced Bathymetry (VTC)	April 2024
IBSC47	April 2024
S-102PT17 (VTC)	May 2024
S-102PT18 (VTC)	June 2024
S-102PT19 (VTC)	August 2024
8th Council Meeting (C8)	October 2024
CSBWGIS01-2024 (Intersessional Meeting)	October 2024
S-100 WG	November 2024
S-102PT20	November 2024
TWCWG9 (VTC)	November 2024
SPRWG1, 2 & 3	Nov 2024 – Feb 2025
WENDWG15	February 2025

Future activities include:	
DQWG20 (VTC)	March 2025
CSBWG16	March 2025
IBSC48	May 2025
S-100WG10	September 2025
9th Council Meeting (C9)	October 2025
S-102PT21 (VTC)	November 2025
SWPHC23	March 2026

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. 58 Active Drifting buoys – 56 drifting, 1 beached and 1 island. 54 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.

LINZ provides geospatial support to other NZ Government agencies who respond to emergency events and help with post-event recovery. The LINZ Geospatial Incident Management Team responded to flooding following extreme weather events in June, October and November 2024.

New Zealand's National Emergency Management Agency have signed up to the International Disasters Charter. This enabled LINZ to respond to three international responses supporting GNS during the PNG Landslide (May 2024), NZ Defence Force after the sinking of HMNZS Manawanui (October 2024) and supporting Fire & Emergency NZ Urban Search & Rescue Team during the Vanuatu Earthquake (December 2024).

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 transforming the traditional paper chart use, 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 SWPHC21	
SWPHC S-100 Workshop (VTC)	May 2024
IC-ENC SC25 (VTC)	July 2024
Australasia Community Briefings for the S-5B Students	July 2024
IC-ENC S-101 Conversion Workshop	October 2024
6th South and West Pacific Regional Mapping Community Meeting (VTC)	November 2024

Future activities include:	
IC-ENC SC26 (VTC)	July 2025
SWPHC S-100 Workshop	Q3 2025

12. Conclusions
a) Areas of significant achievement

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:
- Hydrographic risk assessment completed and published

CSB:
- Partnership between Seabed 2030 and the Spirit of Adventure Trust and installation of data logger on *Spirit of New Zealand* training ship.
- Installation of data logger on DOC vessel and publication of data on IHO DCDB.

b) Areas of particular concern
- Maritime Digital Transformation
  - Secure funding to deliver the IHO 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

- The RNZN are keen to contribute to hydrography in the region and welcomes all requests for survey through the appropriate official defence to defence channels.

- New Zealand is planning to nominate Adam Greenland, NZ National Hydrographer for the position of IHO Director, to be decided at IHO A4 Assembly in April 2026. As NZ has worked closely together with the SWPHC, it is important to ensure the SWPHC was among the first to know of this. Adam would value the opportunity to discuss his nomination and hear your perspectives on the future of both our region and the IHO at this meeting.

Annex A

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)

P-5 updated via online form 30 January 2025.

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 updated via online form 17 January 2025.

National MSI Self-Assessment

Country: New Zealand
Organization: Maritime New Zealand

Refer to NAVAREA XIV Report to SWPHC22