

COOK ISLANDS
NATIONAL REPORT



**11th SOUTH WESTERN PACIFIC
HYDROGRAPHIC COMMISSION MEETING
BRISBANE, AUSTRALIA
15th -16th FEBRUARY 2012**

Table of Contents

1.0 Introduction.....	3
2.0 Cook Islands Nautical Charts.....	4
3.0 Scanned Maps.....	8
4.0 Hydrographic Capacity.....	8
5.0 IHO Capacity building training.....	9
6.0 SPC-SOPAC Hydrography Assistance	9
7.0 National Projects.....	9
7.0.1 Cook Islands ECS (Extended Continental Shelf) Claim	9
7.0.2 Maritime Boundaries	10
8.0 Capacity Building visit 21 – 25 February 2010	10
9.0 National Priorities 2012.....	10
10.0 Conclusion.....	11

1.0 Introduction

This report is prepared for the upcoming 11th meeting of the Hydrographic Organisation South West Pacific Hydrographic Commission to be held in Brisbane, Australia, from 15 to 16 February 2012. The Cook Islands along with other SWPHC member countries are to report back to the Commission on the progress of Hydrographic activities undertaken by each States as their obligation under UN Resolution A/58/240

“Invites the International Hydrographic Organization and the International Maritime Organization to continue their coordinated efforts, to jointly adopt measures with a view to encouraging greater international cooperation and coordination for the transition to electronic nautical charts and to increase coverage of hydrographic information on a global basis, especially in areas of international navigation and ports and where there are vulnerable or protected marine areas.”

The Cook Islands is a self-governing nation in free associated with New Zealand, and comprises a series of islands located in the western equatorial Pacific Ocean scattered between 8° and 23° latitude S and 156° and 167° longitude W as specified in the *Constitution of the Cook Islands*.

Under SOLAS V/9 – It is an obligation for Government of the Cook Islands to collect and compile of hydrographic data and the publication, dissemination and keeping up to date of all nautical information necessary for safe navigation.

The Cook Islands in contrast have the third largest 200 EEZ in the Pacific Region in which they depends on the ocean for export and imports of goods for economic benefits. The shipping industry needs efficiency and safety. Poorly charted areas and lack information can cause voyages to be longer than necessary, and may prevent the optimum loading of ships, thus increasing costs. The saving of time and money resulting from the use of shorter and deeper routes and the possibility use of

larger ships or load ships more deeply may produce importance economies for national industry and commerce. It is very important to note that the SOLAS Convention, Chapter V, considers a ship unseaworthy if it does not carry up to date charts necessary for the intended voyage.

2.0 Cook Islands Nautical Charts

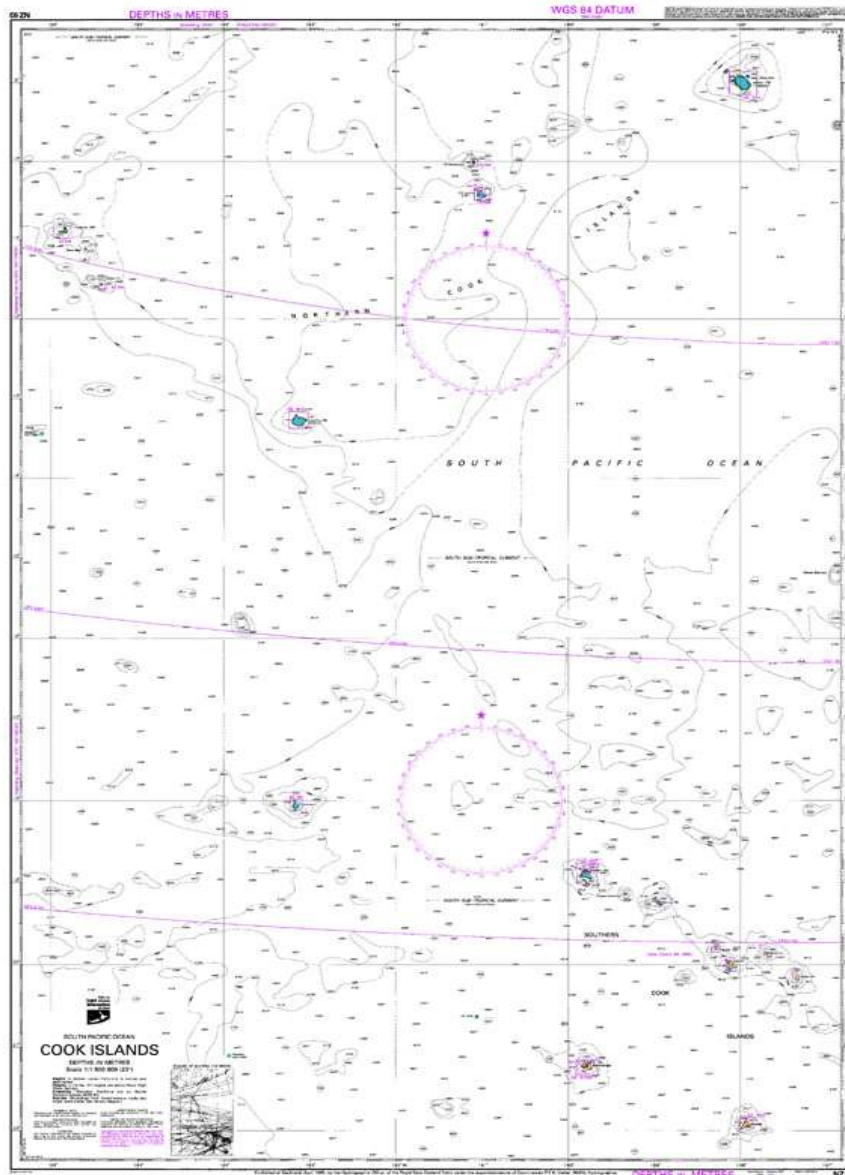


Figure 1. Cook Islands Nautical Chart produced by Land Information New Zealand showing the general bathymetry of the Cook Islands.

Two series of Nautical Charts of the Cook Islands were produced by the hydrographic office of the Royal New Zealand Navy in October 1993 shown below in Figure 2, 3 4. (NZ945, NZ955 and NZ9558). The Nautical Charts shows the Southern and the Northern Group islands of the Cook Islands.

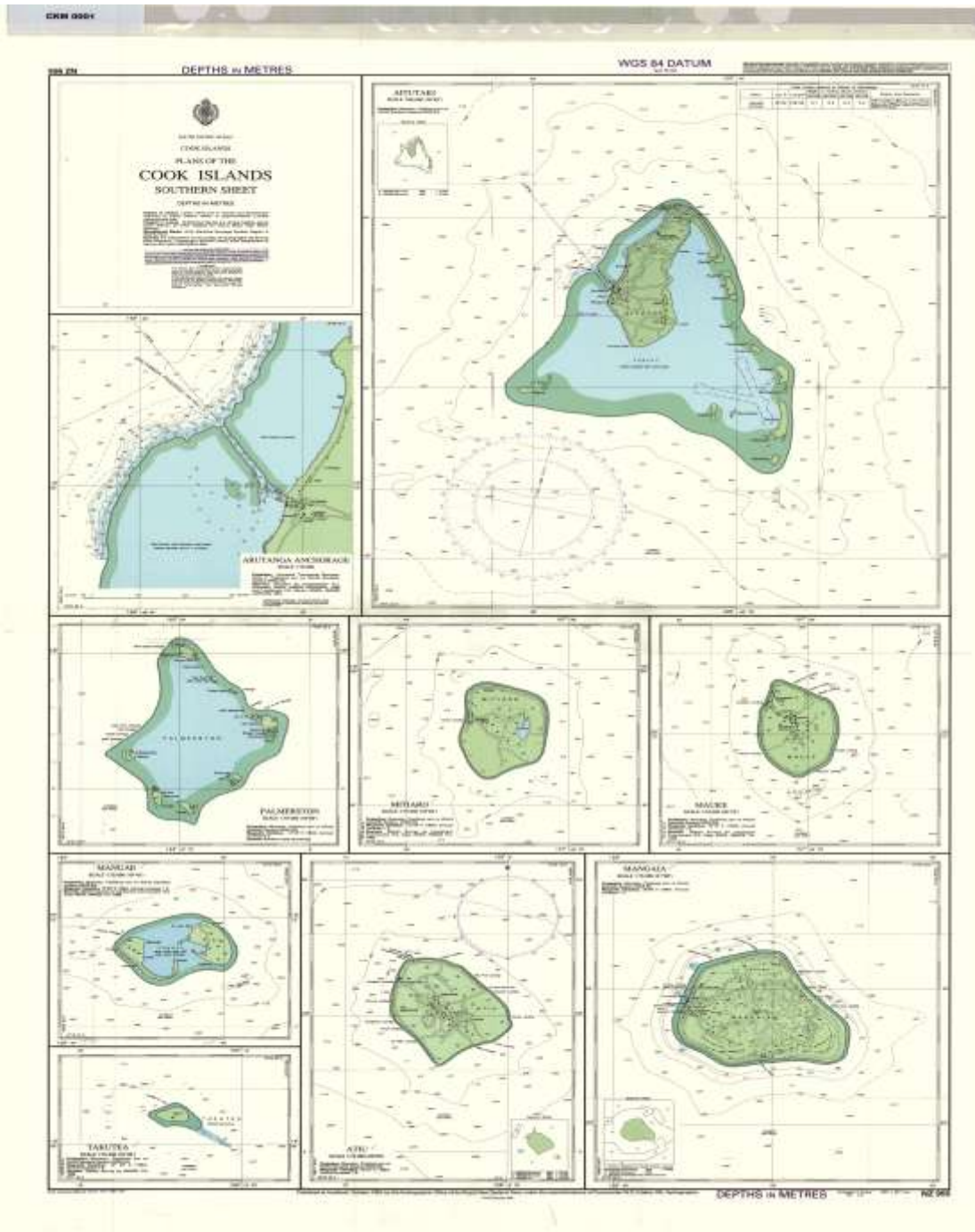


Figure 2.NZ945 Hydrographic Chart -Southern Group Islands, Cook Islands.

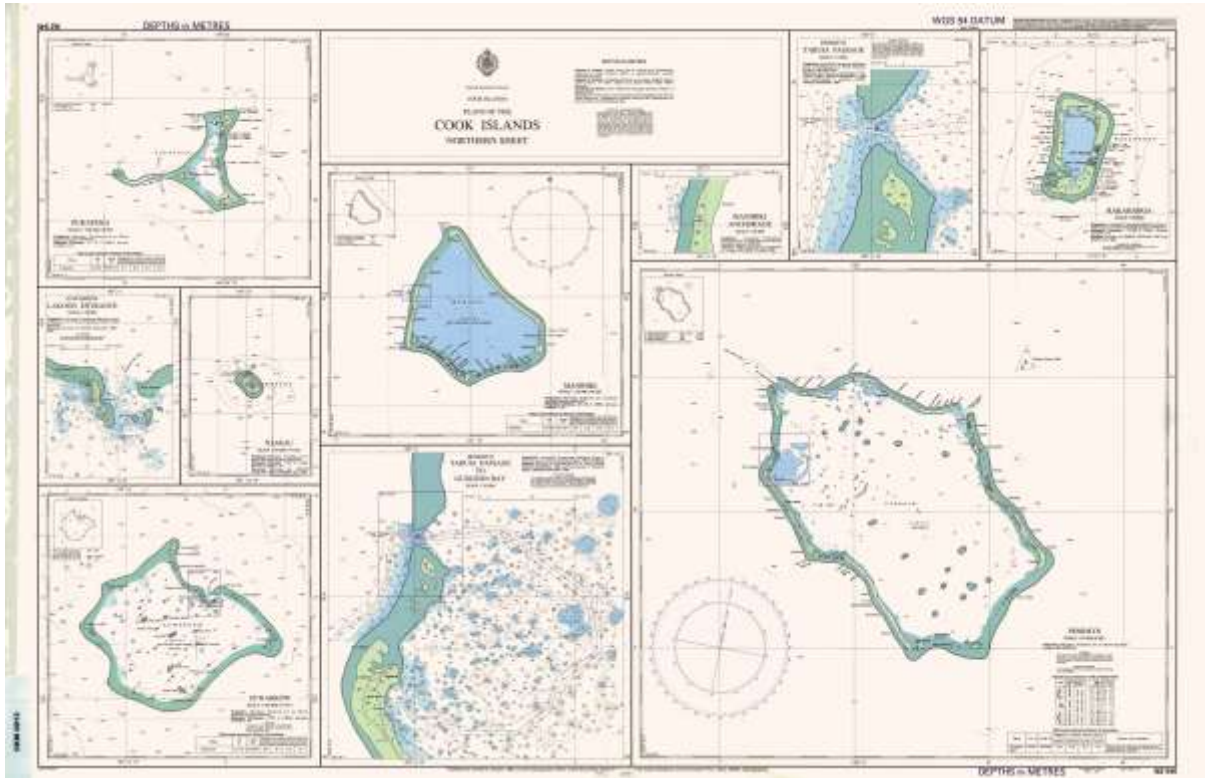


Fig 3.NZ955 Hydrographic Chart – Northern Group Island, Cook Islands

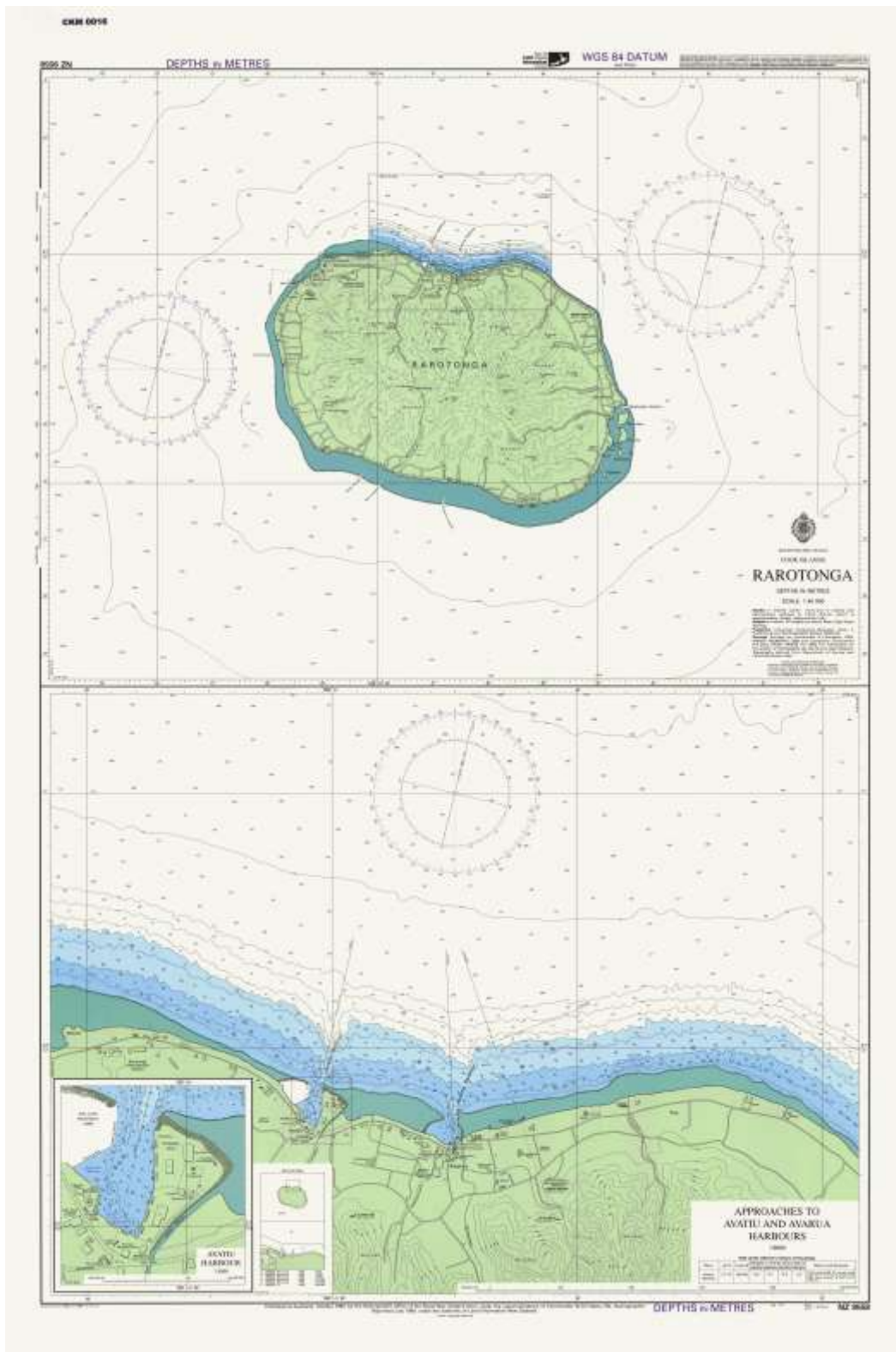


Fig 4. NZ9558 Hydrographic Chart Rarotonga Island (Main Island)

The Cook Islands comprises two groups of islands as follows:

- the northern group including Manihiki, Nassau, Rakahanga, Penrhyn, Pukapuka, Suvarrow; and
- The southern group including Aitutaki, Atiu, Mangaia, Manuae, Mauke, MitiaroPalmerston, Rarotonga, Takutea.

There are a total of fifteen islands in the Cook Islands group located between 150° to 170° west longitudes and 5° to 25° south latitude. The Cook Islands is one of the Polynesian groups in the South Pacific Region with a total land area of 242 sq km.

The Cook Islands has a good coverage of hydrographic charts produced by the hydrographic department of the Royal New Zealand Navy. These charts are published on the World Geodetic system 1984 (WGS84)

3.0 Scanned Maps

Listed in the table below are the three hydrographic Charts covering the Cook Islands

Reference	Map Title	Scale	Type	Data Produced
NZ945	Cook Islands (Northern Sheet)	Various	New Zealand Hydrographic Chart	October 1995
NZ955	Cook Islands (Southern Sheet)	Various	New Zealand Hydrographic Chart	October 1993
NZ9558	Cook Islands (Rarotonga)	1:40000	New Zealand Hydrographic Chart	October 1992

4.0 Hydrographic Capacity

The Cook Islands does not have any government agency established to undertake hydrographic activities to carry out hydrographic surveys and the production of nautical charts. There were some assurances from the minister of seabed mineral authority that these activities should imbedded as part of the newly created seabed mining unit under the office of the deputy prime minister office.

5.0 IHO Capacity building training

- Cook Islands have attended the technical workshop on Maritime Safety Information (MSI) hosted in Sydney in August 2010.
- Cook Islands have attended the two weeks Regional Training Course in Hydrographic Surveying and Introduction to Chart Production October 2010 in Port Moresby, Papua New Guinea.

6.0 SPC-SOPAC Hydrography Assistance

The South Pacific Applied Science Commission (SOPAC) are active in the Cook Islands and have carried out many bathymetric surveys for scientific purposes including, water management, habitat mapping, infrastructure projects and environmental impact assessments. Some of these surveys could be used to improve the quality of nautical charts.

SOPAC reports significant WGS84 GPS positioning inconsistencies when compared to the official charts of the Cook Islands. It is possible that SOPAC positional information could be used to improve the positional accuracy of some Cook Islands charts.

7.0 National Projects

7.0.1 Cook Islands ECS (Extended Continental Shelf) Claim

The Cook Islands have submitted their submission to UNCLOS in 2009 for their claim of their extended continental shelf. The next sub commission meeting has been confirmed for April this year for the Cook Islands to attend and for the commission to relook at the submission for endorsement. If the Cook Islands successfully with their submission they will be the first country in the Pacific region to have their extended continental shelf approved by the UNCLOS sub-commission.

7.0.2 Maritime Boundaries

The Cook Islands currently have 3 treaties with French Polynesia, Tokelau and American Samoa. The Cook Islands and its neighbours Niue and Kiribati have finally completed their technical work of their baseline and waiting for the completion of the agreements draft by their legal team. During the technical workshop in Fiji last year the median and high seas boundaries were also delimited to ensure that each countries have the complete area of their 200 EEZ. The amendment of the maritime acts were also considered priority to enable both countries to use satellite images to developed their baseline rather than using the nautical charts, hence the error of 800 metres in the Cook Islands charts.

8.0 Capacity Building visit 21 – 25 February 2010

Commodore Rod Nairn, Hydrographer of Australia, Royal Australian Navy, and Adam Greenland, National Hydrographer, Land Information New Zealand (LINZ), the New Zealand Hydrographic Authority, undertook a technical assessment visit to the Cook Islands from 21 to 25 February 2011 on behalf of the International Hydrographic Organization (IHO). The visit was funded from the IHO Capacity Building Fund. Coincidentally, the visit coincided with a visit from a representative of Maritime NZ who had come to discuss potential Cook Island maritime infrastructure aid projects.

9.0 National Priorities 2012

- The Cook Islands government apply for membership of the International Hydrographic Organisation (IHO);
- The Cook Islands government to investigate funding at least a minimum level of incountryhydrographic and MSI capability perhaps through using some of the shipping fees from visiting ships or from the Cook Islands shipping registry;

- The Cook Islands government to seek associate membership (as a non-IHO-Member State) of the South West Pacific Hydrographic Commission (SWPHC)
- The Cook Islands government to formally establish a national hydrographic governance structure, to ensure the provision of hydrographic services in accordance with the international Convention on Safety of Life at Sea (SOLAS) and contemporary international practice;
- The Cook Islands government to ensure that the national framework to meet hydrographic responsibilities establishes at least:
 - 1) a national MSI Coordinator position
 - 2) a formal agreement with Land Information New Zealand (LINZ), the New Zealand Hydrographic Authority, for the provision of hydrographic services;
- The Cook Islands government to establish a close liaison with LINZ to ensure new navigationally significant information is forwarded and included in existing charts of the country; and
- The Cook Islands government to form a national hydrographic consultative committee to coordinate national hydrographic requirements.

10.0 Conclusion

The Cook Islands does not appear currently to be meeting its international treaty obligations to ensure that appropriate hydrographic services are in place. Furthermore, the current state of nautical charting and the lack of coherent MSI services may have a significant adverse impact on the Cook Islands economy as well as putting the safety of life at sea and protection of the marine environment at risk.

The development of an in-country hydrographic data gathering capability is not currently seen as an economically sustainable option. The RNZN has provided Hydrographic surveying services in the past. Current hydrographic technical expertise has more recently been provided by LINZ, e.g. technical specifications and

advice to the Ports Authority and SOPAC for the hydrographic survey of the new cruise tender landing stage at Arorangi.

There is an urgent need for the development of a prioritised survey programme that would allow:

- a. reported dangers to be confirmed,
 - b. enable the collection of relevant new or changed hydrographic information,
- and
- c. identify priorities for the survey of previously unsurveyed areas.

However, this will require the allocation of suitable funding. All the hydrographic data collected would require processing and subsequent verification by LINZ prior to charting action.