

## IHO Capacity Building in the South West Pacific Region – NZ Perspective

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#### **Overview**



- Introduction to Capacity Building
- IHO Strategy, Plan and Goals
- Implementation by SWPHC
- Recent Initiatives in the SWP
- New Zealand's role, responsibility & contribution



#### **Introduction to Capacity Building**







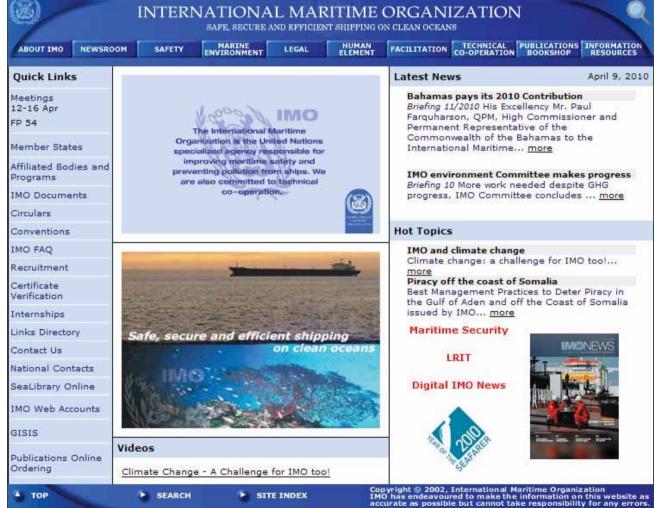


- IHO is an Intergovernmental body, recognised by the UN as a competent organization for hydrography and nautical charting
- Objectives include coordination of the work of Hydrographic Services to ensure that hydrographic surveys are conducted; nautical charts and publications are published and maintained and maritime safety information is promulgated without undue delay
- Hydrography underpins almost all maritime applications i.e. port construction, fisheries, delimitation of national jurisdictional zones



#### **International Maritime Organization**









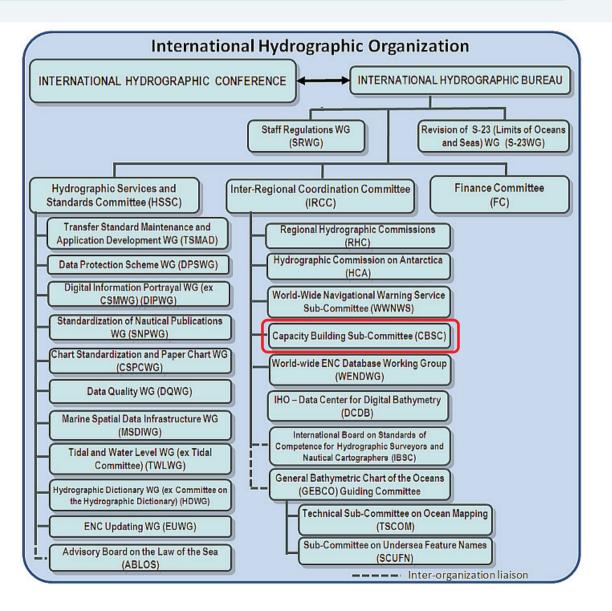
		INTERNATIONAL MARITIME ORGANIZATION SAFE, SECURE AND EFFICIENT SHIPPING ON CLEAN OCEANS								
ABOUT IMO	NEWSROOM	SAFETY	MARINE ENVIRONMENT	LEGAL	HUMAN	FACILITATION	TECHNICAL CO-OPERATION	PUBLICATIONS BOOKSHOP	INFORMATION RESOURCES	

- IMO Purpose
  - ...to encourage and facilitate the general adoption of the highest practical standards in matters concerning maritime safety, efficiency of navigation...
- Maritime Safety Committee (MSC)
  - SOLAS chapter V, regulation 9: collection and compilation of hydrographic data
  - To meet SOLAS obligations, coastal States should consider establishing a national Hydrographic Service



#### **IHO Committees & Working Groups**







#### **Capacity Building Concept**



30 Contractions	INTERNATIONAL HYDROGRAPHIC ORGANIZATION L'ORGANISATION HYDROGRAPHIQUE INTERNATIONALE								
Home Letters and Docum	ents Standards & Publications Committees & WG Capacity Building & Training About ENCs and ECDIS Meetings External Liaisons IHO Member States								
SUBMENU	Home / Capacity Building & Training								
<ul> <li>Capacity Building Management</li> <li>Capacity Building Assessment</li> </ul>	Capacity Building - Concept								
Capacity Building Training     QUICKSEARCH	With respect to the IHO, Capacity Building is defined as the process by which the Organization assesses and assists in sustainable development and improvement of the States, to meet the objectives of the IHO and the Hydrography, Cartography and Maritime Safety obligations and recommendations described in UNCLOS, SOLAS V and other international instruments.								
search GO	Capacity Building is considered by the IHO as a strategic objective.								
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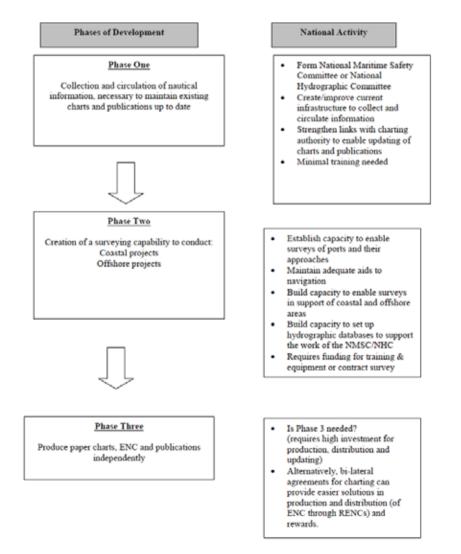


- Capacity building is a vital component of the efforts of intergovernmental technical organisations to support the development goals of the United Nations (UN).
- Principles
  - 3 Phase assessment of a nations need for infrastructure
  - appropriate and sustainable transfer of skill and technology
  - regional coordination, support and co-operation
  - national interest
  - achieve an enduring output which benefits safe navigation, safety of life at sea and economic development





#### PHASES OF DEVELOPMENT OF HYDROGRAPHIC SURVEYING AND NAUTICAL CHARTING CAPABILITY







- Long term objective
  - enable all States with navigable waters to achieve timely collection and promulgation of hydrographic information for their national waters; develop a national plan for the creation of survey capability; and production of nautical products
- Short term objectives
  - raise awareness of the importance of hydrography
  - establish a "live" electronic version of C-55
  - present priorities for capacity building action to the UN
  - enable RHC to establish a database and prioritisation process for regional co-operative efforts
  - Implement appropriate management of IHO CBF (complete 2006)
  - Produce an auditable IHO Capacity Building Management Plan (complete 2006)



#### **Recent Initiatives in the SWP Region**



#### Capacity Building Publications/ Publications relatives au renforcement des capacités

Reference/ <i>Référence</i>	Description	Downloads/ Téléchargement
C-6	Reference Texts for Training in Hydrography.(In preparation) Textes et journaux de référence pour la formation en hydrographie (en préparation)	
C-13	Manual on Hydrography, 1st Edition, May 2005 Manuel d'Hydrographie, 1ère édition, mai 2005	English Español
C-16	National Hydrographic Regulations. January 2008 Règlements hydrographiques nationaux. Janvier 2008	Multilingual
C-17	Spatial Data Infrastructures: "The Marine Dimension" - Guidance for Hydrographic Offices, Edition 1.0, October 2009 Infrastructure des données spatiales: "La dimension maritime" - Guide à l'usage des Services hydrographiques, édition 1.0, octobre 2009	English
C-47	Training Courses in Hydrography and Nautical Cartography (6th edition) Cours de formation en hydrographie et en cartographie marine	English
C-51	Manual on Technical Aspects of the UN Convention on the Law of the Sea. 4th Edition (English only). French and Spanish versions to come. Manuel sur les aspects techniques de la Convention des Nations Unies sur le droit de la mer, 4ème édition (anglais seulement). Versions françaises et espagnoles en préparation.	English
C-55	Status of Hydrographic Surveying and Nautical Charting Worldwide, (3rd edition 2004) <b>Continuously updated</b> . Etat des levés hydrographiques et de la cartographie marine dans le monde (3ème édition 2004), <b>mise à jour continue</b>	English Web Version Français Version en ligne



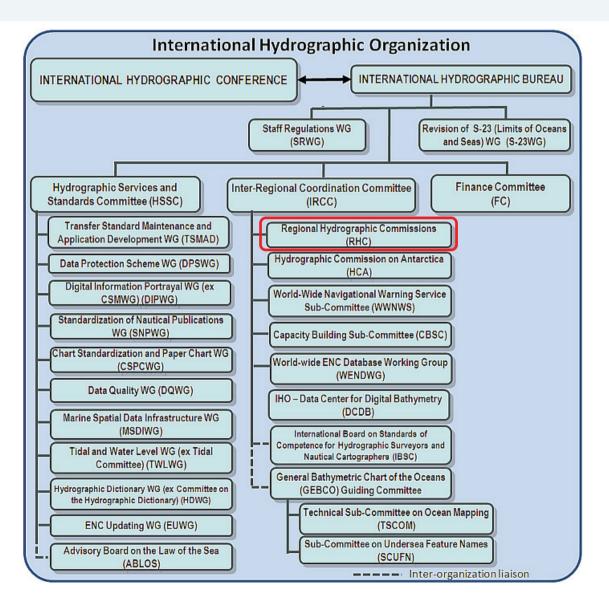


- Capacity building process built around 4 steps
  - Awareness to be raised of the significance and impact of hydrography on maritime safety
  - Assessment through the revision and update of C-55 and technical visits
  - Analysis of C-55 database i.e. MSI, survey and charting for coastal States, reviewed through IHO RHCs and National Reports; and technical visits
  - Action mechanisms include; contact with national experts i.e. IHO, IHB, RHC, technical workshops; IHO and RHC assistance coordinating regional survey, charting and MSI projects; provision of SOLAScompliant hydrographic services, loan of skilled staff, training, sustainable technology transfer



#### **Regional Hydrographic Commissions**

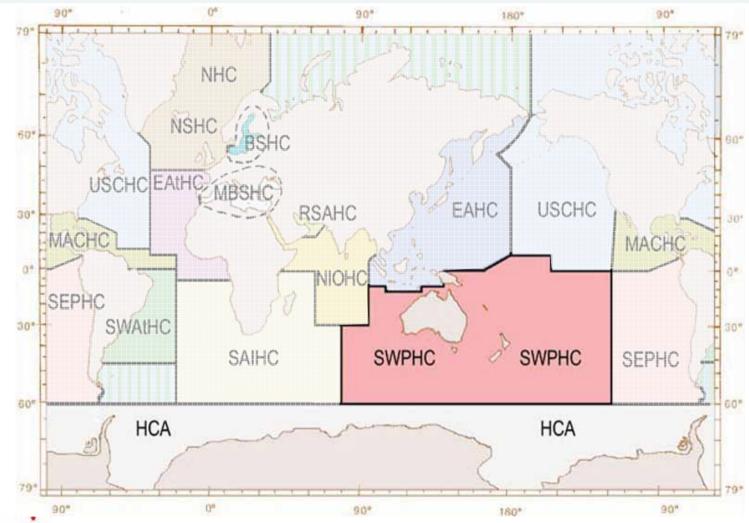






# South West Pacific Hydrographic Commission







#### **Implementation by SWPHC**



- Capacity building has been identified as a major issue in the SWPHC Region
  - liaison to raise awareness of the importance of hydrographic services and support development of hydrographic capabilities
  - assessment studies and technical visits
  - participation in IHO CBSC to provide input from region to CBWP
- Meetings
  - 9<sup>th</sup> Meeting, Papua New Guinea, Mar 2009
  - 10<sup>th</sup> Meeting, Solomon Islands, Nov 2010





#### **Implementation by SWPHC**



- 9<sup>th</sup> SWPHC Reports & actions
  - Australia and New Zealand to finalize the six applications for CBSC funding
    - PacMA meeting, May 2009 (complete)
    - Solomon technical visit in 2009 (complete)
    - Cook Islands technical visit in 2009 (funding approved)
    - Kiribati technical visit in 2009 (funding approved)
    - MSI workshop organised by Australia 17-19 Aug 2010
    - Cartographic training course in 2010-11



### **Recent Initiatives in the SWP Region**

- Pacific Islands Maritime Association (PacMA) ٠
  - SWPHC invited to attend meeting of May 2009 as observer
  - LINZ attended and presented a paper describing the role of SWPHC within IHO and benefits of membership
  - Paper presented the broad issues of concern to the SWP, including declining hydrographic institutions and skills; relationship between hydrographic and economy
  - Importance of hydrography in the region for SOLAS regulations
  - Coordination of surveying and charting
  - Capacity building identified as one major issue in the region





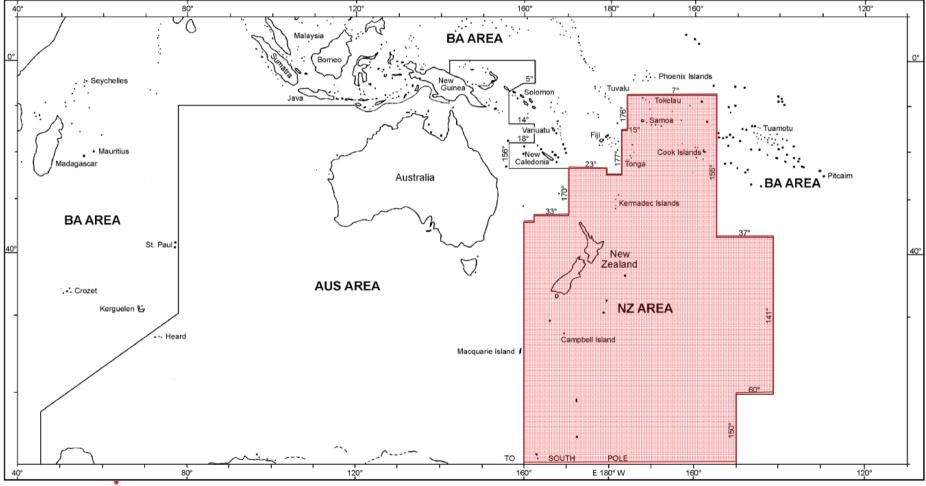






#### **New Zealand Area of Responsibility**







#### New Zealand's Role & Responsibilities



- LINZ is the authoritative provider of New Zealand's Hydrographic Services responsible for producing and maintaining official nautical products to aid safe navigation in New Zealand waters, the Ross Sea Region of Antarctica and certain areas of the South West Pacific.
- LINZ Hydrographic Services was established in 2005 with a team of 5. In 2010 there are 10 team members responsible for:
  - Maritime Boundaries
  - Validation of hydrographic data
  - Notices to Mariners
  - Nautical Publications
  - Charting Programme
  - Survey Programme
  - Tide Predictions

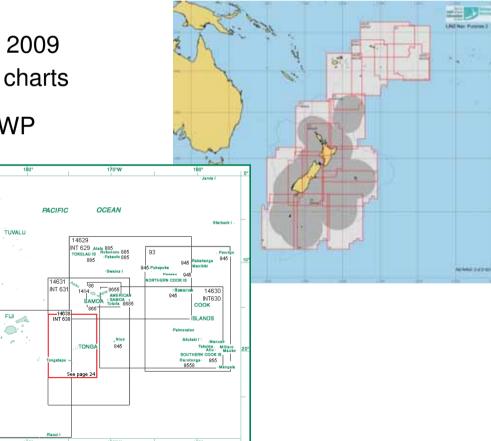




#### New Zealand's Role & Responsibilities



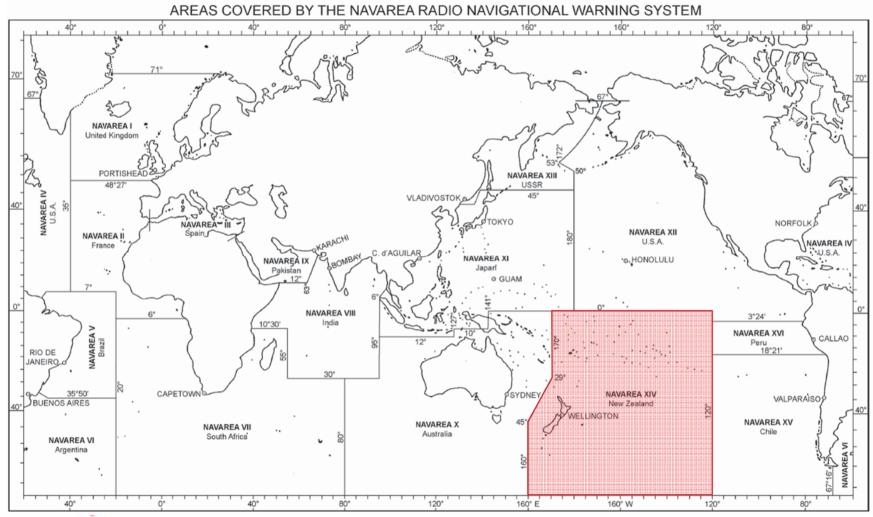
- 180 paper charts in the LINZ chart folio
- Recent implementation of single source digital database (CARIS HPD)
  - First ENC produced Nov 2008
  - First paper chart produced Oct 2009
  - Approx. 60 ENC cells, 2 paper charts
- LINZ Chart and ENC schema for SWP
  - A number of fathom charts on undetermined datums





#### **New Zealand Area of Responsibility**



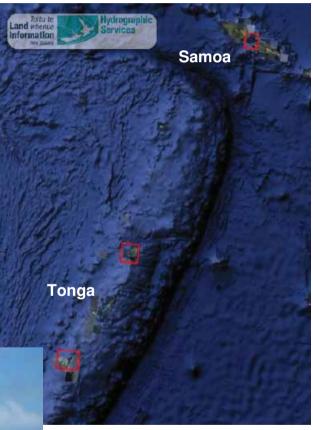






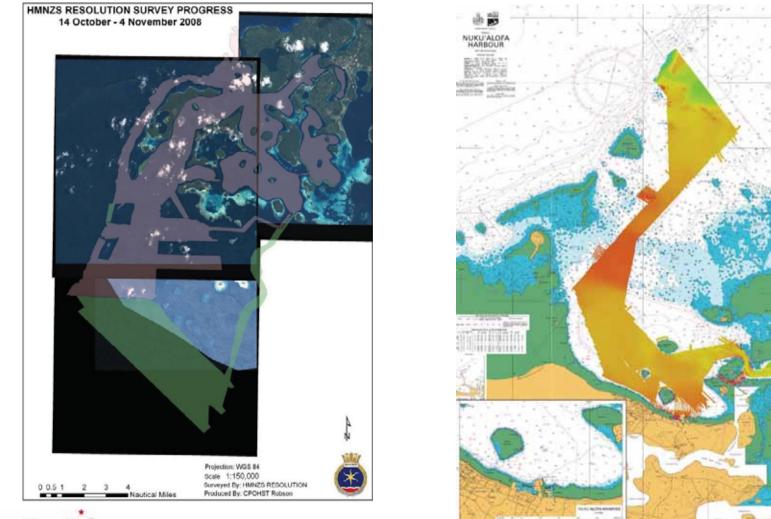
- Annual National Prioritised Survey Plan, including South West Pacific islands
- 2005 & 2007 RNZN survey of Tokelau islands, New Edition produced 2009.
- 2008 RNZN tasked with survey in Kingdom of Tonga and Samoa. New Charts to be published in 2010.
  - Hydrographic surveyors from Tongan
     Defence Service onboard HMNZS
     Resolution







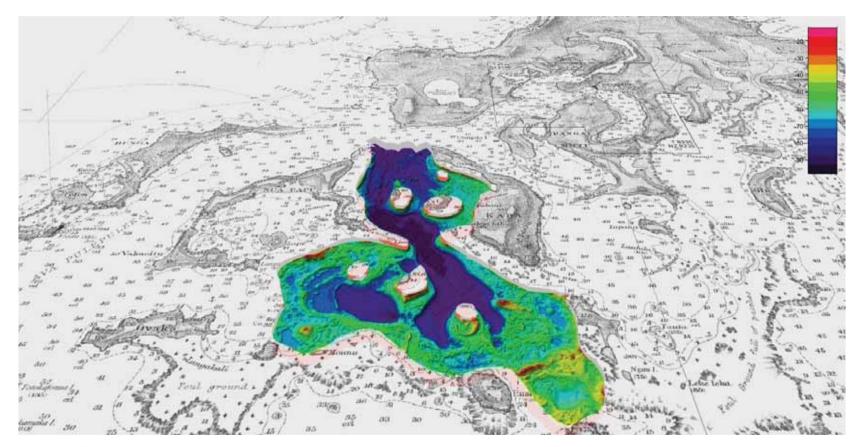








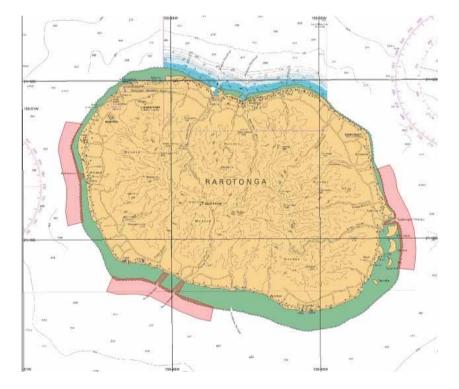
#### Kingdom of Tonga, Vava'u Group

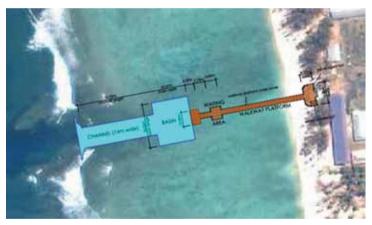






 Technical advice provide to Cook Island Port Authority for development of cruise ship tender landing jetties









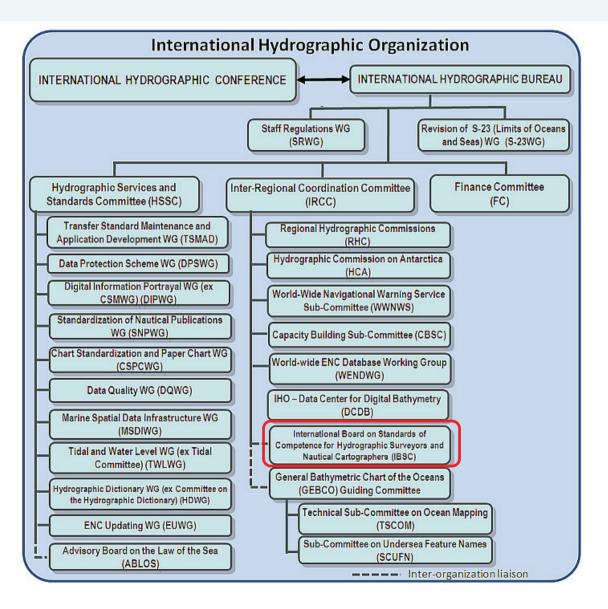
- 2008 MFAT request for technical assistance with the delimitation of the maritime boundary between Tokelau and Cook Islands
- Mis-location of Northern Cook Islands requiring further investigation





#### **Regional Hydrographic Commissions**









- SWPHC 6<sup>th</sup> Meeting, Fiji, Nov 2004
- SWPHC 7<sup>th</sup> Meeting, New Zealand, Nov 2005
- 11<sup>th</sup> PacMA Meeting, Samoa, Apr 2007 IHB Technical Visit
- SWPHC 8<sup>th</sup> Meeting, Tahiti, Sep 2007
- IMO/IHO Seminar, Raising Awareness of Hydrography in the Island States of the South Pacific, Fiji, Oct 2008
- SWPHC 9<sup>th</sup> Meeting, Papua New Guinea, Mar 2009
- IBSC International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers
  - 33<sup>rd</sup> Meeting March 2010







- Capacity building in the SWP is a vital component in raising the awareness of the importance of hydrography in the South West Pacific Island States
- The SWPHC has identified capacity building as a major issue in the region and is facilitating various technical workshops
- The SWPHC has encouraged other South Pacific Island organisations (SOPAC, PacMA and SPC) to join the SWPHC
- LINZ surveys in Tonga and Samoa. TDS personnel onboard
- Future surveys to be confirmed
- NZ committed to hydrography in SWP region





## Thank You & Questions