

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

Minutes of the 11th SWPHC Meeting

1. Welcome and Opening Remarks

Mr Nicholas Pion (Chairman SWPHC) opened the meeting and spoke briefly about the previous SWPHC Meeting held in Honiara, Solomon Islands. He thanked Australia for organizing and hosting the current meeting.

CDRE Rod Nairn (Vice Chair SWPHC) welcomed all participants, noting that there were many new participants to the forum. He added that this was one of the best attended meetings in the history of the Commission, and hoped that many new Observer States would become Members of the SWPHC. CDRE Nairn also mentioned the success of the Ports and Shallow Water Bathymetry Technical Workshop held during the previous two days. He took this opportunity to review the history, intent and statutes of the SWPHC for the benefit of the new participants.

The list of meeting participants is provided in **Annex A**.

2. Confirmation of Agenda

The agenda (SWPHC11-2 rev1), circulated prior to the Meeting, was unanimously adopted. (Note: Subsequently in the Meeting it was decided that additional two items be added to the agenda - i.e. item 7B (Review of Statutes and delimitation of boundaries of Hydrographic Commission) and item 11A (Regional and National Survey Data Management).

3. Review of Action Items from the 10th SWPHC Meeting

The status of actions and decisions arising from the previous Meeting were reviewed. Outcomes are detailed below.

Action 9.2- Member States who have not yet ratified the protocol of amendments to the IHO Convention to ensure that the process is underway, to request assistance from the IHB if necessary and to ask their administration to accelerate the process.

It was reported that New Zealand has ratified the protocol of amendments and forwarded to the Monaco government for processing. The Chair would write to Fiji and Tonga requesting them to expedite the process of ratification.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
1	9.2	Request Fiji and Tonga to expedite process of ratification of the Protocol of Amendments to the IHO Convention.	Chair	ASAP	

Action 9.9- Australia to act as the SWPHC focal point for Capacity Building matters.
It was agreed that Australia will continue in this role.

Action 10.1- *IHB to contact SPC Director-General and IHB/France to pursue formalization (e.g. MOU) of SPC-IHO relationship.*

CAPT Ward reported that a MOU has been concluded with SPC, and within the MOU there is specific mention of the SWPHC being the focal point of contact for the SPC. CAPT Ward met with Director General of SPC in Fiji and he is supportive and enthusiastic to use MOU to best advantage, and has started to raise the importance of hydrography at ministerial briefings within the SPC community.

Action 10.2- *SWPHC Chair to write to Director SOPAC encouraging SOPAC to include personnel with internationally recognised hydrographic qualifications.*

Action completed. Mr Jens Kruger (SOPAC-SPC) commented on the success of partnering with the AHS in submitting an application to AUSAid for funding for staff to undertake Category B hydrographic surveying training. Unfortunately the application was unsuccessful in this instance but a good model for future endeavours.

Action 10.3- *SOPAC and Charting Authorities to keep each other informed of survey activities in the region. SOPAC to provide Charting Authorities with existing survey data and Charting Authorities to provide feedback on the quality of SOPAC surveys.*

Action completed. Mr Bob Wilson (UKHO) reported that he had a fortuitous meeting with Dr Jimmy Rogers and Dr Russell Howorth of SOPAC in Fiji in 2011. A co-operation programme between UKHO and SOPAC was put forward and is currently being finalised. Australia will send its survey programme ‘Hydroscheme’ to SOPAC. New Zealand commented that they have not had any survey activities in the region, however this is due to change in the future. NZ is undertaking risk assessment of the region, examining the risk associated with inaccurate charting in the region and using these results to inform charting priorities and apply for funding through AID programs.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
2	11.1	Hydroscheme to be provided to SOPAC	Australia	ASAP	

Action 10.4- *SOPAC to compare LINZ survey data with the SOPAC data to be acquired in Tonga, in order to evaluate the quality of SOPAC data.*

Action outstanding. Mr Jens Kruger (SOPAC) reported that the survey was carried out April-May 2011 and data post-processing had been completed. Subsequently LIDAR survey was carried out over the same area to fill some gaps. It was decided to leave the action as outstanding until LIDAR data becomes available so that comparison can be made & no duplication is noted.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
3	10.4	Compare LINZ survey data with the SOPAC data to be acquired in Tonga, in order to evaluate the quality of SOPAC data	SOPAC	ASAP	

Action 10.5- *France (Mr Bruno Frachon) to represent SWPHC on the IHR editorial board, until the next IH Conference.*

Action completed. The UK (Mr Bob Wilson) volunteered to take on the role after the next IH Conference.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
4	11.2	Mr Bob Wilson to represent SWPHC on IHR editorial board – succeeding Mr Bruno Frachon.	UK		

Action 10.6- *Charting Authorities to review and confirm the validity of IHO Publication C-55- even if no change has occurred.*
Discussed under Agenda Item 11.

Action 10.7- *Australia, with the assistance of designated Member States to finalise the applications for CBSC funding discussed during the Meeting for submission at CBSC9.*
Action completed. See details in Agenda Item 7.

Action 10.8- *Charting Authorities to include SOPAC in their list of information providers when preparing new charts.*
Action ongoing.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
5	11.3	SOPAC to be included in list of information providers when preparing new charts	Charting Authorities	Ongoing	

Action 10.9- *Australia to coordinate Region L INT chart scheme and ENC production boundaries and propose Terms of Reference (ToR) for a Region L ICCWG to the members. Charting Authorities to designate a national point of contact by November 2010.*
The meeting noted that ToR have been drafted but not circulated. It was agreed that the item will be dealt with more comprehensively at Agenda Items 8 & 9.

Action 10.10- *France to provide diagrams showing the coverage of French ENC (band 1 & 2).*
Action completed.

Action 10.11- *Australia to finalise the SWPHC ENC scheme (band 1 & 2).*
Action completed.

Action 10.12- *Charting Authorities who have not provided details of their ENC large scale scheme (band 3-6) in their respective areas, to provide the other members of ICCWG with their plan in a GIS compatible format.*
Discussed under Agenda Item 9.

Action 10.13- *France to forward information about Litto3D® and INFRAGEOS projects to SWPHC Member States and SOPAC.* It was reported that this task was completed.
Action completed.

Action 10.14- *Member States and SOPAC to provide a brief report about their experience on MSDI by December 2010 and France to provide a synthesis to IRCC.*
Action completed.

Action 10.15- *Member States and SOPAC to provide a brief report about their experience in terms of response to marine disasters by December 2010 and France to provide a synthesis to IRCC.*
Action completed

Action 10.16- *Australia to confirm venue of the 11th SWPHC Meeting and associated technical workshop.*
Action completed.

4. Exchange of Information through National Reports

All Member States in attendance presented comprehensive national reports which are available from the IHO website (http://www.iho.int/mtg_docs/rhc/SWPHC/SWPHC11/SWPHC11_Docs.htm). The following points were highlighted:

4.1 United Kingdom

Since the previous SWPHC Meeting, the UK has published 13 new adoptions from the AUS series and 23 new editions of charts previously adopted as well as 8 new editions of charts previously adopted from the NZ series. A review of charting in the Kiribati region is currently being undertaken with a view to embarking on a chart modernisation programme in the area.

The UK's principal responsibility in the region is for the Pitcairn Islands but also undertakes primary charting for Fiji, Kiribati, Solomon Islands, Tuvalu and Vanuatu.

During the past year, the UK has accompanied the IHB on technical visits to Kiribati, Vanuatu and Fiji and will proactively follow up on the recommendations coming out of those visits.

4.2 France

France has a number of territories in the region. SHOM, the French Hydrographic Service, conducts or participates in different types of surveys in the SWPHC region. Two main types of survey activity are undertaken in the region- the first involves collection of data in support of French continental shelf claims and the second is aimed at collection of nautical information to improve the SHOM chart portfolio.

Since November 2010 SHOM has conducted surveys and installed tide gauges in New Caledonia, French Polynesia and Wallis & Fortuna. Survey activities have focussed on shipping routes, harbours, ports and bays with tide gauges being installed as part of a tsunami warning network.

SHOM has produced 33 ENC's of the SWP region since the last Meeting and has plans to produce a further 14 during 2012. French ENC's are distributed through PRIMAR RENC.

4.3 Australia

The main focus of effort from the Australian Hydrographic Service (AHS) has been to achieve initial ENC coverage of Australia's waters. It was reported that 816 ENC's have been published and initial ENC coverage of Australia and PNG was completed during the first half of 2011. Complete coverage of Australia is expected to be completed by May 2012- remaining cells include Antarctica, fishing ports, recreational boating harbours etc.

The AHS transitioned to a full Print on Demand (PoD) service in May 2011. There is now capacity to produce 6500 charts per week. From January 2011 the AHS includes temporary and preliminary Notices to Mariners in ENC updates.

All AHS products are undergoing a re-branding, to emphasise they are government authorised products. The new branding will include AUS as a prefix and will include the Commonwealth of Australia logo.

One significant recent development is the introduction of a dynamic Under Keel Clearance planning system to improve navigation safety through the Torres Strait.

4.4 New Zealand

Land Information New Zealand (LINZ) is the agency charged with responsibility for hydrography in NZ. LINZ produces nautical products but does not own or operate any survey vessels. A surveying and charting program guides activities. To date LINZ have published more than 110 ENC's- these are available through the IC-ENC distribution service.

In February 2011, on behalf of the IHO, Mr Adam Greenland and CDRE Rod Nairn, undertook a technical assessment visit to the Cook Islands. NZ is the primary charting authority for the Cook Islands and this was an ideal opportunity to discuss maritime infrastructure projects. The full report from the visit is available on the IHO website http://www.iho.int/mtg_docs/CB/CBA/Technical%20visits/TV11/2011-CookIsReport.pdf. LINZ has also provided technical assistance to SOPAC including advice on equipment, tide gauges and data processing. This will assist SOPAC in developing their hydrographic survey capability for ongoing work in the Region.

LINZ has been working in partnership with Maritime NZ and Ministry of Foreign Affairs and Trade on the South West Pacific Hydrography Programme on two projects - Accelerated NZ ENC Production and a Strategic Hydrography Risk Assessment for the South West Pacific. The two-year programmes aim to produce a complete set of ENC for the NZ charting area and an enduring hydrography risk assessment framework for the South West Pacific maritime infrastructure that comprises of a regional risk assessment, economic impact assessment, implementation and funding plan.

4.5 United States

US hydrographic surveys are undertaken by three agencies- The National Oceanic and Atmospheric Administration's (NOAA) Office of Coast Survey (OCS), the National Geospatial-Intelligence Agency (NGA), and the Naval Meteorology and Oceanography Command (U.S. Navy).

4.6 Papua New Guinea

The National Maritime Safety Authority (NMSA) is the agency in PNG responsible for hydrography, as well as navigational aids, search and rescue, ship safety, and marine pollution. NMSA does not have a hydrographic (surveying) capability and is reliant upon Australia, with hydrographic activities being implemented under the terms of a long-standing Memorandum of Understanding. The hydrographic unit within NMSA currently handles chart sales and distribution and Notices to Mariners.

The NMSA is focussed on cooperative data sharing arrangements with the private sector/exploration companies for supply of information which may be of benefit to charting- two charts are under production as a result of this kind of arrangement.

Training in hydrographic cartography for officers within the hydrographic unit is a high priority. One officer is currently in the UK undergoing ENC Production training. NMSA is in talks with the Asian Development Bank to fund hydrographic cartography capability within the hydrographic unit and they have agreed in principle to this together with improving navigational aids and SAR capabilities.

CAPT John Lowell (USA) offered a PNG survey team the opportunity to come aboard one of the USN vessels when next in the area undertaking missions. This was accepted.

CAPT Ward (IHB) noted the excellent progress in relation to hydrography that PNG have made in only five years. CDRE Nairn (Australia) commented that having established points of contact in an effective administration and organization within a country makes it much easier for States like Australia, NZ, UK & the USA to offer assistance, provide and share information and offer training opportunities and capacity building activities.

5. Reports from other regional agencies and observers (IHB, SOPAC, SPC, PacMA, IMO)

All Observer parties in attendance presented comprehensive reports which are available from the IHO website (http://www.iho.int/mtg_docs/rhc/SWPHC/SWPHC11/SWPHC11_Docs.htm). The following points were highlighted:

5.1 International Hydrographic Bureau (IHB)

CAPT Ward highlighted the status of voting for the amendments to the IHO Convention: 34 of the 48 votes required have been achieved, which included 6 of the 8 IHO Member States in the SWPHC. Fiji and Tonga are yet to ratify the Protocol of Amendments. Chairman was requested to inform Fiji and Tonga to expedite this process.

The Protocol of Amendments includes the following changes:

- joining rules of the IHO. Membership - a member of United Nations will confer automatic membership to the IHO;
- move from the current Directing Committee (3 Directors) to a Secretary General plus 2 Programme Directors.
- establishment of a Council to provide an additional layer of decision making;
- periodicity of conferences will move from 5 years to 3 years.

CAPT Ward reported that a number of States were in the process of joining the IHO, and stated that Montenegro was one vote short of being eligible to become a Member. As Papua New Guinea was yet to approve Montenegro's application, Mr Pion was requested to expedite this approval process.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
6	11.4	Expedite approval process of Montenegro's application for IHB membership	Papua New Guinea	ASAP	

Preparations are underway for the XVIIIth International Hydrographic Conference to be held in April in Monaco. It is expected that approximately 60 of the 80 Member States will be sending representatives. In attendance will also be a number of observer organizations and exhibitors at the trade exhibition. There are a number of proposals that will be up for consideration at the IHO Conference. Of particular note is Proposal #6- proposal to highlight to IMO and other maritime agencies the need to put more resources into acquiring new survey data for charting. Over the past 20 years the number of survey vessels directly operated by Member States has declined dramatically, resulting in lack of current data available for charts. Another strategy mentioned was for the IMO to consider implementing a chart improvement fund.

Within the IMO, ENC coverage is receiving less visibility as more focus is placed on e-navigation. Some mariners and Hydrographic Offices have noted that ENCs do not perform as expected in some manufacturers' ECDIS. A workshop was held to assess results and not a single ECDIS passed all of the checks set by the IHO. The checks didn't question the ENC data itself but the display of the data in the ECDIS. The IHO's intention is to bring this issue to the attention of the IMO Maritime Safety Committee Meeting in May 2012. Australia is in the process of preparing papers to support the IHO submission to the IMO.

S-100, the IHO digital data transfer standard, is gaining increasingly wide interest from non-hydrographic data providers and users. It is more than likely that there will be S-100 based digital applications that are not hydrographic, before there is an S-100 based ENC.

There has been a substantial increase in funding for the next few years (in excess of €200K annually) through generous contribution by Republic of Korea. CAPT Ward advised the Meeting of the need to put forward project proposals on an A and B priority list. This means that in years where there is underspending there may be an opportunity to put forward additional projects at short notice so it's best to be prepared.

CAPT Ward provided an update of the latest information in C-55 covering South West Pacific States. The full listing can be found at paragraph 20 of the IHB report to this meeting (SWPHC11-5.1_IHB Report).

The IHO plays a significant role at the IMO's Sub-Committee on Radio communications and Search and Rescue (COMSAR) World-Wide Navigational Warning Service (WWNWS). The Secretariat has been monitoring the work in certification of watchkeepers including specific training in the use of ECDIS. The revision process has not finished yet but IHO inputs have been included. There is now a new requirement for watchkeepers to complete ECDIS training and possess an ECIDS certificate.

5.2 South Pacific Islands Applied Geoscience Commission (SOPAC) of the Secretariat of Pacific Community (SPC)

Mr Satesh Kumar reported on the activities of SOPAC-SPC, providing some background on the composition, capabilities and purpose of SOPAC-SPC. He reported that 26 Pacific Islands and Territories were currently members of the SPC. SPC has six technical divisions, including the Oceans and Islands Programme (OIP) within the Applied Geoscience and Technology Division (SOPAC), which is responsible for hydrographic data acquisition and management.

Requests for hydrographic surveys submitted by Member States are considered at the annual meeting of the SOPAC for inclusion in the Work Plan (available on the SPC website). There were significant efforts in surveying activities in the Region during 2011 (extracted in Part 2 of the SOPAC-SPC report), with surveys conducted in six Pacific countries in cooperation with industry/government stakeholders. The surveys were primarily of ports, atolls, harbours and shipping channels.

SPC-SOPAC is very well established to be a regional hydrographic service provider, provided they have adequate training and qualified staff. A high priority is to pursue funding options for further hydrographic training.

5.3 Cook Islands

Mr Vaipo Mataora stated that presently the Cook Islands does not have an agency mandated to undertake hydrographic responsibility. Establishing a hydrographic agency within the Cook Islands is a high priority; however instability within the government and a public service review have stalled progress in the past. Mr Mataora had a meeting with the Minister for Transport prior to attending the Meeting and had been given assurances that establishing a hydrographic authority is now a government priority.

The Cook Islands have submitted an Extended Continental Shelf (ECS) claim to the United Nations Commission on Limits of Continental Shelf (UNCLCS). The claim is due to be reviewed by the Commission in April 2012. The Cook Islands have utilised satellite imagery rather than charts in order to establish their baseline.

Membership to both the IHO and SWPHC, as well as establishing a hydrographic authority, developing an effective MSI capability and achieving adequate funding for these activities will be the focus of activities for the Cook Islands in the immediate future.

5.4 Palau

Ms Madelsar Ngiraingas presented the report for Palau. This was Palau's first attendance at a SWPHC meeting. Palau is in the process of establishing a hydrographic office, this move has been prompted by recent Extended Continental Shelf (ECS) claims and maritime boundary delimitation issues. A formal proposal will be made to the Head of State in July with recommendations on how to set up an agency for hydrography.

Capacity building is required for nautical charting capability. Palau has a number of qualified land surveyors and GIS technicians who may need to be trained to undertake hydrographic surveying tasks.

The priorities for Palau are to retain the relationship with the existing chart authority and establish internal priorities regarding what responsibilities a national hydrographic authority would take on once established. Ms Ngiraingas advised that hydrographic surveys would like have to be contracted out but Palau is keen to build domestic expertise to oversee surveying and manage hydrographic data.

Palau also needs to determine which Regional Hydrographic Commission they should become a member of- SWPHC or East Asian Hydrographic Commission.

CDRE Nairn (Australia) suggested that Palau should review IHO Publication M-2 *The Need for Hydrographic Services* and noted that it may assist Palau in determining priorities etc when establishing a domestic hydrographic capability.

5.5 Kiribati

Mr Omirete Tabureka presented the report for Kiribati and provided some background to the geographical and economic position of the country. Kiribati relies heavily on exports so is mindful of obligations under SOLAS and the need for updated accurate nautical charts.

Kiribati does not have a designated hydrographic agency. The charting authority for Kiribati is the UK and a total of 14 charts cover the entire maritime domain of Kiribati. All except one of these charts are in fathoms and referenced to data acquired prior to WWII. Kiribati disseminates MSI on a local basis, but does not forward to a NAVAREA coordinator. Following the discussions during this meeting they are now aware of the need to forward MSI to the NAVAREA Coordinator and will do so.

The priorities for Kiribati includes seeking assistance from regional neighbours to carry out hydrographic surveys, participation in bilateral agreements for chart production, development of domestic capability for collection and use of hydrographic data, establishment of an agency with responsibilities for hydrographic matters, dissemination of MSI and liaison with NAVAREA Coordinator.

Australia and USA had carried out surveys of Port Betio and will provide the processed survey data to Kiribati. Kiribati will forward the same to the UKHO for charting action (by end of April 2012).

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
7	11.5	Australia and United States to process data of Port Betio and forward to Kiribati. Kiribati to forward to UKHO for charting action	Australia, United States, Kiribati	30 April 2012	

CAPT Ward (IHB) updated the Meeting of the outcome of the IHB and UK technical visit to Kiribati in November 2011. The report from this visit has been released and is available on the IHO website (http://www.iho.int/mtg_docs/CB/CBA/Technical%20visits/TV11/Report_on_the_State_of_Hydrography_an

[d Charting in Kiribati Nov11.pdf](#)). The report is a four-year action plan to upgrade charting using existing uncharted data and satellite imagery, any data held by other agencies would be welcome. Australia and the United States have undertaken to forward any Kiribati survey data to the UKHO.

CAPT Ward took this opportunity to draw attention to the excellent work of Bob Wilson from the UKHO in relation to technical visits undertaken in both Kiribati and Vanuatu.

5.6 Niue

Niue's representative at the Meeting was Mr Richard Siataga. He advised that Niue does not have any hydrographic capability and that NZ is the charting authority for the country. Recent surveying and charting activities in the region include a high resolution bathymetric survey conducted by SOPAC in 2005. However port developments and the potential construction of a marina have highlighted the need for more updated data. Niue only has access to printed charts, no digital data available domestically- only downloaded from LINZ website.

The meeting requested Mr Jens Kruger to check whether the data of this survey has been incorporated into charts, otherwise it is to be forwarded to NZ for charting action, and Niue to be advised accordingly.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
8	11.6	Check whether data of 2005 survey of Niue has been incorporated into charts, otherwise forward to New Zealand for charting action. Advise Niue accordingly	SOPAC		

In order to improve hydrographic capability in Niue Mr Siataga suggested that staff placements within foreign hydrographic offices and participation in further training activities is crucial.

5.7 Samoa

Captain Tafaigata Toilolo presented the report for Samoa to the Meeting. NZ is the charting authority responsible for Samoa and in 2010 produced five new charts with metric soundings. Agreements are in place with Australia and NZ for surveys of Samoan waters.

The most recent survey activity in Samoa was by RNZN in 2006. SOPAC also collects some bathymetry, magnetic, gravity and seismic reflection data and processes and analyses it on behalf of Samoa but there is no domestic hydrographic surveying or data management capability.

Training and development of hydrographic programs are required to improve hydrographic services in Samoa. Mr Adam Greenland (NZ) noted that generally charting is adequate for Samoa's needs. A technical visit from the IHO may be of assistance in ensuring Samoa is discharging their responsibilities under SOLAS. A technical visit is planned for 2013.

5.8 Vanuatu

The national report for Vanuatu was presented by Mr Toney Tevi who advised the Meeting that Vanuatu has data and GIS however they need to organise everything and get it all in order and do a stocktake.

The technical visit by IHO and the UKHO was appreciated and beneficial. An interim National Hydrographic Service committee was formed in the wake of the technical visit- this committee needs approval from the Council prior to becoming official.

Vanuatu needs to produce a report showing what they have, what they need and any gaps that require addressing. This report, along with the IHO Technical Visit report will be presented to Vanuatu Cabinet to raise the profile of hydrographic services in the country.

Mr Tevi asked when Australia would provide data from survey conducted during the November 2011 visit. He requested that the verified data be forwarded to both Vanuatu and UKHO as soon as possible to enable charting updates.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
9	11.7	Provide verified survey data to Vanuatu and UKHO	Australia	30 April 2012	

Mr Mike Drake (Carnival Australia) addressed the Meeting and advised that the CEO of Carnival Australia had planned to visit Vanuatu to discuss hydrography, however the visit was delayed due to a cyclone. Carnival has undertaken to support a campaign to raise awareness of the importance of hydrographic services.

5.9 Solomon Islands

Mr Edward Tokuru presented the report for the Solomon Islands. The Marine Department historically has been responsible for both regulation and provision of services, however modern practice realised the need for separation of these two functions. With funding from overseas (mostly EU and ADB), the Marine Department underwent reform and the Solomon Islands Maritime Safety Administration (SIMSA) was established in 2010.

Within SIMSA there is now a dedicated fledgling hydrographic unit (SIHU) which is tasked with resuming control of Solomon Islands navigational charts and publications, ensuring compliance with international obligations, collection of data, as well as providing support to industry partners and other government departments.

Of critical importance for surveying is the Port of Honiara. It is a busy area and critical for maritime trade in the Solomon Islands, but is regularly inundated with silt from a nearby river so updated survey data is sorely needed.

The Solomon Islands is embarking on a period of rapid growth and economic development with new wharf, tourism, and fisheries projects on the horizon. As a result, there is a need for updated accurate survey data and nautical charts - of particular significance is tourism development with cruise ships wanting to access areas, however they are unable to do so due to poor coverage. Future focus for SIHU is the development of in-house hydrographic capability, development of legislation, and regulatory framework and increased capacity to expand control over the maritime boundary.

Adam Greenland (LINZ) advised that the Royal New Zealand Navy had undertaken a survey of the Solomons and the data has been passed on to LINZ. Mr Tokuru consented to Mr Greenland's request for passing this data on to UKHO (charting authority for Solomon Islands) for charting action.

CDRE Nairn (Australia) commented that there has been excellent progress by SIMSA since the last SWPHC meeting. Through submissions to the IHO Capacity Building Sub-Committee there is support for Mr Bob Wilson (UKHO) to visit the Solomon Islands and develop a rigorous survey and charting program.

5.10 Carnival Australia-

Mr Mike Drake addressed the meeting on behalf of Carnival Australia Cruise Lines. He noted that better chart coverage of the South West Pacific is needed and his company wants to raise the profile of this issue by intensive lobbying of governments and aid agencies to get funding to improve the situation. The focus needs to be on how hydrography and charting directly contribute to the economic wellbeing of South West Pacific nations. He then played a short DVD produced by Carnival highlighting development opportunities in the region.

Mr Drake advised that the Commission that his company is very keen to expand the number of destinations they can go to within the region. However they are currently restricted by the lack of adequate nautical charts.

6. Reports on IHO Meetings (IRCC, HSSC, WEND etc)

6.1 Hydrographic Services & Standards Committee (HSSC)

CAPT Ward stated that the HSSC met in November 2011 to review the technical program and set the program for the future. S-101, standard for the next generation of ENC, was discussed in this forum. The reports indicate that S-101 ENC won't be 'on the streets' any time soon so no particular measures need to be taken by Hydrographic Offices to prepare. The next meeting is scheduled for September 2012 at the IHB.

6.2 International Regional Coordination Committee (IRCC)

CDRE Rod Nairn (Vice Chair, SWPHC) represented the Commission at the IRCC Meeting held in Niteroi, Brazil, on 23-25 May 2011. It is mainly an administrative meeting which discusses all the reports from the Regional Hydrographic Commissions (RHCs), Hydrographic Commission on Antarctica (HCA) and Capacity Building Sub-Committee (CBSC), and coordinates these into an overall programme of the IHO.

The main item raised from the SWPHC was the need to address issues re INT chart overlaps between regions, particularly ENCs, as currently there were overlapping ENCs of the same usage bands. It also reported on development of the MOU with Secretariat of the Pacific Community (SPC).

The CBSC Report items that generated considerable discussion at IRCC were:

- Difficulty in administering of many CB activities which was keeping big load on MS trying to coordinate CB activities, and there was general support for allocating additional resources towards coordinating these activities
- Ensure follow-up reports in accordance with the CB Procedures were submitted on time and comprehensive enough to allow an audit of the outcomes of any CB activities.

The next IRCC meeting will be held in Singapore during first week of June 2012, aligned with the next CBSC meeting.

6.3 World-wide Electronic Navigational Chart Database Working Group (WEND-WG)

CDRE Rod Nairn reported on the WEND-WG Meeting held in Wollongong, Australia on 13-14 October 2011. The WEND committee was developed initially to coordinate the sharing and making internationally available all the ENCs that were to be produced under the ENC programme.

The main outcome of the meeting was the positive development towards improvements on cooperation between the two distributing RENCs - PRIMAR and IC-ENC. A joint presentation will be made by both members at XVIIIth IH Conference in April 2012. It was also agreed that transparency documents would be prepared and placed on the website to provide all MS with details of how RENCs operate, their models, what

services they provide to the mariner, etc. The documents would be prepared in common format for both RENCs.

These documents have now been produced and distributed by the IHO (Circular Letter 05/2012). The meeting noted that only about two thirds of world's data is available through RENCs. Other data has to be sourced individually through producing hydrographic offices.

7. Reports on IHO Capacity Building Sub-Committee (CBSC) Meeting and actions (including regional cooperation on surveying and chart production)

CDRE Rod Nairn (SWPHC representative on the IHO CBSC) stated that the CBSC met in Niteroi, Brazil, in May 2011. A new Chair- Mr Thomas DEHLING (Germany) and Vice Chair- CDRE Vinay BADHWAR (India)- were elected. The meeting reviewed the IHO CB Work Programme, Capacity Building Procedures and the CB budget.

The normal budget for capacity building is around €200K. During the meeting the Republic of Korea announced that their annual contribution to the CB Fund would increase from US \$100K to US \$400K which presents greater opportunities for CB bids. The biggest limitation of this is the ability of existing hydrographic offices to host, manage and coordinate those capacity building activities.

There was also general reluctance to use contracted support to implement capacity building activities, and hydrographic offices agreed to provide the necessary personnel to implement those tasks. If contracted support is not able to be used in the future, existing hydrographic offices may not be able to provide as much support to capacity building activities as was optimal, and therefore the program would not be able to take best advantage of the funds available. Implementation of capacity building activities in accordance with the objectives of the CBSC is limited by the scope of hydrographic offices to provide the support, rather than money. This is an ongoing issue.

Concerns expressed at the meeting involved the failure to close the loop between delivery of a capacity building activity and effective reporting back with lessons learned. Generally reporting is not good enough and hence there is no continuous improvement cycle.

The SWPHC submitted 13 applications for capacity building projects from 2011-2014, which were developed at the previous SWPHC Meeting in Honiara. Out of those 13, most were approved and a number of these have already been implemented. The table below provides information regarding the projects and their current status:-

CBSC Request	Status
SWPHC representation at PacMA Meeting in 2011	Approved. However it did not occur as meeting was not held.
Technical Assessment & Advice Visit – Vanuatu (2012)	Approved. Visit completed
Hydrographic Administration Training Placements with Regional HO (2012)	Approved. Partially completed PNG & Solomon Islands at Australian Hydrographic Office in Feb 2012). Timor Leste and Vanuatu planned for later in 2012.
Ports & Shallow Water Bathymetry Technical Workshop (2012)	Approved. Workshop completed on 13-14 February 2012.
Technical Visit to Solomon Islands to facilitate National Hydrographic Requirements (2012)	Approved. Visit to be conducted by UKHO in Feb 2012 (following SWPHC11 Meeting).
Regional Cat C Course including MSI and Hydrographic Surveying (2012)	Not approved. A 2 week Regional Course on Hydro Survey &

	Introduction to Chart Production was planned in SW Pacific during first half of 2012 - IMO funded and IHO in kind support
PNG National Hydrographic Capability Development (2012)	Approved. To be conducted in second half 2012.
Module 2 of the UK Category B Programme – Hydrographic Data Processing (2012)	To be conducted in NZ (9 July- 10 Aug 2012) but it will be ‘Open Call’ to all IHO Member States
Technical Visit to the Cook Islands to facilitate National Hydrographic Requirements (2012)	Approved. NZ to liaise with Cook Islands and inform Australia (by end May) whether visit is required in 2012 or to be carried forward to 2013 – in order to be reported to CBSC10 Meeting in Singapore. (4-6 June 2012).
Technical Assessment & Advice Visit – Samoa (2013)	Included in IHO CB Work Programme for 2013.
Technical Assessment & Advice Visit – Tonga (2013).	Included in IHO CB Work Programme for 2013
MSI Regional Workshop (2013)	Included in IHO CB Work Programme for 2013.
Technical Visit to Kiribati to facilitate National Hydrographic Requirements (2014)	Requested for 2014, but was carried out in 2011.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
10	11.8	Liaise with Cook Islands and inform Australia (by end May) whether visit is required in 2012 or to be carried forward to 2013 – for reporting to CBSC10 Meeting in Singapore. (4-6 June 2012).	New Zealand	31 May 2012	

The meeting noted that in accordance with the agreed 2012 Capacity Building Work Programme, there are IMO funded courses to be conducted in regions. Mr Adam Greenland stated that a SPC circular (end of January 2012) indicated that a two week Regional Training Course in Hydrographic Surveying and Chart Production was planned to be held in Fiji in June 2012 as part of the IMO’s future capacity building training program. Participants indicated support for such a course as it would cover considerable details and practical ‘hands-on’ introduction to hydrographic surveying. The UKHO advised that if it was to be involved in the delivery of such a course they would couple this with the provision of assistance to SOPAC in order to bring their survey data up to scratch.

The following key points came out of discussion regarding the course

- UKHO offered course materials and instructors to conduct the course, and also provision of assistance to SOPAC in order to bring their survey data up to scratch
- Kongsberg Maritime have offered a quote for provision of systems in order to run the practical component of the course;
- SOPAC would investigate options regarding provision of equipment and some instruction;
- NZ to consider providing an instructor
- UK have suggested that an actual survey should form part of the course
- CARIS have offered their support
- If spaces are available on the course, there may be capacity for countries to fund additional applicants;
- Island States represented at this Meeting should be given first preference in applying

CAPT Ward advised that the IHB had only recently been informed of this course - when it was seen in the work program. Three years ago an IMO funded Hydrographic Awareness course was conducted in Suva, Fiji. It was meant to be fully coordinated and administered by an IMO representative; however it ended up with the IHB having to organise it – source the instructors and conduct the lectures. The applications were sent out

very late (only four weeks notice) resulting in a number of Island Nations being unable to send, the appropriate personnel to the Course – insufficient time to arrange participation. It was noted that the proposed start date of the course (11th June 2012) is a public holiday in Fiji. Jens Kruger to check with the team at SOPAC to see if there are more suitable dates available.

It was decided that SOPAC and the IHB would need to contact Capt. John Rounds (Director General, SPC), the organiser and sponsor of the course, and discuss a number of issue - to ascertain availability of instructors; that UKHO would take the lead coordinating the training package; participants of SWPHC Meeting be given first preference for the course; flexibility of dates (due to short notice), issues such as certain members in the region unable to go to Fiji (either as instructors or students); whether SPC will be issuing the invitations and when.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
11	11.9	a) Contact Capt. John Rounds (SPC) regarding details of IMO funded Regional Training Course in Hydrographic Surveying and Chart Production planned to be conducted in Fiji in June 2012. (Post Meeting Note : The Course has now been re-scheduled for 24 September 2012) b) Coordinate the training package	a)SOPAC and IHB b) UK		

7A. Future Capacity Building Initiatives

The meeting discussed the future capacity building activity plan (2013-2017), which is a five-year outlook, formulated prior to the Meeting in 2011. CDRE Nairn stated that the list was done at fairly short notice in consultation with the Member States and contained what is believed to be appropriate future capacity building needs. The principal used in developing the plan was that if States had had an initial technical visit then there should be a follow up visit within two years for the establishment of a hydrographic requirements prioritisation plan. Any State which has not had an initial technical visit should be scheduled for one during the life of the plan.

The list of available activities and courses on the left side of the spreadsheet was based on what has been offered in other regions and whilst the SWPHC may not have run these courses before, if there was interest within the region in a particular course, then some research could be done to find out the course content and find the appropriate authority to conduct the course.

At this stage, the South West Pacific States are mostly at phase 1 of capacity building - awareness, internal recognition and acknowledgement of national responsibilities, national framework for implementation and meeting those responsibilities, setting out appropriate agreements, internal management and, in some cases, embryonic capabilities in collection and dissemination of hydrographic information to provide MSI to regional coordinators and update charts.

Following discussion on the activities planned for the period 2013-2017, the meeting decided on the following:

- (1) Shift the ‘Basic Hydrographic Survey Course’ from 2013 to 2014 .- due to IMO funded two-week course in Hydrographic Surveying and Introduction to Chart Production being planned for 2012. (discussed extensively at Agenda Item 7)

- (2) Amend ‘Hydrographic Administration and Technical Training Placements within Regional HO’- thus enabling NZ and SOPAC to provide technical training
- (3) The ‘Hydrographic Administration and Technical Training Placements within Regional HO’ training Cook Islands and Kiribati scheduled for 2014 advanced to 2013; also to include SOPAC in this.
- (4) Australia to liaise with the National Tidal Centre (Bureau of Meteorology) re possibility of its course being customised for the Island States.
- (5) Australia and NZ to collaborate the application proposals for the Modules 1 and 3 of the Category B Cartography Course.
- (6) UK to prepare a CB proposal for “Chart Quality Technical Workshop” to be held in conjunction with the next SWPHC meeting.

The amended CB Schedule for 2013-2017 is attached as **Annex B**.

It was decided that Australia would co-ordinate with New Zealand and UK to finalize the applications for CBSC funding for 2013 for submission to CBSC10 Meeting to be held in Singapore. (4-6 June 2012).

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
12	11.10	Coordinate with New Zealand and United Kingdom and finalize the applications for CBSC funding for 2013 for submission to CBSC10 Meeting (Singapore, 4-6 June 2012).	Australia		

An experiment currently being undertaken by the Australian Hydrographic Office is the placement of staff within the office, not on a formal training program, but just to see how things are done within the office. Recently, Clifford Olisukulu (Solomon Islands) and Nick Pion (PNG) undertook such a placement and reported to the Meeting that it was a worthwhile endeavour and they learned a lot from the experience. In the forward plan, Cook Islands, Kiribati, Samoa and Tonga have placements scheduled for 2014 and these will likely take place within LINZ. Kiribati noted that the administration training placements within regional HOs may not be appropriate for all Island States and that a more practical focus may be required. CDRE Nairn suggested that the wording of the placement be changed to ‘hydrographic administration or technical training program placements’.

One course on the list that has not been included in the SWPHC submissions yet is the MSDI and Database Management course. Based on subsequent discussions during the meeting it appears that this course could be of relevance to many the States in the region.

SOPAC-SPC offers States an opportunity to come on board to observe when they are conducting surveys in that States’ waters but haven’t as yet extended an invitation to return to SOPAC-SPC offices to work on the post-processing of bathymetric data. This may be another learning opportunity for States and there is potential for a funding stream to be added to cover the travel expenses for such activities within the capacity building work programme for the region.

Discussions also dwelt on capacity building activities that participants would like to see programmed in for future years. Mr Jens Kruger (SOPAC) requested for a SOPAC staff members to attend CAT B hydrographic surveying training. CDRE Nairn advised that traditionally long courses aren’t funded through the CBSC. However he would approach the CBSC regarding this training, provided there is an undertaking from the

SOPAC staff that he/she will remain with the organisation and contribute long-term to regional capacity building. Besides the CBSC alternative funding sources will also be investigated.

Mr Calvin Martin advised that the USA offers CAT A & B training and funding is available. He advised that States can apply through their US embassy, and if assistance is required regarding submitting applications they may contact him. There is also capacity for States to apply through the USA embassy for in-country survey support. If the US decides to conduct surveys in the region, representatives from the Island State are offered the opportunity to join the vessel and observe the survey. This provides both a survey output as well as a practical training opportunity for the Island State. These activities are part of the Pacific Partnerships program, and the mobile training teams come in from start to finish. States can nominate a priority survey area, and the US provides the vessel and the equipment to collect and process data and produce a product. These activities range from 45-60 days and considerable surveying can be done during this time. Hence it is a great opportunity for Island States. Requests for such activities need to be made officially through the embassy.

7B. Review of Statutes and delimitation of boundaries of Hydrographic Commission.

The current Statutes of the SWPHC refer to the geographic area of the SWPHC as that coinciding with Region ‘L’ of the INT Charting Scheme. The meeting noted that there are some Pacific States (e.g. Palau, Marshall Islands and Micronesia) which are outside Region L but have much in common with many island nations of the SWPHC – similar challenges faced re capacity building, geographic and cultural similarities, etc.

Director Ward advised that Regional Hydrographic Commissions, though guided by various IHO Resolutions, are autonomous organizations and as such set their own governing statutes and membership requirements. The IHO Resolution 2/1997 as amended (formerly Technical Resolution T1.3) pertaining to RHCs states that “Geographical areas of RHC will normally coincide with INT chart regions, modified as appropriate to meet regional requirements and special circumstances.” There would be no impediment to amending the statutes to allow flexibility for other Pacific island nations to join the Commission. He explained that membership to one Commission does not exclude members from joining other Commissions – for example, the Nordic Commission has members that are simultaneously members of the Arctic, North Sea or Baltic Commission as their interests are represented in all these forums.

CDRE Nairn suggested that perhaps the membership of the Secretariat of the Pacific Community (SPC) (www.spc.int) would be a good indicator as to which States should be potential Members of the SWPHC.

A motion proposed by the UK was unanimously voted in favour of the change to Clause 1 (b) of the SWPHC from:

The geographic area covered by the Commission (hereinafter referred to as “The Region”) shall be that defined by the IHO INT Charting Scheme Region L

to:

The geographic area covered by the Commission (hereinafter referred to as “The Region”) shall be that defined by the IHO INT Charting Scheme Region L together with the waters of those Pacific Island States that are members of the Secretariat of the Pacific Community (SPC).

It was agreed that Australia would inform the IHB regarding the amendment to the Statutes in order to update relevant information on the IHO website. Adjacent Commissions, i.e. East Asia Hydrographic Commission (EAHC) and South East Pacific Hydrographic Commission (SEPHC), would also be informed of this.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
13	11.11	Advise IHB re amendment to Clause 1 (b) of the	Australia		

		SWPHC Statutes for updating information on IHO website, and also inform EAHC and SEPHC re the same.			
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The meeting also requested Australia to send a letter of invitation to observer States to consider becoming Associate Members of the SWPHC by acceding to the Statutes of the Commission. Copies of the Statutes and the Signature Page would be forwarded to these States, and a response requested before end of May 2012.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
14	11.12	Invite observer States to become Associate Members of the SWPHC by acceding to the Statutes of the Commission.	Australia and observer States	Responses to Australia by 31 May 2012	

8. Review Status of INT Chart Scheme for Area L.

Prior to the meeting Australia (INT Chart Coordinator for Region 'L') had obtained updated information from the Member States producing INT charts in the region – i.e. France, New Zealand, UK. The collated information was discussed and Members requested to provide any additional updates. United Kingdom's request that the format of INT626 (Kiribati) be changed to landscape was accepted. The revised limits would be provided to Australia and the IHB advised accordingly for updating S-11.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
15	11.13	a) Advise Australia of revised limits of INT626 b) Forward all updated information re INT Chart Scheme (Region L) to the IHB for updating S-11	a) UK b) Australia		

9. Progress with Production and Distribution of ENC's.

Ms Hilary Thompson (Australia) provided an overall summary of the progress of ENC's for the SW Pacific region. There is an agreed ENC scheme for usage codes 1 and 2 providing full coverage of the area. Australia stated that it does not have (usage code 2) ENC of Norfolk Island, and inquired whether NZ or UK had INT chart coverage of the area and would be willing to produce the chart for this specific area. NZ to take the lead on this and put a proposal to the UK on how to manage this area and subsequently advise Australia of the outcome.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
16	11.14	Liaise with UK regarding NAV Purpose 2 ENC of Norfolk Island for Australia and advise.	New Zealand		

Ms Thompson then went on to discuss the issue of the representation of EEZ boundaries on cells. Australia does this and would like to request that NZ shows Australian EEZ boundaries on cells it produces of Australian waters. Adam Greenland (NZ) indicated that NZ is happy to show EEZ boundaries as requested. The UK and France indicated that they are happy to do this as well.

Action item 10.12 (from SWPHC10 Meeting) related to the sharing of plans for bands 3-6 with other members of the ICC Working Group in a GIS compatible format. Regions need to ensure that ENC large-scale scheme bands 3-6 in their respective areas are adequately coordinated. The challenge up until now has been to get coverage of the top 2000 ports but there are other areas that still require ENC coverage and any critical shortfalls need to be identified. CDRE Nairn (Australia) suggested that it may be appropriate to address this issue in a Working Group.

RADM Nick Lambert (UK) suggested that it would be helpful for producer nations for Island States represented at the Meeting to review the current schema and decide what they need from a development perspective, speak with stakeholders (shipping companies, government agencies etc) and consider what survey data they may have available and propose to producer nations that they would like to see in a new scheme. This should be included in the new NZ developed risk analysis.

All members agreed that the most appropriate way to address this issue would be through a correspondence working group .SWPHC Region L ICCWG (SWPICWG). The Terms of Reference for this WG have been drafted and Australia will circulate them to the relevant persons out of session.

During the meeting the producer nation points of contact for this Working Group were confirmed as follows: Ms Hilary Thompson (Australia), Mr Olivier Parvillers (France), Ms Jennifer Ryan (NZ), Mr Nick Webb (UK), Mr Douglass Baird (USA).

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
17	11.15	a) INT Chart WG members to agree to ToR, and work together to share information to establish ENC schema for bands 3-6 and data exchange format b) Development of consolidate large scale ENC Schema would be an ongoing item	Australia, France, New Zealand, United Kingdom, United States	a) 30 Apr 2012 b) 31 Dec 2012 (first-pass)	

10. Report on GMDSS, MSI and NAVAREA coordination

NAVAREA X

Australia is the Coordinator for NAVAREA X, which extends from the Antarctic coast to the equator and from 080 E to 170 E longitude. Maritime Safety Information (MSI) is managed within NAVAREA X by the Australian Maritime Safety Authority (AMSA).

Australia has contributed to capacity building by assisting in the provision of MSI training in Sydney in August 2010 which was attended by a number of SWP States, and is considering assisting PNG & the Solomon Islands in promulgating coastal SafetyNET warnings.

More specific information regarding MSI in NAVAREA X is contained within the NAVAREA X report to the Meeting. (SWPHC11-4.3A)

NAVAREA XIV

New Zealand, coordinator for NAVAREA XIV, stated that its MSI Report was contained as Attachment 1 to its National Report to the meeting. Attention was drawn to page 2 of the Report - list of national coordinators

within NAVAREA XIV - and NZ requested all participants review this list and ensure the information pertaining to their respective countries is correct. Australia echoed this request for NAVAREA X.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
18	11.16	Confirm MSI point of contact in accordance with the reports from NAVAREA X and XIV and advise (Australia and NZ respectively) of any changes	All regional States		

It was noted that the NAVAREA XIV report may not have been sent (as an attachment to NZ National Report). Mr Adam Greenland would verify this, and forward a copy to the meeting secretary.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
19	11.17	Verify re lodgement of the NAVAREA XIV report. (Post Meeting Note: The report can be downloaded from the WWNWS section of the IHO website: http://www.iho.int/mtg_docs/com_wg/CPRNW/WWNWS3/WWNWS3-3-2-XIV.pdf)	NZ	ASAP	Complete

11. IHO Publication C-55 (Status of Hydrographic Surveying and Nautical Charting Worldwide)

CAPT Ward encouraged all participants to review publication C-55 in detail. The document provides a very general overview and attempts to show the proportion of regional areas at different depth bands that have been adequately surveyed (or require surveying) and have been adequately charted (or require charting). It is used as a world reference when trying to look statistically at how much surveying and charting effort is to be done in different regions in the world, used by aid agencies, etc.

Three separate activities were currently in progress to look at providing a better source of information that is currently provided by C-55 to enable assessments to be made of the status of hydrography nation by nation. There are two students (from Plymouth University and University of New Hampshire respectively) looking at other concepts for describing the status of hydrography on a State by State basis, particularly using easily accessible information. The third activity involves UKHO which is leading a small group to look at other means of producing a source of information for this purpose, and will be reporting to the IRCC.

Producer States providing information to populate C-55 were requested to break down the States and territories when populating the database rather than aggregating the figures across States, islands or regions. This allows the information provided in C-55 to be presented in the most logical way.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
20	11.18	Producer States submitting information to populate C-55 to provide data by State or logical island or regional group in order to ensure the most logical presentation.	Producer States		

11A. Regional and National Survey Data Management

Participants held a general discussion on regional and national survey data management. Many States would require some capability to manage survey data even in the absence of a hydrographic capability.

NZ reported on the management of geospatial data within LINZ. In NZ there is an open data agenda being pursued and all agencies are required to make their data available. In response to this initiative, LINZ has embarked on a risk assessment project and launched the LINZ Data Services which includes charting information, survey data, topographic data. There is significant amount of information released by LINZ through the Data Service.

NZ Geospatial Office (within LINZ) has released a Geospatial Data 'Cookbook', which is orientated at providing advice and assistance to government departments in terms of their data, what it means, what the implications are as well as addressing issues of custodianship, stewardship and government agencies' responsibilities.

LINZ is in the process of the realisation of a hydrographic data infrastructure. It has a number of projects attached to it, one of which is to bring online and catalogue digital data holdings and make that information available. A project aligned with this is the LINZ in-house catalogue. LINZ is also working through their paper archive, including scanning paper records. The end result will be to make all LINZ-held data available through the open data agenda.

Key messages about data management that came out of this session include that data should be:

- should be registered and catalogued,
- stored and backed-up securely,
- accessible (via a web search engine or internally through an organisation),
- searchable and discoverable (including metadata or information relating to that data- best stored in accordance with international standards, e.g. ISO 19-100),
- up to date; and
- auditable and changes should be traceable.

CDRE Nairn recommended that all participants familiarise themselves with the LINZ Spatial Data Information Cookbook, which is available online at <http://www.geospatial.govt.nz/sdi-cookbook-home>

UK reported on their experience at the MESO American & Caribbean Sea Hydrographic Commission (MACHC) Meeting in the Caribbean, December 2011. One issue that became important was how to translate the concepts behind a marine spatial data initiative into something concrete within the region, in order to make data in the region available to all Member States. It was decided that instead of calling such an initiative a marine spatial data infrastructure, it would be referred to as the Marine Economic Infrastructure Project (MEIP) for the reasons of engaging politicians and funding agencies. A workshop during the Meeting led to the establishment of a virtual Working Group which is a forum for the discussion of ideas regarding what attributes be included in a MEIP, how to engage industry and use this group to formulate a plan for better service and information and go and get funding. There is a regional approach in the Eastern Caribbean with about ten member states working together on a common survey requirement and program that will be done in conjunction with industry and will seek regional and/or international funding.

CDRE Nairn noted that such a program would provide an excellent blueprint for a survey requirements prioritisation model within the SWP region as well as many other regions globally and he queried whether it would be appropriate for it to be hosted at the IHB and whether there is something under development. CAPT Ward (IHB) noted that a global metadata database, which will allow regions access in order to populate data, is being developed for the HCA and is taking on board some of the lessons learned from the Baltic Hydrographic Commission. This database has the potential to meet regional requirements in the future.

Mr Adam Greenland (NZ) noted that the concept of a regional GIS in association with the risk assessment project has been discussed, but further discussions are required in order to develop it further.

Discussion then dwelt on whether there was merit in the SWPHC pursuing its own MSDI initiative – noting that a realistic assessment of the Commission’s aspirations vs. ability needed to be done and whether the Commission has the manpower, effort and capability to dedicate to such a project at the moment, especially considering that there is a global solution under development which may suit the Commission’s needs well. It was concluded that it is better for Member States to focus on internal data management so that when a global scheme is up and running, data can be fed directly into this system rather than expending the effort developing a regional solution at this time.

Mr Jens Kruger (SOPAC-SPC) stated that SOPAC has a project underway to rescue all the marine data that they have, digitising all paper charts and populating a geo network. This initiative grew out of a project where map servers were installed in 14 different countries but only one is still operational. SOPAC realised that many countries are not able to maintain their own geo network databases, and therefore provides databasing for South West Pacific nations.

It was agreed that the Commission would wait and see what other regions (MACHC, Baltic) and the IHB come up with regarding a MEI model rather than pursuing one for the SWPHC. It was noted that it would be helpful to be kept up to date on the developments of the MACHC working group.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
21	11.19	Report to SWPHC on updates and developments coming out of the MACHC MEIPWG.	United Kingdom		

CAPT Ward (IHB) commented that the Hydrographic Services and Standards Committee (HSSC) had formed an MSDI Working Group. Its first task was to produce a ‘cookbook’ which was very general in nature. MSDI-WG now has no tasks assigned to it and when it was suggested that it be disbanded, however this was rejected on the basis that HSSC members considered that MSDI is an important topic. The continuing existence of MSDI-WG will come up again this September when the HSSC meets again, noting that while MSDI activity is taking place in a number of regions, it has stagnated in the IHO. It was agreed that that one of the tasks for the WG could be to provide guidance on best practice based on the experiences of the MACHC and the Baltic to IHO Member States.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
22	11.20	Request the HSSC to propose a work item for the MSDI WG to develop guidance framework/best practice model for implementation of MSDIs in other RHCs.	Chair		

12. Training and Technical Assistance

This agenda item was extensively addressed under agenda item 7.

13. Other business

13.1 XVIIIth IH Conference (Monaco, 21-27 April 2012)

The XVIIIth International Hydrographic Conference will be held in Monaco on 21-27 April 2012. All Member States were extended invitation to attend; all other States are welcome to attend as observers. The relevant documentation is available on the IHO website.

13.2 World Hydrography Day, 21st June 2012 - National Plans

The theme for World Hydrography Day (WHD) 2012 is “*International Hydrographic Cooperation-Supporting Safe Navigation*”. This theme has been chosen to align with the introduction of compulsory carriage of ECDIS. WHD is an excellent opportunity for States to promote involvement in international activities at the bilateral, multinational, regional and global levels covering issues such as bilateral support, data exchange, chart coverage, development of standards and regional cooperation.

Major Hydrographic Offices such as in Australia, France, NZ, PNG, UK and US, PNG host WHD events and release excellent resources on their website to coincide with WHD. Observer States present were urged to take advantage of these resources and those disseminated by the IHO, as it provides a great opportunity to raise the profile of hydrography. (Refer to IHB Circular Letter 13 for more information http://www.iho.int/mtg_docs/circular_letters/english/2012/C113e.pdf)

14. Date and Venue of Next Meeting

Mr Toney Tevi’s offer to host the next meeting of the SWPHC in November 2013 in Vanuatu was unanimously accepted by the participants. The dates and venue for the meeting will be confirmed by correspondence.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
23	11.21	Confirm by correspondence the dates and venue of the 12 th SWPHC Meeting	Vanuatu		

The meeting discussed the significance of holding technical programme/workshop in conjunction with the next meeting, involving industry as well as technical experts from within the SWPHC.

CAPT Ward suggested that appropriate themes for such a workshop could be electronic charting implementation and issues. This would cover chart improvement, the role of the island States in getting charts and data, chart quality and electronic charting. The workshop themes would be focussed on returning participants to their own countries equipped with some tools and training in order to set up effective domestic infrastructure, as well as providing some practical guidance for participants to make meaningful contributions towards the establishment of effective administrations for hydrographic services.

UK agreed to draft a programme for a technical workshop on chart quality matters, and also to draft a submission for capacity building funding for this workshop. Australia stated that it may be possible for a RAN survey vessel to visit Vanuatu to undertake a survey to coincide with the workshop and the SWPHC Meeting in Vanuatu, November 2013.

No.	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
24	11.22	a) Propose a programme for a technical workshop (on chart quality matters) to be held in conjunction with SWPHC Meeting in Vanuatu, November 2013 b) Draft a submission for capacity building funding for the technical workshop. (see Item 7A above)	United Kingdom		

15. Election of Chair and Vice Chair

RADM Nick Lambert (United Kingdom) and Mr Nicholas Pion (Papua New Guinea) were unanimously elected as Chair and Vice Chair respectively.

16. Summary of Resolutions, Decisions, Recommendations and Actions

The actions arising from the meeting are detailed in **Annex C**.

17. Closing remarks

The Chair and Vice Chair thanked all participants for their attendance and contribution to the Meeting. Observer States were urged to consider membership of the Commission.

List of Participants
11th Meeting of the SWPHC, Brisbane Australia. 15-16 February 2012

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SWPHC Planned Activities for 2013-2017

<u>List of Available Activities and Courses</u>	2011	2012	2013	2014	2015	2016	2017
<u>Technical and Advisory Visits</u>							
Technical Assessment & Advice Visit	Cook Islands, Kiribati, Vanuatu (completed)		Samoa, Tonga				
Technical visit to facilitate National Hydrographic Requirements		Solomon Islands (completed Feb 12) Cook Islands	Vanuatu (in conjunction with SWPHC12 Meeting and Chart Quality Workshop in Vanuatu)	Kiribati	Samoa, Tonga		
<u>Technical Workshops, Seminars, Short Courses</u>							
MSI Course (3 days)				Cook Islands, Fiji, French Polynesia, Kiribati, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, SOPAC			Cook Islands, Fiji, French Polynesia, Kiribati, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, SOPAC
Phase 1 Skills: An introduction to the assessment and promulgation of navigationally significant data (5 days)							
Port & Shallow Water Bathymetry Technical Workshop (2 days)		Cook Islands, Fiji, French Polynesia, Kiribati, New Caledonia,			Cook Islands, Fiji, French Polynesia, Kiribati, New Caledonia,		

		Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, SOPAC (completed)			Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, SOPAC		
Regional Training in Hydrographic Surveying, Cartography and MSI (10 days)			Cook Islands, Fiji, French Polynesia, Kiribati, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, SOPAC			Cook Islands, Fiji, French Polynesia, Kiribati, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, SOPAC	
Chart Quality Technical Workshop (2 days)			Cook Islands, Fiji, French Polynesia, Kiribati, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, SOPAC				
Tides and Water Level Workshop (5 days)				Cook Islands, Fiji, French			Cook Islands, Fiji, French

				Polynesia, Kiribati, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, SOPAC			Polynesia, Kiribati, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, SOPAC
Basic ENC and ENC Production Course (10 days)							
MBES Processing (5 days)							
Law of the Sea Workshop (5 days)							
MSDI and Database Management (5 days)							
ENC Production and QA (5 days)							
Tsunami Inundation mapping workshop (5 days)							
Seabed Classification Workshop (5 days)							

	2011	2012	2013	2014	2015	2016	2017
<u>Technical Workshops, Seminars, Long Courses</u>							
Module 1 – Marine Cartography of the CAT B Cartographic Course (5 weeks)				Fiji, New Zealand, Papua New Guinea, Solomon Islands, Tonga, Vanuatu			
Module 2 – Hydrographic Data Processing of the CAT B cartographic Course (5 weeks)		Fiji, New Zealand, Papua New Guinea,			Fiji, New Zealand, Papua New Guinea,		

		Solomon Islands, (In Wellington, NZ – Jul-Aug 2012. Open to all IHO MS)			Solomon Islands, Tonga, Vanuatu		
Module 3 – Electronic Navigational Charts (ENC) of the CAT B Cartographic Course (5 weeks)			Australia, Fiji, Papua New Guinea, New Zealand, Tonga, Solomon Islands			Australia, Fiji, Papua New Guinea, New Zealand, Tonga, Solomon Islands, Vanuatu	
Other							
Representation at Pacific Islands Maritime Administration (PacMA) meetings	SWPHC Chair (or representative)- <i>No meeting held</i>	SWPHC Chair (or representative)	SWPHC Chair (or representative)	WPHC Chair (or representative)	SWPHC Chair (or representative)	SWPHC Chair (or representative)	SWPHC Chair (or representative)
Hydrographic Administration and Technical Training Placements within Regional HO		Papua New Guinea, Solomon Islands (completed Feb 12) Timor Leste, Vanuatu (planned for 2 nd half 2012)	Cook Islands, Kiribati,	Tonga, Samoa			
National Hydrographic Capability Development – Nautical Cartography and Hydrographic Information training and work experience		Papua New Guinea (planned for 2 nd half 2012)	Solomon Islands	Vanuatu	Cook islands, Kiribati	Tonga	Samoa

**Actions items from the 11th SWPHC Meeting
15-16th February 2012- Brisbane, Australia**

No.	SWPHC11 Action Item	SWPHC11 Agenda Item	11 th SWPHC Action	Action by	Deadline	Status
1	9.2	3	Request Fiji and Tonga to expedite process of ratification of the Protocol of Amendments to the IHO Convention.	Chair	ASAP	
2	11.1	3	Hydroscheme to be provided to SOPAC	Australia	ASAP	
3	10.4	3	Compare LINZ survey data with the SOPAC data to be acquired in Tonga, in order to evaluate the quality of SOPAC data	SOPAC	ASAP	
4	11.2	3	Mr Bob Wilson to represent SWPHC on IHR editorial board – succeeding Mr Bruno Frachon.	United Kingdom		
5	11.3	3	SOPAC to be included in list of information providers when preparing new charts	Charting Authorities	Ongoing	
6	11.4	5.1	Expedite approval process of Montenegro's application for IHB membership	Papua New Guinea	ASAP	
7	11.5	5.5	Australia and United States to process data of Port Betio and forward to Kiribati. Kiribati to forward to UKHO for charting action	Australia, United States, Kiribati	30 Apr 2012	
8	11.6	5.6	Check whether data of 2005 survey of Niue has been incorporated into charts, otherwise forward to New Zealand for charting action. Advise Niue accordingly	SOPAC		
9	11.7	5.8	Provide verified survey data to Vanuatu and UKHO	Australia	30 Apr 2012	
10	11.8	7	Liaise with Cook Islands and inform Australia (by end May) whether visit is required in 2012 or to be carried forward to 2013 – for reporting to CBSC10 Meeting in Singapore. (4-6 June 2012).	New Zealand	31 May 2012	
11	11.9	7	a) Contact Capt. John Rounds (SPC) regarding details of IMO funded Regional Training Course in Hydrographic Surveying and Chart Production planned to be conducted in Fiji in June 2012. (Post Meeting Note : The Course has now been re-scheduled for 24 September 2012) b) Coordinate the training package	a) SOPAC and IHB b) United Kingdom		
12	11.10	7A	Coordinate with New Zealand and United Kingdom and finalize the applications for CBSC funding for 2013 for submission to CBSC10 Meeting (Singapore, 4-6 June 2012).	Australia		
13	11.11	7B	Advise IHB re amendment to Clause 1 (b) of the SWPHC	Australia		

			Statutes for updating information on IHO website, and also inform EAHC and SEPHC re the same.			
14	11.12	7B	Invite observer States to become Associate Members of the SWPHC by acceding to the Statutes of the Commission.	Australia, Observer States	Responses to Australia by 31 May 2012	
15	11.13	8	a) Advise Australia re: revised limits of INT626 b) Forward all updated information re INT Chart Scheme (Region L) to the IHB for updating S-11	a) UK b) Australia		
16	11.14	9	Liaise with UK regarding NAV Purpose 2 ENC of Norfolk Island for Australia and advise.	New Zealand		
17	11.15	9	a) INT Chart WG members to agree to ToR, and work together to share information to establish ENC schema for bands 3-6 and data exchange format b) Development of consolidate large scale ENC Schema would be an ongoing item	Australia, France, New Zealand, United Kingdom, United States	a) 30 Apr 2012 b) 31 Dec 2012 (first-pass)	
18	11.16	10	Confirm MSI point of contact in accordance with the reports from NAVAREA X and XIV and advise (Australia and NZ respectively) of any changes	All regional States		
19	11.17	10	Verify re lodgement of the NAVAREA XIV report.	NZ	ASAP	Complete
20	11.18	11	Producer States submitting information to populate C-55 to provide data by State or logical island or regional group in order to ensure the most logical presentation.	Producer States		
21	11.19	11A	Report to SWPHC on updates and developments coming out of the MACHC MEIPWG.	United Kingdom		
22	11.20	11A	Request the HSSC to propose a work item for the MSDI WG to develop guidance framework/best practice model for implementation of MSDIs in other RHCs.	Chair		
23	11.21	14	Confirm by correspondence the dates and venue of the 12 th SWPHC Meeting	Vanuatu		
24	11.22	14 & 7A	a) Propose a programme for a technical workshop (on chart quality matters) to be held in conjunction with SWPHC Meeting in Vanuatu, November 2013 b) Draft a submission for capacity building funding for the technical workshop. (see Item 7A above)	United Kingdom		

**11th Meeting of the South West Pacific Hydrographic Commission (SWPHC)
Brisbane, Australia – 15-16 February 2012**



IHO South West Pacific Hydrographic Commission (SWPHC)
Brisbane, Australia – 15-16 February 2012

1. CDRE Rod Nairn - Australia
2. Nicholas Pion - PNG
3. CAPT Robert Ward - IHO
4. RADM Nick Lambert - UK
5. Ronan Pronost - France
6. Jennifer Ryan - New Zealand
7. Andrea McDonald - New Zealand
8. Captain John Lowell - USA
9. Adam Greenland - New Zealand
10. Calvin Martin - USA
11. Toney Tevi- Vanuatu
12. Korua Tamuera- Kiribati
13. Madelsar Ngiraingas- Palau
14. Vaipo Mataora- Cook Islands
15. Daniel Benoma- PNG
16. Clifford Olisukulu- Solomon Islands
17. Boata Iabeta- Kiribati
18. Edward Tokuru- Solomon Islands
19. Bob Wilson- UK
20. Tim Sewell-UK
21. Tafaigata Toilolo- Samoa
22. Hilary Thompson- Australia
23. Satesh Kumar- SOPAC-SPC
24. Jens Kruger- SOPAC-SPC
25. Omirete Tabureka- Kiribati
26. Eileen Handerson- French Polynesia
27. Charly Kalo- Vanuatu
28. Robert Cario- CARIS
29. Daniel Kruimel- CARIS
30. Kevin Smith- L3 Communications Nautronix
31. Richard Siataga- Niue
32. Mike Drake- Carnival Australia
33. Hugh Parker- Fugro LADS
34. Richard Williams- Kongsberg Maritime Ltd
35. Dave Garforth- CEE Hydro Systems
36. CMDR Pete Kenshole- Australia
37. Jasbir Randhawa- Australia