

## South West Pacific Hydrographic Commission (SWPHC)

### SWPHC Report to IRCC8

Abu Dhabi, UAE, 29-31 May 2016

1. **Chair:** CDRE Brett Brace, Hydrographer of Australia  
**Vice Chair:** Mr Nicholas Pion, Hydrographer of Papua New Guinea

2. **Membership**

Members	Australia, Fiji, France, New Zealand, Papua New Guinea, Kingdom of Tonga, United Kingdom, United States of America
Associate Members	Cook Islands, Kiribati, Niue, Palau, Samoa, Solomon Islands, Vanuatu
Intergovernmental Observer Organization	Secretariat of the Pacific Community (SPC)
Observers	New Caledonia
IHB Representatives	President Robert Ward, Asst. Director Alberto Costa Neves
Note	Solomon Islands and Vanuatu have applied for IHO membership. (IHO Circular Letters 32/2015 and 62/2015)

3. **Meetings**

The 13<sup>th</sup> SWPHC Meeting held in Rarotonga, Cook Islands on 25-27 February 2015 was attended by more than 40 participants. Meeting was preceded by a 2-day Workshop on Hydrographic Governance.

The 14<sup>th</sup> SWPHC Meeting will be held in Noumea, New Caledonia from 30<sup>th</sup> November to 2<sup>nd</sup> December 2016 and will be preceded by a 2-day technical workshop.

4. **Current SWPHC Working Groups**

- a) SWPHC International Charting Coordination Working Group (SWPHC-ICCWG)
- b) SWPHC Capacity Building Working Group (SWPHC-CBWG)

5. **Status of IRCC Actions (relevant to SWPHC)**

Action No	Action Item	Resp.	Action Taken/Status
IRCC7/01	Encourage the approval of pending applications for IHO membership	RHC Chairs	Ongoing communication to SWPHC members encouraging MS to approve pending applications.
IRCC7/02	Continue to engage pending applicants in their region to encourage the ratification of the IHO Convention	RHC Chairs	Addressed at SWPHC13
IRCC7/03	Consider the participation of stakeholders at the RHC conferences	RHC Chairs	Some stakeholders attended SWPHC13. and good interaction was achieved. Invitations will be sent for the next meeting to be held in Nov-Dec 2016.
IRCC7/05	Provide the IRCC Chair with progress reports on the relevant tasks in the IHO 2015 Work Programme	RHCs and IRCC subsidiary organs	Done. Included in the SWPHC reports to CBSC14 and IRCC8.

Action No	Action Item	Resp.	Action Taken/Status
IRCC7/07	Provide to the IRCC Chair the estimated values of SPIs and agreed WPIs as of 31 December 2015 and target values for 31 December 2017, complemented by the comments on the difficulties encountered and suggestions for a way forward	RHC Chairs	Discussed during CBSC14.
IRCC7/08	Invite GEBCO Guiding Committee / Bathymetric Regional Project Chairs to attend corresponding RHCs meetings, aiming at strengthening collaboration with a priority on improving high resolution shallow water bathymetry at the regional level	RHCs / GEBCO	A standing agenda item for SWPHC meetings. GEBCO will be invited to the next meeting (Nov 16).
IRCC7/09	Encourage MSs and representatives of industry and academia to promote and to work together to ensure that the best possible use is made of Satellite Derived Bathymetry	RHC Chairs	A standing agenda item for SWPHC meetings
IRCC7/15	Provide material to the IHB to promote the achievements of IRCC bodies	RHC Chairs and subsidiary bodies	Outcomes of CB events are reported to IHB. MS are requested to provide relevant material to IHB.
IRCC7/17	Encourage National Hydrographers to invest in English language training in order to increase the chances of their candidates being selected to Cat A and Cat B training courses delivered in English	RHC Chairs	At SWPHC meetings this requirement is communicated to all attendees.
IRCC7/18	Facilitate resolution of important inconsistencies between paper charts and ENCs and between ENCs from different producers as identified by the RENCs or otherwise	RHC Chairs	Addressed in region through SWPHC-ICCWG
IRCC7/19	Encourage MSs in their respective regions to use the Risk Assessment methodology to establish Hydrographic Survey priorities	RHC Chairs	Facilitated by New Zealand through its SW Pacific Regional Hydrography Programme. Further use is planned for the New Zealand facilitated Pacific Regional Navigation Initiative (PRNI).
IRCC7/20	provide input to CBSC on how to identify possible sources of funding to support capacity building efforts and programmes across the regions	IRCC Members	To be discussed at SWPHC14
IRCC7/26	report to IRCC on the status of the RHC procedures for selecting their respective representatives to the Council	RHC Chairs	In progress. Proposed procedure for selecting SWPHC representative to IHO Council has been circulated to Commission MS for comments.

Action No	Action Item	Resp.	Action Taken/Status
IRCC7/27	<p>To task:</p> <p>a) New INT Chart Producer Nations to provide first edition INT chart to Regional INT Chart Coordinator (or ICCWG) for review as soon as convenient during the production cycle;</p> <p>b) INT Chart Coordinators/ICCWGs to manage the review of the first edition INT charts produced by new INT Chart Producer Nations to check their compliance with IHO standards, provide feedback to the Producer and to report progress to the next RHC meeting;</p> <p>c) All INT Chart Producer Nations to provide first edition and new edition INT charts to Regional INT Chart Coordinator (or ICCWG) 3 months prior to every RHC meeting to enable Regional INT Chart Coordinator (or ICCWG) to validate current INT Chart Scheme;</p> <p>d) All editions of INT charts submitted under action 27 a) and b) to be subsequently transferred to the IHB to be included in the IHB reference collection for internal use; and</p> <p>e) Member States to provide an update of the list of on-line chart catalogues, either directly or systematically when updating the Yearbook.</p>	RHC Chairs	<p>a) Not applicable, no new INT Chart Producer Nation.</p> <p>b) Not applicable, no new INT Chart Producer Nation.</p> <p>c) INT Chart Producer Nations will be reminded in July 16 for upcoming SWPHC meeting in Nov 16.</p> <p>d) ) Not applicable, no new INT Chart Producer Nation.</p> <p>e) Completed.</p>
IRCC7/28	implement procedures approved by Decision 3 and to report their processes for the review of first edition INT Charts produced by new Producer Nations to IRCC	RHCs	Not applicable, no new INT Chart Producer Nation.
IRCC7/32	invite NZ to report to IRCC on the economic value case for the SW Pacific Risk Assessment project	SWPHC	The economic value assessment / methodology is a work in progress. This year NZ has completed the NZ risk assessment (via contractor) and the Niue risk assessment (inhouse). The results are yet to be analysed and this will include scrutiny of the economic value case/methodology.
IRCC7/33	instruct the ICCWG Coordinators to investigate ways to improve communication across the regions and report back to IRCC	RHC Chairs	Budget constraints do not allow F2F meetings. Ongoing correspondence via email predominantly as tele-conferences not practical due to substantial time differences between SW Pacific region and Europe/USA.
IRCC7/41	consider incorporating hydrography in more comprehensive maritime projects as a way of raising awareness and funds from Donor agencies and to report progress to IRCC	RHCs	Previous Australian AusAID and New Zealand SW Pacific Regional Hydrography Programmes, along with the current New Zealand Pacific Regional Navigation Initiative (PRNI) are examples of larger regional projects. However, access to funds for comprehensive projects is yet to be achieved.
IRCC7/42	invite Member States to update C-55 annually including reports of "no changes")	RHCs	MS are invited to update C-55 annually. It will be discussed at next SWPHC meeting.

Action No	Action Item	Resp.	Action Taken/Status
IRCC7/43	provide access to the IHB to any of their relevant promotional material on CB and to consider using the posters displayed at the EIHC 5 CB exhibition	RHCs	To be discussed at next SWPHC meeting.
IRCC7/44	provide full reports for those TVs undertaken in 2014 that have not yet been submitted to the IHB	RHC Chairs and CB Co-ordinators	Not applicable. The TV to Samoa scheduled to be undertaken in 2014 was postponed to 2016.
IRCC7/48	Consider nominating regional representatives on the MSDIWG	RHCs	To be discussed at next SWPHC meeting.
IRCC7/52	continue supporting GEBCO regional projects and report back to IRCC	RHCs	Any relevant GEBCO projects are discussed at SWPHC meetings and are supported where appropriated or within the resources of the MS.
IRCC7/53	remind HOs of the standing request to provide GEBCO with access to existing shallow water bathymetric data, at whatever resolution is permissible by the country and to report progress to IRCC	RHC Chairs	MS are reminded of this when discussing standing agenda item on GEBCO during SWPHC meetings.
IRCC7/56	provide comments on doc. WENDWG5-04B (Relevance of information overlay services and their status in the global IHO ENC programme) to IRCC	RHCs	Formal introduction and use of Information Overlays for ENCs must be done so with great caution. There are areas where additional information is of great value, there are others where there is absolutely no requirement and could cause great confusion.
IRCC7/62	consider providing representatives of the IHO at the international meetings listed in doc. IRCC-10B on relations with stakeholders and to inform the IHB	RHCs	MS are encouraged to provide IHO representatives at relevant international meetings held in the region.

## 6. Capacity Building Activities

The following Capacity Building (CB) activities were carried out in the region since the last IRCC Meeting:

### 6.1 IHO CB Activities

#### 6.1.1 Vanuatu Technical Implementation Visit (2015 CBWP – A-01)

Mr Samuel Harper (International Hydrographic Projects Manager, UKHO), accompanied by a SPC representative, undertook the visit in November 2015. Initial development tables have been submitted to Vanuatu, SWPHC CB Coordinator and the IHB. The Technical Visit Report is currently being finalised.

#### 6.1.2 Kiribati Technical Implementation Visit (2015 CBWP – A-02)

Mr Samuel Harper (International Hydrographic Projects Manager, UKHO), accompanied by an SPC representative, undertook the visit in November 2015. Initial development tables have been submitted to Kiribati, SWPHC CB Coordinator and the IHB. The Technical Visit Report is currently being finalised.

#### 6.1.3 Tides & Water Levels Technical Workshop, (2015 CBWP – P-06)

The workshop was held at the Australian Hydrographic Office, Wollongong, Australia on 26-30 October 2015. A total of 10 participants attended – 8 representatives from the Pacific Islands Countries and 2 from the Secretariat of Pacific Community (SPC), one of which was funded by SPC. In addition to providing participants with a basic knowledge of tides and water level variations; the workshop also trained participants on the application of tides and water levels to hydrographic surveying. The

workshop encouraged greater collaboration between Pacific Island States on exchange of tidal information pertaining to the marine environment in the region.

## **6.2 IHO - NIPPON Foundation Chart Project**

### **6.2.1 7<sup>th</sup> Course in Marine Cartography and Data Assessment (Category B)**

One candidate from the SWP region, i.e. from Fiji, attended the 7<sup>th</sup> Course in Marine Cartography and Data Assessment (Category B) at the United Kingdom Hydrographic Office from 7 September to 18 December 2015.

## **6.3 Non-IHO CB Activities**

### **6.3.1 Japan international cooperation Agency (JICA) Group Training Course on Hydrographic Survey**

One candidate from the SWP region, i.e. from Tonga, attended the JICA Course on Hydrography for Charting and Disaster Management (internationally accredited Category B) in Japan during June-December 2015.

### **6.3.2 Ministry of Foreign Affairs and Trade (MFAT) New Zealand Aid Programme – South West Pacific Regional Hydrography Programme (SWPRHP)**

The full reports (Inc. synopsis) for the following have been published (on LINZ & IHO websites):

- (i) Tonga Hydrography Risk Assessment
- (ii) Cook Islands Hydrography Risk Assessment
- (iii) Vanuatu Hydrography Risk Assessment

(IHO website:

[http://www.iho.int/srv1/index.php?option=com\\_content&view=article&id=623&Itemid=407&lang=en](http://www.iho.int/srv1/index.php?option=com_content&view=article&id=623&Itemid=407&lang=en) )

This activity is now closed; see Activity Completion Report, Executive Summary (NZ SWPHP Report to CBSC14)

### **6.3.3 MFAT New Zealand Aid Programme - Pacific Regional Navigation Initiative (PRNI)**

Commenced in April 2015, PRNI is a 5 year programme focusing on navigation-related aspects of maritime safety, and builds on the success of the SWPRHP. It is a partnership between MFAT, LINZ and the Secretariat of the Pacific Community (SPC).

LINZ has a focus on five Pacific Island Countries (PICs) where it is the Primary Charting Authority (PCA) - Cook Islands, Niue, Samoa, Tonga and Tokelau.

PRNI has 5 output areas: Pacific-wide Data Discovery, Hydrography Risk Assessments (Niue, Samoa and Tokelau), Capability/Capacity Building, Mitigation Measures and Pacific-wide Partnerships

To date, LINZ has engaged with:

- Cook Islands (October 2015) and
- Tonga (November 2015) in relation to Capability/Capacity Building and Mitigation Measures.
- Niue (February 2016) to raise awareness of obligations under SOLAS V/9 – IHO Technical Visit
- Niue (March 2016) Hydrography Risk Assessment

The Niue Hydrography Risk Assessment will be completed by June 2016. This activity has been led by LINZ using in-house GIS expertise; GIS assistance from a PhD candidate registered with University of the West Indies (UWI); and contracted Maritime domain expertise. It will deliver the risk model implementation in a GIS, as well as the spatial data inputs that feed into it and the results it creates. This work will form the preliminary investigation/materials for a PhD at UWI to conduct a Hydrography Risk Assessment of the Caribbean.

## **7. Tropical Cyclone Winston and Post-Disaster Needs**

### **7.1 Tropical Cyclone WINSTON struck Fiji as a Category 5 Cyclone in February 2016. Significant damage occurred to villages and shore infrastructure. With the exception of some aids to navigation,**

relatively minor damage was made to maritime infrastructure, wharfs, jetties, and larger marine vessels. Many small craft and dinghies were significantly damaged. In accordance with IHO Resolution 1/2005, as amended, on IHO Response to Disasters, the SWPHC offered various resources and support to Fiji. The bulk of the initial response and assessment was provided by military forces, such as those provided by the Australian, New Zealand, French and Indian forces, and by regional organisations, such as SPC. UKHO, as Charting Authority, again reacted very quickly to assess the nature of the damage to Fiji's maritime infrastructure, resulting in the report: *A preliminary Satellite Imagery Analysis of Navigation & Coastal Damage (Imagery available to 25th February 2016)*.

- 7.2 While there was an initial activity to coordinate the various hydrographic responses, it became clear that apart from the urgent notification by the relevant authority (MSA Fiji and NAVAREA14 coordinator – NZ), the broader support of the SWPHC was not specifically required. The focus was on saving lives and on returning community life to as normal a state as possible. In this particular response case, coordination of the various hydrographic response activities was more a facilitation of communication between relevant authorities and an awareness across the hydrographic community where their support may be required. A copy of a coordination email is provided with this report. This email was the 5th coordination email and shows the nature of the information flow and the activities underway at the time.
- 7.3 SWPHC support to Fiji is now focussed on the longer term 'recovery' phase. Routine charting work is continuing between Fiji and the UKHO and Fiji intends to be in a position to use their own MBES capability to improve the quality of surveys. CBSC14 agreed to fund, via the CB fund, a specific MBES training activity in Fiji. Other support activities may eventuate as the Fiji government further assesses needs and priorities.

## **8. Conclusions**

- 8.1 SWPHC is committed to carrying forward hydrographic, nautical cartographic and capacity building activities in close alignment with IHO objectives and goals.

## **9. Actions Required from IRCC8**

- 9.1 IRCC members are invited to:
- note this report
  - note the high level of engagement and capacity building activity being undertaken in the SWPHC region
  - note the very good support provided to Fiji by SWPHC members and regional bodies following Tropical Cyclone Winston.
  - note the application for IHO membership by Vanuatu and Solomon Islands

**B.K. BRACE**  
**Hydrographer of Australia**  
**SWPHC Chair**