21ST MEETING OF THE SOUTH WEST PACIFIC HYDROGRAPHIC COMMISSION (SWPHC21)

28,29 February and 1 March 2024, Nadi, Fiji

NATIONAL REPORT FROM FIJI TO THE SWPHC21

References:

- A. IHO Resolution 2/1997 as amended (see doc. C3-04.2A, Appendix to Annex A)
- B. IHO Circular Letter 20/2019, The IHO Online Form System for responses to Circular Letters and input to IHO Publications (P-5 and C-55): <a href="https://link.org/link.com/
 - Online system for C-55 (Status of Surveys and Charting Worldwide): <u>link</u>
- C. IHO Strategic Plan: link
- D. IHO IRCC CL 01/2021 IHO Strategic Plan for 2021-2026 Procedure for measuring the Strategic Performance Indicator (SPI) allocated to IRCC: <u>link</u>

Executive summary

- 1. Hydrographic Office / Service:
 - a) Name of the institution: Fiji Hydrographic Services
 - b) Description:
 - The Year 2023 saw Fiji elected to be Vice-Chair of the SWPHC. Fiji through support of PCA was invited to the UKHO for a technical visit to map a way forward collaboratively in progressing Fiji's hydrographic services delivery. In its support of transitioning from paper charts to ENC's, Fiji signed up as the 49th member of IC-ENC. There are plans in expanding the size and number of people within the Unit over the next few years.
 - c) Submitted by: Apenisa Cavuilati: director.fho@fijinavy.org

Detailed information to update IHO Publication P-5 (*Yearbook*) is submitted in Annex A (alternatively, use the online system, reference B). Please indicate "no change" in Annex A if this is the case.

2. Surveys:

- a) Coverage of new surveys:
 - Surveys conducted in 2023 have mainly focussed on updating charts in areas such as: Nawi (BA 378), Natovi (BA744), Denarau (BA 1670), Kadavu (BA745). No new survey coverage in 2023.
- b) New technologies and /or equipment: N/A
- c) New ships: N/A
- d) Crowdsourced and satellite-derived bathymetry national policy: N/A
- e) Challenges and achievements:
 - Challenges faced by FHS is that we lost our Senior Hydrographic Surveyor and an experienced Cartographer during the year. An internal restructure of people was required to ensure sharing of workload as a result of people leaving. Secondly, Equipment maintenance and upkeep is an ongoing issue for FHS. Most of the technical expertise and advice is acquired offshore. Procurement for small parts/maintenance purposes is not available locally. Advice have to be sought from technical partners outside of Fiji. As an achievement, the support provided by the

Australian Hydrographic Office and HMNZS Matataua enabled surveys to update charts in Natovi and Kadavu respectively. Capacity building was a primary output in addition to the updating of data conducted through survey.

Detailed information about surveys to update IHO Publications P-5 (*Yearbook*) and C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is submitted in Annexes A and B, respectively (alternatively, use the online system, reference B). Please indicate "no change" in Annexes A and B if this is the case.

3. New charts & updates:

- a) ENC coverage, gaps and overlaps: As of now, data sets have been submitted to PCA (UKHO) where large scale band ENC's will be produced for example in Kadavu (F9/BA 745) and Denarau (BA1670).
- b) ENC distribution method: N/A
- c) RNCs: N/A
- d) INT charts: N/A
- e) National paper charts: N/A
- f) Other charts, e.g. for pleasure craft
- g) Challenges and achievements:

The cartographic section requires a strength increase to meet the work load. Capacity building is required for the new ones who are joining. Additional challenge is providing training opportunities as all courses are offered overseas. Most cartographic courses offered to Fiji are either from the UK or Korea. Retention of formally trained (CAT B) Cartographers due to migration (03 have departed in the past 5 years). The major achievement since the last RHC meeting is the membership of IC-ENC and submission of 17 FJ S57 ENC Cells to IC-ENC for validation.

Detailed information about charting to update IHO Publications P-5 (*Yearbook*) and C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is submitted in Annexes A and B, respectively (alternatively, use the online system, reference B). Please indicate "no change" in Annexes A and B if this is the case.

4. New publications & updates:

[Describe any significant developments since the last SWPHC meeting in nautical publications related to the items below]

- a) New Publications N/A
- b) Updated publications N/A
- c) Means of delivery, e.g. paper, digital: N/A
- d) Challenges and achievements: N/A

Detailed information to update IHO Publication P-5 (*Yearbook*) is submitted in Annex A (alternatively, use the online system, reference B). Please indicate "no change" in Annex A if this is the case.

5. MSI

[Describe the status of Maritime Safety Information (MSI) related to the items below]

a) Existing infrastructure for MSI dissemination:

MSI is dessiminated by the Maritime Safety Authority of Fiji (MSAF). Radio warnings are broadcasted by the Suva Coastal Radio Station (3DP)

- b) Statistics on work of the National Coordinator
- c) New infrastructure in accordance with GMDSS Master Plan:

Plans are in progress for the relocation of the FHS and Suva Radio Coastal Station to a more ideal location which allow both offices to work more collaboratively. This will be made possible when the Maritime Essential Serices Centre is completed by the end of 2024.

d) Challenges and achievements

Detailed information about MSI to update IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is submitted in Annex B (alternatively, use the online system, reference B). The national self-assessment of MSI is submitted in Annex C. Please indicate "no change" in Annexes B and C if this is the case.

6. C-55

The table with the latest information to update IHO Publication C-55 (*Status of Hydrographic Surveying and Charting Worldwide*) is provided in Annex B (alternatively, use the online system, reference B). Please indicate "no change" in Annex B if this is the case.

7. Capacity Building

[Describe the need for or ability to offer Capacity Building in relation to the items below]

a) Offer of and/or demand for Capacity Building:

In terms of capacity building opportunites, FHS is limited to courses it is offered by its partners and supporting hydrographic offices. We are not able to undertake hydrographic courses in Fiji as no instituions offer this type of training. FHS is only able to run basic training to upskill its surveyors. For intermediary and advance requirements, people are sent overseas.

b) Training received, needed, offered

Training Needed:

Hydrographic Survey training – Cat B, Basic Course, Intermediate Hydrographic Course
Need for more processing/TRG on Caris HIPS & SIPS
Cartographic Training – Cat B
Practical attachment for surveyors and cartographers

Training received in 2023:

One Cat B – Surveyor – Japan Two Basic hydrographic course – Australia Two Intermediate Hydro course – Australia IHO MSI Training (03 attended)

During HMNZS Matataua survey in Fiji, two of our men were attached onboard. Upon completion of survey, three members of the NZ survey team stayed behind and conducted the processing with members of FHS – this capacity building works better for us as gains are more: (1.) an area is surveyed capturing acquiring updated data (2.) more personnel get exposure to the processing undertaken.

In the first quarter of 2023, a team from Fugro (possible through the support by the Australian Hydrographic Office) came over to Fiji to capacity building through during a planned survey. Benefit of this arrangement: there is exposure/learning opportunities more personnel (numbers) when technical experts come over to Fiji compared to sending only one or two overseas.

- c) Status of national, bilateral, multilateral or regional development projects with a hydrographic component. (In progress, planned, under evaluation or study):
 FHS is trying to formalise its MOU with its PCA, UKHO. Intention is to have this signed by February 2024 during the SWPHC meet that will be held in Nadi, Fiji. There is also an MOU planned/intended with the Australian Hydrographic Office ongoing/pending.
- d) Description of proposals and requests to the IHO CBSC: N/A.
- 8. Oceanographic activities

[Describe any significant developments in oceanographic activity since the last SWPHC meeting related to the items below]

- a) General
- **b)** GEBCO & Seabed 2030:

Fiji will be hosting both the GEBCO and Seabed 2030 events this year (November 2024).

- c) Crowdsourced Bathymetry Activities: N/A
- d) Tide gauge network:

The only tide gauges operational are those in Suva and Lautoka. These are maintained and owned by SPC. The FHS tide gauge network that were previously in Savusavu, Malau, Labasa and Levuka are no longer operational.

e) Challenges and achievements:

Challenges:

Maintenance of tide gauges out of the city proved costly considering they were positioned off the main island. To access these sites, additional funding would be required. These had to be taken down as a result of inability to conduct regular maintenance. In one of the sites (Savusavu), as a result of easy access to public, gauge was vandalised and caused damage to the installation.

- 9. Spatial data infrastructures
 - a) Status of MSDI: N/A
 - b) Relationship with the NSDI:
 - c) Involvement in regional or global MSDI efforts: Part of the SWPHC MSDI WG, and the Pacific Geospatial and Surveying Council (PGSC).
 - d) National implementation of the <u>UN Statement of Shared Guiding Principles for Geospatial Information Management</u> including any national data policy and impact on marine data. Ref: IHO Strategic Plan, Goal 2, Target 2.3, SPI 2.3.1 Number of HOs reporting success applying the principles in their national contexts.
 - e) MSDI national portal:

At the moment, respective departments have their own data. At National level, there is no central portal to accommodate datasets from various

Ministries/departments. Moving into the future, intention is for FHS to be the custodian of maritime related data sets.

- f) Best practices and lessons learned
- g) Challenges and achievements

10. Innovation

a) Use of new technologies: N/A

b) Risk assessment: N/A

c) Policy matters: N/A

11. Other activities

[Describe any other significant developments of interest to the SWPHC since the last meeting related to the items below]

a) Participation in IHO meetings:

Director Fiji Hydrographic Services in his capacity as Vice-Chair for SWPHC along with an additional representative (NZ) attended the 7th IHO Council held in Monaco.

- b) Meteorological data collection: N/A
- c) Geospatial studies N/A
- d) Preparation for responses to disasters **N/A**
- e) Environmental protection N/A
- f) Engagement with the Maritime Administration:

Worked closely with the Maritime Safety Authority of Fiji (MSAF) in resolving a few maritime issues last year.

- g) Aids to Navigation matters:
- h) Magnetic and gravity surveys
- i) International engagements
- j) Others

12. Conclusions

Achievements:

Fiji was selected as Vice-Chair to the SWPHC. Fiji also registered in 2023 as the 49th member to join IC-ENC, an indication of the course Fiji is steering towards in trying to maintain and make its own ENC in the next few years. Locally, we have enough competent people to conduct a basic branch training in-house for new surveyors.

Concern:

Retention of trained and skilled personnel continues to be a concern. Succession planning is the way forward for us as a small hydrographic office to ensure that when people leave, business continues as usual.

Challenge also arises when it comes to maintenance of survey equipment as most technical defects, if severe, can only be rectified overseas, which is an expensive exercise. These defects can sometimes lag or delay survey and projects.

Furthermore, FHS does not have a deep water MBES. Limitations arise when we are required to survey areas greater than 200m. Hence, we are limited to survey areas within 200m.

There is not enough recognition nor priority by Government on hydrography. There needs to be awareness. Probable way forward to advocate hydrography was if a syllabus for tertiary could be developed and be inserted into school curriculum to create interest or at the very least make people aware that there is something called hydrography.

Matters of Interest:

Firstly acknowledge our regional and International partners who have been supporting either financially, technically, support through survey or even advice and mentorship. These include: AHO, New Zeland – HMNZS Matataua came to Fiji, UKHO as our PCA, SPC – technical support and SWPHC in advocating for hydrography within the region.

Secondly, are there any possibilities of SDB coverage in Fiji to support charting purposes?

In addition, after observing the tremendous work completed by HMNZS Matataua when they came to Fiji in 2023 and with the capability to survey in areas greater than 200m, as a way forward, it is requested if there is a possibility of having this arrangement done on an annual basis. This arrangement could supplement areas which have been identified as key shipping lanes but cannot be surveyed by FHS due to MBES limitations. This could definitely change Fiji's status of hydrographic survey (C-55) particularly updating areas greaterthan 200m.

Input to the IHO Publication P-5 (Yearbook)

Cou	<i>ntry:</i> F i	iji	
Organization:	Fiji Hydro	ographic Services_	

(Please provide the information in English. Consider using the IHO Online Form System, see reference B)

Contact information	n/ Informations de contact / Información de contacto
-National Hydrographer or equivalent -Directeur du service hydrographique ou équivalent -Director del Servicio Hidrográfico o equivalente -Head of the Hydrographic Office (if different from the person indicated above) -Directeur du Service Hydrographique (si différent de la personne indiquée ci-	Post: Acting Director Fiji Hydrographic Services Name: Apenisa Wilhelm Colati Cavuilati Postal address: PO Box 12387 Tel: 9906010 Fax: Email: director.fho@fijinavy.org Post: Name: Postal address: Tel: Fax: Email:
dessus) -Director del Servicio Hidrográfico (si diferente de la persona indicada anteriormente)	
-Other point(s) of contact -Autre(s) point(s) de contact -Otros punto(s) de contacto	Apenisa Cavuilati Email: ben.cavuilati@gmail.com Phone: (679) 2953632 Jervis M Robinson Email: j_rbsn@hotmail.com
-Web site -site web -sitio web	Phone: (679) 8040614
Country information	/ Informations sur le pays/ Información sobre el país
-Declared National Tonnage -Tonnage national déclaré -Tonelaje Nacional Declarado	Tonnage: Date:
-National day -Fête nationale -Fiesta nacional	10 th October
-Date of establishment and Relevant National Legislation	March 1970 Maritime Trasport Act 2013

-Date de mise en place et	
législation nationale	
pertinente	
-Fecha de constitución y	
legislación nacional	
pertinente	
	In the year 1002
-Date first joined IHO	In the year 1982
-Date d'adhésion à l'OHI	
-Fecha de adhesión a la OHI	
-Date ratification	
Convention	
-Date de ratification de la	
Convention	
-Fecha de ratificación de la	
Convención	
-Remarks on membership	
-	
-Remarques sur l'adhésion	
-Comentarios sobre la	
adhesión	
Agency information/ I	nformation sur l'agence/ Información sobre la agencia
-Top level parent	Fiji Hydrographic Services which is administered under
organisation	the Republic of Fiji Navy
-Organisme mère	J. T. J. J. T. J. T. J. T. J. J. T. J. J. J. T. J.
-Organización asocieda de	
nivel superior	
-Principal functions of the	- provision of hydrographic services required and in
organisation or the	accordance with conventions such SOLAS and IHO
department	- Collect, compile and collate hydrographic data
-Attribution principales de	- maintain and disseminate hydrographic and other
l'organisme ou du	nautical information and nautical publications
département	- maintain and disseminate nautical charts, including
-Principales funciones de la	authorising charts for use in Fiji
Organización o	
departamento	
-Annual operating budget	
-Budget annuel	
-presupuesto anual	
	27
-Total number of staff	37
employed	
-Effectifs totaux	
-Número total de personal	
empleado	
-Number of INT charts	3
published	
-Nombres de cartes INT	
publiées	
*	
-Número de cartas INT publicadas	

Total number of manage	Eiii Charta	10		1
-Total number of paper	Fiji Charts -	10		
charts published-Nombre				
total de cartes papier				
publiées-Número total de				
cartas de papel publicadas				
-Number of ENC cells	Nil			
published				
-Nombres de cellules ENC				
publiées				
-Número de células ENC				
publicadas				
-Number of Other charts	2			
-Nombre d'Autres cartes				
-Número de Otras cartas				
-Type of publications	3			
produced				
-Type d'ouvrages produits				
-Tipo de publicaciones				
producidas				
-Detail of surveying vessels/	-Name	-Displacement	-Date	-Number of
aircraft	-Nom	-Déplacement	Launched	crew
-Détail des bâtiments	-Nombre	-Desplazamiento	-Date de	-Nombre de
hydrographiques / aéronefs			mise en	l'équipage
-Detalle de los buques			service	-Tripulación
hidrográficos / aeronaves			-Fecha de	1
			botado	
	RFNS			
	Volasiga	72 tonnes	05/12/2019	22
	RFNS			
	Kacau	302 tonnes	18/12/2018	35
	SMB			
	Ikavuka	3.5 tonnes		5
				-
-Other information of		ı	1	l
interest				
-Autres informations utiles				
-Otra información de interés				

Input to the IHO Pu <i>Worldwide</i>)	iblication C-5	S (Status of E	lyarographic	Surveying and Charting
,	Cour	ıtry:	Fiji	
(Please provide the				the IHO Online Form System, see
•		refere	ence B)	•
	C-55 Summa	ry for:		Comments on Charts:
Country:	Fiji			
Country Iso				
Code:				
Country				
SubCode:				
INT Region:				
Country/Depend:				
Last updated:				
Provided by:				
	Passage	Coastal		
Chart coverage	(%)	(%)	Port (%)	
INT	100	100	100	Comments on Surveys:
RNC	100	100	100	
ENC	100	100	100	
Status of Paper C	Charts			
Paper charts with			100	
Paper charts refere	enced to a sate	llite datum		
(%)			100	
Status of	Adequate	Resurvey	No survey	
surveys	(%)	(%)	(%)	
0-200m	7	63	30	
> 200m	15	0	85	
MSI	Y/N	Comments		
Local warning	N	Not applicab	le	
i	I	1		

MSI	Y/N	Comments on MSI:
Local warning	N	Not applicable
Coastal warning	Y	Promulgated by National MSI Coordinator (MSAF)
Nav warning	Y	NAVAREA XIV provided by the NAVAREA Coordinator RCCNZ to MSAF. Copies are sent to Hydrographic Office & RCC Operations, Fiji Navy
Port warning	N	Not applicable in Fiji
GMDSS	Y/N	Comments on GMDSS:
Master Plan		
Area A1		
Area A2		
Area A3		
NAVTEX		
SafetyNet		

National MSI Self-Assessment

Country: Fiji
Organization: Maritime Safety Authority of Fiji_

1. Maritime area

Fiji Coastal Navigational Warning area covers Fiji waters including the 200 nautical mile Exclusive Economic Zone of Fiji.

2. Operational Points of Contact for the National Coordinator

INSTITUTION	TELEPHONE	FACSIMILE	EMAIL
MSAF	+679 3315 266		msi@msaf.com.fj
			skumar@msaf.com.fj

3. GMDSS Master Plan

[Report on the status of the GMDSS Master Plan: Is it up to date? When was the last update?]

[Specifics of equipment used and software version with date up-dated]

Equipment Type for Ports and Local Area	Software Version	Date of Up-date

[Detail the number of warnings identified as immediate priority (requiring transmission within 30 minutes) and the average elapsed time for passing to NAVAREA coordinator, as reported to the last RHC meeting]:

Year - 2021		Year - 2022		Year - 2023	
Total	Average elapsed time	Total	Average elapsed time	Total	Average elapsed time
62		72		41	

4. NAVTEX Coverage:

Not applicable in the region.

5. Operational Issues:

HF maritime broadcast coverage area for Suva Coast Radio Station 3DP is unknown.

6. Contingency Planning

MSI messages are sent to the NAVAREA XIV Coordinator, RCCNZ by e-mail. RCCNZ promulgates important messages as NAVAREA XIV Warnings as recommended by the National MSI Coordinator.

7. Capacity Building

MSAF has been very active and fully supported in the past MSI training courses as well as assisting in the delivery of MSI training.

8. Other Activities

MSAF maintains a register of 406 MHz EPIRBs with Fiji country code 520. This serves as a record of EPIRBs installed on Fiji registered vessels. EPIRB information greatly assists our Rescue Coordination Centres in Distress, Search and Rescue operations.

9. National Maritime Website

Address: www.msaf.com.fj

Information is updated from time to time.

Fiji Coastal Navigational Warnings are also uploaded on the website and removed once they are no longer in force.

10. Recommendations

It is strongly recommended that IHO Capacity Building Fund continues to assist and support the SW pacfic region in MSI.

11. Summary

This self-assessment report highlights the MSI activities for the year ending 31st December 2023. Fiji is very actively involved in provision of MSI services to the maritime industry. This includes navy, government ships, port operators, ship owners, ship agents, marina operators/yacht clubs, pilots, and primary hydrographic charting authorities for updating nautical charts & publications.

The National Coordinator is regularly engaging with the NAVAREA XIV in an effort to improve communications, clarifications on navigation warnings and updating of contact details.