REPORT

Direction des missions institutionnelles et des
relations internationales
Division Relations extérieures

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NATIONAL REPORT FROM FRANCE TO THE SWPHC15

1. Hydrographic Service: General

Following up its targets and performance contract for the 2013-2016 period, Shom is pursuing the achievement of its different commitments based on the National Maritime & Littoral Strategy and the Strategic Review of Defence and National Security according to a new 4 years target and performance contract covering the 2017-2020 period, which has been approved one year ago by Shom's Board.

In addition to that, survey works are being conducted according to the prioritized 4-years survey plan for waterways under French jurisdiction.

Detailed information to update IHO Publication P-5 is regularly transmitted to IHO secretariat.

2. Surveys

2.1. Coverage of new surveys

Since the previous SWPHC conference in December 2016, SHOM's survey unit in the Pacific, GOP, has conducted several surveys to improve and update hydrographic knowledge.

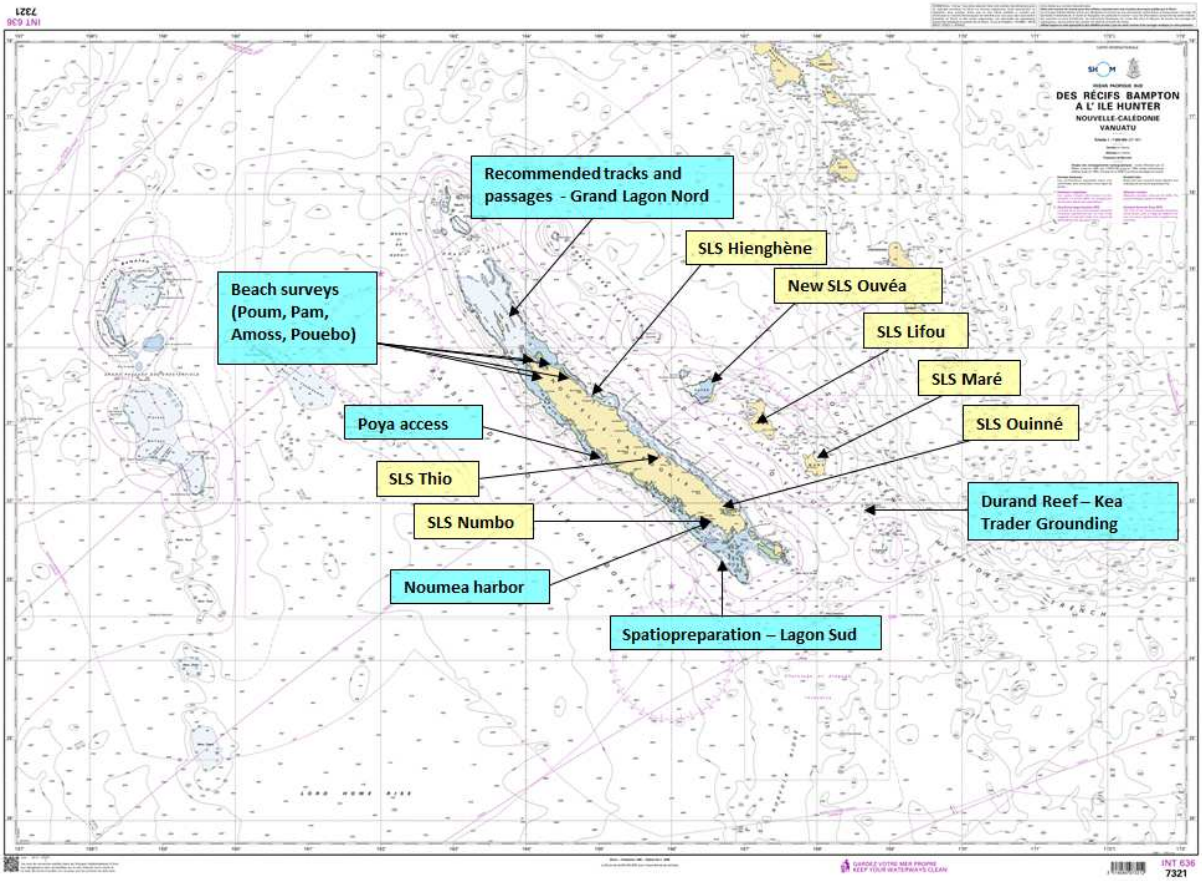
These surveys scheduled in close relation with local governmental authorities in the frame of a prioritized survey plan, to fulfil requirements expressed by local authorities, pilots, fishermen, mining operators and defence.

More precisely, the GOP conducted the following surveys depicted hereafter.

In New Caledonia:

Several surveys of ports, bays, recommended routes and passages have been performed all around New-Caledonia, mainly inside the lagoon, as summarized by figure 1 and illustrated by figures 2 to 8.

- Surveys:
  - Opening of new recommended tracks and passages in unsurveyed areas: Grand Lagon Nord (North channel / East channels)
  - Control survey of Poya access channel
  - Harbor survey updates in Noumea
  - Beach surveys in support to *Croix du Sud* 2018 multinational exercice
- Hydrographic support (surveys, tide prediction and analysis) after Kea Trader grounding on Durand Reef
  - "Spatiopreparation" (field survey for exploitation of satellite imagery) in Lagon Sud
- Deployment (new tide station deployed in Ouvea) and maintenance of Sea Level Stations (SLS) network dedicated to sea level observation and tsunamis warning system.



<u>Fig.1:</u> Surveys achieved in New Caledonia by GOP since December 2016.

<u>Fig.2:</u> Grand Lagon Nord – New recommended routes and passages to the East.

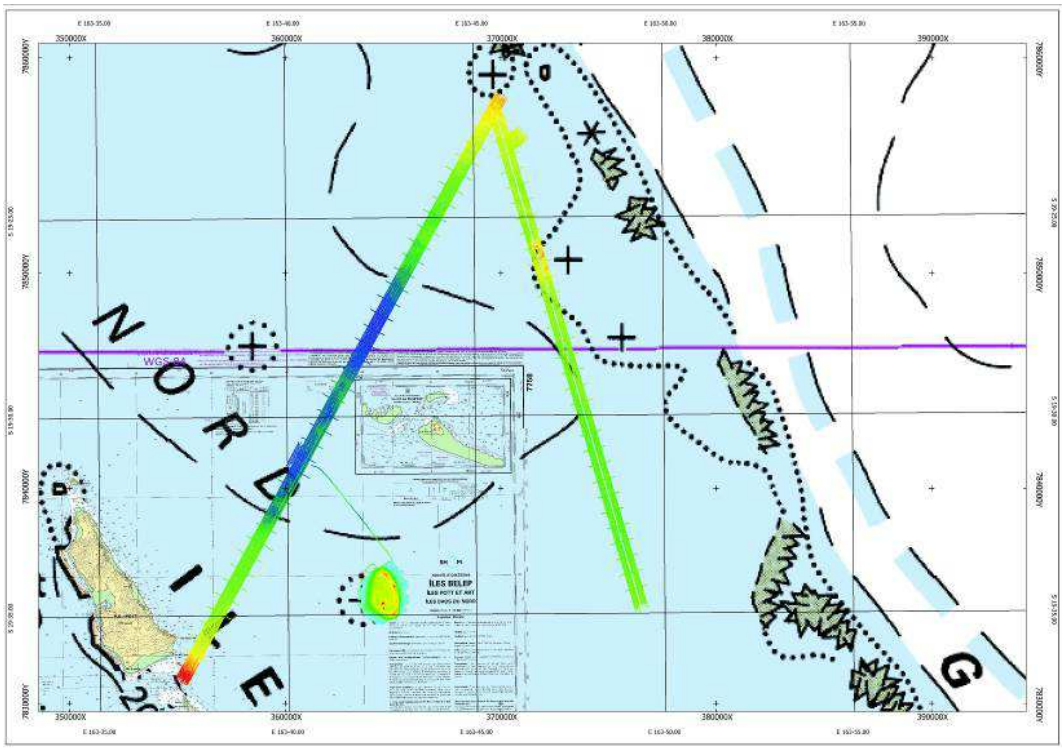


Fig.3: Grand Lagon Nord – New recommended routes to the East.

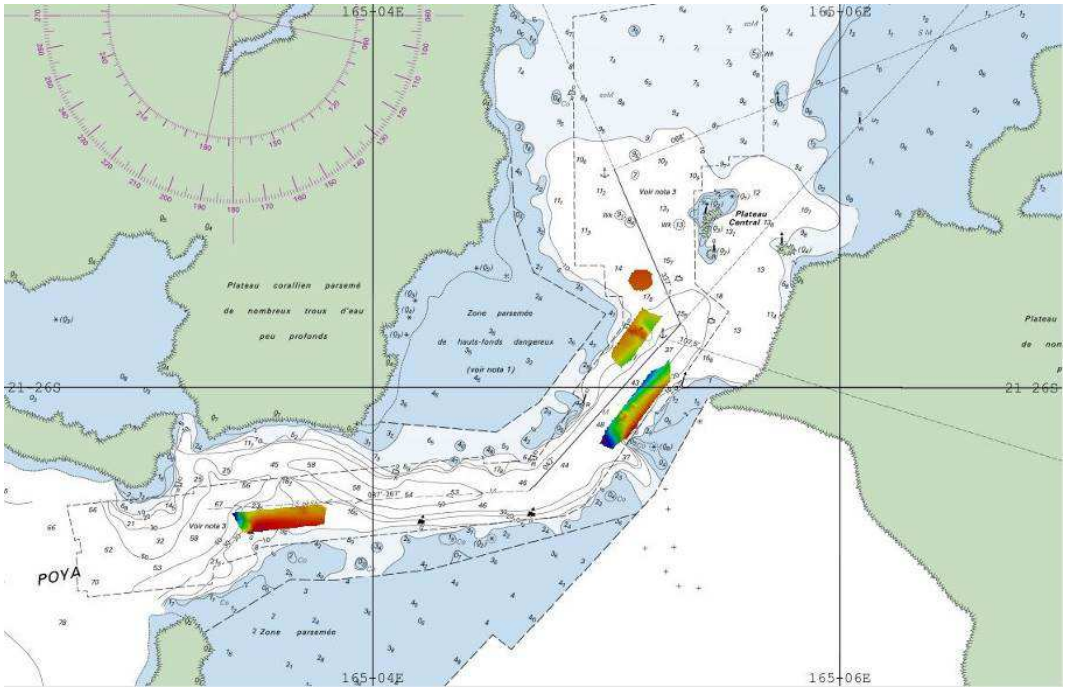
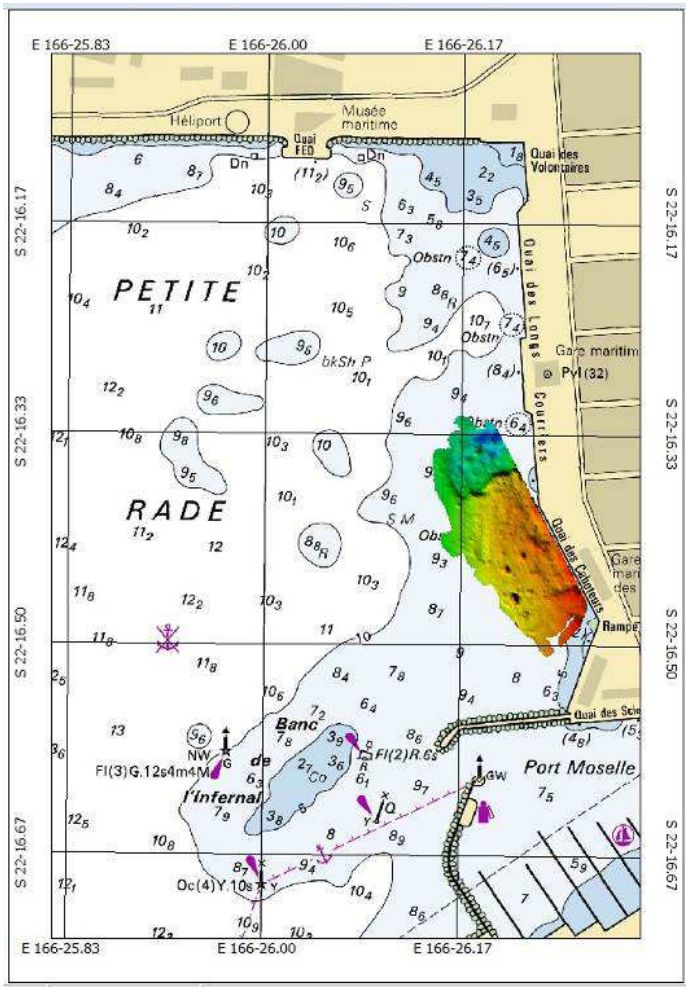
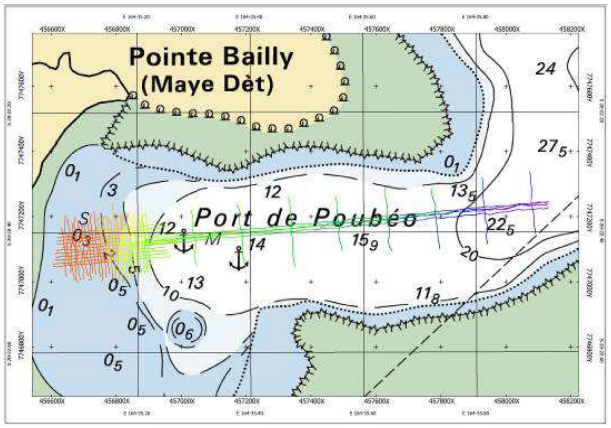
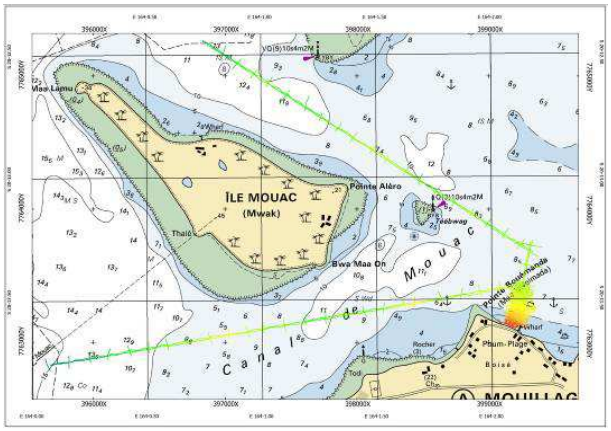


Fig.4: Control survey of Poya access channel



<u>Fig.5:</u> Harbor survey updates in Noumea





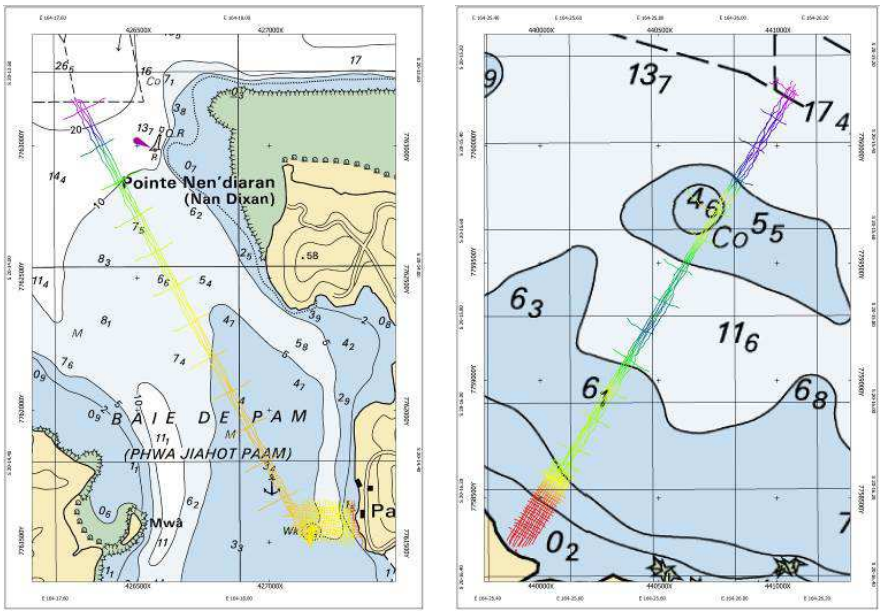


Fig.6: Beach surveys in support to Croix du Sud 2018 multinational exercise

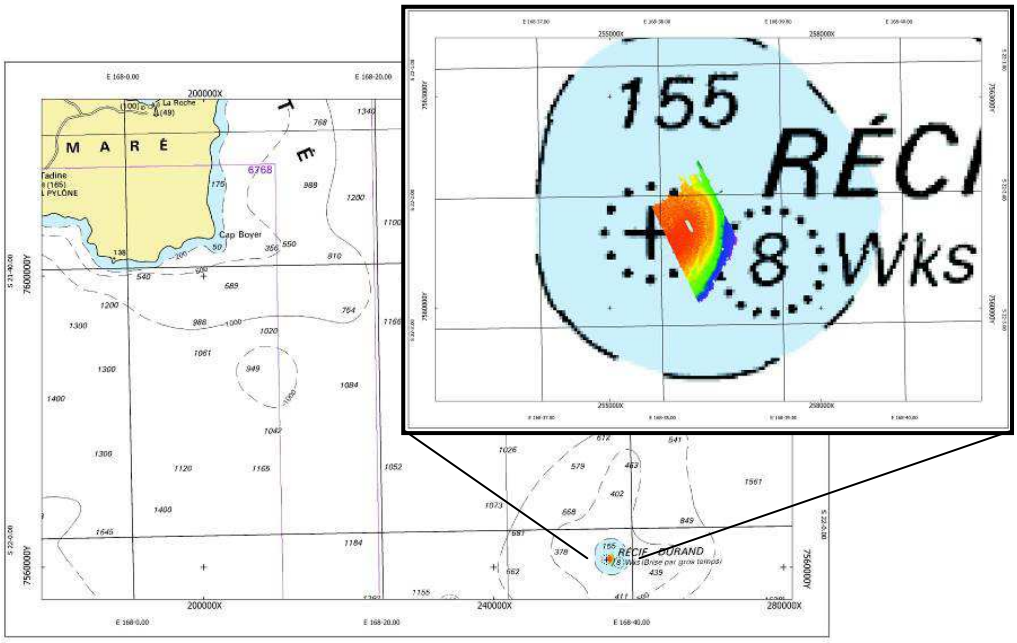


Fig.7: Hydrographic support after Kea Trader *grounding on Durand Reef*

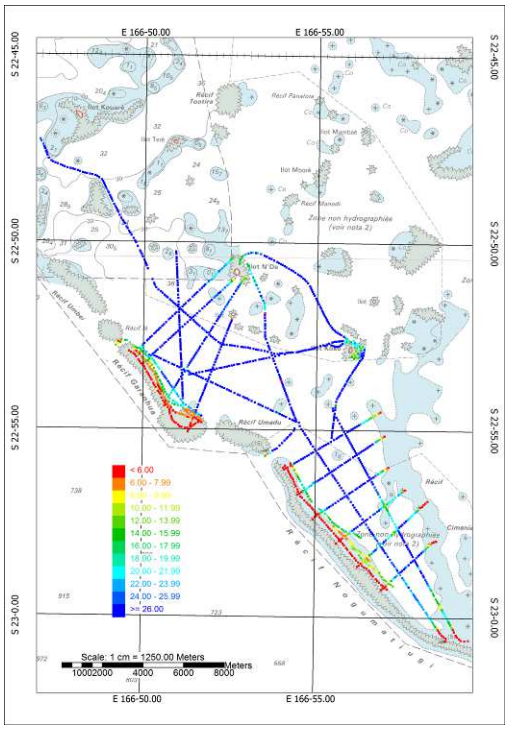


Fig.8: "Spatiopreparation" in Lagon Sud

In French Polynesia:

Several surveys and "spatiopreparation" & "stereopreparation" field works (for exploitation of satellite & aerial images) have been conducted since December 2016 in the French Polynesian islands: Tahiti, Ravahere and Marquises Island.

The GOP also maintained the Sea Level Stations (SLS) network deployed in French Polynesia.

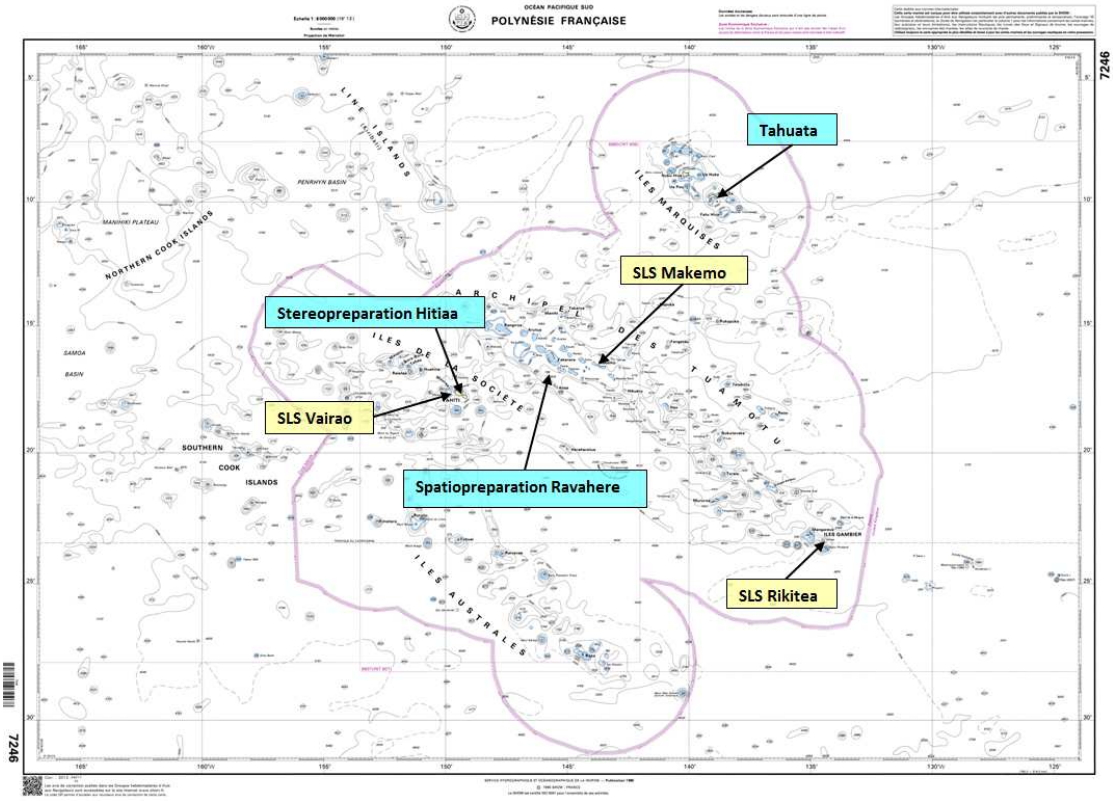


Fig.9: Surveys achieved in French Polynesia since December 2016.

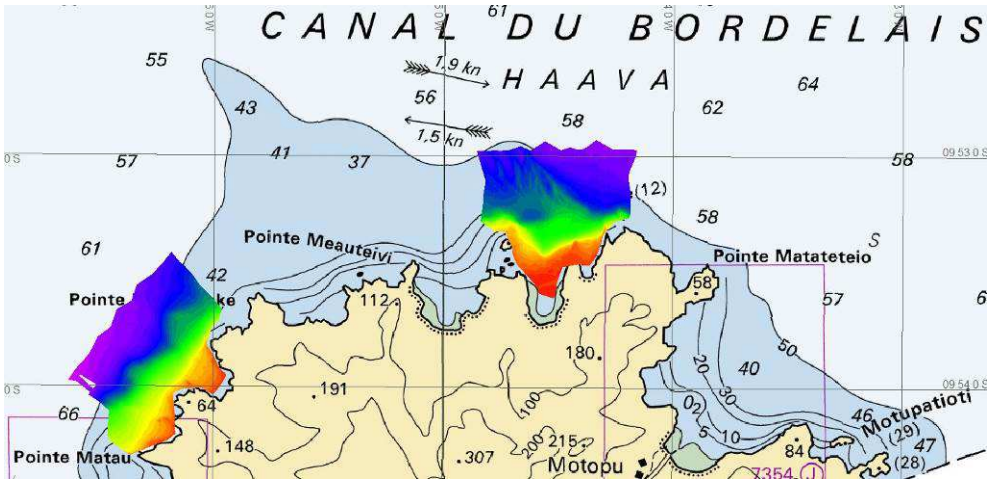


Fig.10: Tahuata Survey (Marquises Island)

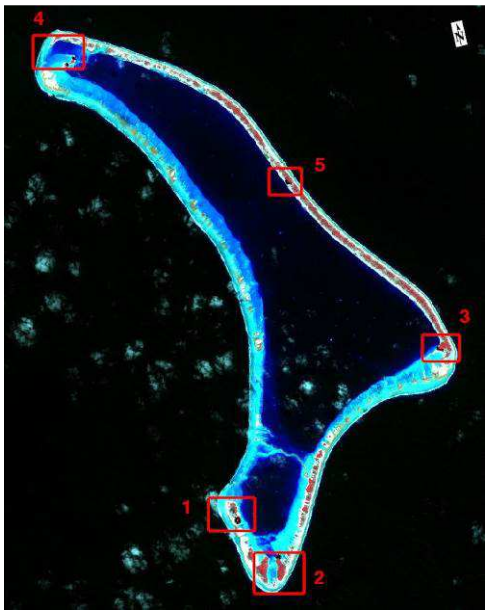


Fig.11: Spatiopreparation work over Ravahere.

Fig.12: Tahiti – Hitia'a – stereopreparation

2.2. LIDAR Surveys

These data, critical for coastline management and risks prevention, are freely available through Shom's data portal (For French Polynesia: http://diffusion.shom.fr/pro/risques/altimetrie-littorale/lidar-polynesie-francaise-2015.html) and the French Government open platform for public data (data.gouv.fr).

Discussions are ongoing with local governments of New Caledonia and French Polynesia to conduct new surveys, yet to be finalized.

2.3. Shom's survey programme for the region

Shom's 2017-2020 national hydrographic survey programme[1] details the long-term targeted objectives of CATZOC compliant hydrographic surveying in New Caledonia, French Polynesia and Wallis et Futuna waters and the current surveys coverage for those three areas (fig.13).

The survey work related to those areas for the next three years is detailed hereafter:

- **New Caledonia**:

  Prioritized survey works defined by the hydrographic commission of New Caledonia, in the framework of the cooperation in hydrography between the State and the government of New Caledonia (convention related to competences transfer, signed on March 2012).

- **French Polynesia**:

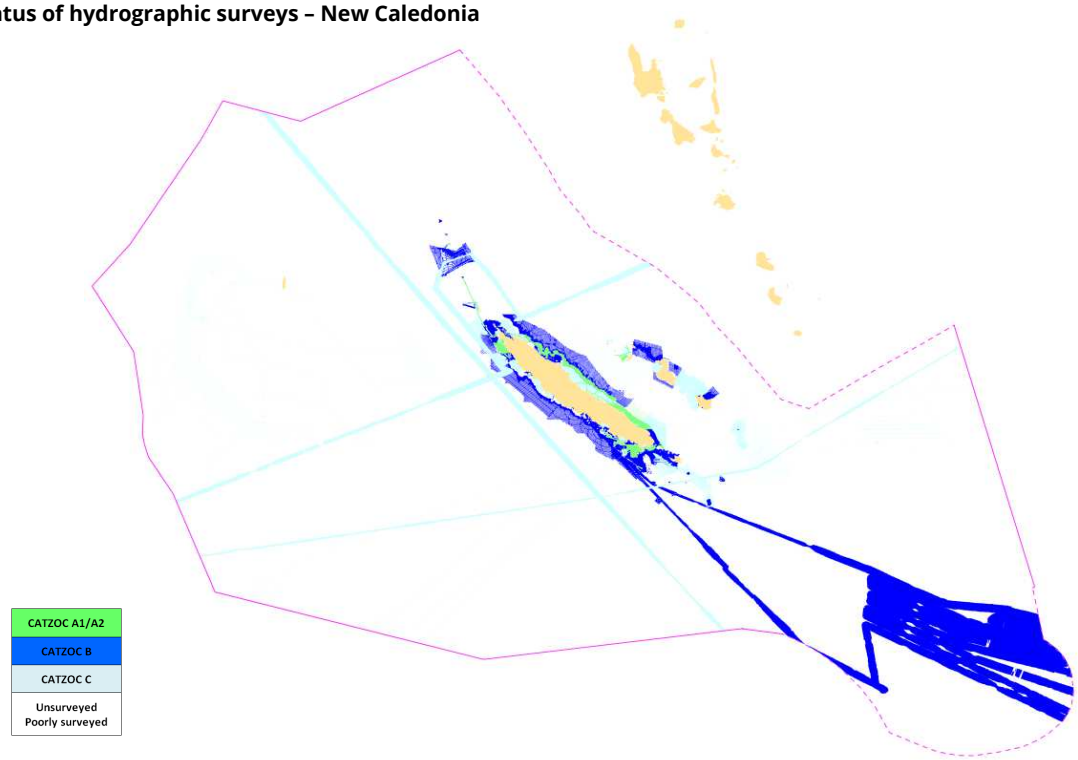
  Survey works in lagoon waters (using deployable equipment) and opportunity surveys.

- **Wallis & Futuna:**

  Survey works in lagoon waters (using deployable equipment) and opportunity surveys.

In 2019, surveys should be performed with the N/O *L'Atalante* both in French Polynesia and in New Caledonia.

Status of hydrographic surveys – New Caledonia



[1] http://www.shom.fr/fileadmin/data-www/01-LE_SHOM/01-PRESENTATION_GENERALE/06-LE_PROGRAMME_ANNUEL/PNH_2017-2020_WEB_BD.pdf

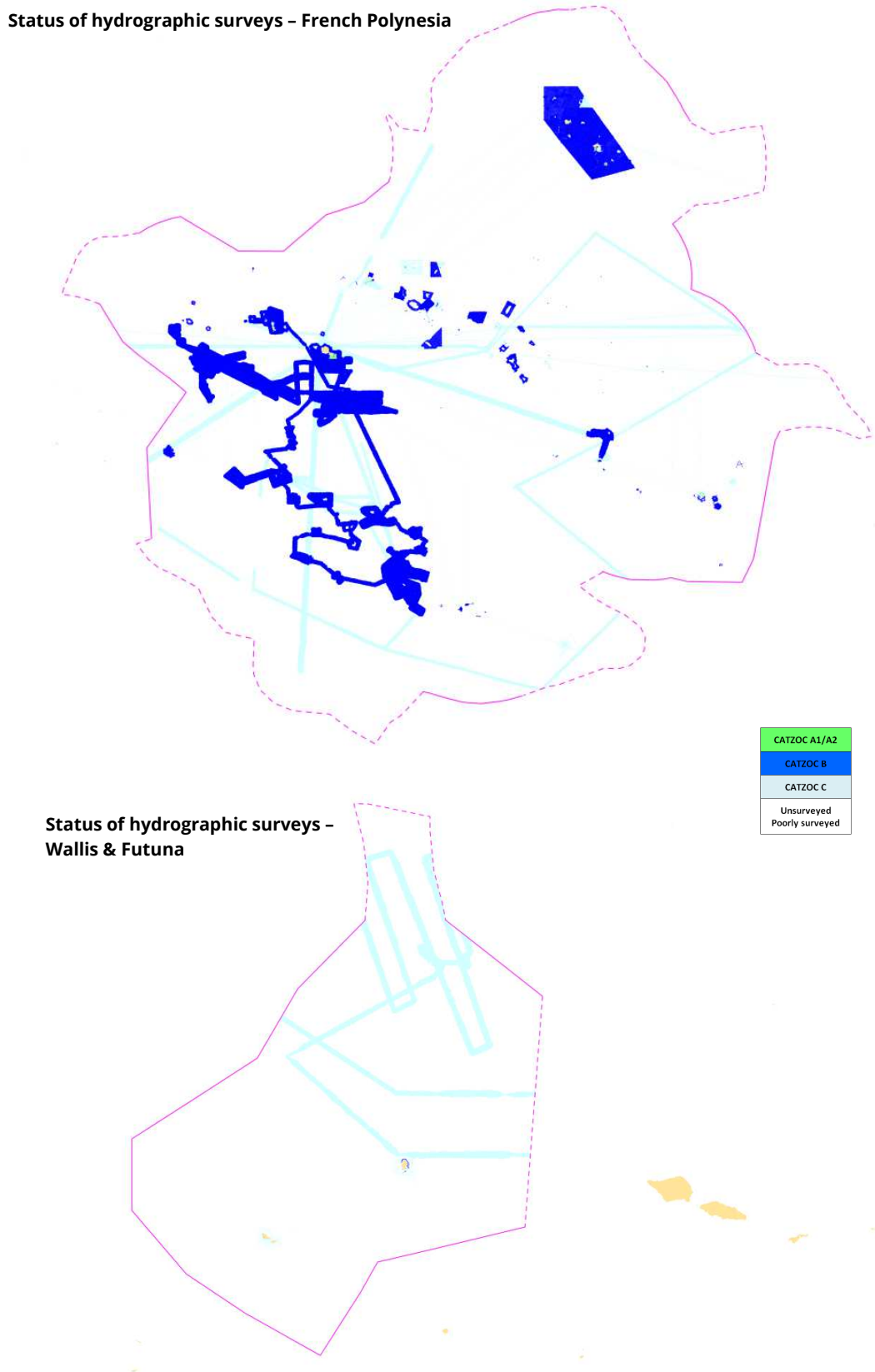


Fig.13-a/b/c: (top to bottom) Existing surveys for New Caledonia, French Polynesia and Wallis&Futuna waters

2.4. New technologies and / or equipment

From February until end of 2018, Shom's units in the Pacific will be equipped with shallow water multibeam echosounders (Konsberg EM2040P).

Regarding data management, the GOP uses the same MSDI centric, processing and compiling tools and software as the ones used by mainland survey units.

2.5. New ships

NTR.

2.6. Problems encountered

Shom may learn by accident of surveys performed by third parties in its areas of charting responsibility, and has to insist to obtain communication of IHO-compliant data relevant to INT charts and nautical information.

3. New charts & updates

3.1. ENCs

As of 1st February 2018, Shom has produced some 600 ENCs, of which 118 ENCs within region L.

The full collection should eventually reach a figure of the order of 900 ENCs, with an approximate rate of 50 new cells per year.

By the end of 2018, full coverage of New Caledonian waters in ENCs should be reached.

Concerning French Polynesian waters, the most frequented routes used by passengers and fret vessels (not concerned by IMO Mandatory ECDIS carriage regulation) are covered by ENCs.

In line with the WEND recommendations and guidelines, France produces its small scale ENC cells as closely as possible to INT chart schemes.

The current status of ENC production in the region L is detailed in the table below (*changes in red*):

Usage Band	Produced Cells	Planned Cells	Percentage
1	1	1	100%
2	13	13	100%
3	7	23	30%
4	34	68	50%
5	49	150	42%
6	14		
Total	118	255	46%

The following figures are extracts from the online PRIMAR catalogue http://www.primar.org showing Shom ENC coverage within the SWPHC (region L) area:

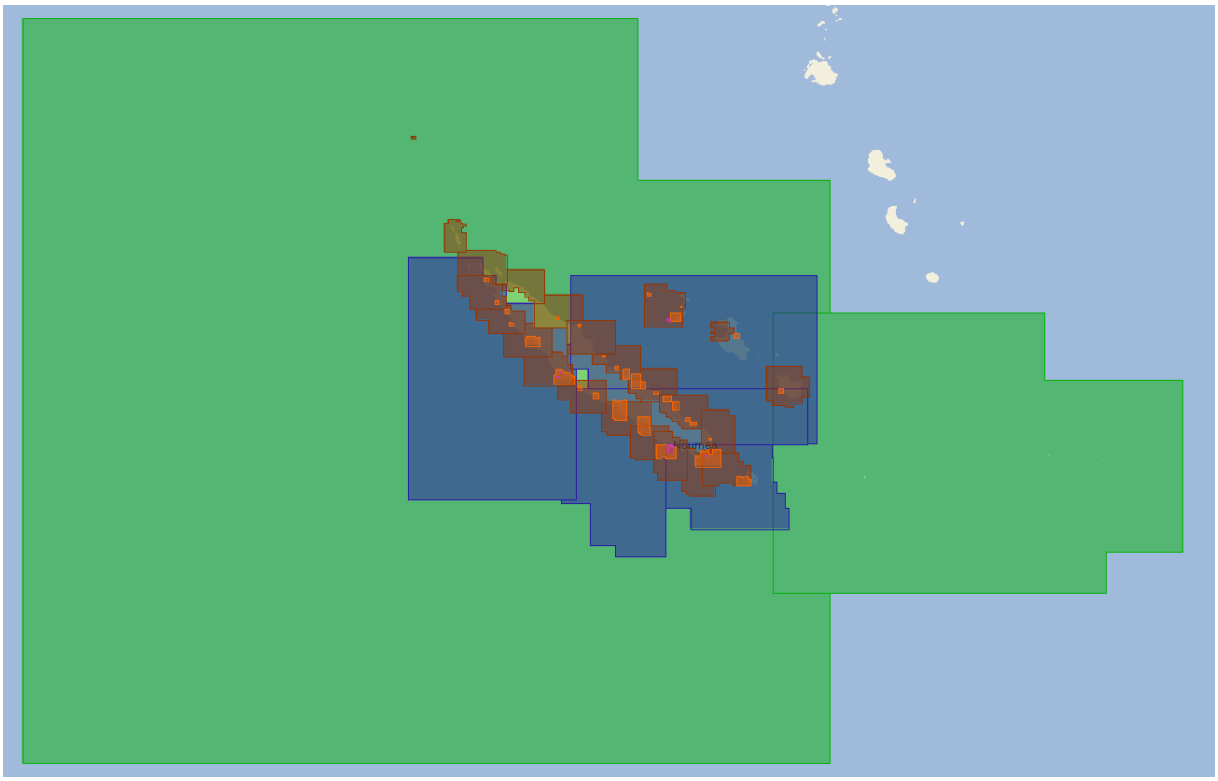


Fig.14: Region L - Shom's ENC production - New-Caledonia (Nouvelle-Calédonie)

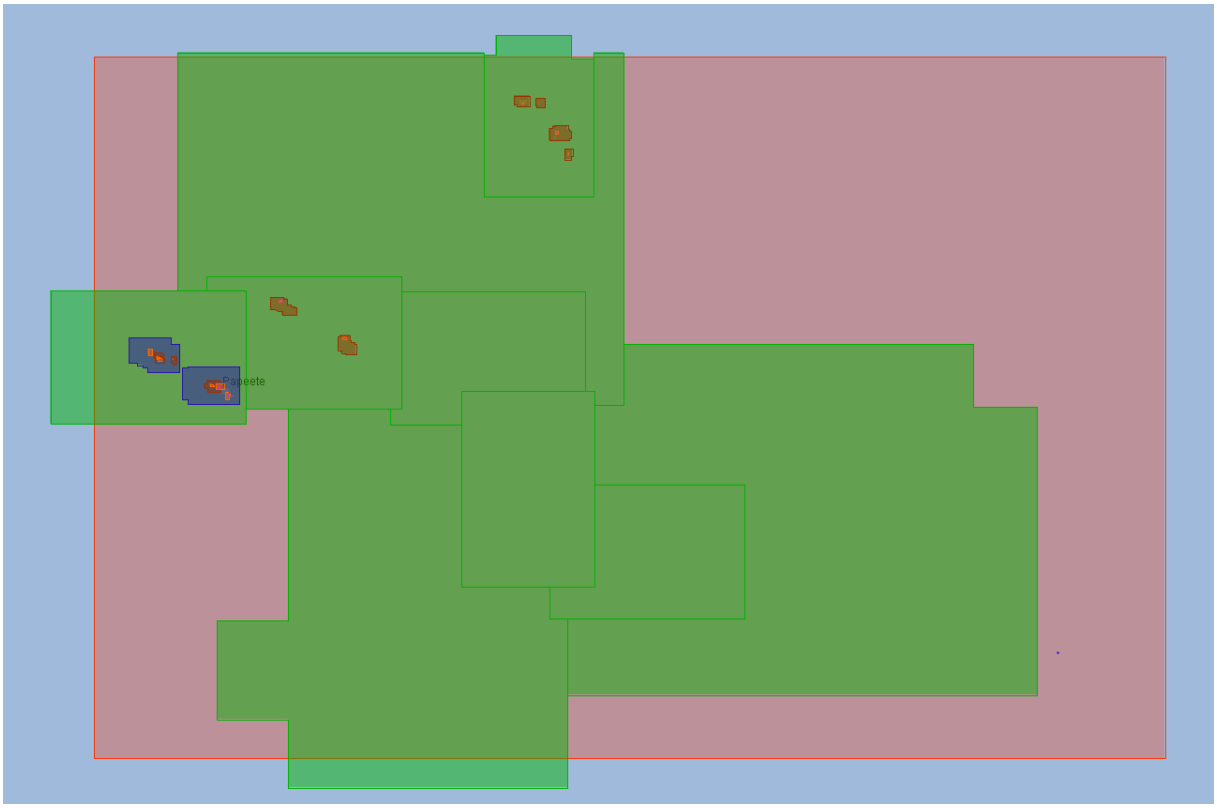


Fig.15: Region L - Shom's ENC production - French Polynesia (Polynésie française)

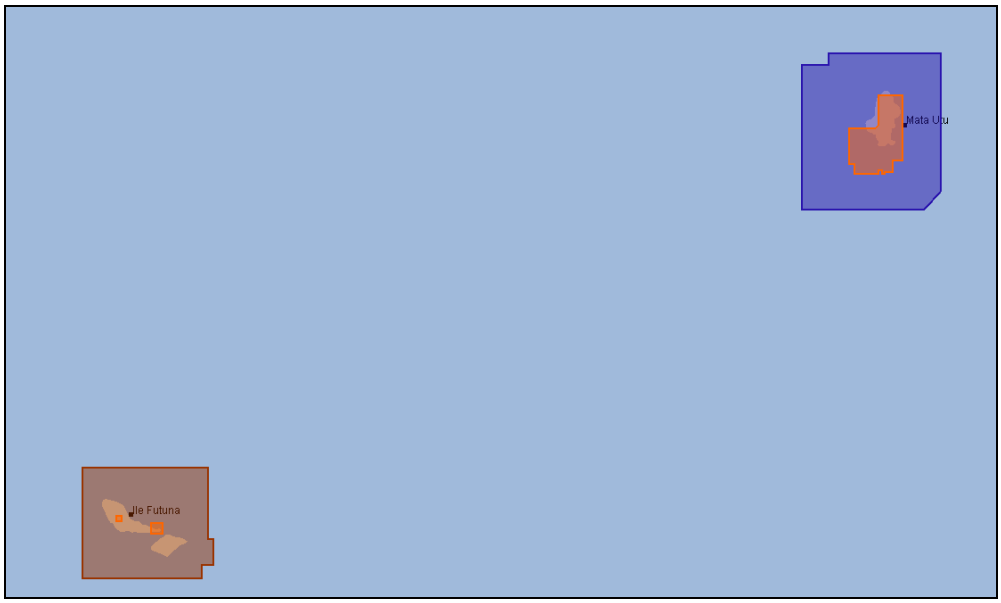


Fig.16: Region L - Shom's ENC production – Wallis & Futuna

ENC cells produced since the last conference are detailed hereafter:

Number	Scale 1 :	Title	Comment
FR270490	350 000	Des îles Loyauté à l'île Hunter	New publication
FR377620	180 000	Nouvelle-Calédonie (parte Ouest)	And new paper chart
FR470980	22 000	Baies d'Ouaraï et Chambeyron - Passes d'Ouaraï et d'Isié	New publication
FR473180	45 000	De Poum à l'île Pam	New publication
FR477580	22 000	Îles Belep - Îles Pott et Art - Îles Daos du Nord	New publication
FR47758A	22 000	Récifs d'Entrecasteaux - Île de la Surprise	New publication
FR57218B	22 000	Mouillages de Fayaoué et de Mouly	New publication

ENC cells planned for 2018/2019 are listed below:

Number	Scale 1:	Title	Comment
FR473190	45 000	De l'île Pam au cap Colnett	New publication
FR57319A	12 000	Baie de Pam	New publication
FR47319B	22 000	Havre de Balade	New publication
FR47319C	22 000	Port de Pouébo	New publication
FR47049A	22 000	Ile Walpole	New publication
FR47049B	22 000	Ile Matthew	New publication
FR47049C	22 000	Ile Hunter	New publication
FR377610	180 000	Nouvelle-Calédonie (partie Nord-Est)	And new paper chart
FR377600	180 000	Nouvelle-Calédonie (partie Nord) – Récifs d'Entrecasteaux	And new paper chart
FR57011A	12 000	Port-Ounia	New publication

FR573510	12 000	De la Passe de Goyeta à la Passe de Koné - Abords de Koné	New publication
FR57168A	12 000	Coupée du Cap Goulvain	New publication
FR571971	12 000	Baie de Bourail	New publication
FR471972	22 000	Coupée Mara et Baie de Moindou	New publication
FR47052A	45 000	Mouillage de Uapan	New publication
FR56820B	12 000	Baie de Doking	New publication
FR57259A	12 000	Baie de l'Allier (Baie de Puan) - Mouillage de La Roche	New publication
FR57259D	12 000	Baie du Nord (Baie de Waeko)	New publication
FR57259B	12 000	Baie de Niri (Baie de Wabao)	New publication
FR57218A	12 000	Passe du Coëtlogon	New publication
FR47218D	22 000	Mouillage de Beautemps-Beaupré	New publication
FR55978B	12 000	Iles Chesterfield - Mouillage de l'île Longue	New publication
FR35978C	90 000	Récifs et îles Chesterfield	New publication
FR35978D	90 000	Atoll de Huon	New publication
FR55978E	12 000	Mouillage de l'île Huon	New publication
FR462840	22 000	Partie Sud de Raiatea	New publication
FR56434B	8 000	Passe Farerea	New publication
FR472130	22 000	Maupiti	New publication
FR57213A	8 000	De la Passe 'Onoiau au Village	New publication
FR461650	22 000	Rurutu	New publication
FR56165A	8 000	Baie d'Avera	New publication
FR56165B	8 000	Baie de Moerai	New publication
FR462070	22 000	Ile Raivavae (Vavitu)	New publication
FR56207A	8 000	Passe Nord de l'île Raivavae	New publication
FR46279A	22 000	Rimatara	New publication
FR46279B	45 000	Maria	New publication
FR464240	22 000	Ile Tubuai	New publication
FR56424A	12 000	Passes et mouillages de Tubuai	New publication
FR467400	22 000	De Maraa à Faaa	New publication
FR468280	22 000	Côte Sud-Ouest de Tahiti - De Atehiti à Maraa	New publication
FR463200	22 000	Makatea	New publication
FR56320A	8 000	Port de Temao	New publication
FR364200	90 000	De Mataiva à Rangiroa et Makatea	New publication
FR364210	90 000	Archipel des Tuamotu - Iles Arutua, Apataki, Kaukura, Niau	New publication
FR466050	22 000	De la Pointe Vénus à Mahaena	New publication
FR47248A	45 000	Apataki	New publication
FR57248B	8 000	Passe Tehere (Aimonu) - Mouillage de Roto Ava	New publication

FR57248C	8 000	Passe Pakaka (Haniuru) - Quai de Niutahi	New publication
FR47248D	22 000	Lagon Ouest - De la Passe Tehere à la Passe Pakaka	New publication
FR372600	90 000	De Apataki à Fakarava	New publication
FR472930	45 000	Manihi	New publication
FR57293A	4 000	Passe Tairapa	New publication
FR474590	22 000	Tikehau	And new paper chart
FR57459A	8 000	Tikehau - Mouillage de Tuherahera	And new paper chart
FR57459B	4 000	Tikehau - Passe Tuheiava	And new paper chart

3.2. ENC Distribution method

All French ENCs (S-63 encrypted format) are distributed to End User Service Providers by PRIMAR RENC. FR is providing its support to the work plan of the WEND working group for improving the implementation of WEND principles.

Shom provides georeferenced marine charts in GeoTiff and S-57 format when produced. These digital marine charts are now available through Shom's online store http://diffusion.shom.fr under various licenses[2] according to the purpose of use. These data can be used with GIS or cartographic software for commercial or private purposes.

A S-57 license[3] allows unlimited download of updated versions for 12 months from the date of purchase.

3.3. RNCs

NTR.

3.4. INT charts

French charts include a QR Code to direct access to NTM applicable to that chart. Moreover, all up to date French charts are now available by 'Print On Demand' to French armed forces.

Here are the INT charts produced since the last conference:

INT	Scale 1:	Title	Comment
6842	300 000	Nouvelle-Calédonie (parte Ouest)	Publication FR7762
6880	60 000	De Port-Ounia au Cap Ndoua	New edition FR6986
6881	60 000	De l'île d'Ouen à l'Île des Pins	New edition FR6933
6883	60 000	Passes de Boulari et Dumbéa	New edition FR6687
6898	31 000	Canal de Havannah et Canal Wodin	New edition FR7645
6899	25 000	Accès au port de Nouméa	New edition FR7644
6900	10 000	Port de Nouméa	New edition FR7643

Besides, the following INT charts are planned for the 2018-2019 period:

INT	Scale 1:	Title	Comment
6840	300 000	Nouvelle-Calédonie (partie Nord) – Récifs d'Entrecasteaux	FR7760 to be published

[2] Internal reuse, commercial reuse, documentary use or end user.

[3] Each license allows internal reuse of the data for up to 5 workstations. For more information, contact *bps@shom.fr*

6841	300 000	Nouvelle-Calédonie (partie Nord-Est)	FR7761 to be published
654	1 500 000	De Tahiti aux Îles Marquises	FR7371 to be edited

Concerning New Caledonia's coastal scheme, France is currently producing five 1 : 300 000 scheme covering the main island and its vicinities. Therefore, France has submitted these five charts under national numbers **FR7760**, **FR7761**, **FR7762**, **FR6686** and **FR6768** to the Region L INT scheme. They have been approved with **INT** numbers **6840**, **6841**, **6842**, **6843** and **6844.**

These new INT chart proposals have been submitted to the Regional Charting Coordinator through the INToGIS online manager interface.

Here the overall INT chart production status for that region (*changes in red*):

Scale	Produced INT charts	Planned INT charts	%
Small (<1/1 000 000)	7	7	100%
Medium	1	5	20%
Large (>1/100 000)	11	11	100%
Total	**19**	**23**	**83%**

3.5. National paper charts

Since the last SWPHC meeting, the following charts have been edited:

National	INT	Scale 1 :	Title
6540	/	60 000	Baie de Saint-Vincent
7354	/	Diverses	Fatu-Hiva – Baies de Hiva-Oa et de Tahuata

The following charts are planned in 2018/2019:

National	INT	Scale 1:	Title
7273	/	60 000	De Nouméa à la Baie de Saint-Voncent
6949	/	60 000	Abords de Thio – Du Cap Bégat à l'île Toupéti
7459	/	Diverses	Tikehau
6558	/	50 000	Île de Moorea – Côte Nord-Ouest de Tahiti
6280	/	12 000	Partie Nord de Raiatea – Port d'Uturoa
6281	/	12 000	Partie Sud de Tahaa
6282	/	30 000	Passes entre les îles Raiatea et Tahaa
6283	/	30 000	Île Tahaa
6284	/	30 000	Partie Sud de Raiatea

3.6. Other charts, e.g. for pleasure craft

NTR.

3.7. Problems encountered

NTR.

4. New publications & updates

4.1 New Publications

Since the last SWPHC conference, a new edition has been issued for the following publication:

- Livre des feux et signaux de brume LC : Océan Atlantique (Est) – Océan Indien (Ouest) – Océan Pacifique (2017) ;
- Radionavigation maritime (91 – 2017) ;
- Stations radio maritimes : Amériques- Océanie – Asie (Est) (92.2 – 2017) ;
- Radiocommunications maritimes : Le système mondial de détresse et de sécurité en mer (92.4 – 2016) ;
- Radiocommunications portuaires : Mer Méditerranée, Océans Indien, Pacifique et Austral (93.2 – 2016)
- Renseignements sur la sécurité maritime : Amériques – Océanie -Asie Est (96.2 – 2017).

4.2. Updated publications

NTR.

4.3. Means of delivery

All nautical publications are available in digital format (pdf files) on Shom's online shop (diffusion.shom.fr). Most publications are still available on paper, but from now on, new editions of nearly all publications will be only digital.

4.4. Problems encountered

NTR.

5. MSI

5.1. Existing infrastructure for transmission

Shom's notices to mariners (GAN) are exclusively available under digital formats, either downloadable on http://diffusion.shom.fr/gan or by annual subscription (CD-rom).

In SWPHC area, SHOM has delegated its functions of national coordinator to two maritime authorities:

- in New Caledonia, to the Commandant de la zone maritime for Nouméa, with operating organism: **MRCC NOUMEA** for regions in NAVAREA X and XIV areas,
- in French Polynesia, to the Commandant de la zone maritime Polynésie Française, with operating organism: **JRCC Tahiti**, for regions in NAVAREA XIV area.

Hereafter are listed the coordinates of those authorities:

Area	Phone number	Fax number	Email address
New Caledonia	+687 292 332	+687 292 303	operations@mrcc.nc
French Polynesia	+689 40 541 615	+689 40 423 915	contact@jrcc.pf

5.2. New infrastructure in accordance with GMDSS Master Plan

NTR.

5.3. Problems encountered

NTR.

6. C-55 Latest update

Previous C-55 update by France has been transmitted to the IHB on June 30th 2017. The C-55 charting and surveying status values regarding Region L area under Shom responsibility are summed up in the following tables:

Survey Status Updated January 2018		Depth < 200m			Depth > 200m		
		A	B	C	A	B	C
L	French Polynesia	1.2	12.1	10.2	0.0	1.5	11.1
	New Caledonia	6.0	2.2	10.9	0.1	5.5	12.4
	Wallis & Futuna	4.0	11.7	17.5	0.0	0.0	13.6

Charting Status Updated Jun 2017		Small (<1 M)			Medium (1M < / < 100 000)			Large (> 100 000)			Metric	WGS84
		A	B	C	A	B	C	A	B	C		
L	French Polynesia	100	0	100	33	0	100	58	0	35	100	96
	New Caledonia	100	0	100	100	0	42.9	87	0	87	100	100
	Wallis & Futuna	100	0	NA	100	0	NA	75	0	100	100	100

C-55 values for survey status (top table) and charting status (down table). Updated values are highlighted in red.

7. Capacity Building Offer of and/or demand for Capacity Building

7.1. Training received, needed, offered

Initial training capabilities provided by Shom include the following FIG-IHO-ACI courses: category B for hydrographic surveyors and category B for nautical cartographers. So far, those courses are provided in French and are open to francophone foreign applicants (training offer: . http://www.shom.fr/fileadmin/data/DRH/FOR/Ecole/Catalogue_de_formation/2017-2018/catalogue_formations_2017-2018_WEB.pdf / Modalities: drh-for-eco@shom.fr).

A category A course for hydrographic surveyors is provided at ENSTA Bretagne.

Fig.17: Courses and training provided at the Shom hydrographic school (source: shom.fr)

Within the Eastern Atlantic Hydrographic Commission capacity building work programme, Shom has developed a maritime safety information e-learning course (http://rsm-msi.org/), available in French for the moment (will be translated in English in 2018).

7.2. Status of national, bilateral, multilateral or regional development projects with hydrographic component

NTR.

7.3. Definition of bids to IHO CB Work Programme

NTR.

8. Oceanographic activities

8.1. GEBCO/IBC's activities

NTR.

8.2. Tide gauge network

Shom is the national coordinator and reference authority for the observation of the sea level, managing and issuing the resulting data. Besides, including these produced by Shom tidal network, RONIM. These missions are carried out under the REFMAR programme. All real time and processed tide gauge measurements collected under that programme are accessible on web http://data.shom.fr/#donnees/refmar in areas under French jurisdiction.

This network is recognized as an important tool for coastal operational oceanography, risk assessment, studies on the evolution of the mean sea level, etc.

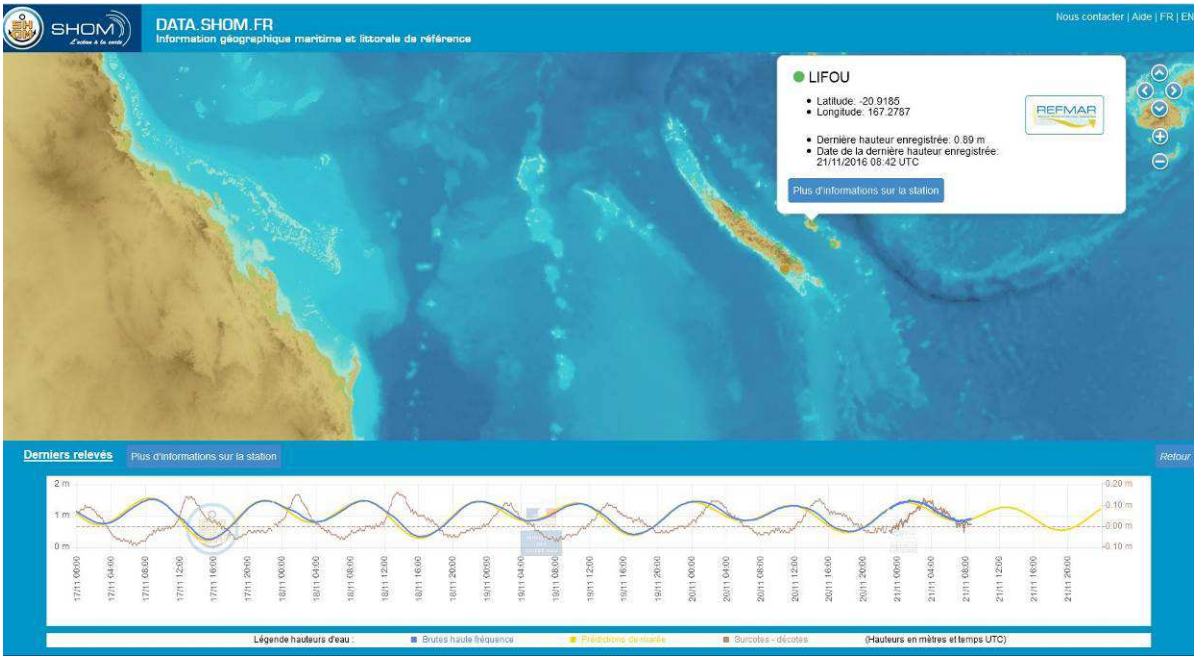


Fig.18: Real time measurements from REFMAR tidal network on SHOM's web portal (source: data.shom.fr)

Shom's tidal predictions are available through a new web/smartphone/tablet-friendly online service named maree.shom.fr. This service provides free access of one year of tidal predictions from over 1,000 harbours worldwide.

In July 2017, during the XVth GLOSS GE meeting, 3 tide gauges from the French Pacific network have been accepted in the GLOSS Core Network, which monitors sea level variation on a global scale.

Since the last conference, several installation or maintenance work have been carried out.

New Caledonia

Tide gauges network in New Caledonia is composed of 6 stations: Hienghène, Numbo (Nouméa), Maré, Lifou, Thio, Ouinné and the newly installed Ouvéa station (set-up in March 2017). Maintenance operations on the existing gauges are carried on a yearly basis (fig. 19).

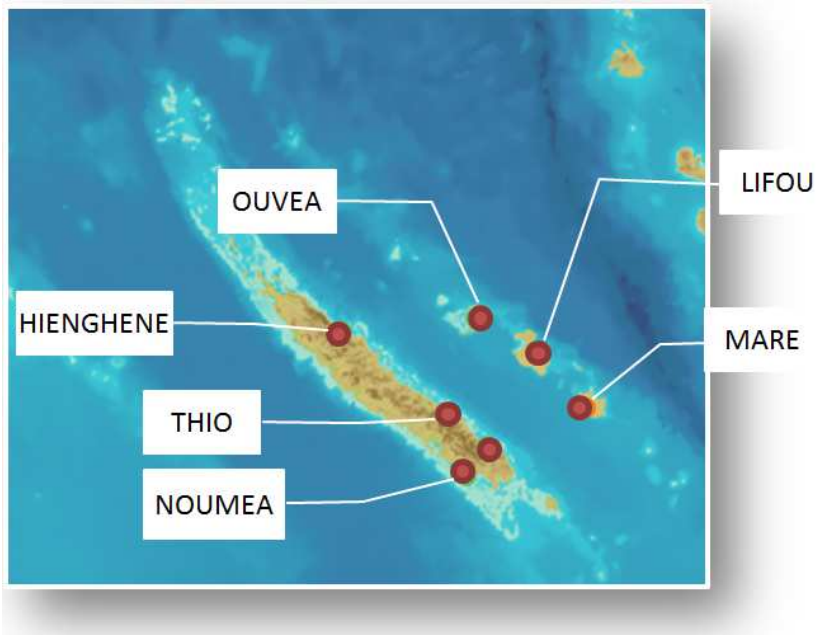


Fig.19: Tidal gauges network covering New Caledonia.

French Polynesia

Maintenance of the existing tide gauges in the Pacific permanent network was conducted on the six existing tide gauges (fig.20).

Fig.20: Tidal gauges network covering French Polynesia waters.

Wallis & Futuna

Futuna Island benefits from a permanent observatory since 2011. In 2014 a permanent tide gauge was also installed on Wallis Island. These stations are fitted with radar sensor, permanent GNSS and satellite real-time transmission. They are maintained on a yearly basis.

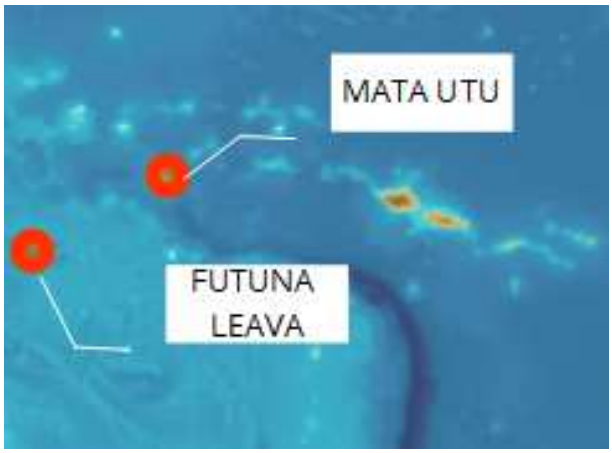


Fig. 21: Tidal gauges in Wallis & Futuna Islands

8.3. New equipment

A new radar sensor was installed in 2017 in Thio, after the previous one was lost due to vandalism.
A new permanent tide gauge was set-up in Ouvéa (New-Caledonia) in March 2017.

8.4. Problems encountered

Distances and complex funding issues make difficult the maintenance of the French permanent sea level network in the Pacific; maintenance of W&F network is uncertain in the short term.

9. Other activities

9.1. Participation in IHO Working Groups

See §9.9 International.

9.2. Meteorological data collection

NTR.

9.3. Geospatial studies

NTR.

9.4. Disaster prevention

France may have Navy ships in the SWPHC region ready to provide support in case of an emergency. France also provides technical support and has a rapid response capacity for environmental data in case of a disaster.

The point of contact at Shom in case of a marine disaster is the head of the maritime safety information division. This division can be reached 24/7 by fax +33 298 221 665 or email coord.navarea2@shom.fr.

- **Tsunami :**

Shom contributes to the deployment and maintenance of most of the French sea-level stations in the Pacific. These observatories contribute to the tsunami alert system

Some of these sea-level observatories are part of the IOC GLOSS system for a global monitoring of sea level change. Nuku Hiva (Marqueses Islands), Noumea (Numbo – New Caledonia), Papeete (Tahiti) and Rikitea (Gambier Islands) are already included in the so-called “GLOSS Core Network”. During the last GLOSS meeting held in New York in 2017, the assembly accepted French proposal to extend this core network with Futuna, Rangiroa, Makemo and Tubuai observatories.

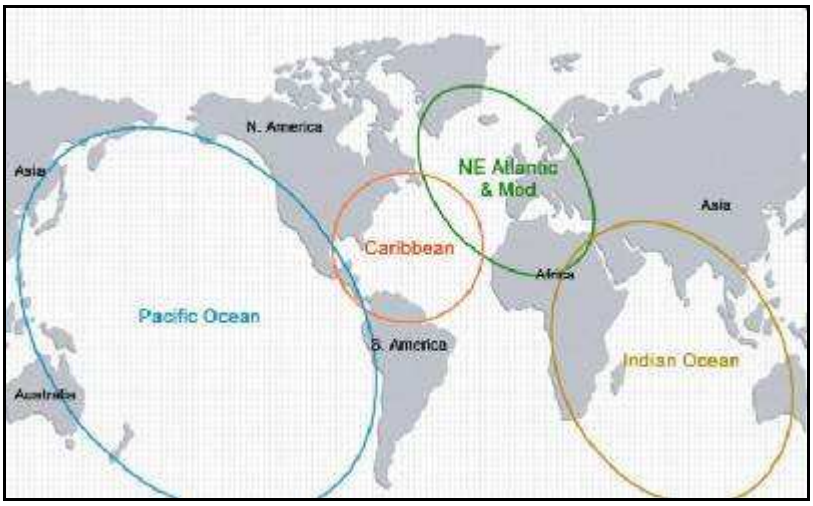


Fig.22: Cooperation areas on tsunami warning system (source COI; UNESCO).

- **Coastal flooding :**

NTR.

- **Oil spills:**

NTR.

9.5. Environmental protection

NTR.

9.6. Astronomical observations

NTR.

9.7. Magnetic/Gravity surveys

NTR.

9.8. MSDI Progress

Since the launch of Shom's maritime and coastal geographic information portal data.shom.fr, further developments have been implemented with new online services data layers on a regular basis. Hereafter are listed the some of the latest evolutions:

- Improved content for oceanographic data : finer description of swell characteristics, automatic and tailored oceanographic report
- Improved cartographic tools
- Timeline function : time synchronisation of layers to produce animated features
- New layer on administrative limits
- Maritime archives: old charts and survey sheets have been scanned and are now available on the web site

Since December 3rd 2017, in accordance with France open data policy, Shom has widely opened up access to its core data: bathymetric data, wrecks, cables, bottom types, maritime limits, and toponyms databases are distributed under Creative Commons « CC-BY-SA 4.0 » licence.

Those evolutions can all be followed via Shom's Twitter account (@shom_en & @shom_fr).

A detailed description of the portal functions and contents is available on Shom website (http://www.shom.fr/les-services-en-ligne/portail-datashomfr/).

Data available on that portal are organised according to the following topics:

- Master data: *charts, maritime boundaries, maritime and coastal databases, coastal altimetry , bathymetry, vertical datums, sedimentology, tides and currents and marine archives ;*
- Oceanographic forecast *: sea state, meteorology, sea level, hydrodynamic ;*
- Coastal observations *: HF radar and tide gauge data*

Not all these information are available on SWPHC region.

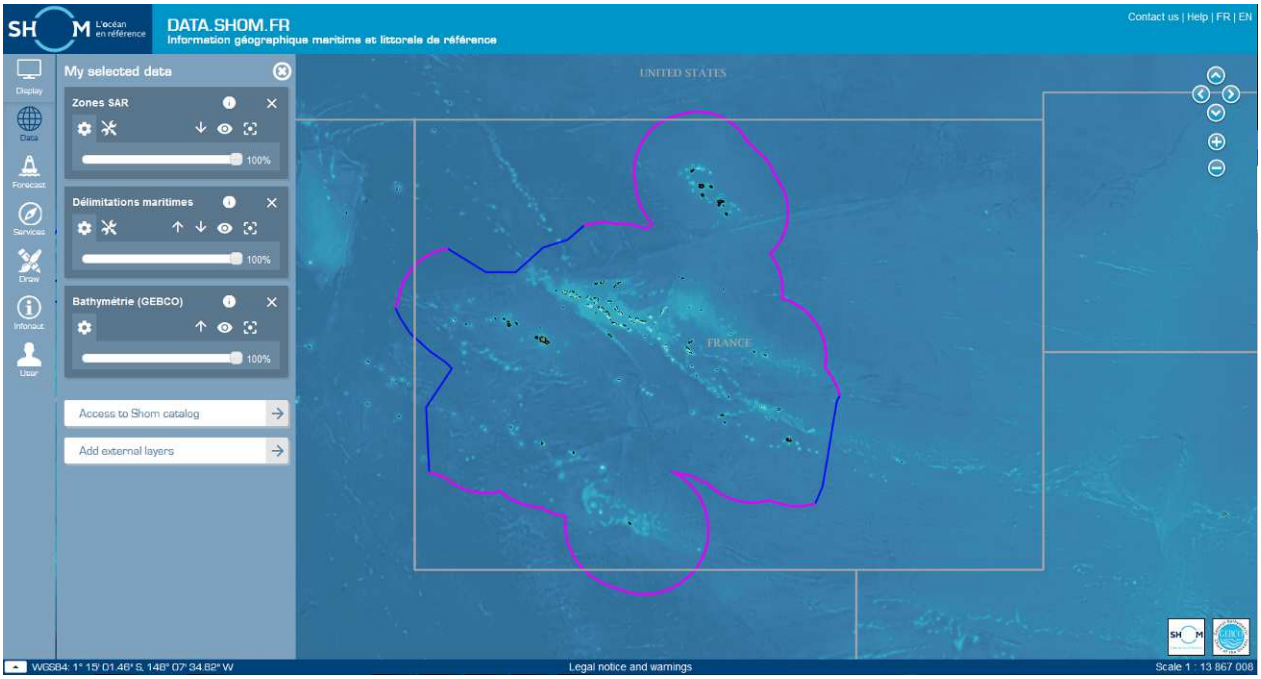


Fig.24: administrative and territorial limits (data.shom.fr)

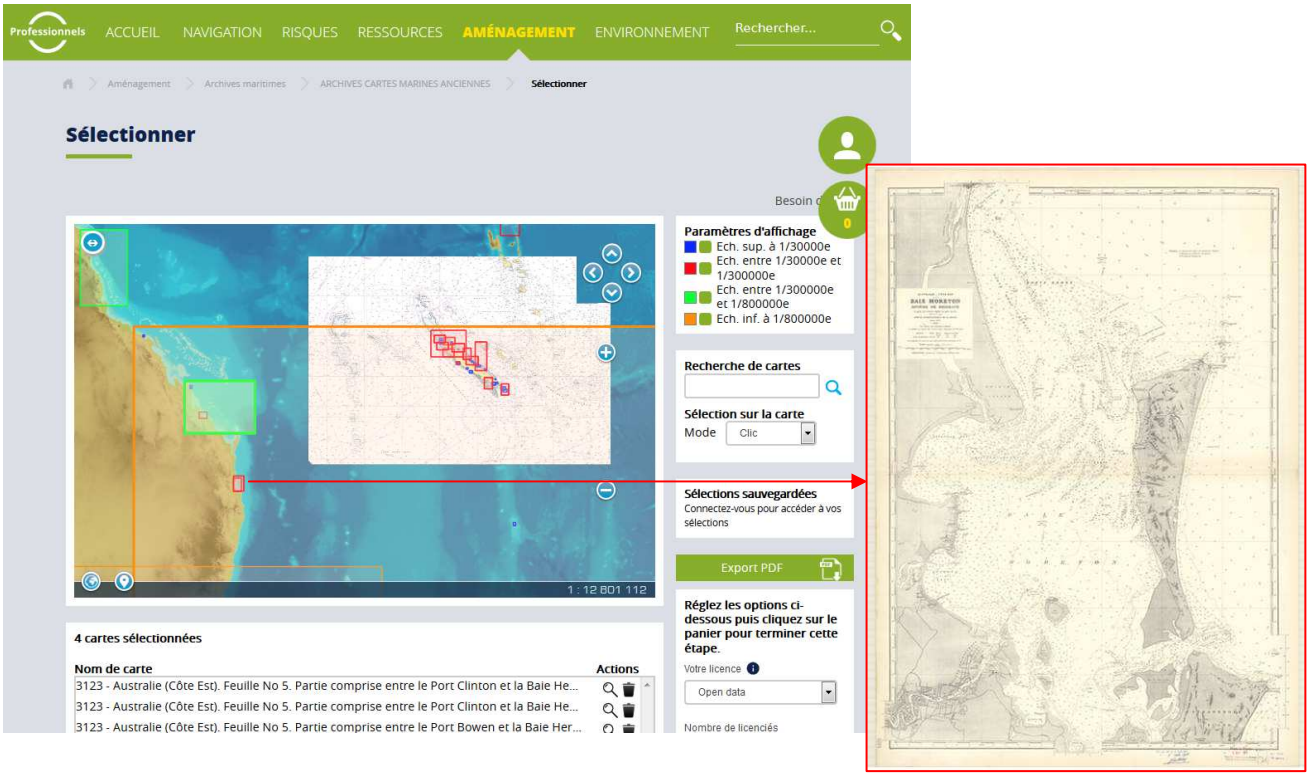


Fig.25: Archives: nautical charts and survey fair sheets (diffusion.shom.fr)

9.9. International

Because of its overseas territories and primary charting responsibilities, France, represented by Shom, is a member or associate member in 9 regional hydrographic commissions.

The detail of Shom's involvement in other IHO activities is listed in the table hereafter:

Name	Chair / Vice chair	Member	Observations
CBSC		✓	Capacity Building Sub-Committee
NCWG		✓	Nautical Cartography Working Group (former CPSCWG)
ENCWG		✓	ENC Working Group (former TSMADWG/DIPWG)
DPSWG		✓	Data Protection Scheme Working Group
DQWG		✓	Data Quality Working Group -Last meeting in 1996
EAtHC		✓	Eastern Atlantic Hydrographic Commission
FC		✓	Vice-chairman of Finance Committee
GEBCO		✓	Joint IOC-IHO Guiding Committee for the General Bathymetric Chart of Oceans (GEBCO)
HCA		✓	Hydrographic Commission on Antarctica
HDWG	✓	✓	Hydrographic Dictionary Working Group
HSSC		✓	Hydrographic Services and Standards Committee, formerly known as the Committee on Hydrographic Requirements for Information Systems (CHRIS)
IENWG	✓	✓	IHO-European Union Working group
IRCC		✓	Inter Regional Coordination Committee
MACHC		✓	MESO American & Caribbean Sea Hydrographic Commission
MBSHC		✓	Mediterranean and Black Seas Hydrographic Commission
MSDIWG		✓	Marine Spatial Data Infrastructure Working Group
NIOHC		✓	North Indian Ocean Hydrographic Commission
NIPWG		✓	Nautical Information Provision Working Group (former SNPWG)
NSHC		✓	North Sea Hydrographic Commission
RSAHC		✓	ROPME Hydrographic Commission
S100WG		✓	S-100 Working Group (former TSMADWG/DIPWG)
SAIHC		✓	Southern Africa and Islands Hydrographic Commission
HSPT	✓		S-44 Hydrographic surveys Project Team
SWPHC		✓	South-West Pacific Hydrographic Commission
TWCWG	✓	✓	Tidal, Water Level and Currents Working Group (former TWLWG/SCWG)
WEND		✓	Wold-Wide Electronic Navigational Chart Database
WWNWS		✓	World-wide Navigational Warning Service Sub-Committee, formerly known as the Promulgation of Radio Navigational Warnings Sub-Committee (PRNW)

10. Conclusions

Shom supports any initiatives aiming at improving the maritime knowledge and the navigation safety, as far as the data collected benefits the charting authorities and the update of nautical documentation of that region.

Destinataire	:	OHI
Copies intérieures	:	DG – DMI - DMI/REX – GOP - Archives (DMIDSD/2.007)