



ROYAUME DU MAROC
FORCES ARMEES ROYALES
ETAT MAJOR DE LA MARINE ROYALE
DIVISION HYDROGRAPHIE
OCEANOGRAPHIE ET CARTOGRAPHIE

MOROCCAN NATIONAL REPORT TO THE 16th CONFERENCE OF THE EASTERN
ATLANTIC HYDROGRAPHIC COMMISSION (EA_tHC)

1. Hydrographic office: General

The division of Hydrography, Oceanography and Cartography (DHOC) is a department of the General staff of the Royal Moroccan Navy. Being the National Hydrographic Office, the DHOC is responsible for producing nautical charts necessary to ensure the safety of navigation in waters under its national jurisdiction. Currently, the DHOC co-produces its charts in collaboration with the French hydrographic office “Shom” and will be fully autonomous by the end of this year.

The nautical charts coproduced by the DHOC and Shom are mainly made using data coming from hydrographic surveys carried out by the DHOC and the Shom as well as other national and international partners.

2. Surveys

2.1 Coverage of new surveys

Since the last conference of the EA_tHC, the DHOC carried out six hydrographic surveys in:

- Casablanca harbor;
- Laâyoune’s harbor approaches;
- Mehdia’s approaches;
- Mohammedia’s approaches;
- New port of Safi harbor and its approaches;
- Tarfaya’s approaches.

A part from the survey in **Mohammedia** approaches, all the surveys were planned for nautical charts needs, according to a national action plan established with all the concerned national departments. Moreover, the survey in **Mohammedia** approaches was conducted specially to create a new 'Reference Area' to serve for the patch tests and for the calibration of acoustic sensors.

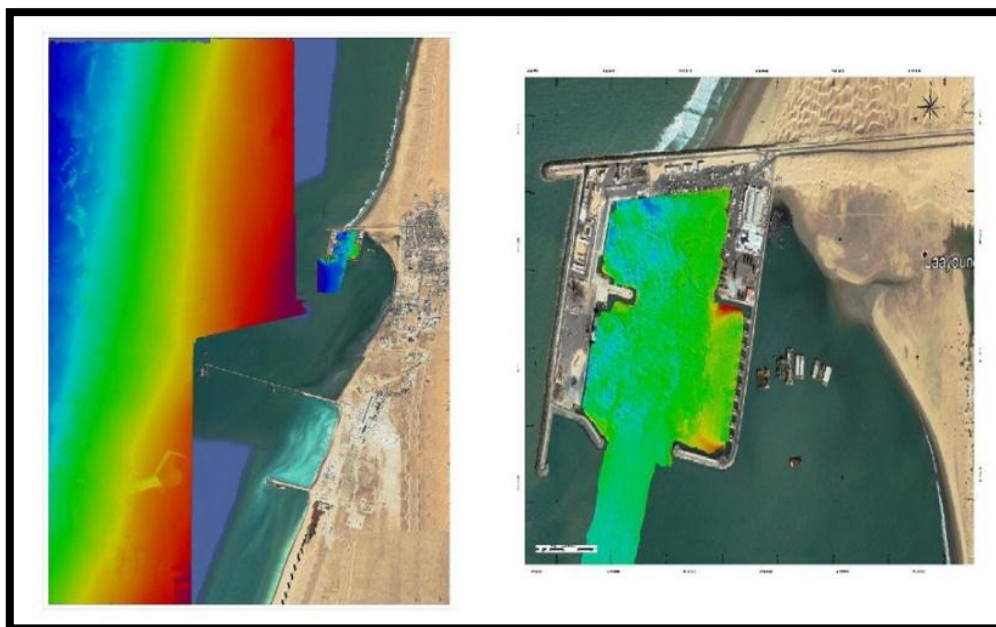


Figure 1: Hydrographic survey carried out in Laâyoune

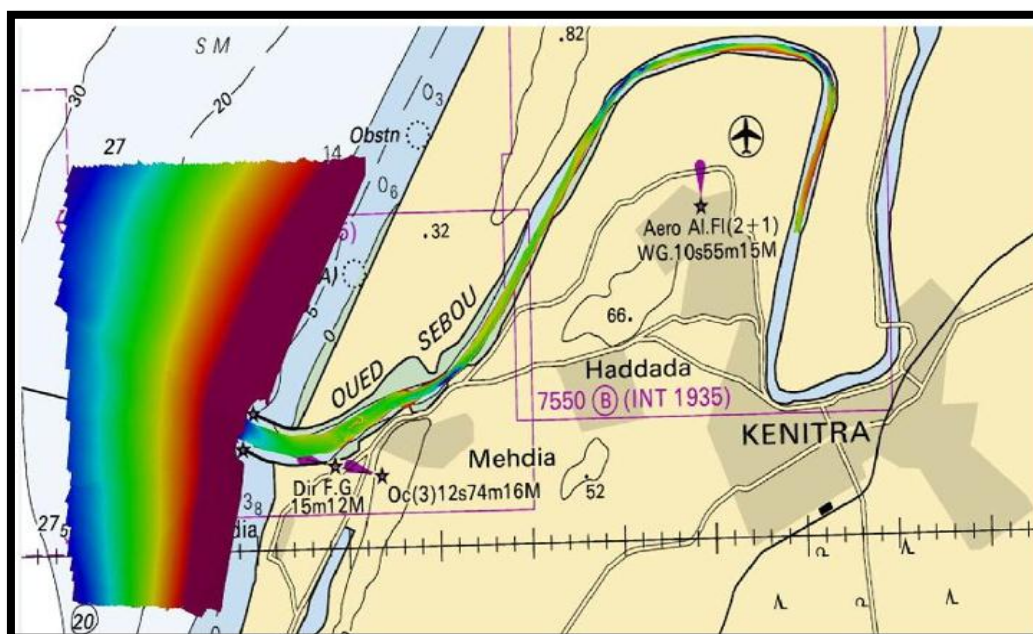


Figure 2: Hydrographic survey carried out in Mehdiya

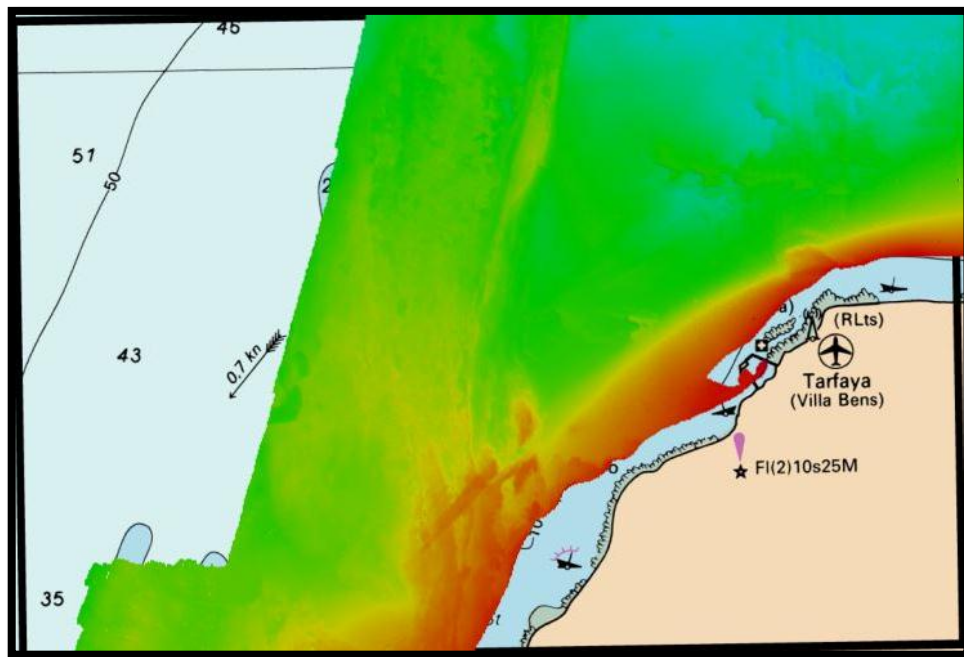
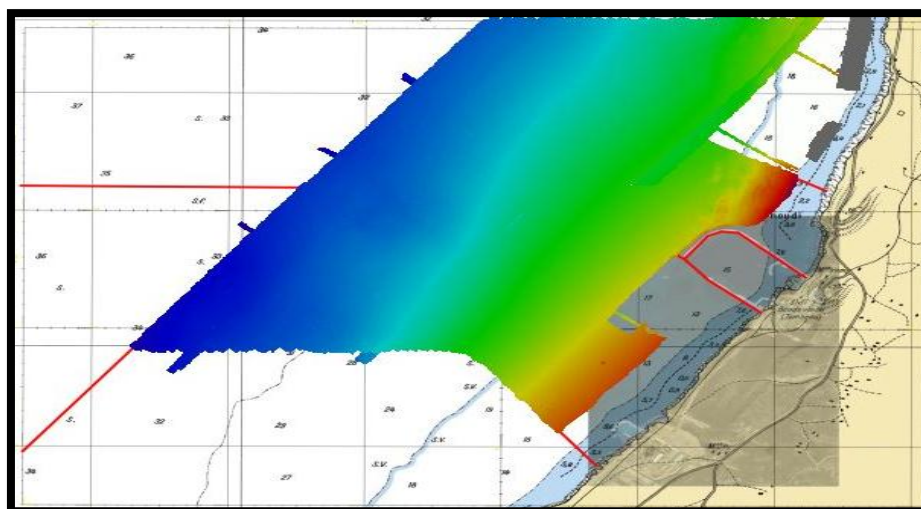


Figure 3: Hydrographic survey carried out in Tarfaya



2.2 New ships

To carry out its hydrographic and oceanographic surveys, either in shallow and deep waters, the DHOC had purchased a new hydro-oceanographic vessel '**Dar Al-Beida**'. Since, it has been put into service three years ago, several hydro-oceanographic surveys were made, in both Atlantic Ocean and Mediterranean Sea.

Furthermore, joined research oceanographic campaigns are regularly planned to be conducted with national departments working oceanographic fields.



Figure 5: Dar Al Beida vessel

3. [New chart and updates:](#)

3.1 ENC's coverage, gabs and overlaps

Since the last conference of the EAtHC, the DHOC and Shom have coproduced, within the area of the EAtCH, nine new ENC's and three new editions.

➤ **New publications**

Number	Scale	Title	Edition
FR377010	1/90 000	Mohammedia to Jorf Lsifar	1
FR67712A	1/4 000	West coast of morocco - Tan Tan harbour	1
FR577120	1/12 000	West coast of morocco - Tan Tan	1
FR677100	1/12 000	Tanger - Ville harbour	1
FR577110	1/8 000	Rade and port of Safi	1
FR377090	1/90 000	From Cap ghir to sidi ifni	1
FR477150	1/45 000	Agadir approaches	1
FR377080	1/90 000	From Oued tensifte to cap ghir	1
FR577130	1/8 000	Rade and port of Agadir	1

Table 1 : List of ENC's produced



Figure 6: Coverage of the ENC's produced

➤ **New editions**

Number	Scale	Title	Edition
FR377040	1/90 000	Asillah to Sidi Al hachimi	2
FR577130	1/8 000	Rade and port of Agadir	2
FR377020	1/90 000	Mehdia to Mohammedia	4

Table 2: List of ENC's edited

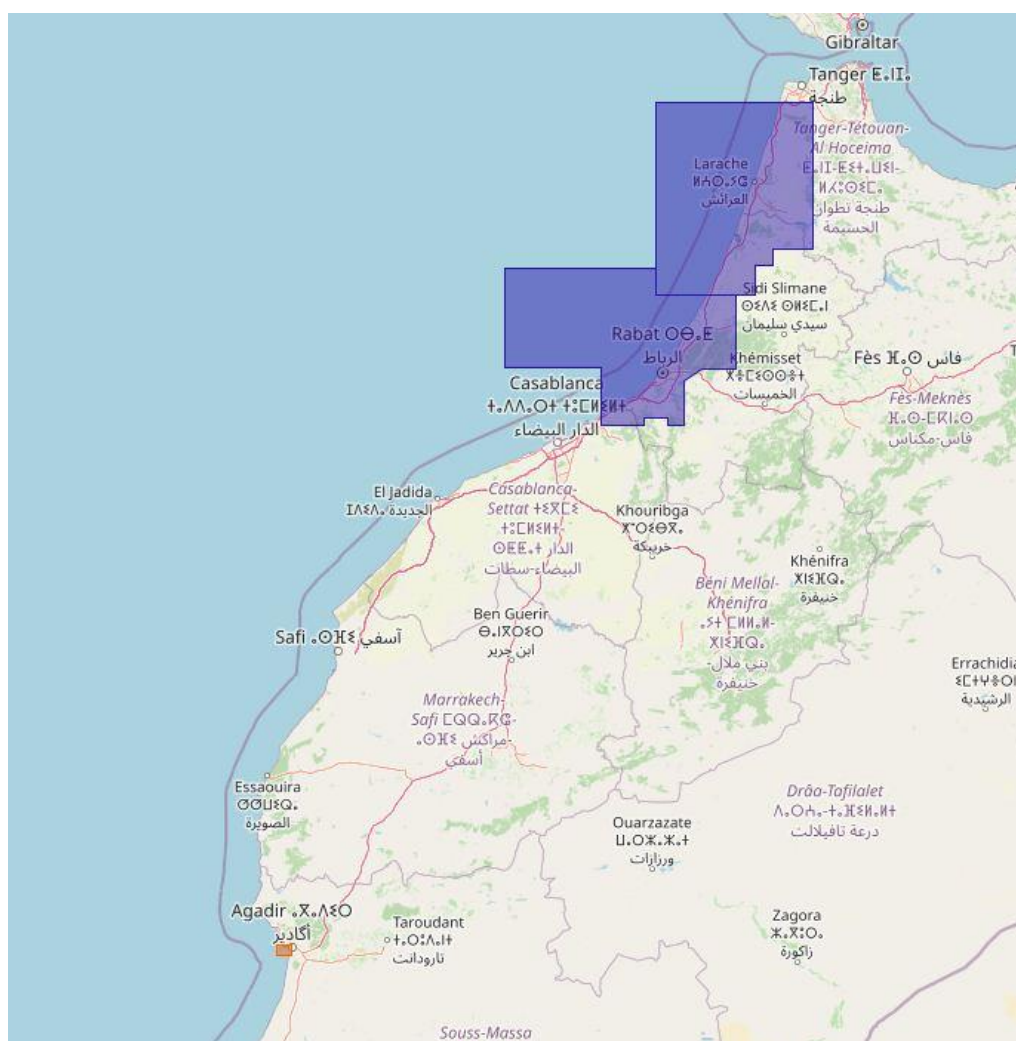


Figure 7: Coverage of the ENC's edited

The figures above are extracted from the PRIMAR website.

Until now, the DHOC and Shom have coproduced sixteen ENC's and six new cells are planned in 2021-2022.

3.2 ENC distribution method

All ENC's coproduced are published by Shom and distributed to the end-users through PRIMAR tools.

3.3 RNCs

NTR.

3.4 INT charts

Up to September 1st, 2021, the DHOC and Shom have coproduced two new INT charts, since the last conference.

INT number	MA number	FR number	scale	Title	Year of publication
1981	1005	7711	1/10 000	Rade et port de Safi	2020
1983	1009	7713	1/ 10 000	Rade et port d'Agadir	2020

Table 3: List of INT charts produced



Figure 8: INT charts produced

3.5 INT charts updated

The DHOC has submitted eight new charts to update the INT scheme of the region G. Six national charts, already published, to be introduced in the INT scheme and two new charts planned to be produced in 2022. This proposition was approved by the ICCWG and the INT numbers have been assigned to the charts proposed. The table below shows the list of the charts proposed by the DHOC.

➤ National charts to be added in the INT scheme:

INT number	MA number	FR number	scale	Title	Year of publication
1821	3004	7704	1/142 000	De la Pte Malabata à Sidi AlHachmi	2009
1968	1013	7712	1/20 000	Abords du port de Tan_tan	2019
1968 plan A	1013A	7712A	1/5 000	Port de Tan-tan	2019
1969	1112	7710	1/12 500	Port de tanger_ville	2020
1979	3005	7708	1/147 980	De Oued Tennesift à Cap Ghir	2021
1941	3007	7709	1/150 000	De Cap Ghir à Sidi Ifni	2021
1984	2007	7715	1/50 000	Approaches d'Agadir	2021

Table 4: List of charts proposed to update the INT scheme

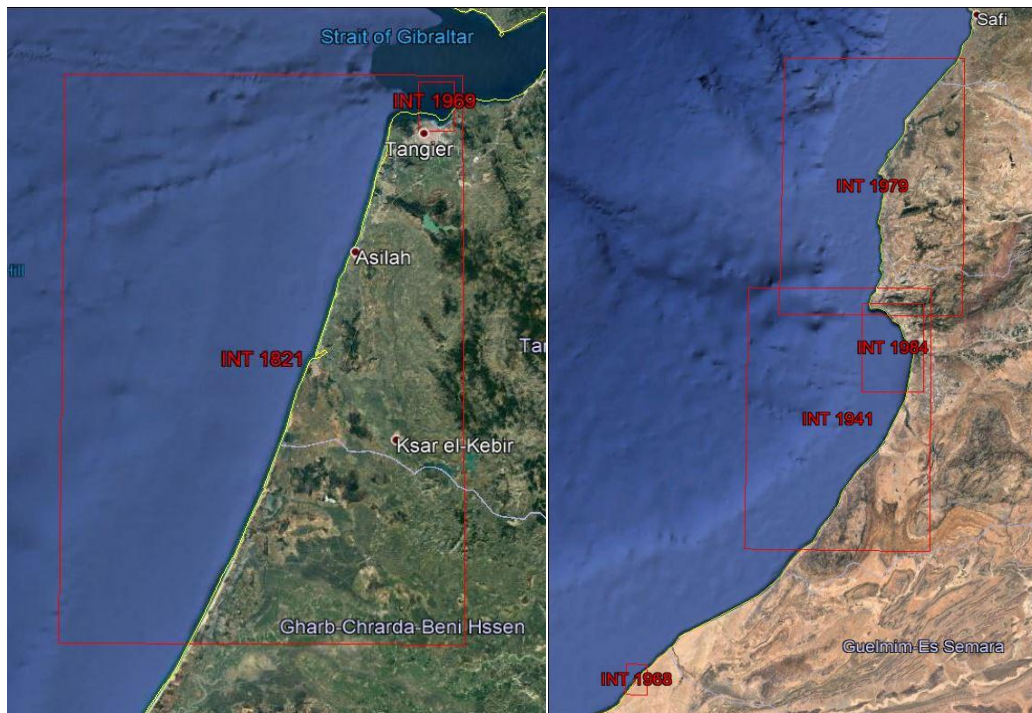


Figure 9: Charts proposed to update the INT scheme

➤ **INT charts planned**

INT number	MA number	FR number	scale	Title	Year of publication
1977	1003	7716	1/10 000	Port de Jorf Lasfar	Schemed
1982	1023	7718	1/ 10 000	Nouveau port de Safi	Schemed

Table 5: INT charts planned

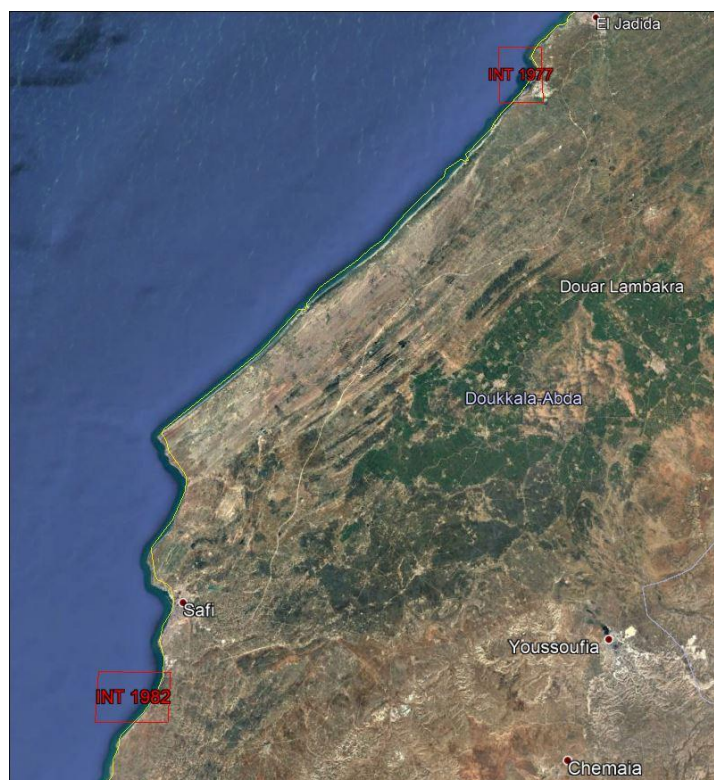


Figure 10: INT charts planned

3.6 National paper charts

Since the last conference, five new national paper charts have been published.

MA number	FR number	scale	Title	Year of publication
1013	7712	1/20 000	Abords du port de Tan_tan	2019
1013A	7712A	1/5 000	Port de Tan-tan	2019
1112	7710	1/12 500	Port de tanger_ville	2020
3005	7708	1/147 980	De Oued Tennsift à Cap Ghir	2021
3007	7709	1/150 000	De Cap Ghir à Sidi Ifni	2021
2007	7715	1/50 000	Approaches d'Agadir	2021

Tableau 6: National paper charts produced

4. New publications and updates

4.1 New publications

The DHOC produce each year a tide table for the Moroccan harbors.

4.2 Updated publications

The “sailing direction of the Moroccan coasts” and “Lights and radio signals document” published by the DHOC in 2018 are updated monthly through the notice to mariners of the DHOC.

5. MSI

Existing infrastructure for MSI dissemination

Currently, the DHOC transmit its notices to mariners mailing the harbor authorities and other departments, who inform the end users. DHOC web site is undergoing and it will be functional by the end of this year. Next year, DHOC’s notices to mariners will be available on its web site.

6. C-55

NTR.

Training received: one hydrograph category B and one cartographer by Shom.

7. Oceanographic activities

In collaboration with other national department, the DHOC established a tide gauge network. Actually, eight tide gauges are installed in the main national harbors. Six tide gauges are planned to be installed in other harbor.

8. Spatial data infrastructures

NTR.

9. Innovation

NTR.

10. Other activities

NTR.