



ROMANIA National Report

**MEDITERRANEAN AND BLACK SEAS
HYDROGRAPHIC COMMISSION
21st CONFERENCE**

**Cadiz, SPAIN
11 - 13 June 2019**

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1. Surveys

In 2018 we have performed the following surveys:

- ✓ Hydrographic surveys, in order to update the national database in the following areas:
 - Eforie North;
 - Constanta North;
 - Vadu;
 - St. Gheorghe;
 - Sulina.
- ✓ Topographic survey of the entire Romanian coastline (yearly activity).
- ✓ Hydrographic and oceanographic surveys for military harbors from Danube River and Black Sea;
- ✓ UXO surveys in the Black sea and on the Danube River;

Hydrographic surveys were executed in the coastal area up to the 20 m bathymetric and at this time we have completed up to 40% of the Romanian coast.

1. Surveys



Hydrographic Ship "Al. Catuneanu"



Survey launch "Al. Catuneanu 2"



Survey launch "Hidrografica 3"

We also started the procedures in order to change:

- the survey equipment for the Romanian Hydrographic ship - we will update it with a deep sea multibeam system;
- update the tide gauge system with 3 new systems;
- the RTK network with 3 new portable RTK base stations.

New ship:

This year we will finalize the procedures in order to acquire 2 new survey platforms that will be fitted with hydrographic and oceanographic equipment (single beam, multibeam, ADCP, SVP probe, CTD).

2. Charts

ENCs:

- ✓ MHD has in portfolio 14 ENC cells
- ✓ MHD distributes its ENCs through IC-ENC

Usage band	Navigation purpose	No of cells released	No of cells planned for production(this year)
1	Overview	N/A	N/A
2	General	1	N/A
3	Coastal	To be produced	2
4	Approach	6	N/A
5	Harbor	3	2
6	Berthing	4	N/A
Total		14	4

- ❑ MHD intends to produce and send for distribution this year, 4 new ENC cells band 3 and 5.

2. Charts

INT Charts:

✓ MHD has in its portfolio 6 INT numbers witch cover the entire Romanian coast of the Black Sea and the Romanian ports

INT No.	SCALE	MAIN TITLE	STATUS
3820	1:300000	<i>From Kaliakra to Danube Delta</i>	Produced / Printed
3902	1:10000	<i>Port of Mangalia</i>	Produced / Not printed
3904	1:10000	<i>Port of Midia</i>	In progress
3905	1:30000	<i>Port of Constantza and approaches</i>	Produced / Printed
3907	1:50000	<i>From Gura Sf.Gheorghe to Gura Musura</i>	Produced / Not printed
3908	1:30000	<i>Port of Sulina and approaches</i>	Produced / Not printed

2. Charts

National Paper Charts :

✓ The MHD national portfolio of paper charts consists of 35 charts

SCALE	NO. OF CHARTS
MEDIUM-SCALE	15
Landfall Charts	4
1:750000	2
1:500000	2
Coastal Navigation Charts	11
1:300000	1
1:250000	1
1:150000	2
1:100000	4
1:75000	3

SCALE	NO. OF CHARTS
LARGE-SCALE	20
Port Approach Charts	6
1:50000	6
Harbour Charts	6
1:30000	1
1:25000	1
1:10000	4
Berthing Charts	8
1:5000	8

An intensive work is carried on by the cartographic staff of MHD to transform the chart folio from CARIS GIS format into the CARIS Paper Chart Composer format. Several charts have been transformed and are ready to be printed as new editions and some are in final stage of preparation.

2. Charts

Chart production:

*MHD intends to introduce the **Print on Demand (PoD)** system*



3. Nautical publications

MHD nautical publications portfolio includes the following documents:

- ✓ *Black Sea Pilot*
- ✓ *List of Lights and Fog Signals*
- ✓ *Charts and Nautical Publications Catalogue*
- ✓ *Maritime Buoyage System*
- ✓ *Symbols and Abbreviations used on Romanian Paper Charts (according to INT1)*
- ✓ *Nautical Tables*

- ✓ *Special Edition of Notices to Mariners*
- ✓ *Annex to Special Edition of Notices to Mariners* \implies *yearly*
- ✓ *Cumulative List of Notice to Mariners*

- ✓ *Notices to Mariners* \implies *monthly (in Romanian and English languages)*

All publication are available only in hard copy format.

4. Maritime safety information

*Maritime Hydrographic Directorate is the national authority which **promulgates** navigational warnings and Constanta Radio is the National NAVTEX service provider.*

NAVTEX

MSI Services are provided on 7/24 basis. Constanta Radio NAVTEX station is transmitting MSI warnings in Romanian language on 490 kHz and English on 518 KHz through Varna Radio KHz. Other communication systems (VHF, MF and HF) are also available to promulgate MSI warnings if needed.



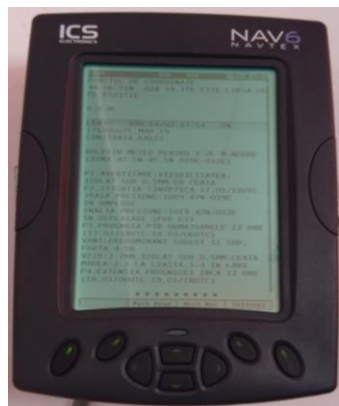
4. Maritime safety information

Number of Coastal and NAVAREA Warnings disseminated last year by MHD are listed below:

Year	NAVTEX Warnings	NAVAREA-III Warnings
2018	95	95

MSI Equipment

MHD owns a NAVTEX receiver (NAV6/NAVTEX) since 2018, through which it can verify the promulgation of all the MSI messages, from area of responsibility.



NAVTEX
receiver

5. Capacity building

Since the last meeting of MBSHC, several MHD employees received training through IHO Capacity building program.

Domain / International Training	Period	Organizer	Country	No. of employee
<u>CARTOGRAPHY</u>				
<i>Workshop on ENC Production and Distribution</i>	Oct 2017	IHO	Turkey	1
<i>Maritime Boundary Delimitation Workshop</i>	Nov-Dec 2017	IHO	Turkey	1
<u>HYDROGRAPHY</u>				
<i>Shallow water survey</i>	Oct 2018	IHO	Italy	1
<i>Hydrographic course Cat A</i>	Aug-2017- Aug 2018	IHO	USA	1

Training received outside the capacity building program:

- ✓ One person attended CAT B hydrography training course at FOST(UK) in 2018;
- ✓ One person attended Marine Cartography and data Assessment Course (Cat-B) organized by UKHO;
- ✓ Two persons attended International ENC Validation Training Course organized by IC- ENC.

5. Capacity building



***Workshop on ENC Production and Distribution
Turkey 2017***



***Maritime Boundary Delimitation Workshop
Turkey 2017***

Training needed:

- Law of the sea practical course;
- Nautical cartography and hydrography courses, cat A and cat B;
- Oceanography course;
- S-100 product specification course.

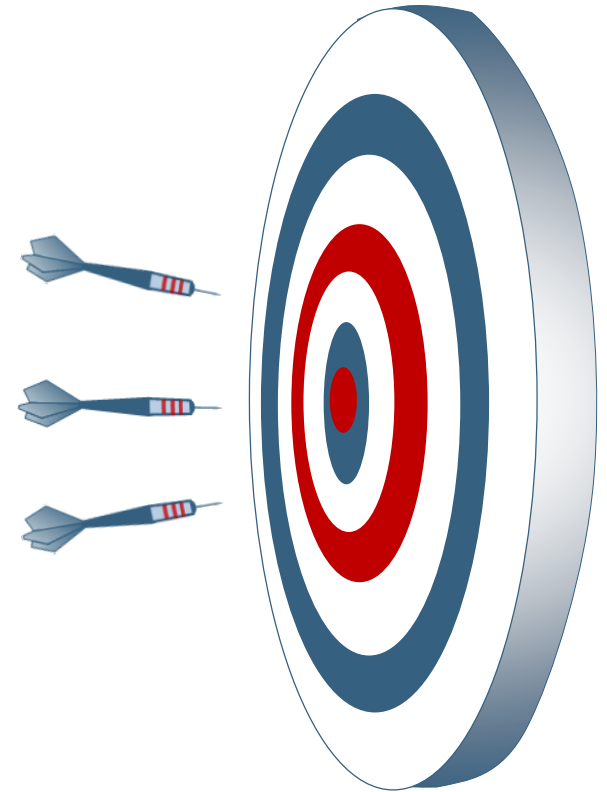


6. Oceanographic activities

OCEANOGRAPHIC ACTIVITIES	
Tide gauge network:	4 water level monitoring systems in Constanta, Midia, Sulina and Mangalia
Equipment:	Pressure gauge Valeport tidesmaster
Oceanographic measurements:	Oceanographic measurements were performed for: Midia, Mangalia, coastal route Constanta – Mangalia and the pouring mouth of Danube in Black Sea through Sulina and Sf. Gheorghe.
Problems encountered:	Lack of training courses for the oceanography personnel

7. Other activities

- ✓ RO MHD collects meteorological data for Romanian Navy use;
- ✓ RO MHD provides signaling for Romanian coast through lighthouses;
- ✓ RO MHD creates special naval charts for Romanian Navy use, according to NATO standards;
- ✓ Close cooperation with national research institutes and private companies activating in marine research field to improve the quality of hydrographic products and services.



Thank you for your attention

Questions???