



National report of Montenegro

**Institute of hydrometeorology and seismology
of Montenegro**

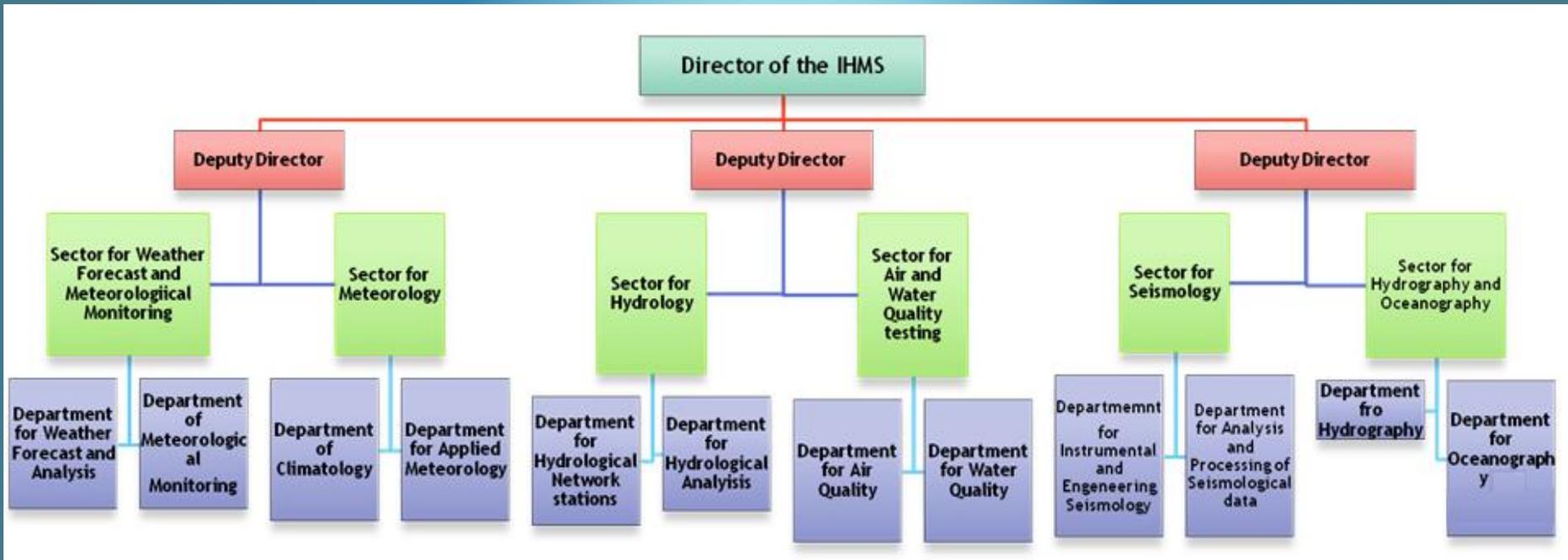
XXI MBSHC, Cadiz, Spain

11 – 13 June 2019.

Content

- Institute of hydrometeorology and seismology organizations units
- Sector of Hydrography and Oceanography
- Nautical publications
- Capacity building program
- Goals and plans

Organization structure of IHMS



Sector of hydrography and oceanography

➤ **Department for Hydrography and nautical cartography**

- Bathymetry
- Side scan sonar surveys
- Magnetometry
- Geodesy
- ENC chart production
- Paper chart production

➤ **Department for oceanography**

- Physical oceanography

Department for hydrography and nautical cartography

Vessels

Hydrographic vessel GreatWhite Enterprise



- length: 8.2 m
- draft: 0.8 m
- accommodation capacities:
 - 2 crew members
 - 2 members of survey team

Department for hydrography and nautical cartography

Vessels

Hydrographic vessel ČH-1



- displacement: 6 t
- length: 9.5 m
- draft: 0.5 m
- accommodation capacities:
 - 2 crew members
 - 2 members of survey team

Department for hydrography and nautical cartography

Vessels

Hydrographic vessel WingCat



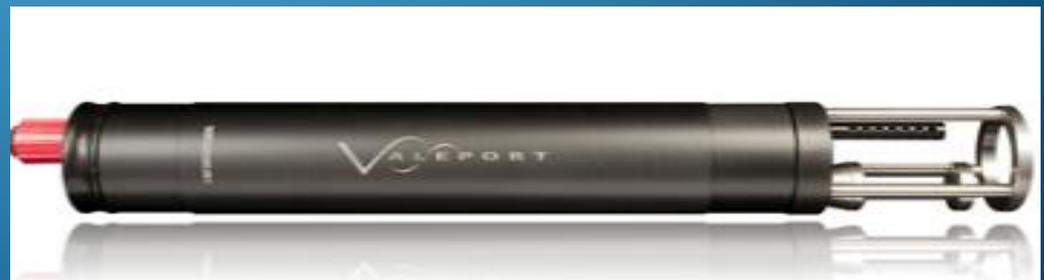
- length: 5.5 m
- draft: 0.6 m
- accommodation capacities:
 - 1 crew members
 - 2 members of survey team

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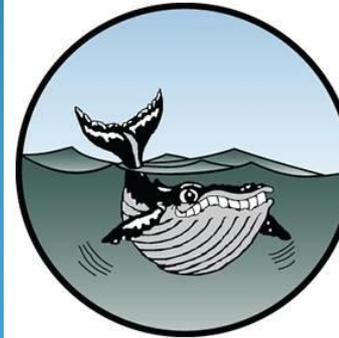
Equipment

- MBES Norbit 200/400kHz,
- SBES Navisound 215,
- CTD Midas SX2 Valeport,
- SSS Edgetech 4125,
- SSS Klein 3900,
- SSS HDS Marine Sonic 900/1800kHz,
- Magnetometer SeaSpy,
- Edgetech USBL portable system,
- GNSS Leica GS018

Department for hydrography and nautical cartography



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HYPACK
a xylem brand



**National
Oceanography Centre**

NATURAL ENVIRONMENT RESEARCH COUNCIL



QPS.

QGIS

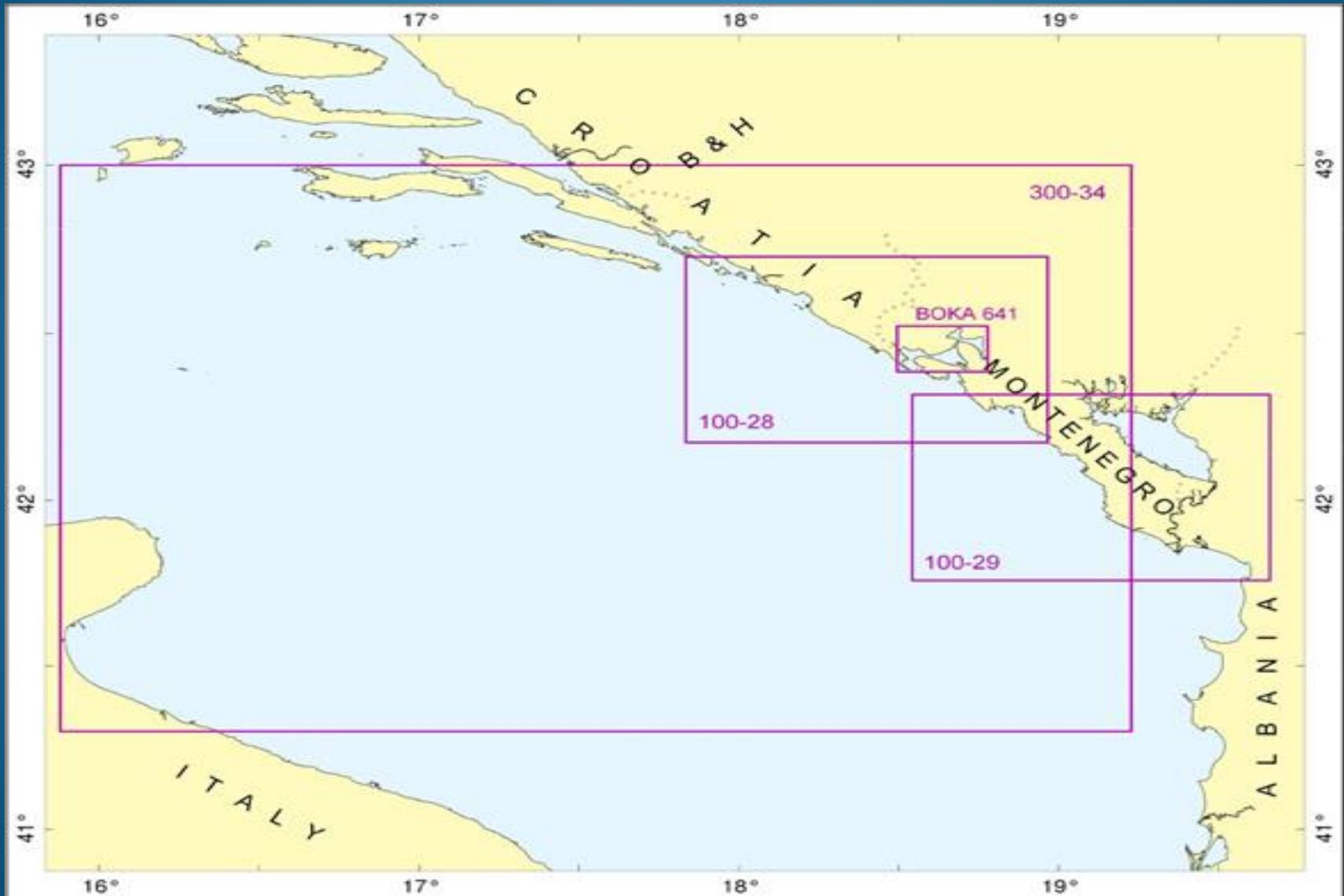


Arc

ESRI

GIS

Department for hydrography and nautical cartography



Department for hydrography and nautical cartography

MONTENEGRO 100-1

BOKA 25-1

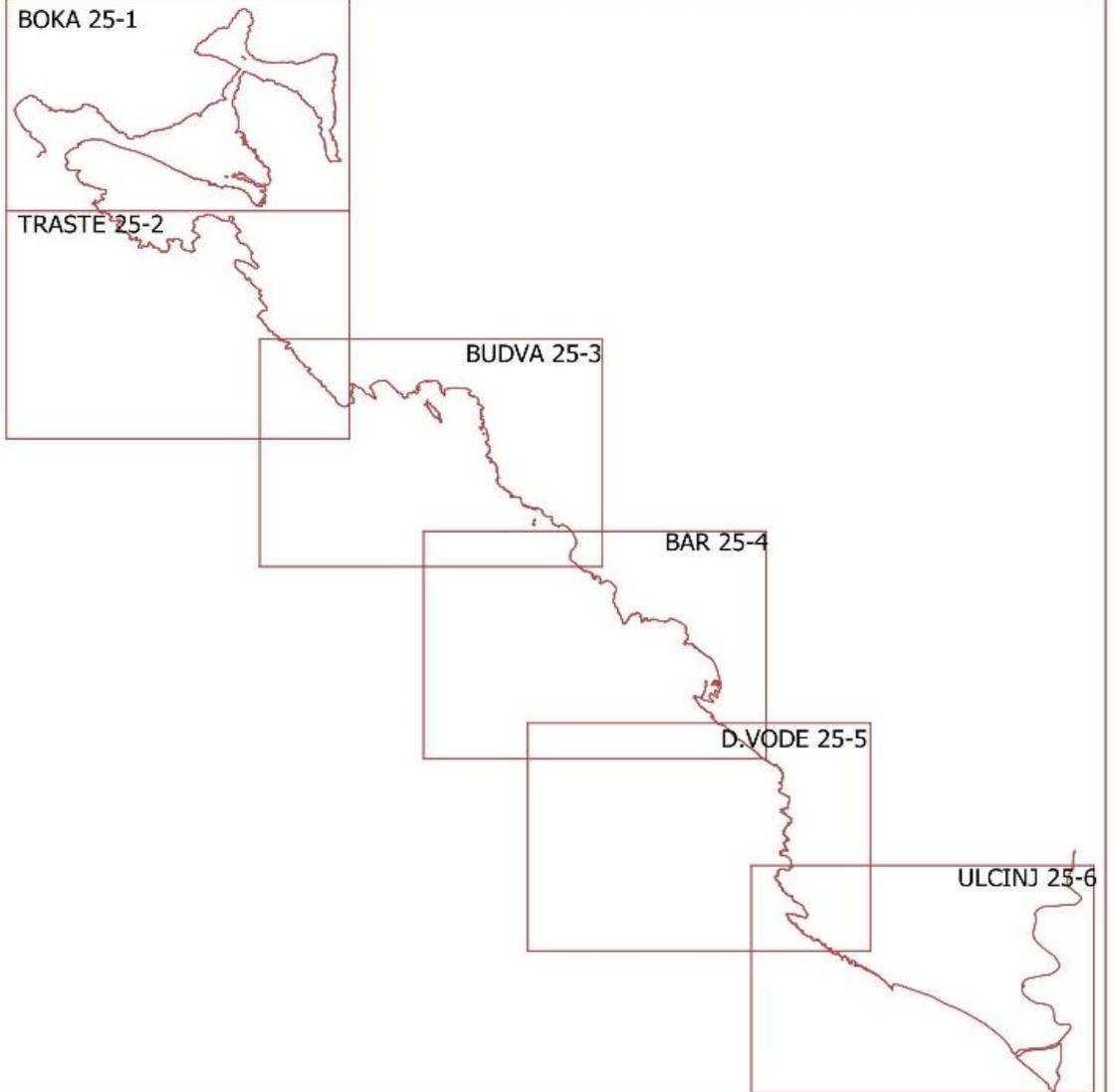
TRASTE 25-2

BUDVA 25-3

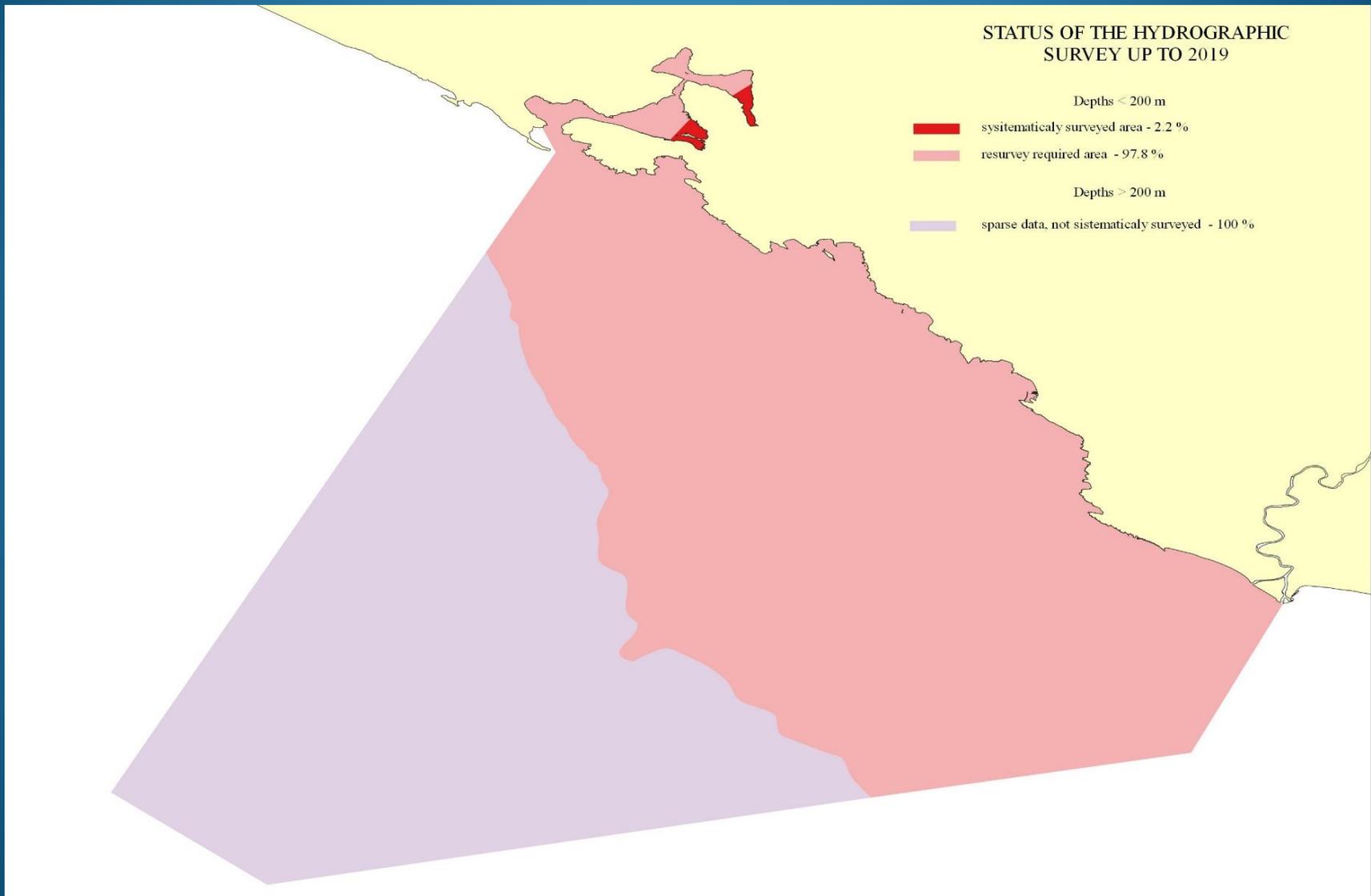
BAR 25-4

D.VODE 25-5

ULCINJ 25-6



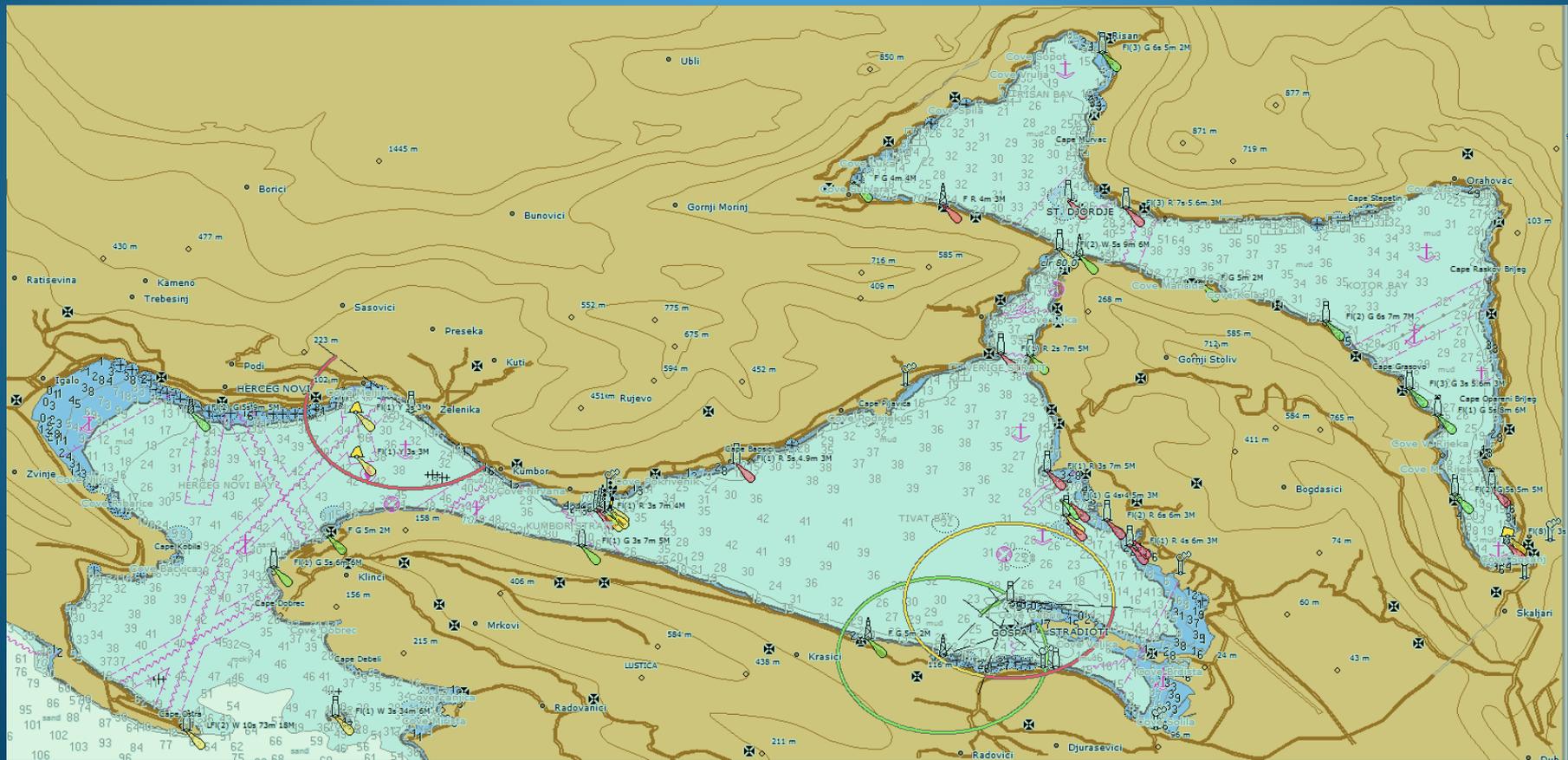
Department for hydrography and nautical cartography



Department for hydrography and nautical cartography

ENC cells

- ✓ 1 coastal (ME3MNE01);
- ✓ 1 approach (ME4BOK01);
- ✓ 4 harbour (ME5KOT01, ME5BAR01, ME5ZEL01, ME5BUD01);
- ✓ 5 berthing (ME6BON01, ME6PON01, ME6MOG01, ME6LUS01, ME6HNV01)



Department for hydrography and nautical cartography

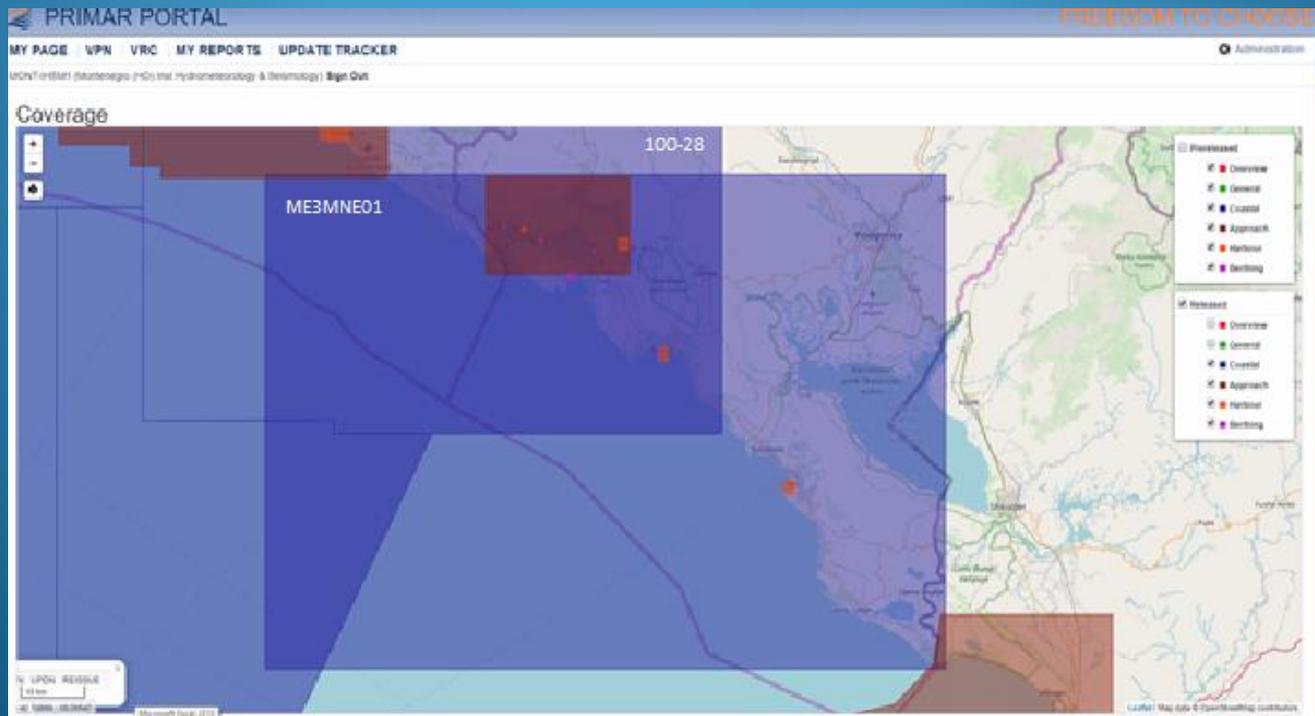
MY PAGE | VPN | VRC | MY REPORTS | UPDATE TRACKER Administration

MONT-IHSM1 (Montenegro (HO) Inst Hydrometeorology & Seismology) [Sign Out](#)

Update Tracker

Cells Show Map

Cell	Edition Number	Update Number	Title
ME5KOT01	2	1	Port of Kotor
ME3MNE01	1	0	Montenegro coast
ME5BAR01	1	0	Port Bar
ME5ZEL01	1	1	Port Zelenika
ME5BUD01	1	0	PORT OF BUDVA
ME6BON01	2	0	BONICI
ME6PNV01	1	0	PORTONOVI MARINA
ME4BOK01	2	0	Boka bay
ME6HNV01	2	0	Herceg Novi
ME6MOG01	1	0	MOGREN COVE
ME6LUS01	1	0	LUŠTICA BAY



Equipment

- Two permanent tide stations
 - Port of Kotor
 - Port of Bar
- One mobile tide station
- RDC 600 currentmeter
- Midas CTD probe

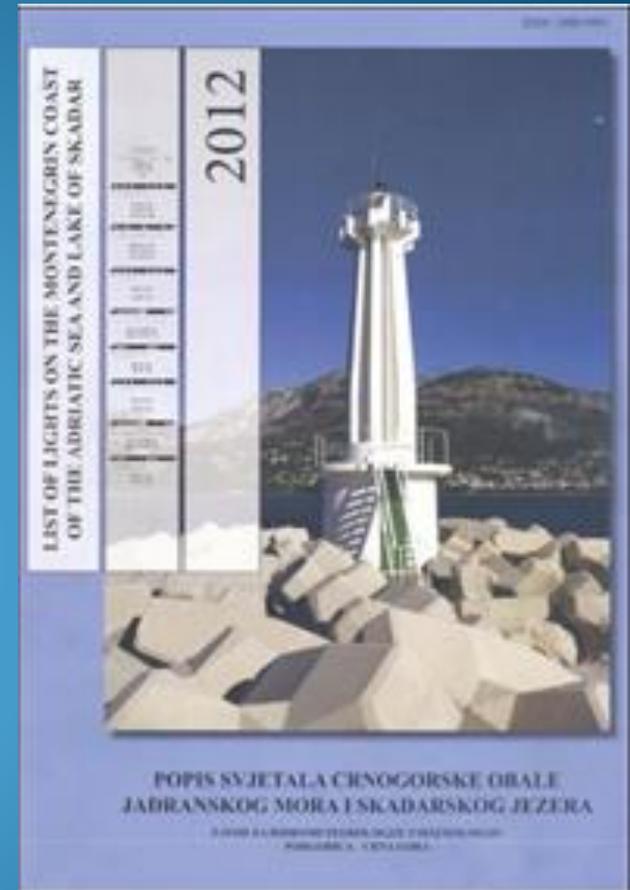
Nautical publications

➤ Nautical publications

- ❖ Notices to Mariners
- ❖ Sailing Directions
- ❖ Pilot: 2013
- ❖ Lists of Lights: 2012

➤ Maritime Safety Information (MSI)

- Maritime safety department of Montenegro



Capacity building program

Nautical cartography capacity building program

- ✓ *Category B course (IHO/FIG/ICA Standards of Competence for Nautical Cartographers)*
- ✓ *Training for Ocean Observation and Hydrographic Surveying (ENC Application)*

Goals and plans

- Improvement of oceanographic department
- Procurement of the new survey vessel
- Creation of two new approach cells and corresponding paper charts
- Training courses for new professional staff

THANK YOU

For Your Attention