Pakistan
National Report

NORTH INDIAN OCEAN HYDROGRAPHIC COMMISSION (NIOHC)

13 – 15 JULY 2021, COLOMBO, SRI LANKA

PNHD

Helping Chart Our World

ORGANIZATION

SURVEY COVERAGE

- A1 category area coverage increased to 95% (Modern surveys)
  - Re-surveys of Approaches to Karachi
  - Re-surveys of Approaches to Gwadar
- A2 category area coverage increased to 47% (Modern surveys)
  - Offshore Makran Coast

SURVEY SHIPS

- New survey vessel BEHR MASAH inducted in Nov 2019
- Enhanced capability and capacity towards hydrographic, oceanographic and geo-physical surveys

SURVEY SHIPS

SV BEHR PAIMA is fully equipped to undertake hydrographic and physical oceanographic surveys on modern standards

NEW TECHNOLOGIES

Hydrography	Oceanography	
MBES (Hull Mounted)	Wave Meters	Gravity Corer
Compact MBES for Boats	Rosette Water Sampler	Sub Bottom Profiler
Dual Frequency Side Scan Sonar	ADCPs	Magnetometer
Synthetic Aperture Sonar /ROV for multiple sensors	Tide gauges	Gravity Meter

NEW CHARTS AND UPDATES

ENCs

- ENCs of all major ports and approaches are available to mariners
- New ENCs of Karachi Deep Water Port and Approaches to Churna have been produced
- Production of all ENCs including Local (PAK Chart series) will be completed by 2022

RNCs

- PNHD is neither producing nor has plans to produce RNCs

PUBLICATIONS AND UPDATES

- Following publications are printed by PN Hydrographic Department on weekly and annual basis:
  - Weekly Notices to Mariners (NTMs)
  - Annual Summary of NTMs
  - Annual Pakistan Tide Table
- These publications are available on newly developed PNHD website (hydrography.paknavy.gov.pk)

MARITIME SAFETY INFORMATION

- Pakistan being NAVAREA-IX Coordinator coordinates/promulgates transmission of following MSIs:
  - NAVAREA IX warnings through International Safety Net
  - Coastal warnings
- NAVAREA IX broadcast is passed daily at 0300 and 1500 UTC through INMARSAT and IRIDIUM Satellites
- All NAVAREA IX warnings are also made available on website (hydropk@paknavy.gov.pk)

STATUS OF HYDROGRAPHIC SURVEYING (C-55)

Depth	A	B	C
<200m	95 %	5 %	0
>200m	47 %	53 %	0

CAPACITY BUILDING

- PNHD conducted Cat B (Hydro) at Navigation & Hydrography School in 2020 for 05 PN officers
- 02 officers from PNHD undergone/undergoing Cat B (hydro) from Indonesia
- 01 Officer is undergoing MS Physical Oceanography from US
- 01 Officer is undergoing MS Satellite Derived Bathymetry (SDB) from Australia

OCEANOGRAPHIC ACTIVITIES

- Oceanographic activities in Pakistan are carried-out by PNHD in collaboration with Pakistan National Institute of Oceanography (NIO)
- Oceanographic cruises are arranged onboard survey vessels for students and scientists of various research organizations for oceanographic observations and data collection

OCEANOGRAPHIC ACTIVITIES

Tide Gauge Network

- Four in number IOC provided automated tide gauges i.e. at Karachi, Ormara, Gwadar and Keti Bandar are installed

Equipment under procurement

- Wave meter, ADCPs, Rosette Water Sampler, SV probes, tide gauges have been procured with new survey vessel

OTHER ACTIVITIES

- PNHD actively participates in following hydrographic related activities:
  - Conduct of Inland water surveys on rivers and dams upon requirement
  - Supports various maritime and research activities in national waters
  - Maintenance of National Hydrographic Data Bank (NHDB)
  - Awareness campaign of MSDI

THANK YOU