



# NATIONAL REPORT OF BANGLADESH

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18<sup>TH</sup> NORTH INDIAN OCEAN HYDROGRAPHIC  
COMMISSION (NIOHC) MEETING

Goa, India

09-12 April 2018

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## 1. **Hydrographic Office/ Services**

1.1 Bangladesh Navy Hydrographic Department (BNHD) is vested with the responsibility of hydrographic survey in the coastal and offshore area of Bangladesh. Besides Bangladesh Inland Water Transport Authority (BIWTA) conduct surveys for inland waters. The BNHD consists of a fleet of five survey ships, Bangladesh Navy Hydrographic and Oceanographic Center (BNHOC) and BN Hydrographic School. The Directorate of Hydrography at the Naval Headquarters is the national representative of Bangladesh to International Hydrographic Organization (IHO) and exercise functional authority over BNHD.



**BN Hydrographic and Oceanographic Centre at Chittagong**

1.2 All the hydrographic activities of the country are coordinated through National Hydrographic Committee (NHC). NHC addresses the hydrographic and other maritime related activities at the national level. Different ministries and stakeholders are the members of NHC. The Assistant Chief of Naval Staff (Operations) of Bangladesh navy is the Chairman of that Committee.

## 2. **Surveys**

2.1. BNHD carries out survey operations with the help of her survey fleet which comprises of a purpose built deep sea survey vessel namely BNS ANUSHANDHAN (EX HMS ROEBUCK), two offshore survey vessels namely BNS SHAIBAL and BNS AGRADOOT and two survey crafts. The ships are fitted with modern hydrographic equipment for carrying out effective survey operations.

2.2 BN survey fleet carryout hydrographic survey operations every year as per the annual survey programme. Directorate of Hydrography promulgates annual survey programme considering national maritime interest pertaining to navigational safety. Due to the dynamic nature of coastal area, BNHD has to continue regular updating of national and INT series charts to ensure safe navigation. In 2016-2017 Survey season, hydrographic survey was conducted to acquire bathymetry for 01 in no INT and 03 in no national series charts. In current survey season (2017-2018), hydrographic survey is in progress to update 01INT and 13 national series charts. Several other hydrographic surveys have also been conducted in coastal areas to support various development projects. Hydrographic departments of BIWTA

(Bangladesh Inland Water Transport Authority) and other port authorities have conducted hydrographic surveys at their own area of jurisdiction i.e. ports, harbours and inland waterways to support safe navigation.



#### **BN Hydrographic Fleet**

2.3 **New Technologies or Equipment.** Bangladesh Navy is in progress of acquiring following technologies/equipment in 2017-2018:

- a. Shallow Water Multibeam Echo Sounder
- b. DGPS Receiver
- c. Levelling Machine
- d. Auto Tide Gauge
- e. Various Samplers
- f. Various Software

2.4 **New Ships.** In 2017 BN did not purchase any new survey ship/boat. However, 02 catamaran type Hydrographic Survey vessels are under construction at Khulna Shipyard Limited, Khulna, Bangladesh which is scheduled to be handed over by May 2018. These two vessels are planned to be equipped with MBES and other state of the art hydrographic survey equipment. Again, BN is also in the process of procuring 02 survey motor boats in 2018-2019.



**BN Survey Activities**

**2.5 Problems Encountered.**

2.5.1 Nil

**3. New Charts and Updates**

3.1 **ENCs.** ENC cells for all 9 INT series charts which are allocated to Bangladesh are currently being produced. Once compilation, V & V is completed, BNHD will make those ENCs available for distribution via suitable RENC/VAR.

3.2 **ENC Distribution Method.** MoU not yet signed with any VAR. However, ENC of Bangladesh waters are being distributed by UKHO.

3.3 **RNCs.** Presently, RNC of Bangladesh water is being produced by UKHO.

3.4 **INT Charts.** BNHD previously has published three INT charts (INT 7425, INT 7426 and INT 7428). Recently, INT charts scheme has been revised. Comparatively larger scales are being considered in the scheme to facilitate the mariners. The complete revised INT chart scheming of Bangladesh has been given in IHO publication S-11 Part B. Edition 3.0.2 August 2017. Bangladesh has published all 09 INT Charts for which she is responsible. It is to be mentioned that, by publishing all 9 INT charts, Bangladesh has fulfilled her commitment to IHO for INT series chart coverage according to IHO S-11 Region J. The published list of INT charts is shown below.

Ser	Chart No	Title
1.	INT 7425	Malancha River to Saint Martin's Island
2.	INT 7426	Approaches to Hiran point
3.	INT 7427	Chittagong Harbour
4.	INT 7428	Approaches to Chittagong
5.	INT 7429	Elephant Point to Matarbari Island
6.	INT 7451	A. Pussur River – Monkey Point to Joyman Reach B. Pussur River – Joyman Reach to Mongla Port

7.	INT 7452	A. Pussur River - Trikona Island to Ghusaingari Khal B. Pussur River - Ghusaingari Khal to Monkey Point
8.	INT 7453	Payra Harbour
9.	INT 7454	Approaches to Payra Harbour

3.1 **National Paper Charts.** In the Year 2017, BNHD published 22 National Series paper charts. The list of published national charts and their details is given below:

Ser	Chart No	Title	Edition No	Edition Date
1.	35001 (INT 7425)	Malancha River to St. Martin's Island	2 (NE)	02 Feb 2017
2.	3505	Approaches to Maiskhali Channel and Adjoining area	5 (NE)	07 Nov 2017
3.	3506	Kutubdia Channel and adjoining area	4 (NE)	04 Apr 2017
4.	1252	Mongla Harbour	1 (NC)	13 Mar 2017
5.	7511 (INT 7429)	Elephant Point to Matarbari Island	3 (NE)	07 Nov 2017
6.	7510 (INT 7428)	Approaches to Chittagong	1 (NC)	02 Feb 2017
7.	3529	Entrance to Raimangal & Malancha River	2 (NE)	11 Jun 2017
8.	7509	Chittagong to Feni River	2 (NE)	23 Mar 2017
9.	3001 (INT 7427)	Chittagong Harbour	1 (NC)	02 Feb 2017
10.	3511	Sandwip West Channel-Bhasan Char to Sandwip Island	2 (NE)	23 Mar 2017
11.	3002 (INT 7453)	Payra Harbour	1 (NC)	02 Feb 2017
12.	7504 (INT 7454)	Approaches to Payra Harbour	1 (NE)	02 Feb 2017
13.	3502	Teknaaf and Adjoinong Area	1 (NC)	13 Mar 2017
14.	3520	Sonar Char to Char Biswas	1 (NC)	20 Jun 2017
15.	3004 (INT 7452)	A. Pussur River - Trikona Island to Ghusaingari Khal B. Pussur River - Ghusaingari Khal to Monkey Point	1 (NC)	04 Jun 2017
16.	2508 (INT 7451)	A. Pussur River – Monkey Point to Joyman Reach B. Pussur River – Joyman Reach to Mongla Port	1 (NC)	04 un 2017
17.	5001 (INT 7426)	Approaches to Hiran Point	1 (NC)	10 Dec 2017
18.	3530	Malancha River to Raimongal River	2 (NE)	11 Jan 2018
19.	25001	Hariabhanga River to Hatia Island	1 (NC)	11 Jan 2018
20.	3531	Jamuna River to Bal River	1 (NC)	12 Feb 2018
21.	3533	Supati to Jaymonirgol & Sela Gang to Pussur River	1 (NC)	12 Feb 2018
22.	3532	Malancha River to Aura Shibsra River	1 (NC)	12 Feb 2018

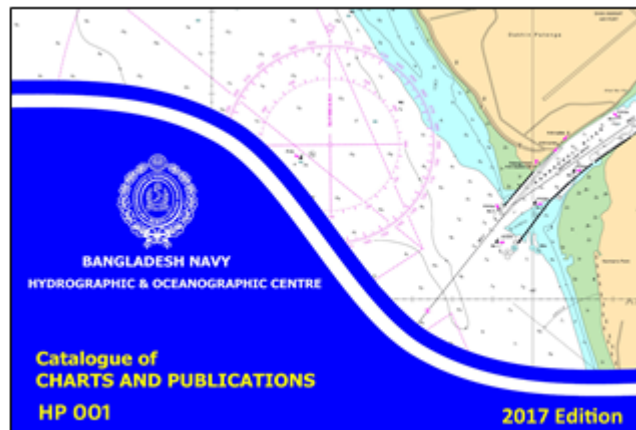
NC = New Chart, NE = New Edition

3.2 To flourish the scope of Blue Economy, Bangladesh Govt has taken up numerous coastal development and offshore installation projects around the coast. As such, national chart scheme is being reviewed.

#### 4. **New Publication & Updates**

4.1 Newly published publications in the year 2018 is given below:

Ser	Publication No	Name of Publication	Remarks
1.	H 001	Catalogue of Bangladesh Navy Charts and Publications	Updated
2.	H 002	Bangladesh Navy Tide Tables-2018	New
3.	H 003	BN Paper Chart Maintenance Record	Updated
4.	-	BN Annual Summary of Notices to Mariners - 2018	New



4.2 Presently all publications are available in paper format only.

#### 5. **Maritime Safety Information (MSI)**

5.1 **Existing Infrastructure for Maritime Safety Information.** Notices to Mariners related to the safe navigation in Bangladesh water is being issued by Department of Shipping (DG Shipping) regularly. These notices are widely circulated by both paper and digital means.

- (a) **Medium Used for Transmission of Navigational Warning.** Navigational warnings are transmitted as Notices to Mariners (NTM) and EGC message.
- (b) **Schedule and Frequency for Transmission of Navigational Warning.** Navigational warnings are transmitted regularly through VHF from sea ports and river ports.
- (c) **Schedule and Frequency for Transmission of Meteorological Warning.** Meteorological warnings are prepared by Bangladesh Meteorological Department and they send it to all government offices. The concerned warnings applicable for vessels plying in inland water

route as well as coastal areas are transmitted to the concerned district headquarters for further transmission in maritime sectors. Bangladesh Radio also transmits weather warnings. Moreover, the updates about weather warnings are also available in mobile applications.

- (d) **System for distribution of NTM.** NTM is issued by Department of Shipping after scrutinizing all the collected information from different sources. Besides Bangladesh Navy and Bangladesh Coast Guard Force issues NTM for their vessels. Chittagong, Mongla and Payra port authorities issue notices locally through VHF for the vessels navigating in coastal waters.

5.2 **NAVTEX Coverage.** At present there is no NAVTEX Station in Bangladesh. Navigational Warnings are transmitted with the help of local coordinator India as part of NAVAREA VIII.

5.3 **Website for NTM and other Warnings.** All the updated warnings including the Notices to Mariners are available on the website of Department of Shipping [www.dos.gov.bd](http://www.dos.gov.bd).

5.4 **Future plan for MSI.** A project named 'Establishment of Global Maritime Distress and Safety System and Integrated Maritime Navigation System (EGIMNS) are in progress. Under this project seven coastal radar stations including NAVTEX station will be installed in the coastal area.

5.5 **Problems Encountered.** Nil.

## 6. **C-55**

6.1 The Updated C-55 tables is attached to this report.

## 7. **Capacity Building**

7.1 **Training Conducted.** The Basic Hydrographic Course conducted by BN Hydrographic School is recognized by IBSC as Cat 'B'. The recognition is valid up to 2020. Apart from BN officers and sailors, BN Hydrographic School also provides training to IHO member states trainees as well as personnel from non-military survey agencies of the country. Other than BN Hydrographic School, BNHOC also conducts refresher and professional training for survey recorders and cartographers. A summary of training courses conducted in 2017 is listed below:

Ser	Name of Course	Duration	No of Trainees
<b>BN Hydrographic School</b>			
1.	Basic Hydrography Course (Cat-B)	26 Weeks	06
2.	SR-I 'Q' 2017	25 Weeks	10
3.	SR-II 'Q' 2016	24 Weeks	11
4.	SR-III 'Q' 2017	23 Weeks	16



<b>BNHOC</b>			
5.	Tide Analysis and Prediction Software	05 Days	08
6.	Training on Data Acquisition and Processing (MBES) Refresher Course	02 weeks	14
7.	Refresher Course on Hydrographic Data Acquisition and Processing	05 Days	15
8.	Caris Advanced Paper Chart Production	05 Days	14
9.	MSI Training	03 Days	11

7.2. **Training Received.** In 2017 BNHD received number of training courses to train her officers and sailors. On successful completion of training, all our personnel are employed in different hydrographic units to implement their theoretical knowledge in practical field. Following table shows the status of training received by CB project and bilateral agreements between BN and other foreign hydrographic organization:

<b>Ser</b>	<b>Participation in Training / Course</b>	<b>Duration</b>	<b>Trainee</b>	<b>Sponsor</b>
1.	Masters on Hydrography	01 year	01	France
2.	ENC Quality Assurance	05 days	01	Thailand
3.	Maritime Safety Information	03 days	01	South Korea
4.	Long Hydrography Course (CAT-A)	09 months	01	India
5.	Electronic Cartographic Course	3 weeks	01	South Korea
6.	SR-I Course	05 months	01	India

7.3 **Training Needed.** By carefully assessing the strength and weakness on BNHD, and by foreseeing the requirement of coming days; it is ascertained that Bangladesh needs further assistance for hydrographic capacity building through training. Some fields where international training will be most beneficial for BNHD are as follows:

- a. Cat-A training in Hydrography.
- b. Cat-B training in Hydrography and Cartography.
- c. ENC Production, Validation and Verification.
- d. Hydrographic Database Management.
- e. Marine Spatial Data Infrastructure.
- f. Multibeam data acquisition and processing.
- g. Ocean Data Acquisition.
- h. Offshore Industrial Survey.

7.4 **Status of National, Bilateral, Multilateral or Regional Development.** BN and UKHO have renewed a MOU regarding the production and distribution of Nautical Charts for next five years which is valid till 2020.

## 8. **Oceanographic Activities**

8.1 After the settlement of our maritime boundary with neighbours, the nation has given special emphasis on oceanographic research activities. Bangladesh Government is planning to acquire an Oceanographic Research Vessel soon. BN Officers are also undergoing higher study on Oceanography in various institutions of Bangladesh including Bangabandhu Sheikh Mujibur Rahman Maritime University. Since other Bangladeshi universities and research organizations are not capable to proceed to sea due to unavailability of vessels, Bangladesh Navy provide assistance with suitable platforms. BNHD always remains supportive to oceanographic researchers to ensure that they get maximum opportunity to carryout research activities for acquiring better knowledge about the marine environment.

## 9 **Celebration of World Hydrographic Day**

9.1 BNHD celebrated the World Hydrography Day (WHD) 2017. On this occasion, Rear Admiral Mohammad Makbul Hossain, OSP, BCGMS, ndu, psc the Assistant Chief of Naval Staff (Operations) and the Chair of National Hydrographic Committee has conveyed a special written message to all the maritime stakeholders of the country. The theme of the WHD 2017 “Mapping our seas, oceans and waterways – more important than ever” reached to majority population of the country through mobile company operators’ general SMS system.

## 10. **Conclusion**

10.1 As a coastal nation, Bangladesh is fully aware of the importance of hydrography. In recent years, the Government of the Peoples’ Republic of Bangladesh has given due importance in developing sustainable Blue Economy to improve the lives of people. To underpin the need for sustainable development, a nationwide importance of Hydrography has been acknowledged. In addition to providing valuable service to Bangladesh’s maritime sector, BNHD has been active to promote regional co-operation in the field of hydrography. BNHD wants to contribute to Blue Economy through sustainable use of our marine resources. To be able to contribute better, BNHD is constantly trying to improve her hydrographic capacity. BNHD expects that countries and organizations in this part of the world will co-operate each other to make our water safe for navigation and free from environmental degradation. Besides, BNHD is also ready to share her expertise and experience with other member states for mutual benefit. BNHD is confident to make her hydrographic department resourceful and skilful with your support and co-operation.