



**NATIONAL REPORT OF BANGLADESH**

16<sup>TH</sup> NORTH INDIAN OCEAN HYDROGRAPHIC COMMISSION (NIOHC)  
CONFERENCE

Chittagong, Bangladesh

14-16 March 2016

## **BANGLADESH NATIONAL REPORT TO 16<sup>TH</sup> NIOHC MEETING**

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

1.1 Bangladesh Navy Hydrographic Department (BNHD) is vested with the responsibility of hydrographic surveying of offshore area of Bangladesh and publication of nautical charts and publications for safe navigation at sea. Besides, Bangladesh Inland Water Transport Authority (BIWTA) conduct surveys for inland rivers. The BNHD consists of a fleet of five sea going 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 and exercises functional authority over BNHD.



### **BN Hydrographic & Oceanographic Center in 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 the Naval Staff (Operations) of Bangladesh Navy is the Chairman of the committee.

## 2. Surveys.

2.1. BNHD carries out survey operation with the help of her survey fleet which comprises a 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 different hydrographic equipment for carrying out effective survey operation. Furthermore, among those two ships and one



**BNS ANUSHANDHAN**



**BNS SHAIBAL**



**BNS AGRADOOT**



**BNS TALLASHI**

boat are fitted with multi beam echo sounder (MBES).

2.2. **Coverage of New Surveys.** Presently, new surveys are being carried out in the coastal area for following charts.

Ser	Chart No	Chart Name	Remarks
1.	BN 3001	Chittagong Harbour	To update existing charts
2.	BN 3530	Malancha River to Raimongal River	-do-
3.	BN 7501	Haariabhangra River to Pussur River	-do-
4.	BN 7509	Sandwip Island to Sangu River	-do-
5.	BN 7510	App. to Chittagong	-do-
6.	INT 7426	Approaches to Hiran Point	New Edition

Ser	Chart No	Chart Name	Remarks
7.	INT 7451 (BN 2508)	Plan A – Pussur River-Monkey Point to Jayman Reach Plan B – Pussur River-Jayman Reach to Mongla Port	New Edition
8.	INT 7452 (BN 3004)	Plan A – Pussur River – Tinkona Island to Ghusaingaria Khal Plan B – Pussur River- Ghusaingaria Khal to Monkey Point	New Edition

2.3 **New Technologies or Equipment.** BNHD has included few equipment and software in her inventory in 2015. Among those few mentionable types of equipment are DGPS receivers, geodetic receivers, single beam echo sounder, side scan sonar etc. Besides all the Hypack and CARIS software are updated to the latest version.

2.4. **New Ships.** A contract has been signed to build two inshore catamaran hull hydrographic survey vessels in local shipyards in replacement of old survey craft .The construction work will start soon and the ships will be in service by 2018.

### 2.5 **Problems Encountered.**

2.5.1. Hydrographic surveying in the coastal waters of Bangladesh has always been a challenging task. Due to the water quality, turbidity, strong tidal stream, unexpected rough sea condition during survey season and dense fishing net etc, surveyors need extra time and effort to manage the survey work.

### 3. **New Charts and Updates.**

3.1. **ENCs.** BNHD has developed a trial ENC cell. BN is in the process of capacity building and software acquisition for ENC production.

3.2. **ENC Distribution Method.** Not Applicable (NA).

3.3. **RNCs.** NA.

3.4. **INT Charts** . BNHD previously has published three INT charts (INT 7425, INT 7426 and INT 7428). Recently INT chart scheme has been revised. Comparatively a

larger scale is being considered in the scheme to facilitate the mariners. The complete revised INT chart scheming of Bangladesh has been published in IHO publication S-11 Part B, Edition 3.0.0 , January 2016. All the charts will be published in due course of time The approved list of new 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	Plan A – Pussur River – Monkey Point to Jayman Reach Plan B – Pussur River – Jayman Reach to Mongla Port
7.	Int 7452	Plan A – Pussur River – Tinkona Island to Ghusaingaria Khal Plan B – Pussur River- Ghusaingaria Khal to Monkey Point
8.	Int 7453	Payra Harbour
9.	Int 7454	Approaches to Payra Harbour

3.5 . **National Paper Charts.** A list of published & updated charts during the year 2015 is given below:

Ser	National Chart No	INT No	Title	Remarks
1.	KAJAL 1	-	Gupta Haola to Char Borhan	New Edition
2.	KAJAL 2	-	Char Borhan to Debir Char	New Edition
3.	KAJAL 3	-	Debir Char to Char Chandraprasad	New Edition
4.	KAJAL 4	-	Char Chandraprasad to Amir Ganj	New Edition
5.	KAJAL 5	-	Amirganj to Kaliganj	New Edition
Ser	National Chart No	INT No	Title	Remarks

6.	BN 3530	-	Malancha River to Raimangal River	New Edition
7.	BN 7504	7454	Approaches to Payra Port	New Edition
8.	BN 3002	7453	Payra Harbour	New Edition
9.	BN 3511	-	Sandwip West Channel-Bhasan Char to Sandwip	New Edition
10.	BN 1253	-	Bethbunia to Chalna	New Edition
11.	BN 70001	-	Bangladesh and Adjoining	New Edition
12.	BN 7512	-	St. Martin's Island to Taknaf	Updated
9.	BN 3501	-	Approaches to St Martin's Island	Updated
10.	BN 25002	-	St. Martin's Island to Chittagong	Updated
11.	BN 2501	-	Shahamanat Bridge to Silok Bazar	Updated
12.	BN 7511	-	Matarbari Island to Elephant Point	Updated

4. **New Publications and Updates.** BNHD has published following publications in the year 2015:

Ser	Description	Remarks
1.	BN Tide table 2016 (HP 002)	New

5. **Maritime Safety Information (MSI).** 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. Radio navigational warnings are also transmitted twice daily. Besides, BNHOC, Chittagong and Mongla port authorities issue notices locally.

6. **C-55 (Updated table).** The updated C-55 table is prepared on behalf of Bangladesh and attached to National Report.

7. **Capacity Building.**

7.1. **Training received.** Training received through IHO Capacity Building (CB) and

bilateral agreement with other nations are as follows:

Ser	Course/Training	CBC/Bilateral Agreement	Country	Duration	Participants
1.	Multi beam Surveyor Training	CBC	India	5 days	01 Offr
2.	HM Advanced Survey Course (Cat A)	Bi-lateral Agreement	UK	20 weeks	01 Offr
3	Masters of Hydrography	Bi-lateral Agreement	France	02 years	01 Offr
4	Long Hydrography Course (Cat A)	Bi-lateral Agreement	India	34 weeks	01 Offr
5	Basic Hydrography Course (Cat B)	Bi-lateral Agreement	India	22 Weeks	01 Offr
6	Survey Recorder Advance Course	Bi-lateral Agreement	India	17 weeks	01 PO

#### 7.2. Training Needed.

- a. Cat A Hydrography Course
- b. OJT on MBES
- c. Training on ENC production

7.3. Training Offered. BN conducts Cat-B Hydrographic course in BN Hydrographic School. Till date, 12 foreign officers and 15 students from different maritime organisations of the country participated. Besides, BN Hydrographic School conducted following courses for the sailors. A good number of personnel from other maritime organizations like BIWTA, Chittagong Port, Mongla Port also participated in the courses.

Ser	Name of Course	Duration
1.	Survey Recorder I	28 Weeks
2.	Survey Recorder II	23 Weeks
3.	Survey Recorder III	23 Weeks
4.	BRCC SD, (X), (Hydro)	8 Weeks
5.	Cartography	12 Weeks



#### 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 till 2020.

8. **Celebration of World Hydrographic Day.** Bangladesh continued her effort in celebrating the 'World Hydrographic Day' on 21<sup>st</sup> June 2015. The day was celebrated with proper gesture by calling a seminar which was outlined keeping the theme of the day "Our seas and waterways - yet to be fully charted and explored".



Different maritime stakeholders of country attended the seminar and spoke very high about the contribution of hydrographic services for the national economy. A display was also arranged to acquaint the participants with different hydrographic products and equipment. Many ancient and modern hydrographic equipment were also displayed in the seminar. Participants went through the display with intense curiosity. They could imagine the hardship that the hydrographers go through to make the water safe for the navigators. Both print and electronic media personnel were present in the seminar and gave wide coverage in various TV channels and national dailies.

9. **Conclusion.** Bangladesh recognizes the importance of Hydrography in promoting the regional cooperation as well as the prosperity of the nation. In spite of many constrains, BNHD is relentlessly working to provide updated nautical charts and other related information to the mariners. BNHD is putting her maximum efforts to develop her hydrographic surveying capabilities. Every year BNHD is trying to annex new equipment and technologies. However, BNHD still needs the assistance of friendly nations to develop human resources in this sector.



**BANGLADESH / BANGLADESH**

**Official Representative to IHO (as designated by Member Government)**  
**Représentant officiel à l'OHI (tel que désigné par le Gouvernement Membre)**

<b>DIRECTORATE OF HYDROGRAPHY</b> <b>Operations Branch Naval Headquarters,</b> <b>DHAKA-1213</b>	
<b>Department of which the Hydrographic Office is part - Ministère dont dépend le Service Hydrographique – Ministerio del que depende el Servicio Hidrográfico</b>	Bangladesh Navy, Ministry of Defence
<b>Principal functions of the H.O. - Attributions principales du S.H. - Principales funciones del S.H.</b>	Conduct or supervision of all hydrographic surveys undertaken in the coastal and sea area of Bangladesh, production of nautical charts and advice to Ministries on all hydrographic matters.
<b>National day - Fête nationale – Fiesta</b>	26 March
<b>Telephone :</b> <b>Cell:</b> <b>Fax :</b> <b>E-mail :</b>  <b>WEB Site:</b>	+ 88 02 985 86 20 + 88 02 01769702170 + 88 02 983 62 70, + 88 02 988 56 33 <a href="mailto:dhydro@navy.mil.bd">dhydro@navy.mil.bd</a>  <a href="http://www.navy.mil.bd">http://www.navy.mil.bd</a>
<b>Date of establishment and Relevant National Legislation - Date de fondation et législation nationale concernée – Fecha de establecimiento y Leyes nacionales de referencia</b>	Hydrographic School : 05 May 1983 1 <sup>st</sup> Hydrographic Vessel : 10 November 1983 Hydrographic Directorate : 1986 Bangladesh Navy Hydrographic & Oceanographic Center (BNHOC):15 March 2001 National Hydrographic Committee: 23 September 2001
<b>Name and rank of the Director or Head - Nom et grade du directeur – Apellidos y graduación del Director</b>	Rear Admiral M Makbul Hossain, OSP, BCGM, ndu, psc Chairman, National Hydrographic Committee  Commodore S Mahmudul Hassan, (H), NPP, aowc, psc, BN Director Hydrography, Bangladesh Navy
<b>Tonnage – Tonelaje</b>	902558 tons(2016)
<b>Total Budget - Budget total – Presupuesto Total</b>	
<b>Staff employed - Effectifs - Plantilla</b>	Officers : 60 Sailors (Survey Recorders) 209 Civilian Personnel : 10
<b>N° of charts published - Nombres de cartes publiées - N° de cartas publicadas.</b> <b>N° of INT charts published - Nombres de cartes INT publiées - N° de cartas INT publicadas.</b>	44  03
<b>N° of ENC cells published - Nombres de cellules ENC publiées - N° de células ENC publicadas.</b>	Nil
<b>N° of Raster charts published – Nombres de cartes matricielles publiées – N° de cartas Ráster publicadas.</b>	Nil

<b>Type of publications produced (e.g. Tide Tables, Sailing Directions, List of Lights etc.) - Type de publications produites (par ex: Tables des marées, Instructions nautiques, Livres des Feux, etc. - Tipo de publicaciones producidas (por ej: Tablas de mareas, Derroteros, Libros de Faros</b>	BN Chart Catalogue (HP 001) BN Tide Table (HP 002 )-Yearly BN Chart Maintenance Record (HP 003)		
<b>Surveying vessels/ Aircraft – Batiments hydrographiques/aeronefs – Buques hidrographicos /Aeronaves</b>	<b>Displacement (tons)</b>	<b>Date Launched</b>	<b>Crew</b>
<b>BNS ANUSHANDHAN</b>	1432	2010	151
<b>BNS SHAIBAL</b>	720	1997	70
<b>BNS AGRADOOT</b>	687	2002	70
<b>BNS TALLASHI</b>	83	1983	39
<b>BNS DARSHAK</b>	83	1983	39
<b>JARIP BOAT – 11</b>	10	1996	6
<b>JARIP BOAT - 22</b>	10	1996	6

## IHO C-55: Composite Report by Nation

**IHO C-55: Bangladesh**

**Updated**

**INT Region J**

### Status of Hydrographic Surveys

A1	A2	B1	B2	C1	C2
100	100	5	0	0	0

A1/A2 = % adequately surveyed 0-200m / >200m  
 B1/B2 = % requiring re-survey at larger scale or to modern standards 0-200m / >200m  
 C1/C2 = % which has never been systematically surveyed 0-200m / >200m

**Comment**

Due to the presence of numerous fringing islands and shoals, 100% survey coverage has always been a challenge for BN Hydrographic Department. However the navigational routes are 100% surveyed and being updated periodically. Due to highly unstable seabed, keeping all the charts reasonably updated has become an exigent task. Yet, the charts covering the navigational routes are re-surveyed at reasonable intervals.

### Status of Nautical Charting

A = % covered by INT Charts, B = % covered by RNC, C = % covered by ENC

Offshore passage/Small	Landfall	Coastal passage/Medium	Approaches	Ports/Large	Comment	
A	B	C	A	B	C	
95	95	0	100	100	0	Nil

Percentage of metric paper      Percentage of paper charts on a satellite datum

### Status of Maritime Safety

**Local Warning**

Yes

**Coastal Warning**

Yes

**Port Information**

Yes

A system exists for port and harbour information to be sent to the charting authority.

**NAVAREA Warning**

Yes

via NAVAREA VIII co-coordinator

**Master Plan**

Yes

**Area A1**

Yes

**Area A2**

Yes

**Area A3**

Yes

**NAVTEX**

Yes

Received / sent to India  
(Implementation is in progress by DG shipping & POMMD)

**Safety NET**

No

Separate Graphic Report available?

No