

NATIONAL REPORT OF BANGLADESH

14TH NORTH INDIAN OCEAN HYDROGRAPHIC COMMISSION (NIOHC) CONFERENCE

Bangkok, Thailand 26-28 February 2014

National Report of Bangladesh

1. Hydrographic Office/ Services

- 1.1 Bangladesh Navy Hydrographic Department (BNHD) is one of the leading survey agency in Bangladesh. According to the Rules of Business of the Government, BNHD is responsible to conduct the hydrographic survey activities of coastal and sea area. The northern part of the Bay of Bengal adjacent to the coastal area of Bangladesh has shallower depth considering the southern part with deeper water. There are nearly eight hundred rivers within Bangladesh. The river delivers about 1.3 billion tons of silt a year from the Himalayan region to the Meghan estuary within the Bay of Bengal (BoB). Bangladesh Inland Water and Transport Authority (BIWTA) conduct surveys for inland waterways. The Directorate of Hydrography at the Naval Headquarters controls activities of BNHD. But, Bangladesh Navy Hydrographic and Oceanographic Centre (BNHOC) at Chittagong is the pivotal point for all survey works.
- 1.2. In Bangladesh, all the hydrographic activities of the country are coordinated through National Hydrographic Committee (NHC). NHC addresses the hydrographic and other related maritime activities at the national level. Different ministries and stakeholders are the members of NHC. The Assist Chief of the Naval Staff (Operations) of Bangladesh Navy is the Chairman of the Committee.



BN Hydrographic and Oceanographic Centre at Chittagong

2. Surveys.

2.1. BNHD carries out survey program with the help of her survey fleet which comprises one deep sea Survey vessel names BNS ANUSHANDHAN (Ex HMS

ROEBUCK), two offshore survey vessel namely BNS SHAIBAL (Ex HMS HELFORD), BNS AGRADOOT and two survey Launches. The ships are fitted with different hydrographic equipment for carrying out effective survey operation. Out of all those equipment two ships and one boat are fitted with Multi Beam Echo Sounder (MBES).



BNS ANUSHANDHAN

BNS SHAIBAL



BNS AGRADOOT



BNS TALLASHI

- 2.2. BNHD produces both INT and National series nautical charts covering the whole coast of Bangladesh for safe and uninterrupted navigation. The coast of Bangladesh being deltaic, enormous changes are experienced every year which causes different types of challenges for hydrographic survey operation. As such, BNHD carries out hydrographic survey operation in a chronological order of priorities based on available resources within the survey fleet. The whole survey area is mainly divided into two zones namely eastern zone and western zone. In the year 2013, survey units were deployed to update two in numbers INT and five in number National Series charts. These charts are mainly used for the approaches to sea ports of Chittagong and Mongla.
- 2.3. All the survey units of BNHD are possessing Side Scan Sonar and three ships and boats are fitted with MBES. So, efforts were taken to sweep the harbour approaches and channels by side scan sonar to find out the presence of underwater wrecks/obstructions. Besides, due importance were also given to use of MBES in certain cases. Though BNHD has inducted MBES in 2010-2011, the effective use MBES is yet to be achieved. However, BNHD is in a process to

develop skilled manpower on MBES to meet up the future challenges. As far as technologies and equipment are concerned BNHD has incorporated SBES, Sound Velocity Profiler, Total Station, Electronic Theodolite, Digital Weather Station and software like CARIS HIPS & SIPS, CARIS GIS etc in the year 2013.

3. New Charts and Updates

3.1. BNHD has designed a Chart Catalogue to prepare different scale of nautical charts covering whole coast of Bangladesh. The charts which are enlisted in the catalogue are being published periodically based on short term and long term plan. Besides charts of port approaches are being updated in a regular interval to incorporate recent information for the mariners. According to our existing plan list of published and updated charts during the year 2013 are given below:

Ser	Chart No	Title	Remarks
1.	BN 7505	Kuakata to Dhal Char	Newly published
2.	BN 7509	Sandwip Island to Sangu River	Newly published
3.	BN 3506	Kutubdia Channel & Adjoining Area	Newly published
4.	BN 3522	Approaches to Andarmanick River	Newly published
5.	BN 3525	Approaches to Bhangra River	Newly published
6.	BN 3529	Entrance to Raimongal & Malancha River	Newly published
7.	BN 4010	BN Instructional Chart (St Martin's Island to Teiknaf)	Newly published
8.	BN 7511	Matarbari Island to Elephant Point	Updated
9.	BN 3503	South of Elephant Point- Monakhali to Inani	Updated
10.	BN 3511	Sandwip West Channel- Bhasan Char to Sandwip Island	Updated
11.	BN 3528	Pussur River- Monkey Point to Mongla	Updated
12.	BN 3530	Malancha River to Raimangal River	Updated
12	INT7428	a. Approaches to Chittagong	Updated
13.		b. Chittagong Harbour	Updated
14.	INT 7426	a. Approaches to Hiran Point	Updated
		b. Pavanga Shoal to Jayman Reach	Updated
		c. Tatral Point to Khulna	Updated
		d. Mongla Port	Updated

3.2. Bangladesh Government has recently extended the port limit of Chittagong Seaport to the seaward side. Besides, existing scale of INT 7428 chart does not comply any more with the latest scale criteria mentioned in S-4

for the harbour As approaches. such. new chart scheme for Chittagong port approaches became obligatory. So, splitting of existing INT 7428 into two separate INT charts deemed essential. Newly proposed charts are planned to be numbered as INT 7427 and INT 7428 with new dimensions and scale. other the hand, producing one new INT series chart of scale 1: 1,00,000 off Elephant Point was a long-time desire of merchant mariners. The same kind of request was made by the local mariners during the National Hydrographic Committee meeting in 2013. Based on this requirement, one new chart is proposed as INT 7429 with a title



Proposed INT Series Charts

"Elephant Point to Kutubdia Island" (scale 1: 1,00,000). We request that new proposal be accepted in the meeting.

- 3.3. CPA experienced a 9.60% increase in container handling in 2013. Moreover port handled around 1.54 million TEUs of containers last year. As such, number of merchant vessel calling the CPA is increasing each year which demands safe navigation and reduce the risk of hazards in the BoB.
- 3.4. Regarding the production of ENC and RNC, Bangladesh is still in the preliminary stage of implementation. In this regard human resources for the productions of ENC are yet to be developed. In this regard, we require definite technical and technological assistance from the capable nations. Just to inform that as per the IHO Capacity Building forecast, one week training will be given by CARIS team on "CARIS S-57 (ENC) Composer" in September 2014. On the other hand, it is to be appreciated that only one week training on the issue is not sufficient to be well acquainted with the ENC production system. Based on the assessed weakness on a particular field, if a detail training program can be

arranged then it will be more fruitful. If not, a follow-up program may be arranged after a period of one year or so to see the progress on such training and necessary steps may be taken to develop the department to an expected standard.

4. New Publications and Updates.

BNHD, with its own capabilities have published following publications in the year 2013:

Ser	Description	Remarks
1.	BN Catalogue of Charts and Publications (HP 001)	Updated for 2013
2.	BN Tide table 2013 (HP 002)	Updated for 2013
3.	BN Chart Maintenance Record (HP 003)	New Publication

- 5. <u>Maritime Safety Information (MSI).</u> 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 through different means. Besides, written notice regarding MSI is also issued from Bangladesh Navy, Chittagong and Mongla port authorities to all units belonging to them.
- 6. <u>C-55</u>. An updated copy of C-55 was produced by Bangladesh during last NIOHC meeting held in Yangon Myanmar. But it was found that the composite reports of the publication were not updated since 15 February 2009. However, the latest updated copy of C-55 is prepared on behalf of Bangladesh. This is attached herewith for necessary up-gradation in C-55 from 01 March 2014.
- 7. <u>Capacity Building</u>. In the year 2013, Bangladesh has received one in number Cat-A course in USA under IHO capacity building program. Besides, we have conducted Cat-B Hydrographic course in the BN Hydrographic School, where 13 students from different maritime organisations of the country participated. BN Hydrographic School conducted following courses for the sailors, where number of personnel from other maritime organisation participated:

Ser	Name of Course	Duration
1.	Survey Recorder I (For Petty Officer)	28 Weeks
2.	Survey Recorder II (For Leading Seaman)	23 Weeks
3.	Survey Recorder III (For Able Seaman)	23 Weeks
4.	BRCC SD, (X), (Hydro)	8 Weeks
5.	Cartography (For all ranks)	12 Weeks

8. <u>Celebration of World Hydrography Day</u>. Bangladesh continued her effort in celebrating the 'World Hydrography Day' on 21st June 2013. This year the day was celebrated attaching due importance by arranging a seminar which was outlined keeping the theme of the day "Hydrography-Underpinning the Blue Economy".

Different maritime stakeholders of the 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. Lot of ancient and modern hydrographic



Celebration of World Hydrography Day 2013

equipment was also displayed. Participants went through the display with intense curiosity. They could imagine the hardship that the Hydrographer 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.
- 10. **Recommendations**. Following recommendations are made in respect of Bangladesh:
 - a. Effective capacity building program may be undertaken within the umbrella of NIOHC to enhance the hydrographic capability of Member States according to the individual requirement.

- b. As the holder of the regional hydrographic training centre, India may provide Cat 'A' Hydrographic course and other training facilities to BNHD.
- c. Detail training on ENC production may be arranged by the capable nations.
- d. In depth training on MBES data management and processing may be arranged for BNHD by some experienced hydrographic offices under NIOHC.