

**BANGLADESH**

**NATIONAL HYDROGRAPHIC REPORT  
FOR THE 13<sup>TH</sup> NIOHC MEETING**



**YANGON, MYANMAR  
19-22 FEBRUARY 2013**

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1. **Hydrographic Office.** As per the allocation of business of the government of Bangladesh, Bangladesh Navy (BN) is responsible for all the hydrographic surveying activities at sea. Bangladesh Inland Water and Transport Authority (BIWTA) conducts the hydrographic survey for inland waters. All the hydrographic activities of BN are administrated from the Directorate of Hydrography at Naval Headquarters. Bangladesh Navy Hydrographic Department (BNHD) consists of following units:

- a. BN Hydrographic and Oceanographic Centre (BNHOC) at Chittagong.
- b. Three offshore hydrographic survey ships, two small coastal hydrographic vessels and two survey motor boats.
- c. BN Hydrographic School at Chittagong.

2. **Surveys.**

a. **Coverage of New Surveys.** New surveys are being carried out in the coastal area to update charts INT 7425, INT 7426, INT 7428 and BN 7501, BN 7502, BN 3501, BN 3504, BN 3507, BN 3508, BN 3526, BN 3527, BN 3528, BN 3529 and BN 3530.

b. **Wreck Survey.** BN has successfully carried out wreck survey using the Side Scan Sonar (SSS). The survey was aimed to get the updated picture of foul grounds situated at the outer anchorage area of Chittagong harbor. Many of the wrecks were disproved as per the standard procedure. After this survey, INT 7428 chart was updated vide a notices to mariners. A new edition of the chart will be published in due course of time.

c. **New Technologies or Equipment.** BNHD has included few equipment and software in her inventory in 2012. Among those few mentionable types of equipment are DGPS Reference Station, DGPS Receivers, Geodetic Receivers, Single Beam Echo Sounder, Side Scan Sonar etc. Besides, few HYPACK and CARIS HIP & SIPS software were also added to the inventory during this period.

d. **New Ship.** Nil.

e. **Problems Encountered.**

(1) MBES is a new technology for BN. BNHD has inducted the equipment recently in her inventory. Still, BN could not develop enough skilled manpower to operate the equipment. So, problems are being encountered while operating the equipment and processing the data.

(2) During the wreck survey operation few problems were encountered. The area was heavily infested with fishing nets and other under water hazards. So, many a times towing cable was parted and it was difficult to recover the lost towfish. Again, it was not possible to use the same software for creating planned line, data acquisition, viewing, mosaicing etc. Separate softwares were used for different tasks which were very clumsy and time consuming.

3. **New Charts & Updates:**

a. **ENCs.** The ENC cell of BNHD is not yet fully developed. BN is in the process of capacity building and software acquisition for ENC production. In this regard, BN request the ENC producer nations to provide training on cell production, maintenance and other associated support.

b. **ENC Distribution Method.** Not Applicable.

c. **RNCs.** Nil.

d. **INT Charts.** BNHD has published all the three INT charts (INT 7425, 7426, 7428) for which BN is responsible. However, BN has proposed to change the title and coverage of INT 7425. The matter was discussed several times in different NIOHC forums. During the 12<sup>th</sup> NIOHC meeting held at Colombo; Bangladesh again raised the issue and it was decided to update the S-11 for INT 7425 as per the limits supplied by Bangladesh to the INT chart

coordinator. However, till now the S-11 is not updated. Bangladesh would appreciate that chairman NIOHC would give necessary directive to the INT Chart Co-ordinator regarding the update of S-11.

e. **National Paper Charts.**

(1) **Publication of New Charts.** Following new national paper charts were published in 2012:

Ser	Chart No	Title
1.	BN 7505	Kuakata to Dhal Char
2.	BN 7512	St. Martin's Island to Teknaf
3.	BN 3521	Approaches to Rabnabad Channel
4.	BN 3522	Approaches to Andarmanick River
5.	BN 3525	Approaches to Bhangra River

(2) **Update.** Following charts have been updated during 2012-2013:

Ser	Chart No	Title
1.	BN 3501	St Martin's Island & Adjoining Area.
2.	BN 3505	Approaches to Maishkhali Channel and Adjoining Area
3.	BN 3506	Kutubdia Channel & Adjoining Area
4.	INT 7426	Approaches to Hiran Point

f. **Problems Encountered.** Nil.

4. **New Publications & Updates.**

a. BN Catalogue of Charts and Publications (HP 001)

b. BN Tide table 2012 (HP 002)

c. Problems Encountered. Nil.

5. **Maritime Safety Information (MSI).** In Bangladesh Notices to Mariners are issued by Principal Officer of Mercantile Marine Department (POMMD) regularly. These notices are widely circulated through different means. Written notice regarding MSI is also issued from Chittagong and Mongla port authorities.

6. **C-55.** An amendment copy of C-55 is attached herewith as Annex A.

7. **Capacity Building:**

a. **Training Received, Needed, Offered.**

(1) **Training Received.** Bangladesh received following training workshop under IHO capacity building in 2012-2013:

Ser	Name of the Course/Training Workshop	Organization/Country
1.	Marine Spatial Data Infrastructure (MSDI)	Sri Lanka

(2) **Training Needed.** Bangladesh needs following courses/ training supports:

- (a) Cat A Hydrography course.
- (b) Cat B Cartography course.
- (c) Practical Training on MBES.
- (d) Courses on ENC production.

National Institute of Hydrography (NIH), India is considered as the regional training center for Hydrography. So, India may assist Bangladesh in this regard.

(3) **Training Offered.** BN conducted Cat B Hydrographic course at BN Hydrographic School from 01 Jul 2012. The course had been offered to different Member States of IHO. Five foreign officers attended the course this time.

b. **Status of National, Bilateral, Multilateral or Regional Development.**

BN and UKHO have got a MOU regarding the production and distribution of nautical charts.

c. **IHO Technical Team Visit.**

A two member IHO technical team visited Bangladesh to assess the current status of charting and hydrography in the country from 3-7 November 2012. This visit proposal was raised during the 11<sup>th</sup> NIOHC meeting and subsequently approved by the Capacity Building Sub Committee. In this regard Bangladesh gives special thanks to the Chairman, NIOHC for his timely decision. A report was made by the technical team which is available in the IHO website. The major recommendations of the team are as follows:

- (1) Pass MBES data sets to experienced hydrographic office for appraisal and assessment of operators and system errors.
- (2) Conduct in country MBES data gathering and processing training using BN survey vessel and equipment. Training is to be provided by an experienced hydrographic office.
- (3) Provide at least one continuation training programme approximately one year after initial training by original training team if possible.
- (4) BN to seek the assistance of an experienced hydrographic office to develop a MBES survey data appraisal system at BNHOC.
- (5) Request professional assistance to enhance the tidal analysis and prediction capability.
- (6) Request professional assistance to convert published paper charts to ENC's.
- (7) Develop an effective ENC production and maintenance capability.
- (8) BN to arrange sending of officers for IHO Cat A hydrography and IHO Cat B cartography courses in recognized institutions.

In the report, it has been advised to take necessary assistance from experienced office for different aspects. So, the member states of NIOHC should take careful note and provide necessary assistance to BNHD in this regard.

8. **Conduct of Hydrographic Course.** Last year following courses were conducted in BN hydrographic School:

- a. Cat B Hydrographic Course
- b. Survey Recorder I
- c. Survey Recorder II
- d. Survey Recorder III
- e. BRCC SD, (X), (Hydro)

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, BN is relentlessly working to provide updated nautical charts and other related information to the mariners. BN is putting her maximum efforts to develop her hydrographic surveying capabilities. Every year BN is trying to annex new equipment and technologies. However, BN 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. S-11 may be updated as per the decision of 12<sup>th</sup> NIOHC meeting.
- b. Effective capacity building program may be undertaken within the umbrella of NIOHC to enhance the hydrographic capability of Member States.
- c. India may provide Cat 'A' Hydrographic course and other training facilities to BNHD as the holder of the regional hydrographic training center.
- d. Industries participating the meeting should take note about the problems encountered by BN during the wreck survey; consequently may design their equipment & software as appropriate.
- e. Experienced hydrographic offices of NIOHC should provide necessary assistance to BNHD as recommended by the IHO technical team.



## IHO C-55: Composite Report by Nation

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**IHO C-55: Bangladesh Updated (Proposed 01 March 2013) INT Region J**


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

**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)

**SafetyNET**

No

Separate Graphic Report  
available?

No