

**SIXTEENTH MEETING OF THE CBSC (CBSC16)**  
**30 May - 1 June 2018, Goa, India**  
**EAHC 3-year Capacity Building Work Plan**

**Submitted by:** Republic of Korea as the CB Coordinator of the EAHC.

**Executive Summary:** This document provides a summary report of the EAHC 3-year Capacity Building Work Plan to the CBSC.

1. The EAHC developed a five-year Capacity Building Work Plan during the 2<sup>nd</sup> Training, Research and Development Center (TRDC) Board of Directors (BOD) meeting in 2014 as follows:

Training	2014	2015	2016	2017	2018
	Programme	Programme	Programme	Programme	Programme
<b>Basic</b>	• BASIC (Carto) (a. Indonesia b. Malaysia c. Singapore d. ROK)	• BASIC (Carto) (a. Indonesia b. ROK c. Malaysia d. Philippines e. Singapore f. China) - MS & SC <sup>4)</sup> (Indonesia)	• BASIC (C & H) MS & SC	• BASIC (C & H)	• BASIC (C & H)
<b>Intermediate</b>	CAT B M2 (Carto)	CAT B M2 (Carto)	CAT B (Carto)	CAT B (Carto)	CAT B (Carto)
<b>Advanced</b>	• MBA <sup>1)</sup>  • TWL <sup>2)</sup>  • TFT <sup>3)</sup> Foundation Course	• MSI <sup>5)</sup>  • MSDI  • TFT BASIC (H)  • MIO <sup>6)</sup>	• TWL  • TFT BASIC (H)  • SDB <sup>7)</sup>  • MIO	• TFT BASIC (C&H)  • SDB  • MIO	• MSDI  • TFT BASIC (C&H)
<b>Special</b>	S-100 Seminar	• S-100 Seminar  • Hydro. Survey for disaster relief Seminar  • Tsunami Inundation Mapping Workshop	• S-100 Seminar • Hydro. Survey for disaster relief Seminar • Cartographic Production Database System Workshop • Multi-beam Survey and Seabed Classification	• Hydrographic Database System Workshop  • Enhanced Delivery Method of Hydrographic Data Seminar	• S-101 Seminar
<b>Staff Exchange Programme</b>	Singapore, Hong Kong				
<b>Technical Visits</b>	• Vietnam  • Brunei Darussalam	• Cambodia	• Timor Leste		

MBA<sup>1)</sup>: Technical aspects of maritime boundaries, baselines and extended continental shelf

TWL<sup>2)</sup>: Tides and water level for hydrographic survey

TFT<sup>3)</sup>: Training for Trainers

MS & SC<sup>4)</sup>: Multi-beam Survey & Seabed Classification

MSI<sup>5)</sup>: Maritime Safety Information

MIO<sup>6)</sup>: Marine Information Overlay

SDB<sup>7)</sup>: Satellite Derived Bathymetric Charting

Highlighted: Funded

Highlighted: Funded and to be conducted (2017-2018)

2. The EAHC has tasked the TRDC BOD to plan, implement and monitor CB programmes, and approved the five-year Capacity Building work plan proposed by the TRDC BOD which has a systematic approach for basic and specialized programmes. However due to the limited CB fund, only a small number of programmes were funded by the CBSC/IHO. Therefore a number of the proposed programmes have not been implemented.

3. For the IHO Capacity Building strategy classifies phases of the development of hydrographic and cartographic capability as 3 phases, the EAHC capacity building phase stages are as follows;

Country/Territory	NHC/NHCC	Phase1	Phase2	Phase3	Last TV
1 Brunei Darussalam	0	1	1	1	2014
2 China	1	4	4	4	0
3 Democratic People's Rep. of Korea	-1	-1	-1	-1	0
4 Indonesia	-1	4	4	4	0
5 Japan	2	4	4	4	0
6 Malaysia	2	4	4	4	0
7 Philippines	1	4	4	4	0
8 Republic of Korea	2	4	4	4	0
9 Singapore	-1	4	4	4	0
10 Thailand	-1	4	4	2	2004
11 Cambodia*	0	0	0	0	2016
12 Timor-Leste*	0	0	0	0	2016
13 Viet Nam**	-1	1	1	1	2014

(Source: KHOA)

\* Impending IHO MSs

\*\* IHO MS but impending EAHC MS

**The numerical grid below applies to the Phases**

-1 - No information available

0 - The country is unaware of its national obligations

1 - The country is aware of its national obligations but does not have the means to do it

2 - The country has the ability to fulfil national obligations

3 - The country fulfils its national obligations through a third party

4 - The country fulfils its national obligations in a sustainable manner

4. The EAHC would like to submit a three-year Work Plan 2018-2020 based on 8<sup>th</sup> TRDC-BOD meeting (March. 2018)

Training	2018	2019	2020
	Programme	Programme	Programme
<b>Basic</b>	BASIC (Carto & Hydro)	BASIC (Carto & Hydro)	BASIC (Carto & Hydro)
<b>Intermediate</b>	• Cat B Hydro (1 year course)	• Cat B Cartography (Phase 1) • Management of MSI DB workshop	• Cat B Cartography (Phase 2) • Maritime Safety Information (MSI) Course
<b>Advanced</b>	• Use of GNSS for tide correction for Survey • LIDAR and Satellite Derived Bathymetry Workshop (Subject to IHO CB Funding)	• Risk Assessment for hydrographic surveys and charting management for the Safety of Navigation Workshop • Integration and management of hydrographic data for MSDI	• MSDI/Internet Of Things/Big Data and application to Hydrographic e-services • S-100 course

<b>Special</b>	• Cartographic Production Database System Workshop (Subject to IHO CB funding)	• Technical Visit to Cambodia	• Hydro. Survey for disaster relief Seminar
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5. TFT – Basic Cartography and Hydrography took place from 2013 to 2017. The training was organized and hosted by the Korea Hydrographic and Oceanographic Agency (KHOA) in Busan. Since 2013, 70 participants were involved: this includes 61 trainees and 9 trainers from ten EAHC Member States (MSs), with the support of the IHO CB Fund and sponsorship by the Republic of Korea. In 2019, The EAHC plan to share this TFT programme model, training course syllabi and content with other Hydrographic Commissions based on the contents developed by the EAHC.

6. The EAHC monitors its capacity building activities and sets up plans at TRDC BOD meetings every year. In 2019, the 5-year CB work plan will be updated.

7. EAHC Capacity Building Programmes have **leveled** up the hydrographic capacities and capabilities among MSs, built a network of cooperation and enhanced navigational safety in the region. However, there is still a gap in technology among the EAHC MSs, and it is considered that there is need for continued capacity building support for and technical visits to countries that have not joined the IHO. In addition, EAHC needs to take part in the latest development of S-100 and MSDI and perform its duty to provide marine safety information and respond to marine disasters. For this reason, EAHC will try to cover diverse fields from basic to advanced level through capacity building activities. However considering the limited CB fund, voluntary funding and participation of each MS is expected.

### **Action Required of CBSC**

9. The CBSC is invited to take note of this report.

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