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02 April 2009

Capt Hugo Gorziglia
Chairman IHO CBSC
International Hydrographic Bureau
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Dear *Hugo,*

REQUEST FOR FUNDING OF COURSES FOR THE EAST ASIA HYDROGRAPHIC COMMISSION CAPACITY BUILDING PROGRAMME

On behalf of the EAHC Member States (MS), we are grateful to the IHO CBSC's support and sponsorship of the ENC Quality Assurance and multibeam survey training courses in 2008 and 2009. From the successful conduct of the courses in 2008, we are pleased to report that Philippines would host the two courses in July 2009. As in last year's training, I am sure the training would greatly benefit the trainees and the hosts too.

2 During the 3rd EAHC Coordinating Meeting held in February 2009, all MS emphasised the need to further increase the ENC quality within the region and to extend the region's capacity building scope to cover maritime boundaries and hydrography in relation to the marine environment. As such, the EAHC requests the IHO CBSC to continue supporting the EAHC Capacity Building 2010 Programme by sponsoring these training courses and Technical Visit to MSs.

3 Enclosed is our application for the IHO CBSC's consideration and approval please.

PARRY OEI
CHAIRMAN
EAHC

cc : Vice Admiral Nakorn Tanuwong, Vice Chair (EAHC)
Royal Thai Navy Hydrographic Department.
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PART 2
SUBMISSION MODEL

IDENTIFICATION

Project Number : (to be filled by CBSC)

Project Name:	Capacity Building in the East Asia Hydrographic Commission (EAHC)
Submitting RHC/Country:	Chair of EAHC – Singapore
Date:	02 April 2009
Institution executing the project:	EAHC Chair and Member States
Name of responsible:	Mr Parry Oei, Chairman EAHC
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GENERAL SPECIFICATIONS

(Please provide detailed information in Annex of no more than three pages)

<p>Background information</p>	<p>At the 9th EAHC Conference held in Sep 2006, the Commission recognised the need for professional training to bridge the gap between technological advances and basic qualifications among EAHC Member States (MS). A permanent EAHC CBC was formed to identify the capacity building needs for the region.</p> <p>The Chief Hydrographers of the Commission meets at the regular annual Coordinating Meetings where Capacity Building is always a top priority on the agenda.</p> <p>At the recent 3rd Coordinating Meeting held in Feb 2009 in Sanya, China, MS jointly identified 3 areas of training needs. Subsequently, MS prioritised the areas of training needs and the criteria for the prioritising these needs were based on: importance, priority and implementability.</p>
<p>Justification of the project</p>	<p><u>Training Courses - Prioritisation</u></p> <p>From the prioritisation exercise, the immediate training requirements identified were in the order of:</p> <ol style="list-style-type: none"> a) Marine cartography and ENC production and Quality Assurance (QA) (3 days) b) Technical aspects of maritime boundaries, baselines and the extended continental shelf (5 days) c) Impact of Hydrography to the Ballast Water Convention (2 days) <p><u>Justification</u></p> <ol style="list-style-type: none"> a) Marine cartography and ENC production and QA: <ul style="list-style-type: none"> • With the impending mandatory carriage of ECDIS and more MS producing ENCs, there is a greater need to coordinate the paper chart and ENC content, and synchronise the issuance of new editions and Notice to Mariners, including temporary and preliminary notices. • There is a need to establish procedures to control data flow and carry out systematic updating of the 2 databases. b) Technical aspects of maritime boundaries, baselines and the extended continental shelf:

	<ul style="list-style-type: none"> • Hydrographic Offices of the EAHC are getting more involved in advising their respective governments on the technical aspects of maritime boundaries and baselines. • EAHC MS have expressed need for their officers to have fundamental and common understanding on the technical aspects of maritime boundaries and its application to hydrography. <p>c) Impact of Hydrography to the Ballast Water Convention</p> <ul style="list-style-type: none"> • The EAHC recognizes that the protection of the marine environment through enhancing the safety of navigation is one of the mission statements of the IHO. Hence, MS recognize the need to have better appreciation on the implementation of regulations on the Ballast Water Convention by the IMO. • In preparation for the implementation of the Ballast Water Convention, HOs need to poise themselves to provide Port State Administrations with up-to-date geographic and hydrographic data with environmental data inputs. <p><u>Technical Visits</u></p> <p>The Chair and Vice Chair of the EAHC plans to make 1 technical visit to selected MS to assess, identify and assist in specific capacity building needs.</p> <p>To help promote countries in the region to join the IHO, the Chair and Vice Chair also intends to visit and encourage potential MS within the EAHC region.</p>
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Countries involved	The countries involved are EAHC Members as listed below: <ol style="list-style-type: none"> 1. China 2. Indonesia 3. Japan 4. Democratic People's Republic of Korea 5. Republic of Korea 6. Malaysia 7. Philippines 8. Singapore 9. Thailand
Exposition of the problem	After courses on ENC Production and QA, there is need for a more coordinated approach within the region on harmonisation of ENC coverage, content and updating between the paper chart and ENC databases. This need was highlighted during the QA of the South China Sea ENCs.
General objective	The EAHC agreed in January 2007 that the CBC should achieve its vision of its MS by developing together through regional cooperation by : <ol style="list-style-type: none"> a) Capitalising on existing expertise amongst MS. b) Building expertise where none exist through regional training. c) Working with the IHO CBC and other relevant organisations.
Specific objectives	These short courses are designed to provide MS: <ol style="list-style-type: none"> 1. Addressing important areas in the respective work processes. 2. Providing professional courses to bridge the gap among MS in the basics of hydrography/ cartography and its application to maritime baselines and the marine environment.
Outputs/Products	Training course instructors would be sourced from the MS and subject experts from the region may also be invited to share their experience, except in the course of maritime boundaries delimitation and Ballast Water Convention. Details of the course syllabi appear as Annex 1, 2 and 3.
Other deliverables	To allow MS to network and share and widen their

	knowledge in the respective work processes.
Achievements and awaited benefits	<ul style="list-style-type: none"> a) To raise the quality of the ENC's within the region. b) To create greater awareness of the application of hydrography to the marine environment.
Schedule of activities	<p>The proposed courses to be conducted in 2010 :</p> <ul style="list-style-type: none"> a) Marine cartography and ENC production and Quality Assurance [June 2010] b) Technical aspects of maritime boundaries, baselines and the extended continental shelf [September 2010] c) Impact of Hydrography to the Ballast Water Convention [November 2010]

RESOURCES

Contribution by countries involved	Course Expertise
Contribution by other parties	Course Expertise from other HO's or commercial sector if needed.
Contribution expected from CBCFund	Sponsorship for Training fee and accommodation costs for all the trainees and trainer.
Total Cost (euros)	<ul style="list-style-type: none"> a) Marine cartography and ENC production and Quality Assurance – 8,700 Euros b) Technical aspects of maritime boundaries, baselines and the extended continental shelf – 11,200 Euros c) Impact of Hydrography to the Ballast Water Convention - 5,000/- Euros d) Technical Visit – 2,800/- Euros

Breakdown of costs	<p>a) Marine cartography and ENC production and Quality Assurance (3 days)</p> <ul style="list-style-type: none"> • Accommodation: 2,700 Euros • Course Fees: 6,000 Euros <p>b) Technical aspects of maritime boundaries, baselines and the extended continental shelf (5 days)</p> <ul style="list-style-type: none"> • Accommodation: 4,500 Euros • Course Fee: 6,700 Euros <p>c) Impact of Hydrography to the Ballast Water Convention (2 days)</p> <ul style="list-style-type: none"> • Accommodation: 1,800 Euros • Course Fee: 3,200 Euros <p>d) Technical Visit –</p> <ul style="list-style-type: none"> • Accommodation: 800/- Euros • Flights – 2,000/- Euros <p>Please refer to Annex 3 for more details.</p>
From CBC Fund (item and amount)	IHCBC is requested to support the above 4 EAHC programmes by sponsoring the training fee and accommodation costs.
From other parties (item and amount)	Host MSs would provide administrative support and logistics arrangements.

PROJECT SUMMARY

Sponsor RHC	Year of Execution	Country/ Countries involved	Priority/ Status	Project Name	Project Objective	Benefits	Assistance required	Cost	Allocation and Priority (to be filled by CBSC)	Contact Person
EAHC	2010	EAHC Members		Marine cartography and ENC production and Quality Assurance	Professional training to raise technical competence	To increase the quality of ENCs.	CBC Funds for Training and Accommodation Costs.	8,700 Euros		Mr Parry Oei, Chair(EAHC)
EAHC	2010	EAHC Members		Technical aspects of maritime boundaries, baselines and the extended continental shelf	Professional training to raise technical competence	To increase the competence and common understanding of hydrographers with respect to maritime boundaries delimitation.	CBC Funds for Training and Accommodation Costs.	11,200 Euros		Mr Parry Oei, Chair(EAHC)
EAHC	2010	EAHC Members		Impact of Hydrography to the Ballast Water Convention	Professional training to raise technical competence	To create greater awareness of impact of the marine environment with respect to hydrography. For HOs to prepare for environmental data gathering and its use.	CBC Funds for Training and Accommodation Costs.	5,000 Euros		Mr Parry Oei, Chair(EAHC)
EAHC	2010	EAHC Chair and Vice Chair		Technical Visit to EAHC MS and potential MS	To assess and assist in specific capacity building needs.	To enhance regional cooperation.	CBC Funds for Accommodation and flights only.	2,800 Euros		Mr Parry Oei, Chair(EAHC)

Course Outline - Marine cartography and ENC production and Quality Assurance

	Duration
Planning and Organising the QA Process	
Quality Assurance of ENC Database	1 day
a) Verification : <ul style="list-style-type: none"> i. Cell naming ii. Data set descriptive (meta) records iii. Cross verification with paper charts iv. Digital check v. Logical check using software (e.g. ENC Analyzer) vi. Check edited data b) Harmonisation of objects between cells c) SCAMIN d) Detailed checks on Objects Crucial to Navigation : <ul style="list-style-type: none"> i. Danger to Navigation (e.g. wreck, obstruction) ii) Regulated Area, Harbour Regulation (e.g. TSS, anchorages, fairways) iii. Others (e.g. submarine cables, fishing facilities) e) Corrective Action f) Practicals- Hands-on practice on carrying out QA and corrective actions g) Standardisation and documentation	
Harmonisation of Paper Chart and ENC databases	1 day
a) ENC and Paper coverage and compilation scales b) Comparison of Meta data eg. Zones of Confidence c) ENC and paper chart updating d) T and P notices e) Practicals- Hands-on practice on carrying out QA and corrective actions f) Standardisation and documentation	
Field Verification of ENCs	1 day
ECDIS Sea Trials – verification of ENCs	
Review	
a) Review and conclusion of training course	
Total	3 days

ANNEX 2

Course Outline - Technical aspects of maritime boundaries, baselines and the extended continental shelf

	Duration
UN Law of the Sea Conventions	
<ul style="list-style-type: none"> • Definitions and terminologies. • Use of charts. • Geodetic considerations, chart scales, projections. • Limitations of graphical drawings and publications. • Baselines - the Normal, Straight, bay closing lines, archipelagic straight baselines. 	
<ul style="list-style-type: none"> • Areas of jurisdiction – territorial sea, contiguous zone, exclusive economic zones, continental shelf, high seas. Legal status and freedoms, innocent passage, archipelagic sea lanes, international straits. • Establishing baseline control points – problems of vertical and horizontal datums, low tide elevations, harbour works, offshore installations. • Islands and reefs – treatment and claims. 	
<ul style="list-style-type: none"> • Bi-lateral boundaries – equity, equidistance line between adjacent and opposite states, median lines, partial effect, general direction of coast and bisectors, thalweg concept, prolongation of land boundaries. • Special Circumstances, proportionality. • Delimitation of Continental Shelf and Article 76. – detailed analysis of Article 76 and its application. Process of making claims and the Commission on the Continental Shelf. 	
<ul style="list-style-type: none"> • Arbitration and judgement - the International Court of Justice. • Customary Law, jurisprudence and states practice – apparent trends in the development of the law. 	
<ul style="list-style-type: none"> • Computer software available for maritime delimitation. • Case studies. 	
Review	
Review and conclusion of training course.	
Total	5 days

Course Outline - Hydrography roll for the Ballast Water Exchange Area Designation

	Duration
Introduction to BWMC(Ballast Water Management Convention)	
a) IMO International Convention for the Control and Management of Ships Ballast Water and Sediments (BWMC) <ul style="list-style-type: none"> i. The IMO Convention ii. 14 Guidelines for Uniform Implementation of the BWMC iii. Current Status and Timeframe for the Convention b) Municipal Law in each Governments <ul style="list-style-type: none"> i. Federal and State Regulations in the U.S. ii. Regulatory Frame in the Republic of Korea iii. Current Status in Other Countries iv Authority and Responsibility of the Administration c) Development of Ballast Water Treatment System <ul style="list-style-type: none"> i Technology ii Type Approval 	1 day
Hydrographic Office contributions to the BWM	
a) Correspondence National Strategy of the BWMC b) Development of Ballast Water Management Plan c) Hydrographic consideration on BW Exchange Area Designation <ul style="list-style-type: none"> i. Legal aspects ii. Important resources and protected areas ii Navigational constraints <ul style="list-style-type: none"> - Navigation Route Impacts including the desirability of minimizing delays - Safe Navigation including the Shipping Traffic, adequate aids to navigation and shipping lanes/routeing systems 	1 day
Review	
Review and conclusion of training course.	
Total	2 days

Estimated Accommodation costs for EAHC Training Courses

Course	Cost Per Trainee (Euros)	Number of Trainees	Total (Euros)
a) Marine cartography and ENC production and Quality Assurance			
Accommodation	100 x 3 nights	9	2,700/-
Course Fees- includes return flights, training software and rental of hardware, ½ day practical at sea, training notes, etc.	667	9	6,000/-
Total =			8,700/-
b) Technical aspects of maritime boundaries, baselines and the extended continental shelf			
Accommodation	100 x 5 nights	9	4,500/-
Course Fees- includes return flights, training software and rental of hardware, training notes, lecturer costs, etc.	744.4/-	9	6,700/-
Total =			11,200/-

		Cost Per Officer (Euros)	Number of officers	Total (Euros)
c) Impact of Hydrography to the Ballast Water Convention				
Accommodation		100 x 2 nights	9	1,800
Course Fees- includes return flights, training software and rental of hardware, training notes, lecturer costs, etc.		355.5	9	3,200
Total =				5,000/-
d) Technical Visits to one EAHC MS or potential EAHC MS				
Accommodation	100	4*	1 x 2 days	800/-
Return Flights	500	4*	1	2,000/-
Total =				2,800/-

Note : * 2 officers each from the Chair and Vice Chair Offices.