



IHO File No. S1/3023 & CBSC-1

CIRCULAR LETTER 18/2019  
20 March 2019

**CATEGORY "B" MARINE GEOSPATIAL INFORMATION  
CAPACITY BUILDING PROGRAMME SPONSORED BY THE REPUBLIC OF KOREA  
(29 July - 13 December 2019)**

**CALL FOR APPLICATIONS**

References:

- A. IHO CL38/2011 dated 30 June – *Memorandum of Understanding (MoU) between the Republic of Korea and IHO on Support of the IHO Capacity Building Programme*
- B. 2019 Capacity Building Work Programme (2019 CBWP)

Dear Hydrographer,

1. The Republic of Korea (ROK) supports the IHO Capacity Building (CB) Programme by providing funds under the terms of a Memorandum of Understanding signed in 2011 as indicated in Reference A. In accordance with Reference B (Activity P-02), a Capacity Building training on "Marine Geospatial Information Programme" will be held at the Korea Hydrographic and Oceanographic Agency (KHOA), Busan, ROK, from 29 July to 13 December 2019. Funding provided by the ROK is available for up to seven participants to attend this Programme. The Programme is recognized at the Category "B" level by the International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) in accordance with IHO Publication S-8B - *Standards of Competence for Category "B" Nautical Cartographers*. Further details of the Programme are provided in Annex A.
2. Funding support will cover a return airfare, accommodation, meals and training materials. The funding does not include pocket money for the students or allowances for family members. Medical and life insurance are not covered and should therefore be arranged by the submitting organizations or the selected students.
3. IHO Member States are invited to consider nominating ONE suitable candidate who will benefit from this Programme and will thereby assist the nominating country in developing its hydrographic capabilities. In accordance with the IHO CB Strategy, this Programme is only open to candidates from IHO Member States.
4. It is essential that candidates are employed by a national hydrographic office, a maritime authority or a related national agency in the nominating country. The nomination must include a statement specifying that the candidate is, or will be, involved in the provision of hydrographic services and that, once the training has been successfully completed, the candidate will continue to work in this field.
5. The authority nominating a candidate should select the nominee carefully and ensure that opportunities will be in place for the individual to apply the learning received in a structured manner on their return to their country. This will ensure that the individual and the nominating organization gain maximum benefit from the education opportunity.
6. Nominated candidates MUST meet the following criteria:
  - a. Have a high school diploma plus two years of additional education from a technical college, institute or university. The additional education should be focused on GIS, navigation, geography, mathematics and computer science.

- b. Have a very good standard of English, both written and spoken, with reasonable technical English (Candidates' English skills will be assessed during a telephone or teleconference interview before final selection).
- c. Submit an application that includes their education, work experience and exposure to hydrography and cartography. Evidence of education and a CV should be provided with the submission.
7. Applications should be submitted in accordance with Capacity Building Procedure 7, using the Application Form reproduced in Annex B (a Word file version is available in the IHO website at: [www.iho.int/cb](http://www.iho.int/cb) → CB Procedures → Procedure 7).
8. A Selection Panel, comprising of representatives from the IHO Secretariat and KHOA, will select the candidates for the Programme. The successful candidates and their parent organizations will be informed of the selection by end of May 2019. Successful candidates will be selected individually based on their merits. Once selected, candidates cannot be changed by their national authorities. Selected candidates will receive detailed administrative and logistic information directly from the KHOA Project Leader.
9. Applications should be submitted **no later than 20 May 2019** to the following address:
- IHO Secretariat  
Fax: +377 93 10 81 40  
e-mail: [cl-lc@iho.int](mailto:cl-lc@iho.int) with copy to [pok@iho.int](mailto:pok@iho.int) and [cba@iho.int](mailto:cba@iho.int)
10. Applicants and nominating authorities should carefully consider the short timescale involved between selection and commencement of the Programme. This may impact on the ability of some personnel to obtain the necessary visas and to make all personal domestic and administrative arrangements. Selected candidates will be expected to report to KHOA to commence the training on 29 July 2019.

On behalf of the Secretary-General  
Yours sincerely,



Mustafa IPTES  
Director

Annexes (*in English only*):

- A. Summary of the Marine Geospatial Information Programme  
B. Application Form

**CATEGORY "B" MARINE GEOSPATIAL INFORMATION PROGRAMME**  
**(FIG-IHO-ICA Category "B")**  
**KHOA, Busan, Republic of Korea, 29 July – 13 December 2019**

**SUMMARY OF THE PROGRAMME**

The Programme consists of four Modules and one Specialism.

A certificate recognising the successful completion of a Category B accredited course in nautical cartography will be awarded to the students that successfully complete the programme.

**Module 1** represents the foundation module of the programme. It introduces students to the basics of marine data processing, chart work and cartography, building the foundation for Module 2.

**Module 2 Part A** includes extensive practical exercises, assignments, hands-on instruction and continuous testing of newly acquired skills.

<b>Module 1 - Foundations of Marine Geospatial Information</b>	
Unit 1	Introduction to Charts and ENC's
Unit 2	Chart Compilation Concepts
Unit 3	ENC Data Concepts
Unit 4	Product Maintenance – Ways of Updating
<b>Module 2 Part A - Marine Data Assessment, Compilation and Production</b>	
Unit 1	Chart Design and Planning (Chart Scheming)
Unit 2	Compiling Topography & Coastline
Unit 3	Compiling Bathymetry, including contouring
Unit 4	Compilation of other features
Unit 5	Product Finishing – ENC's and Paper Charts

**Module 2 Part A (revision) and Part B** include extensive practical exercises, assignments, hands-on instruction and continuous testing of newly acquired skills.

<b>Module 2 Part A (revision) and Part B - Marine Data Assessment, Compilation and Production</b>	
Unit 6	Evaluating Bathymetry (Advanced)
Unit 7	Quality Control & Workflow
Unit 8	Complex Compilation
Unit 9	Product Finishing: Raster Charts & Printing

**Module 3** contains the legal and scientific elements of the programme, including geology, oceanography and maritime law.

**Module 4** represents a self-contained course on Marine Spatial Data Infrastructures (MSDI), including the wider uses of hydrographic data with practical assessments to ensure comprehension.

**Specialism 1** (Remote Sensing for Hydrographers) is based on the practical use of satellite and aerial imagery for chart compilation and cartography.

<b>Module 3 - Marine Environment &amp; Context</b>	
Unit 1	Marine Geology
Unit 2	Oceanography
Unit 3	Maritime Law
<b>Module 4 - Marine Spatial Data Infrastructures</b>	
Unit 1	Marine Data Products & Services
Unit 2	Marine Spatial Data Infrastructures
Unit 3	MSDI Applications
Unit 4	Marine Information Objects
<b>Specialism 1 - Remote Sensing for Hydrographers</b>	
Unit 1	Photogrammetry Concepts and Techniques
Unit 2	Remote Sensing
Unit 3	Imagery Interpretation

**CATEGORY "B" MARINE GEOSPATIAL INFORMATION PROGRAMME  
(FIG-IHO-ICA Category "B")**

**KHOA, Busan, Republic of Korea, 29 July – 13 December 2019**



**CB Procedure 7  
APPLICATION FORM**



<b>1. Project characteristics</b> (filled by the IHO Secretariat or project leader)	
Type of project:	Choose the type of your project
Name of the project:	Enter the name of the project
Venue:	Country - City - Department/State/Region if applicable
Period:	From Starting date to Finishing date
<b>2. Personal information</b> (filled by applicant)	
Title:	Choose your title
Family name:	Enter your family name
First name:	Enter your first name
Nationality:	Enter your nationality
Date of birth:	Enter your date of birth
Place of birth:	Enter your place of birth
<b>3. Address direction</b> (filled by applicant)	
Address:	Enter the street number
	Enter the complement
	City – Enter the postal code
	Country
Telephone:	(Country code) phone number
Fax:	(Country code) fax number
e-mail	Enter an e-mail address
<b>4. Present position and description of duties</b> (filled by applicant)	
Describe here your current position in the organization and a short description of your duties (maximum 5 lines)	
<b>5. Experience in Hydrography and Cartography</b> (filled by applicant)	
Describe here your past experience in Hydrography and Cartography, with emphasis in the ones related to the project (maximum 7 lines)	
<b>6. Candidate's future plans for application of the training/participation</b> (filled by applicant)	
Describe here your future plans for application of the training or participation in technical events (maximum 5 lines)	
<b>7. Date and signature of the applicant</b>	

Attachment: Candidate's Curriculum Vitae (if requested in the call for nomination)

**STATEMENT BY THE NATIONAL HYDROGRAPHER**  
**Or**  
**APPROPRIATE NATIONAL AUTHORITY**

The **Hydrographer** (Type here if not the Hydrographer) of (type here the name of the country) requests the IHO to consider this Application Form and confirms that he/she is fully aware of the following conditions which apply to this application:

1. The candidate (if selected) once the training has been successfully completed, he/she will continue to work in the field of the training received.
2. The IHO Capacity Building Fund will support the items so agreed and indicated in the relevant Circular Letter or Invitation Letter.
3. Insurances, visa and any other expenses are not covered by the IHO Capacity Building Fund. They are the responsibility of the institution submitting the application.
4. Should a selected candidate not be able to participate in the course for any reason he/she will be replaced by a candidate from the waiting list and **NOT** by an applicant from the same country.
5. Passport and Visa are the responsibility of the applicant or the applicant's administration.
6. Where the IHO Secretariat is informed less than 1 month before the start of the course that a selected candidate is unable to participate in the course, his/her sponsoring institution will be required to refund the IHO Capacity Building Fund any expenses already incurred by the IHO.

Date: Signature date	Name: National Hydrographer/authority name
Signature:	

The Application Form should reach the IHO Secretariat **no later than 20/05/2019** and should be addressed to:

**IHO Secretariat**  
**Fax: +377 93 10 81 40 or**  
**e-mail: [cl-lc@iho.int](mailto:cl-lc@iho.int) with copy to [pok@iho.int](mailto:pok@iho.int) and [cba@iho.int](mailto:cba@iho.int)**