



IHO File No. S1/3023 & CBSC-1

CIRCULAR LETTER 15/2022
13 April 2022

CATEGORY "B" HYDROGRAPHIC SURVEY PROGRAMME
SPONSORED BY THE REPUBLIC OF KOREA
(25 July 2022 - 9 December 2022)

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. 2022 Capacity Building Work Programme (2022 CBWP)

Dear Hydrographer,

1. The Republic of Korea (ROK) supports the IHO Capacity Building (CB) Programme by providing funds under the terms of the MoU signed in 2011 (Reference A). In accordance with Reference B, activity P-02, the ROK Category "B" Hydrographic Survey Programme will be held at the Korea Hydrographic and Oceanographic Agency (KHOA), Busan, ROK, from 25 July to 9 December 2022. The ROK has provided funding for up to 10 participants to attend this course. The Hydrographic Survey 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-5B - *Standards of Competence for Category "B" Hydrographic Surveyors*. 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 nominating authorities 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 available 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 responsible for hydrography in the nominating country. The nomination must include a statement by the nominating authority (Annex B) 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 carefully select the nominee and ensure that opportunities will be in place for the candidate to utilize and transfer the knowledge gained

through the programme in a structured manner for the benefit of his or her parent organization. This will ensure that the individual and the nominating organization gain maximum benefit.

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, geography, mathematics and computer science.
- b. Have a very good standard of English, both written and spoken, with reasonable technical English (Candidates' English skills can be assessed if necessary).
- c. Submit an application that includes their education, work experience and exposure to hydrography and cartography. A CV (in English) and evidence of education should be provided with the submission.

7. Applications should be prepared in accordance with Capacity Building Procedure 7. This procedure is available on the IHO website at: www.iho.int → Inter-Regional Coordination → Inter-Regional Coordination Committee → CBSC → Miscellaneous → 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 17 June 2022. Successful candidates will be selected individually based on their merits. Once selected, candidates cannot be changed by their national authorities.

9. 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.

10. Applications should be submitted no later than 3 June 2022 by e-mail (cl-ic@iho.int with copy to adcc@iho.int, cba@iho.int, pok@iho.int and infokhoa@korea.kr) or Fax (+ 377 93 10 81 40) using the Annex C template, but preferably using the IHO Online Form System by accessing the following link: https://IHO.formstack.com/forms/cl15_22

On behalf of the Secretary-General
Yours sincerely,



Luigi SINAPI
IHO Director

Annexes (in English only):

- A. Summary of the Hydrographic Survey Programme
- B. Statement by the National Hydrographer
- C. Application Form

CATEGORY "B" HYDROGRAPHIC SURVEY PROGRAMME
(FIG/IHO/ICA recognized Category B)
KHOA, Busan, ROK, 25 July - 9 December 2022

SUMMARY OF THE COURSE PROGRAMME

- Programme: **Hydrographic Survey Programme**
- Level of Recognition: **Category "B"**
- Duration: **20 weeks**

The programme consists of 15 modules for 16 weeks and a final project lasting 4 weeks
 (A total of 20 weeks with Theory: 5 weeks; Practical components: 14 weeks; Self-Guided study: 1 week)

15 Modules (16 weeks)

- Three introductory modules: Introductory modules deliver overview and demonstration to motivate students and give perspective.

Module	Duration	Description
INTRO1	2 days	Introduction to Hydrography
INTRO2	5 days	Introduction to Data Collection and
COMPUT	10 days	Computation Tools

- Eight modules on theory and guided practice covering the scientific content along with practical work.

Module	Duration	Description
NAUTIC	10 days	Nautical Science
ENVIRO	6 days	Earth and Environmental Sciences
POSIT1	6 days	Horizontal and Vertical Positioning
WATLEV	5 days	Water Levels
REMSEN	3 days	Remote Sensing
BATHY1	3 days	Bathymetry (SBES, SSS)
BATHY2	3 days	Bathymetry (MBES)
LAWSEA	1 day	Law of the Sea, Liability

- Four modules on practical work: To reinforce autonomy and theory.

Module	Duration	Description
POSIT2	5 days	Land Survey Practice
QAQC00	5 days	QA/QC
HYDROP	6 days	Hydrographic Practice
HYDROM	10 days	Hydrographic Data Management

Final Project (4 weeks)

- The final project covers planning and preparing for a small survey, data acquisition, processing and deliverables.

Task	Duration	Description
Planning	16 hours	<ul style="list-style-type: none"> • Design a survey plan • Identify challenges for the survey
Preparation	36 hours	<ul style="list-style-type: none"> • Set-up survey instrument ground support and onboard • Perform and report on survey offsets, calibration and health checks
Acquisition	26 hours	<ul style="list-style-type: none"> • Deploy and operate MBES, SBES and SSS • Apply QA procedures Report on survey operations
Processing	46 hours	<ul style="list-style-type: none"> • Format and configure collected data • Apply reductions Perform data cleaning • Assess data quality and analyze the results of the survey
Deliverables	12 hours	<ul style="list-style-type: none"> • Compile survey data for delivery • Create survey products
Reports	24 hours	<ul style="list-style-type: none"> • Report of survey • Oral presentation of survey conduct and results

The table below shows how the modules fit in the overall scheme.

Week	1			2			3			4				
Module	INTRO1			INTRO2			COMPUT			NAUTIC				
Practice	Demo and hand on MBES deployment			Computer programming										
Assess.	Participation			Practical exercises						Questionnaire & Practical exercises				
Week	5			6			7			8				
Module	NAUTIC			ENVIRO			POSIT1			POSIT2				
Practice	Plan Route	H&S	Boatmanship	Meteo	Oceano.	Marine geology	Comp. tools	GNSS soft.	GIS soft.			Land survey practice		
Assess.	Questionnaire & Practical exercises			Written Exam	Practice exercises			Practice exercises			Written Exam	Practice exercises		
Week	9			10			11			12				
Module	POSIT2			WATLEV			REMSEN			BATHY1			BATHY2	QAQC00
Practice	Land survey practice			Comp. tools	TG Deploy	LIDAR Proc.	GIS Tools.	SBES proc.	SSS deploy		MBES proc	Error TPU calc.		
Assess.	Practice exercises			Practice exercises			Written Exam	Practice exercises	Written Exam	Practice exercises	Written Exam	Practice exercises		
Week	13			14			15			16				
Module	LAWSEA			HYDROP			HYDROM							
Practice	Case studies	QC MBES		Survey planning, deployment, acquisition, processing			Data acquisition and Control				Data Processing and Analysis	Data Managt, Product creation		
Assess.		Written Exam	Written Exam	Practice Exercises			Practice exercises			Practice exercises				
Week	17			18			19			20				
Module	Comprehensive Final Field Project													
Practice	Planning	Preparation			Acquisition			Processing			Deliverables	Reports		
Assess.	Participation and Report	Participation and mobilization report			Participation, logs and reports			Quality of processed data			Quality of products	Report of survey and presentation		

**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:	



<p>CB Procedure 7</p> <p>APPLICATION FORM</p>



IHO CAPACITY BUILDING PROJECT CANDIDATE APPLICATION FORM

1. Project characteristics (filled by the IHO Secretariat or project leader) 2022 CBWP (Activity P-02)	
Type of project:	Course
Name of the project:	Category "B" Hydrographic Survey Programme
Venue:	Republic of Korea - Busan - KHOA
Period:	From 25/07/2022 to 09/12/2022
2. Personal information (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
3. Address direction (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
4. Present position and description of duties (filled by applicant)	
Describe here your current position in the organization and a short description of your duties (maximum 5 lines)	
5. Experience in Hydrography and Cartography (filled by applicant)	
Describe here your past experience in Hydrography and Cartography, with emphasis in the ones related to the project (maximum 7 lines)	
6. Candidate's future plans for application of the training/participation (filled by applicant)	
Describe here your future plans for application of the training or participation in technical events (maximum 5 lines)	
7. Date and signature of the applicant	

Attachment: Candidate's Curriculum Vitae