



CIRCULAR LETTER 22/2018
05 March 2018

IHO File No. S1/3023 & CBSC-1

**HYDROGRAPHIC SURVEY PROGRAMME
(FIG-IHO-ICA Category B)
SPONSORED BY THE REPUBLIC OF KOREA**

KHOA, Busan, ROK, 16 July – 30 November 2018

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. 2018 Capacity Building Work Programme (2018 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 new Capacity Building training on "Hydrographic Survey Programme" will be held at the Korea Hydrographic and Oceanographic Agency (KHOA), Busan, ROK, from 16 July to 30 November 2018. Funding provided by the ROK is available for up to seven 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 course 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 trainees 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 new Category "B" level hydrographic course and will thereby assist the nominating country in developing its hydrographic capabilities. In accordance with the IHO CB Strategy, this course 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 the maximum benefit from the training 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 physics, statistics, mathematics, information and communication technology.

- 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.
7. Applications should be provided in accordance with CB Procedure 7, using the Application Form reproduced in Annex B (a Word file version is available in the IHO website at: www.iho.int → Capacity Building → CB Procedures → Procedure 7).
8. A Selection Panel, comprising representatives from the IHO Secretariat and KHOA will select the candidates for the course. The successful candidates and their parent organizations will be informed of the selection by mid-May 2018. 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 logistic information directly from the KHOA Project Leader.
9. Applications should be submitted no later than **11 May 2018** to the following address:

IHO Secretariat
Fax: +377 93 10 81 40
e-mail: cl-lc@iho.int with copy to pok@iho.int and cba@iho.int

10. Applicants and nominating authorities should carefully consider the short timescale involved between selection and commencement of the course. 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 15 July 2018.

On behalf of the Secretary-General
Yours sincerely,



Mustafa IPTES
Director

Annexes (*in English only*):

- A. Summary of the Hydrographic Survey Programme
- B. Application Form

CATEGORY "B" HYDROGRAPHIC SURVEY PROGRAMME
(FIG-IHO-ICA Category B)
KHOA, Busan, ROK, 16 July – 30 November 2018

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 Processing
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	Design a survey plan Identify challenges for the survey
Preparation	36 hours	Set-up survey instrument ground support and onboard Perform and report on survey offsets, calibration and health checks
Acquisition	26 hours	Deploy and operate MBES, SBES and SSS Apply QA procedures Report on survey operations
Processing	46 hours	Format and configure collected data Apply reductions Perform data cleaning Assess data quality and analyze the results of the survey
Deliverables	12 hours	Compile survey data for delivery Create survey products
Reports	24 hours	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	GIS soft.	GNSS 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				

**CATEGORY "B" HYDROGRAPHIC SURVEY PROGRAMME
(FIG-IHO-ICA Category "B")
KHOA, Busan, ROK, 16 July – 30 November 2018**

To reach the IHO Secretariat no later than **11 May 2018**

Send to:
IHO Secretariat
Fax: +377 93 10 81 40
E-mail: cl-ic@iho.int with copy to pok@iho.int and cba@iho.int

APPLICATION FORM

*(Information here must be written in English by the Candidates themselves.
The course will be conducted in English.)*

1. Personal Information

Title Mr / Ms
Family Name
Given Name
Nationality
Date of Birth (dd/mm/yyyy).....
Place of Birth

2. Contact Information

Mailing Address.....
Telephone (office).....
Telephone (home).....
Mobile phone.....
Fax
E-mail

Note: Reliable phone numbers, fax numbers and e-mail addresses are MANDATORY and VITAL for further communications and interview, if necessary.

3. Brief description of candidate’s written and spoken ability in English language together with supporting evidence/certificate.

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4. Candidate’s current position of employment.

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5. Description of duties of candidate’s current position of employment.

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6. Description of candidate's past experience in hydrography and cartography before the current position of employment.

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7. Current issues confronting the candidate and his/her organization.

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8. How, in practice, the candidate could apply what is learnt during the training course to solve the above-mentioned issues.

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9. Candidate's short-term (within 5 years) career plan in hydrographic surveying, including expected position or role upon completion of the training course.

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10. Candidate's long-term vision of his/her future career path (no more than 200 words)

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11. How will the candidate contribute and benefit as part of the alumni network after course completion

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Candidate's signature:

STATEMENT

The Hydrographer (or appropriate authority) of endorses this application and accepts the conditions that apply.

Date: _____

Signature: _____

Name: _____

Title/Position: _____

Information about the candidate:

1. What makes the candidate suitable for the course?

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2. What are the expected employment position and responsibilities of the candidate immediately upon completion of the course?

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Attachment: Curriculum Vitae of Candidate (mandatory, photo included).