



IHO File N° S3/4505-S1/3022

**CIRCULAR LETTER 09/2020 Rev1**  
**07 February 2020**

**Call for Applications to the IHO - Nippon Foundation  
Geospatial Marine Analysis and Cartography (GEOMAC) Project, UKHO, Taunton, UK  
1 September to 18 December 2020**

References:

- A. IHO CL 10/2014 dated 24 January - *Signing of the Memorandum of Understanding between the International Hydrographic Organization and the Nippon Foundation.*
- B. CBSC17-08.4 - *A quantitative analysis of a capacity building activity, the IHO-Nippon Foundation CHART project.*

Dear Hydrographer,

1. The previous three-year cycle of the “Cartography, Hydrography and Related Training” (CHART) Project was successfully completed in December 2019, based on a Memorandum of Understanding (MoU) between the IHO and the Nippon Foundation (NF) (Reference A). The course is recognized at the Category “B” level by the FIG-IHO-ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) and has attracted many nautical cartographers. The alumni have shown their significant progress which has been quantitatively confirmed in the world charting coverage (Reference B).

2. This eleven-year successful programme, kindly funded by the Nippon Foundation of Japan, has been warmly welcomed by the IHO Member States and there has been a consistent demand for the course as average applications per seat have been more than fourfold. Fast technology development may drastically change the role of nautical cartographers in the near future and the realm of nautical cartographers are changing in Hydrographic Offices (HOs) in alignment with the big wave of automation. Necessary competences, skills and knowledge will continually change while Hydrographic Offices move towards data centric environments. This prospective scenario has led the IHO Secretariat and the NF to consider progressing the existing CHART project into a more advanced education project focusing on leading-edge technologies while keeping a Category “B” recognized programme as the core of the project.

3. A coordination meeting comprising representatives from the Japan Hydrographic and Oceanographic Department (JHOD), the United Kingdom Hydrographic Office (UKHO) and the IHO Secretariat was held in Taunton, UK on 9 January 2020 to review the previous course and the recent IHO-NF Alumni Seminar held in Singapore in October 2019. Details of the future training possibilities were also considered. The evolved course has been named “Geospatial Marine Analysis and Cartography” (GEOMAC), which will be implemented by the UKHO and other contributing partners. Prior to the course, a distance learning module will be tasked to the candidates as well as a one-year license for online education material to complement their nautical cartography modules. The course will consist of eight modules including Category “B” programme, seabed data management supported by Artificial Intelligence, and Marine Spatial Data Infrastructure (MSDI) (Annex A).

4. The IHO Secretariat has already submitted a proposal to the Nippon Foundation to continue the IHO-NF GEOMAC Project for another three years. The new cycle is expected to begin in 2020, subject to approval and funding by the Nippon Foundation.

5. Subject to the agreement of the Nippon Foundation to continue supporting the GEOMAC Project, the next course in Geospatial Marine Analysis and Cartography will take place at the UKHO from 1 September to 18 December 2020. (The scheduled dates may be subject to slight change due to logistic reasons) Financial support from the NF is expected for up to seven trainees. The support will cover course fees, travel to and from the respective countries, accommodation and a reasonable living allowance. Accommodation that will be provided for students will be at the sole discretion of the GEOMAC Project and cannot be changed for any reason.

6. Member States are invited to consider nominating **ONE suitable candidate** for the training. In accordance with the IHO CB Strategy, this course is only open to candidates from IHO Member States. The GEOMAC course is aimed at individuals at the start or early in their cartographic careers. Applicants should therefore make specific reference to how their learning will be embedded into their career plan to allow for consideration. The national authority nominating a candidate should ensure that appropriate opportunities will be in place for the individual to apply the knowledge on their return for the maximum benefit.

7. It is essential that candidates are employed by a hydrographic office, a port authority or a related national agency of the nominating country. The nomination must include a statement specifying that the candidate is, or will be, involved in the production and maintenance of nautical charts and, even after the training, will continue to work in this field. A template for this statement is available in Annex B and must be signed by the authority and a digital copy submitted via the IHO Online Form System, as detailed in paragraph 10.

8. Nominated candidates **MUST** meet the following criteria:

- A very good standard of English, both written and spoken, with reasonable technical English. (*Candidates' level of English will be checked and confirmed by a telephone or teleconference interview before final selection*).
- A high standard in mathematics and geography.
- A background in cartography, hydrographic surveying, geospatial sciences or related areas.
- Individual commitment for international cooperative activities such as Seabed 2030.

9. A Selection Panel, comprising of representatives from the IHO Secretariat and the Nippon Foundation, in consultation with the UKHO and JHOD, will select the candidates for the next course. The successful candidates and their parent organizations will be informed of their selection **by mid May 2020**. Once selected, candidates cannot be changed and selected candidates will receive detailed logistic information from the UKHO.

10. The application should be submitted via the IHO Online Form System, including the signed Application Signature Form (Annex C) and the signed nomination statement (see paragraph 7), **no later than 30 April 2020**. If Member States have technical difficulty to use the IHO Online Form System, please contact the IHO Secretariat individually. The IHO Online Form System can be accessed in the following address:

[https://IHO.formstack.com/forms/web\\_form\\_cl\\_09\\_2020](https://IHO.formstack.com/forms/web_form_cl_09_2020)

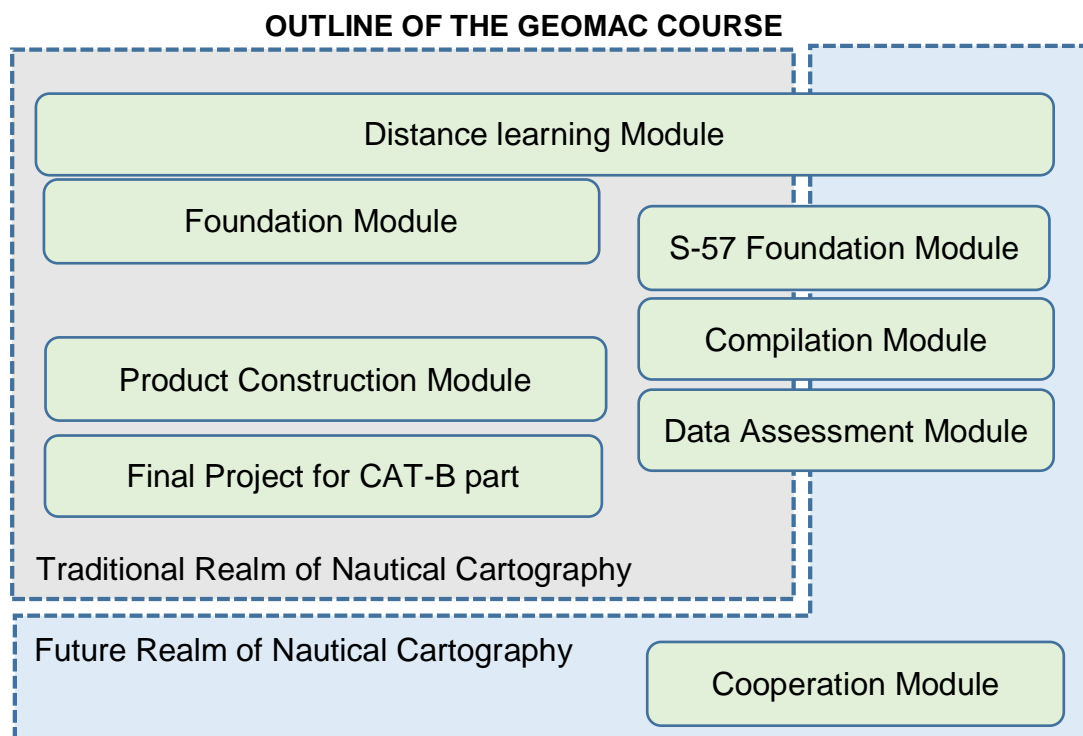
On behalf of the Secretary-General  
Yours sincerely,



Mustafa IPTES  
Director

Annexes (in English only):

- A. Summary of Course Programme
- B. Statement by the National Authority
- C. Application Signature Form



- **Distance learning Module**
  - 1 week for UKHO course. A textbook (paper/ digital) is sent to students 6 weeks prior to cover the basic elements. Exercise Book is also used for marking ahead of the course.
  - 1 year license for further E-learning material on IOC-Ocean Teacher and Udemy (to be verified by IHO in the selection process.)
- **Foundation Module** –3 weeks in 2020.
  - Cartographic basics covering the underlying details of nautical cartography.
- **S-57 Foundation Module** –2 weeks in 2020.
  - Understanding the IHO S-57 Transfer Standard as well as practical aspects of S-57 Composer software and appropriate data management regarding geospatial database.
- **Compilation Module** – 3 weeks in 2020.
  - Practical module regarding compilation into a geospatial database (bathymetry element, coastline, scheduling, field exercise, meta-data) in compliance with IHO S-57, S-58 using CARIS software.
- **Product Construction Module** – 3 weeks in 2020.
  - Production of an ENC / Paper Chart (from data capturing to quality assurance and publication process)
  - Introduction of the future standard such as S-100.
- **Data Assessment Module** – 3 weeks in 2020.
  - Decision making and processing of new information using software and traditional checking processes to fulfill the responsibility of Hydrographic Offices. (Notice to Mariners, New Edition, maintenance)
- **Final Project (for CAT-B part)** –3 days in 2020.
  - Overall exercise by students including course review, evaluations and lessons learned sessions.

- **Cooperation Module** – 1 week (from 2020)
  - Integrated data management for Maritime Spatial Data Infrastructure (MSDI) for the better ocean governance for 3 days in Taunton, UK.
  - Topographic data management in wider perspective with the insight of the Artificial Intelligence (AI) for 4 days in National Oceanographic Centre (NOC), Southampton, UK.

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Category "B" Programme), UKHO, Taunton, UK, 1 September to 18 December 2020

STATEMENT BY THE NATIONAL AUTHORITY

- 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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- 3. How many years the candidate is expected to serve as Cartographer?  
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In addition, it is my commitment to make the candidate actively participate in certain international cooperative projects such as Seabed2030 after finishing of the course as much as possible.

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

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Note: A signed copy of this document is to be submitted in response to IHO CL 09/2020 Rev 1.

**IHO - Nippon Foundation  
Geospatial Marine Analysis and Cartography (GEOMAC) Project (including a FIG-IHO-ICA  
Category "B" Programme), UKHO, Taunton, UK, 1 September to 18 December 2020**

To reach the IHO Secretariat no later than **30 April 2020**

via the IHO Online Form System  
<[https://iho.formstack.com/forms/web\\_form\\_cl\\_09\\_2020](https://iho.formstack.com/forms/web_form_cl_09_2020)>

**APPLICATION SIGNATURE FORM**

To answer the following questions, please use the IHO Online form mentioned above. This page is intended to be scanned and to be uploaded into the Online form with the handwritten signature of the candidate.

I hereby declare that the following information which I have given in the IHO Online Form System is true and correct to the best of my knowledge and belief. In case any information given in this application proves to be false or incorrect, I shall be responsible for the consequences.

In addition, it is my commitment to actively participate in certain international cooperative projects such as Seabed2030 as much as possible in my circumstance with utilizing skill and knowledge beyond the Hydrographic Office.

1. Personal Information
2. Contact Information (Office address, telephone and mobile phone numbers are mandatory)
3. Written and spoken ability in English language
4. Candidate's current position
5. Description of duties of candidate's current position
6. Description of candidate's past experience
7. Current issues
8. How, in practice, the candidate could apply.
9. The e-learning material
10. Candidate's short-term (within 5 years) career plan
11. Candidate's long-term vision
12. How will the candidate contribute and benefit as part of the alumni network

Date:

Candidate's Name:

Candidate's signature:

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