

**21st MEETING OF THE CAPACITY BUILDING SUB-COMMITTEE
(CBSC21)
7 - 9 June 2023, Tokyo, Japan**

IHO e-Learning Center

Submitted by:	CB e-Learning Project Team (PT Chair)
Executive Summary:	This document provides a report of the PT activities and the progress of IHO e-Learning Center
Related Documents:	Implementation Plan for e-Learning Center
Related Projects:	IHO e-Learning Center Project

1. Introduction / Background

The Assembly (A-2) endorsed the activities to install an IHO e-Learning Center based on Pro 3.3 and the related recommendations of the IRCC/CBSC.

Outcomes of the Meeting of the IHO Council and the Strategic Issues of the CBSC:

- a) Recognizes the importance and very high potential of distant learning or e-learning for the improvement and extension of Capacity Building activities in hydrography,
- b) Specifies e-learning in this proposal as all forms of learning, where electronic or digital media are being used for presentation and distribution of learning material and/or to support communication in learning,
- c) Is aware that the CoVID-19 pandemic and its consequences puts much more pressure on the development of e-learning means,
- d) Sees that e-learning development is extremely limited with the current capabilities of the IHO CB Fund,
- e) Therefore, welcomes the initiative and generous offer from Republic of Korea to establish and support an IHO e-Learning Center, to provide the infrastructure and to cooperate with IHO, its Member States and industry, and
- f) Suggests to further develop the structure and framework of an IHO e-Learning Center together with ROK and IBSC by setting up a Project Team.

Then, CBSC-18 established the Project Team.

Nowadays, this Team has 19 representatives from IBSC, IC-ENC, Brazil, Canada, Denmark, France, Greece, IHO (Secretariat), Portugal, ROK, Turkey, South Africa, United Kingdom, and USA.

The Council reported to Assembly (A-3) that with significant support from the Korea Hydrographic and Oceanographic Agency (KHOA) the IHO e-learning Center has been established and KHOA has stood up and hosts an e-learning portal.

2. Major strategies

- Open Platform: Co-Uses MSs' e-Learning contents and allow participation of industry;
- Efficiency: Expand CB activities and reduce time and cost;
- Adaptability: Active response to fast changing hydrographic technology; and
- Expandability: Develop various e-Learning contents and service them in English, Spanish, and France languages.

3. List of Representatives

The Project Team of IHO e-Learning Center started Its work after CBSC-18 with ten (10) representatives. In March 2021, during the 2nd Meeting, the PT grew by receiving 5 new members and replacing two (2). After 3rd Meeting, increasing the efforts five (5) new members joined to PT, replacing one. Nowadays, the PT has nineteen (19) representatives:

- Aeri Yu (EAHC - KHOA)
- Christoff Theunissen (SAHO – South Africa)
- Christopher Janus (US-NGA and WNWWS-SC – USA)
- Emre Gulher (MBSHC - Turkey)
- Gordon Johnston (IBSC - UK)
- Helber Carvalho (SWAtHC – Brazil - Chair)
- Jens P. Hartmann (MSDIWG - Denmark)
- Jeremy Kitchker (UKHO)
- Julien Smeeckaert (EAtHC – SHOM - France)
- Leonel P. Manteigas (IHO)
- Lucy Fieldhouse (UKHO)
- Lysandros Tsoulos (IBSC - Greece)
- Mina Foroutan from the CHS – Canada – Vice-Chair)
- Nickolás de A. Roscher (IBSC - Brazil)
- Peter You (EAHC - KHOA)
- Ronan Le Roy (France)
- Videira Marques (IH - Portugal)
- Thomas Richardson (IC-ENC)
- Ruth White (IC-ENC)

4. Activities concluded since CBSC20 to date

4.1 - 2022:

4.1.1 – Report to CBSC20Int the activities achieved and the progress.

4.1.2 – Draft Guidelines in progress

4.1.3 – The website and domain were created.

4.1.4 – Running tests with 4 courses:

- Fundamentals of Hydrographic Survey
- Fundamentals of chart production
- 2 cases of MSDI fundamentals

4.1.5 – Report to CBSC20.

4.1.6 – Defined the composition of Center Steering Committee – SC and roles (Decision from 8th Meeting - 4-5 October 2022)

To be composed by 10 people:

- IHO Director (1),
- CBSC Chair or Vice-Chair (1),
- Member of IBSC (1),
- Secretary (1), and

- 6 other Members; and

The Secretary should be a member of the SC and shall be appointed by the CBSC.

The scope of work of the SC is as follows:

- Approving the results of the education plan and operation.
- Matters concerning cooperation on e-learning.
- Matters concerning the appointment of the structure of governance and the expansion and running of human resources required by the e-Learning Center.

4.1.7 – Defined the composition of Center Support Team (CST) and roles (Decision from 8th Meeting - 4-5 October 2022)

To be composed by one General Manager and one System Manager.

The duties of the staff (CST) of the e-Learning Center are as follows:

The General Manager:

- Manage its overall operation.
- Present to SC and CBSC the main issues regarding e-Learning Center and a work plan to be approved.
- Operate management of curriculum, content and trainee.
- Report regularly on the establishment of the LMS and material, and cooperation between the IHO and Member States relating to the e-Learning Center to the Steering Committee.
- Operate overall e-learning material, such as analysis of the e-learning material requirements, operational test, instructional design, review and development of contents, and operation and management of the e-learning material and its contents.
- Review the processes of creating, updating, assessing, and discontinuing e-learning material.
- Endeavor to ensure that feedback is sought and received between instructors and students throughout the course.

The System Manager:

- Manage the hardware and software, ensure the security and network of the website and LMS of the e-Learning Center, monitor them, respond to emergency faults, ensure adequate and effective system backup and recovery and maintenance, and update manuals.

4.1.8 – Operate the courses and receive feedback from IHO Member States.

4.2 – 2023: the main achievements and planned activities

4.2.1 - Decision from 9th Meeting – 1 (9th FEB, 2023):

KHOA will continue operating the e-learning system under these conditions:

1. Add a prerequisite to take e-learning courses for the applicants and selected students of the Cat. A and Cat. B programmes run by the IHO-ROK fund;
2. The IHO will ask MSs to share contents to the e-Learning Center; and
3. KHOA will translate the subtitles of the contents in English, French, and Spanish and the IHO will ask MSs using these languages to provide feedback on the translation.

4.2.2 – Notices from 9th Meeting

- The installation of the e-Learning Center;

- The PT recommends to the future Steering Committee to inform on the contents of the available courses contribution to the IHO S-5 and S-8 standards; and
- SHOM is kindly developing a MSI course for e-Learning Center and is expected It will be available soon. The course is in French but the Moodle environment can be configured in English.

4.2.3 - Report to CBSC21Int the activities achieved and the progress.

4.2.4 – Operate the courses and receive feedback from IHO Member States.

4.2.5 – As appointed during 9th PT Meeting, the Guidelines of IHO e-Learning Center was concluded and be ready for approval.

The final updated version (Draft v4.5) is attached to this report, in two files format (PDF and Word).

4.2.6 – Result of test run

After more than a year of successful testing, the e-Learning Center now has 447 registrants from 111 countries, more than 98 IHO member states. Monthly membership has increased significantly since the official domain was launched in May 2022, 20th CBSC, 6th Council and the 3rd Assembly. Last year, the completion rate was only 13%, but it is expected to increase to 37% in 2023, indicating that users are adapting to the e-Learning System.

4.2.7 – The need to encourage Member States to share contents

The pilot seems successful so far, but the future is unclear. Without expanding quality eLearning content, there's no way to absorb bystanders.

5. Draft of the Guidelines

KHOA presented the draft e-Learning guidelines at the 3rd PT Meeting and a Drafting Group was formed with the lead of the Vice-Chair of the PT to create the Guidelines. Since this meeting the Project Team performed several meetings and have been working to improve and update the Guidelines. The objective of this document is to promote smooth performance of the IHO e-Learning Center by establishing basic matters concerning its operation.

This document contains the requirements for running the IHO e-Learning Center by reflecting the views of Member States with experience in e-Learning courses.

It is important to take in mind this Guideline is a living document thus it could be revised as and when necessary.

The main contents are:

- 1 - Overview
- 2 - Introduction
- 3 - Objectives and scope of the guidelines
- 4 - Terminology - Glossary
- 5 - The IHO e-Learning Center
 - Objective
 - Vision
 - Mission
 - Composition
 - Scope of Work

- 6 - Steering Committee
 - Composition
 - Scope of work
 - Duty
- 7 - Management of e-Learning Material
 - Types of managed courses
 - Development of new e-Learning material and content
 - Types of contents
 - Copyright and intellectual property rights
- 8 - Use of e-learning material by learners
- 9 - LMS management and operation

6. Conclusions

Since CBSC-18, when the Project Team was established, the PT performed nine (9) meetings and executed several activities, according to IHO objectives and goals.

The Council reported to Assembly (A-3) that with significant support from the Korea Hydrographic and Oceanographic Agency (KHOA) the IHO e-learning Center has been established and KHOA hosts an e-learning portal.

A platform was successfully created for sharing e-learning contents (elearning.iho.int) which contains a Learning Management System (LMS) to enhance the convenience of users and strengthen the management by an administrator.

- a. The website provides the following information:
 - Introduction of the IHO e-Learning Center, announcements, meeting documents, and user manual including Q&As
 - e-learning courses. If you click a course, it takes you to the LMS.
- b. The LMS provides the following functions:
 - Various modes of learning including videos, quizzes and tests.
 - Functions for users such as checking the learning progress and continuing learning from where they stopped.
 - Functions for an administrator such as managing courses and user information.

Four courses (two basic MSDI, one hydrographic survey, and one nautical cartography) are already available. The website was further improved by reflecting users' feedback and solving system errors and now is ready for sharing of e-learning contents through the IHO community.

After more than a year of successful testing, the e-Learning Center now has 447 registrants from 111 countries, more than 98 IHO member states. Last year, the completion rate was only 13%, but it is expected to increase to 37% in 2023, indicating that users are adapting to the e-Learning System.

The users of the IHO e-Learning Center are open to all.

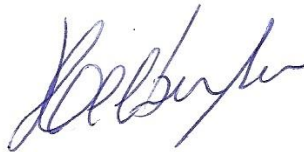
As appointed during 9th PT Meeting, the Guidelines of IHO e-Learning Center was concluded and now it is ready to be evaluate and approval.

It is important to take in mind to the need to form a Steering Committee (CBSC21).

7. Action Required of CBSC21

The CBSC is invited to:

- a. Approve the Guidelines of IHO e-Learning Center proposed by the Project Team;
- b. Form a Steering Committee; and
- c. Note this report.



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