**12th MEETING OF THE IHO INTER-REGIONAL COORDINATING COMMITTEE
IHO-IRCC12**
Video Conference, 6-7 October 2020

Report on e-Learning progress

Submitted by:	Chair of the e-Learning Project Team, Republic of Korea
Executive Summary:	We report on the establishment of the e-Learning Project Team by the CBSC and the outcome of its first meeting.
Related Documents:	A-2 PRO 3.3, ACL19 Para. 7, CBSC-18 Decisions 9 & 10, Action 8

Introduction / Background
The Republic of Korea submitted PRO 3.3 *Establishment of an IHO e-Learning Center* to the 2nd session of the IHO Assembly. According to ACL19, it was advised to discuss the PRO during the Capacity Building Sub-Committee meeting and following amendments, submit it for consideration by the Assembly. Following the CBSC-18 in June 2020, it was decided to establish an e-Learning Project Team and the PT gathered online to discuss the ways forward. Meanwhile, the ROK submitted the amended PRO following the outcome of CBSC-18, and the Secretary-General requested that the IRCC report to A-2 should include the amendments to the PRO.

Meetings
18th CBSC online meeting, 2-3 June 2020
1st e-Learning Project Team online meeting, 10 September 2020

Analysis/Discussion
CBSC-18 discussed PRO 3.3 and made the following decisions regarding the PRO. 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.

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 and to report to IRCC12, so this can be taken to A-2, where the inputs from the CBSC are expected as in ACL-19.

Following the CBSC discussion, ROK amended the PRO and submitted it to IRCC-12 for consideration (Annex A, B). The e-Learning Project Team consists of 10 members from the CBSC, IBSC and interested Member States. Action 8 of the CBSC18 established that PTe-Learning should work together with IBSC and KHOA "in the development of the structure and framework of an IHO e-Learning Center and report to IRCC12". The PT held its first online meeting on 10 September 2020 and discussed in depth the structure and framework of the IHO e-Learning Center. The following is the outcome of the meeting.

a) Establish the IHO e-Learning Center under the CBSC and set up a Steering Committee and a Secretariat for efficient implementation. The Center liaises with the CBSC, IRCC and IBSC (Annex C).
b) KHOA will set up the server in a distributed manner (web, WAS, VOD steam, DB) to provide a stable service and respond to system overload. KHOA will provide e-Learning service even when 1,000 Member State users access at the same time (Annex D).
c) It was agreed to consider the practical exercise (or face-to-face) aspects when developing the e-Learning guideline and curriculum as required by the nature of hydrography.
d) If PRO 3.3 is approved at A-2, it was agreed to continue the PT until A-3 (April 2023) and set up the e-Learning Center and complete the guideline, in collaboration with ROK (Annex E). It was also agreed to develop the guideline further through continuous feedback, based on the table of contents drafted by ROK (Annex F).

Conclusions

The IHO e-Learning Center is expected to provide an effective alternative to undisturbed capacity building activities, whatever the situation becomes such as COVID-19. The PT noted that there might be limitations to e-Learning but agreed that it is a powerful capacity building tool and it has a very high potential in improving the safety of navigation. The PT will continue to work with ROK to establish the Center by A-3. Meanwhile, considering the limited e-Learning contents within the IHO, Member States who have experience in developing and providing e-Learning contents are invited to actively share the resources and experience to the PT.

Action Required of IRCC 12

The IRCC 12 is invited to:

a. Take note of the progress made by the CBSC, e-Learning Project Team, and ROK.
b. Support the e-Learning Project Team in establishing the IHO e-Learning Center and developing an e-Learning guideline in cooperation with ROK.
c. Invite the Member States who have experience in developing and providing e-Learning contents to share the resources and experience to the PT.
d. Endorse the amended PRO 3.3 and report the outcome of discussion by the CBSC and the PT to A-2.
e. take action any further action as seen appropriate

Annex A. Establishment of an IHO e-Learning Center (Red-line version)

B. Establishment of an IHO e-Learning Center (Clean version)

C. IHO e-Leaning Center Framework

D. IHO e-Leaning System architecture

E. Timeline of IHO e-Learning Center Project Team

F. Draft list of contents of the e-Learning Guideline

PRO 3.3 – Establishment of an IHO e-Learning Center (Red-line version)

Submitted by: Republic of Korea

References:

A. Article II(c) of the IHO Convention as amended: "To improve global hydrographic capability, capacity, training, science and techniques;"
B. Decision no. 16 of A-1: "PRO-2: The Assembly directed the IRCC to take into account e-learning in the IHO Capacity Building Strategy and to consider using e-learning in its Capacity Building activities."
C. ACL No. 19 dated 21 April 2020 *Approval of the Proposed Scenario on the Postponement of the 2nd Session of the IHO Assembly and Associated Activities*, Paragraph 7
D. CBSC-18 (Online meeting, 2-3 June 2018) Decisions 9, 10 and Action 8

PROPOSAL:

PRO 2 – *Development of IHO e-Learning Capacity* was discussed at the 1st Session of the IHO Assembly. However considering that the absence of detailed implementation plan is not progressing the concept of e-Learning, the following are proposed:

a) to establish an IHO e-Learning Center to serve as a common platform among the Member States; and
b) to develop an e-Learning guideline to implement e-Learning programmes.

EXPLANATORY NOTE:

1. Faced with rapid technological changes including the introduction of S-100 standards, unmanned hydrographic survey and Marine Spatial Data Infrastructure (MSDI), the IHO should strive to satisfy the needs of the IHO community through continued capacity building activities. Furthermore, measures should be drawn up to actively prepare for situations in which the outbreak of global disasters such as the recent COVID-19 pandemic could disrupt capacity building activities.
2. PRO 2 – *Development of IHO e-Learning Capacity* was discussed at the 1st Session of the IHO Assembly (A-1) and as a consequence decision no. 16 was made as the following: "PRO-2: The Assembly directed the IRCC to take into account e-learning in the IHO Capacity Building Strategy and to consider using e-learning in its Capacity Building activities (Reference B)." However there has been no progress on the implementation of the Assembly decision.
3. The IHO Secretariat and the IRCC are aware of the need for e-Learning but there are financial limitations in creating and maintaining an e-Learning platform.
4. Since there is no e-Learning guideline, Member States implement their own training

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programmes, lacking systematic development of contents and limiting the use of existing contents. The examples are the Maritime Safety Information run by France, Spanish Hydrographic School, e-Learning material developed by Denmark/IHO MSDIWG and Basic Online Hydrographic Survey and Nautical Cartography courses run by the ROK.

5. The following were decided at CBSC-18 (Reference D).

    a)   The CBSC recognizes the importance and very high potential of distant learning or e-learning for the improvement and extension of Capacity Building activities in hydrography (Decision 9a).

    b)   The CBSC 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 (Decision 9e).

    c)   to establish Project Team (Brazil, France, ROK, Turkey, United Kingdom, Secretary) to further develop the structure and framework of an IHO e-Learning Center (PRO-3.3), PTe-Learning (Decision 10).

    d)   PTe-Learning to work with IBSC and ROK on the development of the structure and framework of an IHO e-Learning Center and report to IRCC12 (Action 8).

6. In this regard, based on experience from hosting the Training, Research and Development Centre (TRDC), East Asia Hydrographic Commission since 2013 and running offline training programmes and having developed and run the e-Learning infrastructure and programmes, the ROK proposes the following three items for e-Learning implementation:

    a)   It is required to establish an IHO e-Learning center in the form of a portal to implement e-Learning more effectively and systematically and enable co-use of contents developed by Member States and industry partners. To facilitate this, the ROK would like to contribute to the IHO community by hosting the center utilizing its web hosting service and Learning Management System (LMS) platform developed by the Korea Hydrographic and Oceanographic Agency (KHOA) between 2018 and 2019.

    b)   It is required to develop an e-Learning guideline which includes the development and management of e-Learning contents and running of e-learning programmes and external communications, etc. to enhance the use of e-Learning and implement it systematically.

    c)   As a proposer, ROK will work with the e-Learning PT to provide the platform necessary for the establishment of the e-Learning center (H/W, LMS, website) and support its operation and managements.

ACTIONS REQUIRED OF THE ASSEMBLY:

7. The Assembly is invited to approve:

    a) the establishment of an IHO e-Learning center; and

    b) the development of an e-Learning guideline.

Annex B

PRO 3.3 – Establishment of an IHO e-Learning Center (Clean version)

Submitted by: Republic of Korea

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3.   The IHO Secretariat and the IRCC are aware of the need for e-Learning but there are financial limitations in creating and maintaining an e-Learning platform.
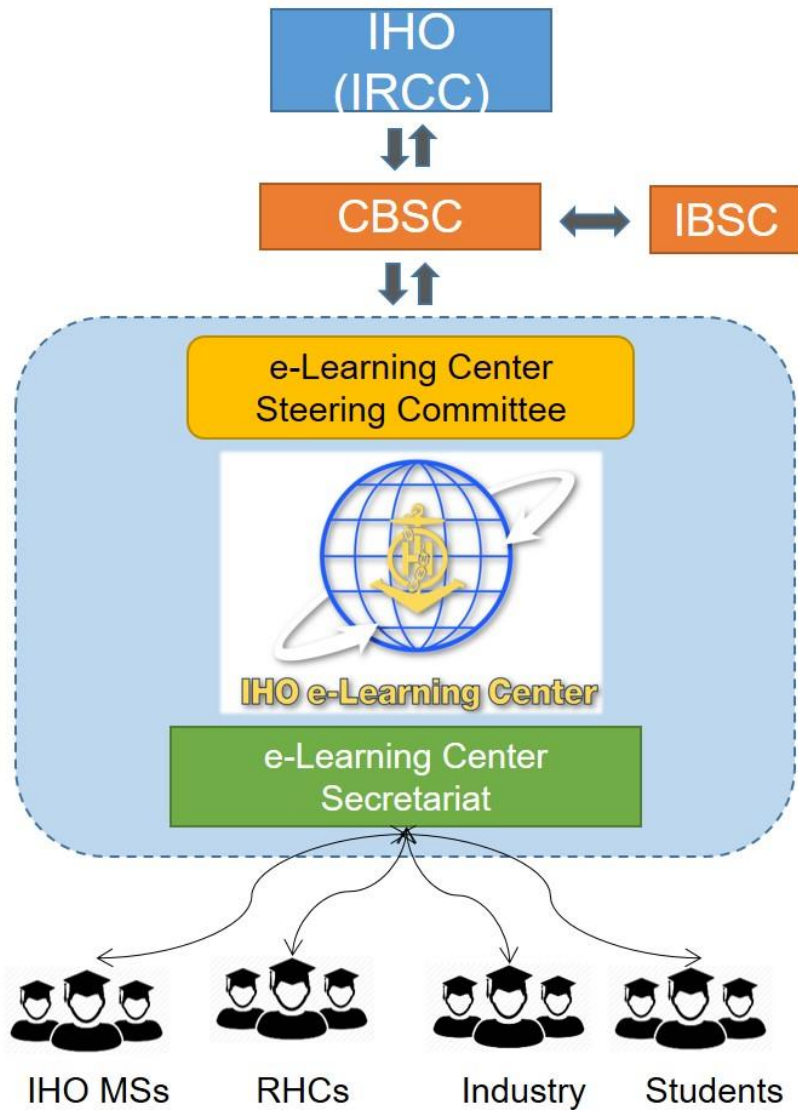
4. Since there is no e-Learning guideline, Member States implement their own training programmes, lacking systematic development of contents and limiting the use of existing contents. The examples are the Maritime Safety Information run by France, Spanish Hydrographic School, e-Learning material developed by Denmark/IHO MSDIWG and Basic Online Hydrographic Survey and Nautical Cartography courses run by the ROK.

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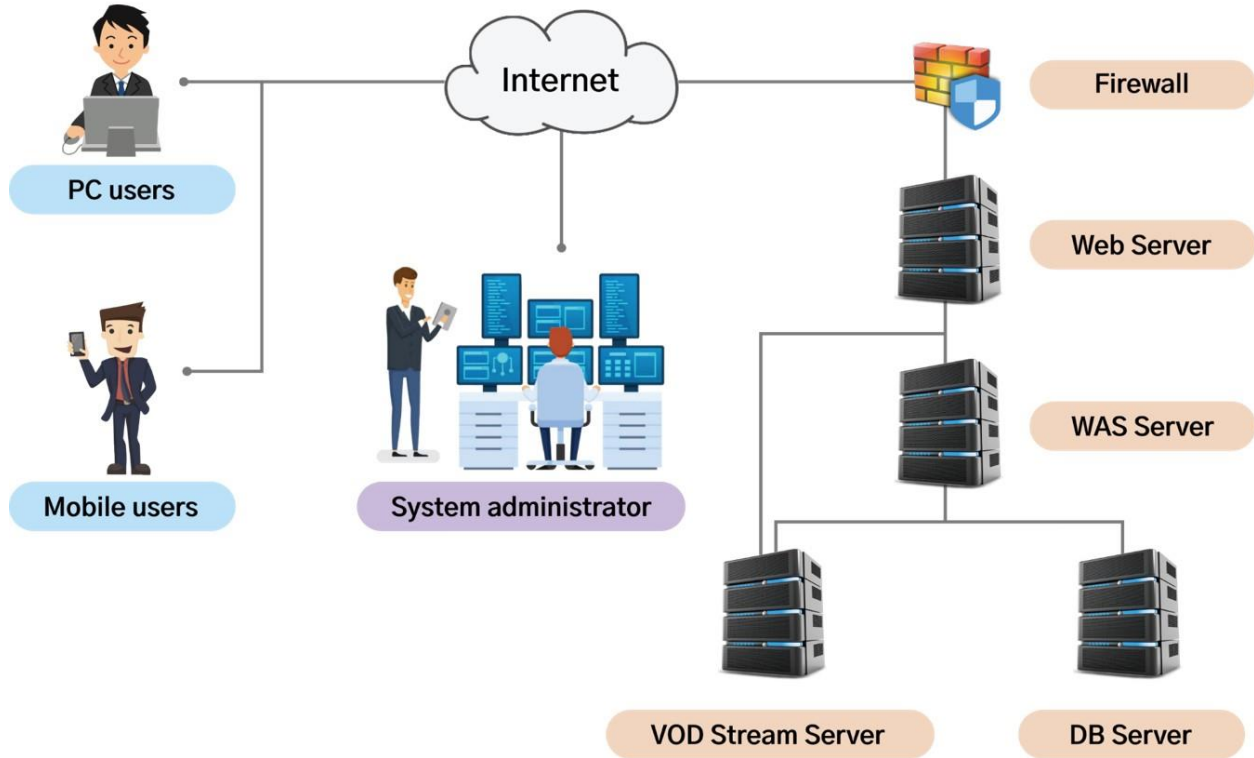   b) the development of an e-Learning guideline.

IHO e-Learning Center Framework (draft)
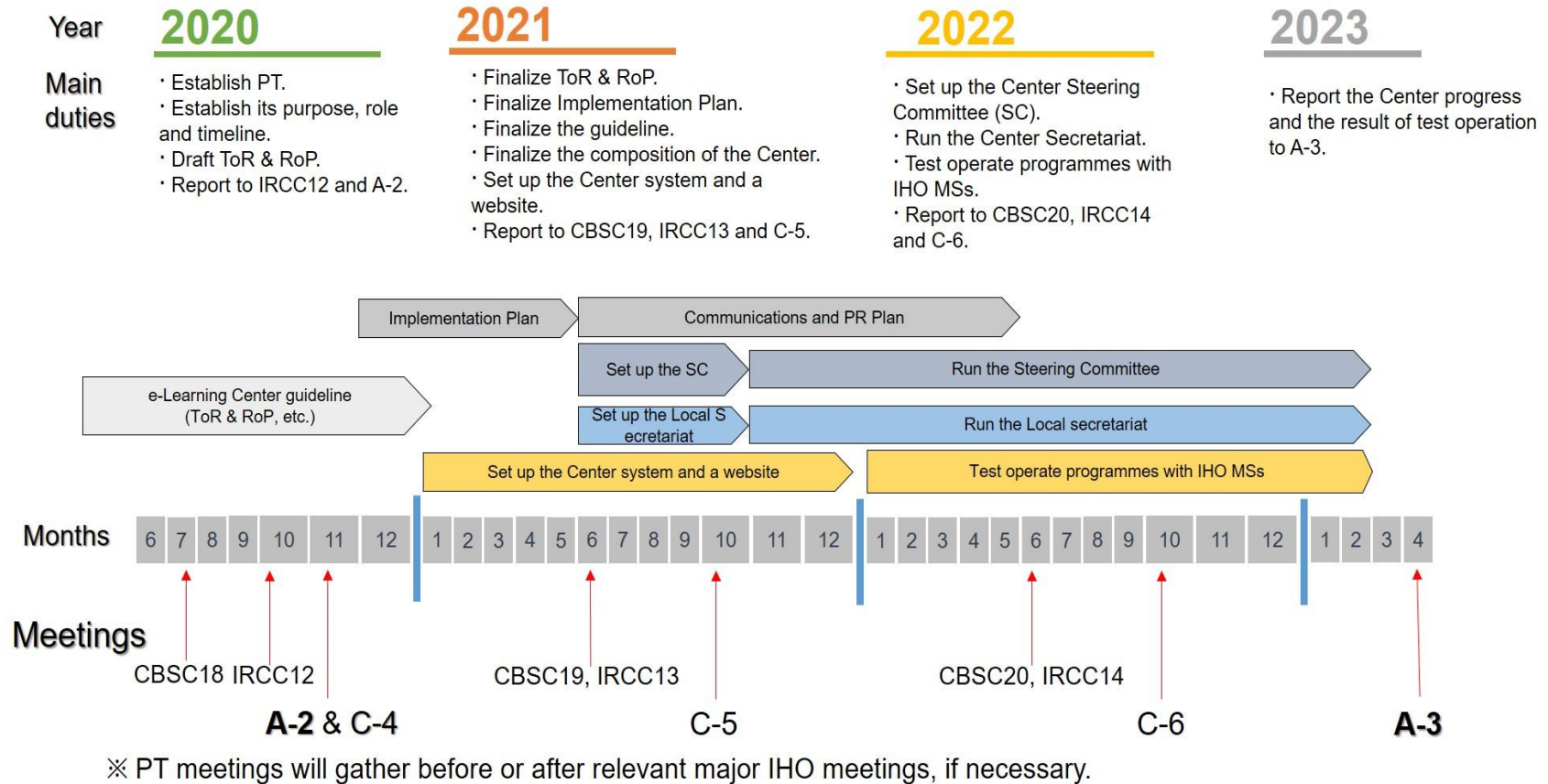
Organizational Structure

e-Learning System Architecture (draft)

Distributed Server Configuration Scheme to prevent Overload

Timeline of IHO e-Learning Center Project Team (draft)

Year   **2020**   **2021**   **2022**   **2023**

Main duties

2020
· Establish PT.
· Establish its purpose, role and timeline.
· Draft ToR & RoP.
· Report to IRCC12 and A-2.

2021
· Finalize ToR & RoP.
· Finalize Implementation Plan.
· Finalize the guideline.
· Finalize the composition of the Center.
· Set up the Center system and a website.
· Report to CBSC19, IRCC13 and C-5.

2022
· Set up the Center Steering Committee (SC).
· Run the Center Secretariat.
· Test operate programmes with IHO MSs.
· Report to CBSC20, IRCC14 and C-6.

2023
· Report the Center progress and the result of test operation to A-3.

Implementation Plan | Communications and PR Plan

Set up the SC | Run the Steering Committee

e-Learning Center guideline (ToR & RoP, etc.)

Set up the Local Secretariat | Run the Local secretariat

Set up the Center system and a website | Test operate programmes with IHO MSs

Months: 6 7 8 9 10 11 12 | 1 2 3 4 5 6 7 8 9 10 11 12 | 1 2 3 4 5 6 7 8 9 10 11 12 | 1 2 3 4

Meetings

CBSC18 IRCC12   CBSC19, IRCC13   CBSC20, IRCC14

A-2 & C-4   C-5   C-6   **A-3**

※ PT meetings will gather before or after relevant major IHO meetings, if necessary.

Annex F

e-Learning Guideline
(Table of Contents)