

Paper for Consideration by HSSC

Progress on Development of e-MIO product specification for East Asia region

Submitted by:	EAHC E-MIO Working Group
Executive Summary:	The East Asia Hydrographic Commission (EAHC) established an Environment Marine Information Overlays Working Group (e-MIO WG) in Jan 2013 to examine the limitations of S-57 and to assess the use of S-10X for the display of marine environmental information on ECDIS. This paper reports on the work plan and status of the development by the EAHC's e-MIO WG.
Related Documents:	HSSC5-INF10
Related Projects:	None

Introduction / Background

At the EAHC Coordinating Meeting held in Jan 2013 in Busan, Republic of Korea, the EAHC recognized the importance of the blue economy as well as the need to protect the marine environment. The EAHC e-MIO Working Group led by the Republic of Korea was tasked to produce a test bed marine environment ENC's for the East Asia region. This paper reports on the work plan and status of the development by the EAHC's e-MIO WG.

Analysis/Discussion

The e-MIO WG established in January 2013 drew up the following plans for the establishment of the marine environment MIO:

- e-MIO Test Bed Establishment Stage (2013 - 2014)
- e-MIO Dataset Establishment Stage (2015 -)
- S-10X Transfer Study Stage (2015 -)

Currently in the stage of e-MIO Test Bed Establishment, the major activities of the e-MIO WG include the preparation of the draft Marine Environment Product Specification, production of test dataset, and the development of e-MIO Viewer.

The e-MIO WG recognized that the Product Specification needs to be further supplemented and expanded in order for an EAHC Member State to build a database by applying the Marine Environment Product Specification. Finding CeisNET, established by the Japan Coast Guard, includes a wide range of information on marine environment, the e-MIO WG decided to expand the Marine Environment Product Specification to include the information available in CeisNET. At the 3rd Carting and Hydrographic Committee Meeting held in Hong Kong in July 2014, the e-MIO WG presented the progress and outcomes in the expansion of the Product Specification, production of test dataset for Tokyo Bay, and the development of the e-MIO Viewer.

ROK, a leading member of the e-MIO WG underlined the need for the EAHC Member States to review the updated Product Specification and proposed that a guideline or a cookbook be created as a reference in building an e-MIO database. The EAHC CHC to which the e-MIO WG reports reviewed the progress made by the e-MIO WG and supported the continuous work of the e-MIO WG.

To finalize the e-MIO Test Bed Establishment Stage (2013-2014), the e-MIO WG is planning to report the outcomes of the following and report them to the 4th EAHC CHC meeting in Japan in 2015:

- Preparation of e-MIO Product Specification (draft), as agreed on the WG level
- Sample dataset produced in accordance with the e-MIO Product Specification
- Outcomes of the development of e-MIO Viewer
- Guidelines for e-MIO establishment as a reference for Member States

The EAHC CHC agreed that each Member State establishes its own e-MIO dataset which suits various purposes and needs of the country. In the meantime, the e-MIO WG will continue to consider whether joint regional database is required or training programmes are needed for capacity building purpose.

In addition, as part of the preparation for the transfer of the EAHC's e-MIO Product Specification to S-100 based Product Specification, the e-MIO WG will continue its research taking the following areas into account:

- Inclusion of the marine environment MIO in the FCD (Feature Concept Dictionary)
- Development of S-10X Standard linked with the SNPWG's S-122 MPA (Marine Protected Areas)
- How to transfer the e-MIO to S-10X using the S-57 to S-10X Converter
- How to establish the S-10X Test bed on Marine Environment

Action Required of HSSC

The HSSC is invited to:

- a. note the information in this paper.