

Paper for Consideration by NIPWG

[Progress of EAHC e-MIO project]

Submitted by:	Republic of Korea (KHOA)
Executive Summary:	This paper introduces the status of e-MIO project with WG under EAHC
Related Documents:	SNPWG17-26 Progress of e-MIO project of EAHC
Related Projects:	EAHC, e-MIO WG

Introduction / Background

ROK experienced the research of e-MIO to contribute to the systematic research on various marine environmental matters and the effective response to maritime accidents such as oil spills which can be used together with the ENC's produced as a overlay concept. Users may understand geographical feature by ENC and find additional information by e-MIO easily.

In the past, the EAHC organized the e-MIO WG and conducted the e-MIO test bed project. This paper is a report of results about e-MIO development status since the SNPWG5 in 2015.

Analysis/Discussion

Overview of e-MIO

As the demand for diverse marine information increases, the need for additional marine spatial information that can be overlaid on the current ENC layer or used independently. For example, e-MIO can be used in a variety of ways such as tidal and algae, weather prediction, marine natural environment, marine protected area, and fishing prohibited area, which can be used in conjunction with electronic charts in ECDIS or other chart systems.

Summary of e-MIO Improvements

Through the 2015-2016 research project, KHOA has generated various forms of marine spatial information constructed by ROK as e-MIO data set. This includes fisheries information such as Fig. 1, marine fisheries ordinance, and marine environment management zone, as well as related laws and ordinances established to protect and preserve the marine environment.

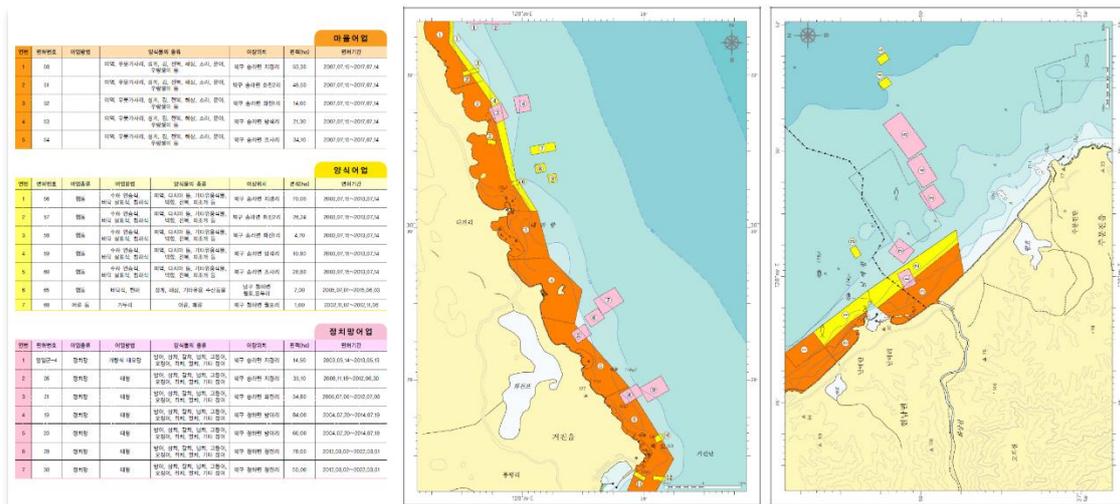


Fig. 1 Fisheries information

The research team of KHOA defined the necessary features and attributes for e-MIO data set, and generate it into a file with an extension of 000 through internal procedures such as lookup table and symbol creation. The e-MIO was provided through the S-57 ENC Viewer developed by KHOA, contributing to the improvement of the work efficiency of related practitioners. The feature and attribute information contained in the e-MIO can be checked in the form of a pick-report, and various detailed information through the results in Fig. 2.

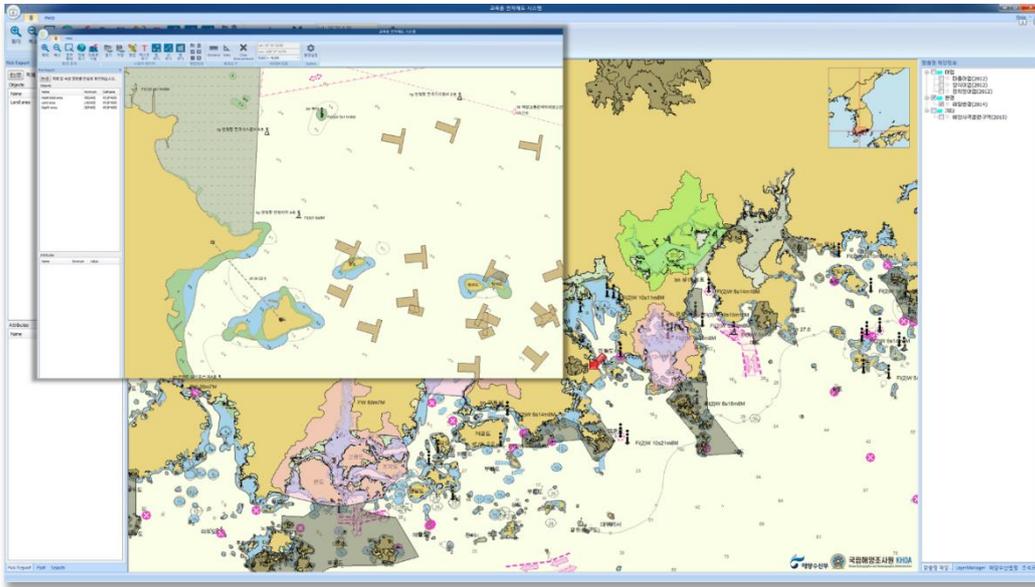


Fig. 2 e-MIO 제작 결과(해양환경관리구역, 어장정보도)

Conclusions

KHOA has produced e-MIO contents as digital data set from 2014, which can be used in addition to the ENC currently being published for navigation purposes. As a result, e-MIO is providing information related to marine environment and spatial information industry as well as coastal information as well as major harbors and fisheries information.

Action Required of NIPWG

The NIPWG5 is invited to:

- a. Note this paper.
- b. Decide on any future actions