Input paper: [[1]](#footnote-1) ENG7-5.5

Input paper for the following Committee(s): check as appropriate Purpose of paper:

**□** ARM **X** ENG **□** PAP **□** Input

**□** ENAV **□** VTS **X** Information

Agenda item [[2]](#footnote-2) (from agenda) 5.5

Workplan Task Number / Technical Domain 2 5.3.1

Working Group Committee

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Mr. Ji-Min Yeo / Korea Association of Aids to Navigation

Current Status of Development of AtoN simulation

# Summary

## Purpose of the document

We proposed the development of Guideline and manuals on the AtoN simulation system on the agenda of the 2018-2022 Work Plan in ENG6. This was adopted as the 2018-2022 Work Plan idea(ENG6). This paper is showed the technology trend of AtoN simulation system.

## Related documents

IALA Guideline No. 1058 on The Use of Simulation as a Tool for Waterway Design and AtoN Planning(Ed. 2, '11.6), IALA Guideline No. 1097 on Technical Features and Technology Relevant for Simulation of AtoN (Ed. 1, '13.5)

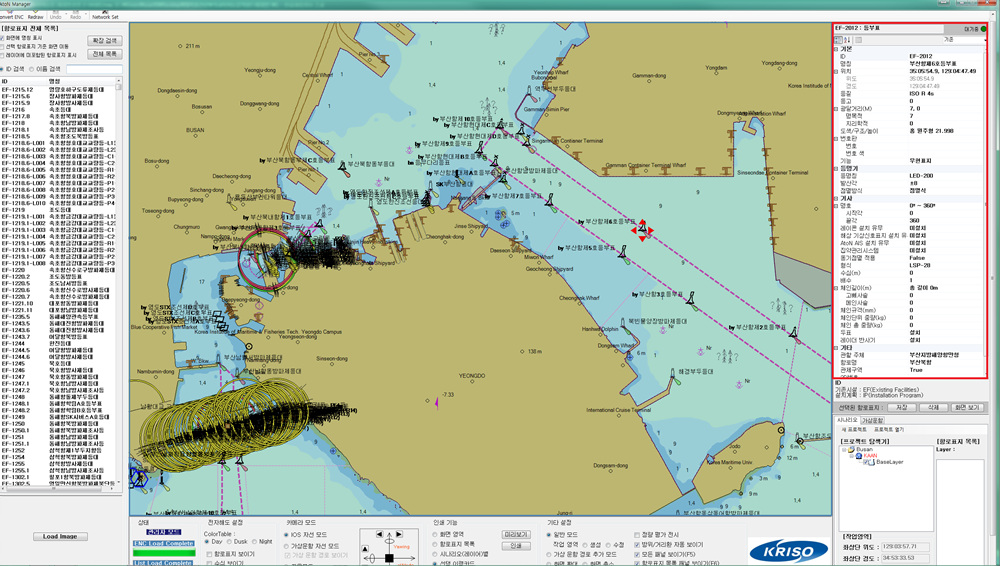
# Discussion

The AtoN simulation system can support decision making for AtoN planning with safety and efficiency by considering the topographical and environmental characteristics of the target area, navigating vessels, and maritime traffic.

The AtoN simulation system is based on a ship handling simulator and has been developed by KAAN(Korea Association of Aids to Navigation) and KRISO(Korea Research Institute of Ships & Ocean Engineering) funded by Ministry of Oceans and Fisheries(MOF) in Korea. AtoN simulation system was built in the Namhae buoy management office(Yeosu) in 2014.

We proposed optimal placement with AtoN simulation and evaluation of placement quantification of 5 waterways of Busan Port in 2016. And it was reflected in the relocation plan of AtoN and improved the efficiency of AtoN operation of Busan Port.

Details of the revision of the Guideline on AtoN simulation system and the development of operational manual refer to IALA ENG5-10.38 document.



1. Operation screen of AtoN simulation management system

Also, the AtoN simulation system was acquired as S class(Special Task) of the ship simulation system according to the international certification Standards of the ship simulation system from KR(Korean Register of Shipping) on April 21, 2017.

However, there is no international certification Standards for the AtoN simulation system and it is necessary to develop the manual for the AtoN simulation system and the Recommendation on international certification Standards and revise of the Guidelines of the AtoN simulation system.

1. Certificate of acquisition for AtoN simulation system

# Action requested of the Committee

The Committee is requested to: (Body text)

Request development review of documents related to tidal current signal system

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Input papers should be assigned to a work task as listed in the Committee work plan which is available in input papers. Leave open if uncertain but consider how the paper is to be processed if not relevant to a work task [↑](#footnote-ref-2)