Input paper: [[1]](#footnote-1) ENAV21-9.7

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

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Technical Domain / Task Number 2 Working Group 1 (Harmonisation)

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Research progress of S-201 AtoN product specification

## Purpose of the document

ROK recognized the importance of S-201 AtoN product specification in terms of management and service of AtoN (Aids to Navigation) information and has been conducting a research project on the standard. This document outlines the research result on S-201 since the 20th ENAV meeting and introduces future plans.

## Related documents

* ENAV20-9.8.1 IALA S-201 Product Specification

# Discussion

## Progress of S-201 AtoN research

ROK has been conducting a research project to support the development of S-201 product specification and investigating how to apply AtoN data model to existing AtoN management system. Especially, creation of TDS (Test Data Sets) and development of application software was been done to enhance the understanding of AtoN data model.

Trinity House developed the web based S-201 editor and they granted ROK to test the system. Utilizing the S-201 editor system, the research team could create the S-201 test data for 3 areas of ROK.

ROK has developed the S-201 AtoN Viewer and List of Light to verify the S-201 datasets. A digital list of light was introduced in the former ENAV meeting, but the team redeveloped the software, which is the S-201 viewer basically and contains a function for list of light.

Fig. 1 shows the Landmark feature type located at the Yeosu port of ROK. In the left window of viewer, Equipment feature type and structure feature type is classified based on the S-201 AtoN data model. If one feature type is selected, the attribute value window shows the attribute values in detail. In the right window, the google map was used to mark the AtoN symbol on the map and the AtoN image can be shown with the mouse selection.

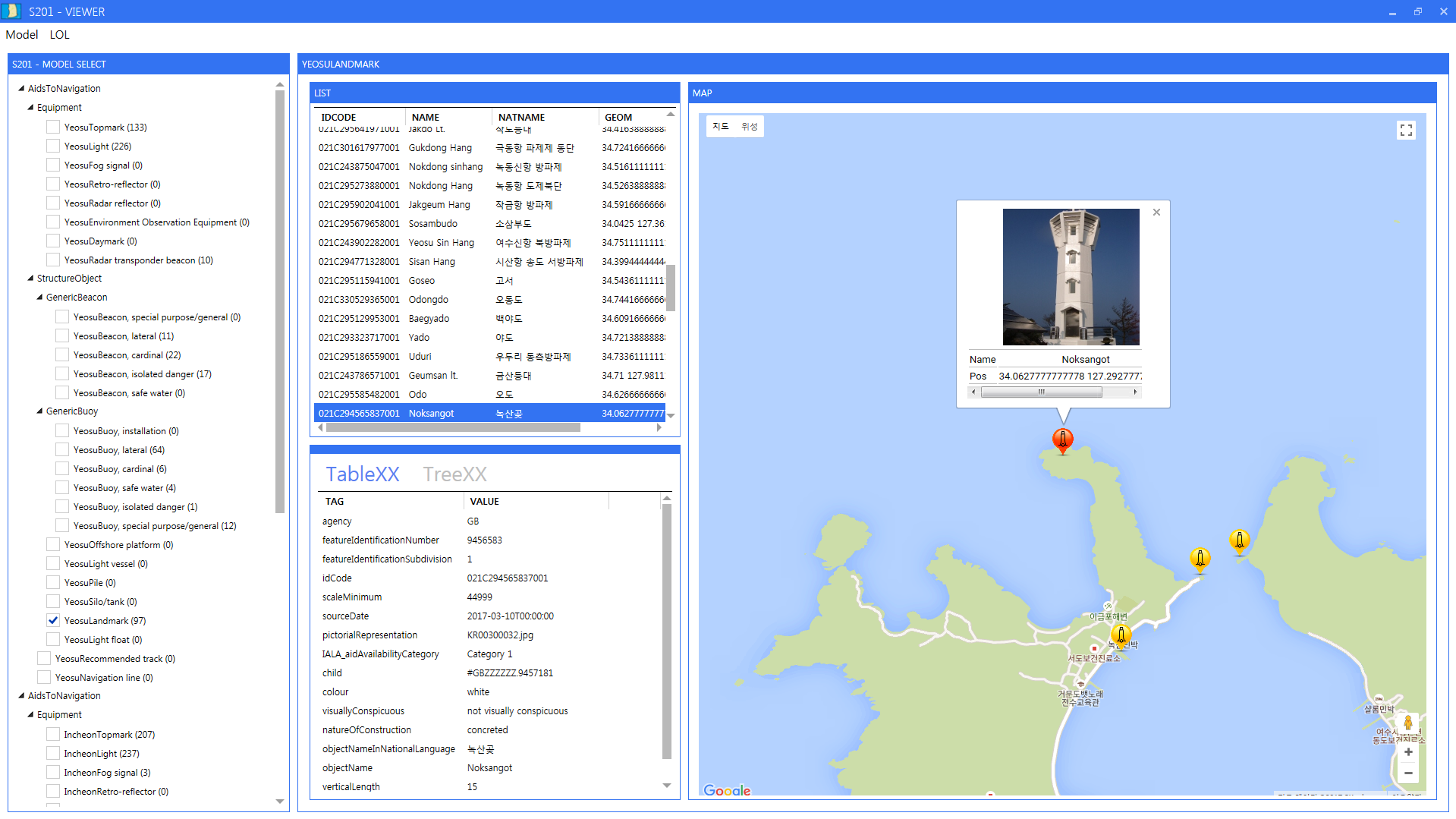


Fig 1. Development of S-201 AtoN Viewer

While the S-201 viewer is a tool to view instances for feature and attribute types of AtoN data model, the list of light is one to see as LOL stylesheet for lighthouse, light buoy, buoy, light beacon and beacon. Fig. 2 shows AtoN feature instances in the stylesheet of list of light, which contains id, name, position, light characteristics and structure information.

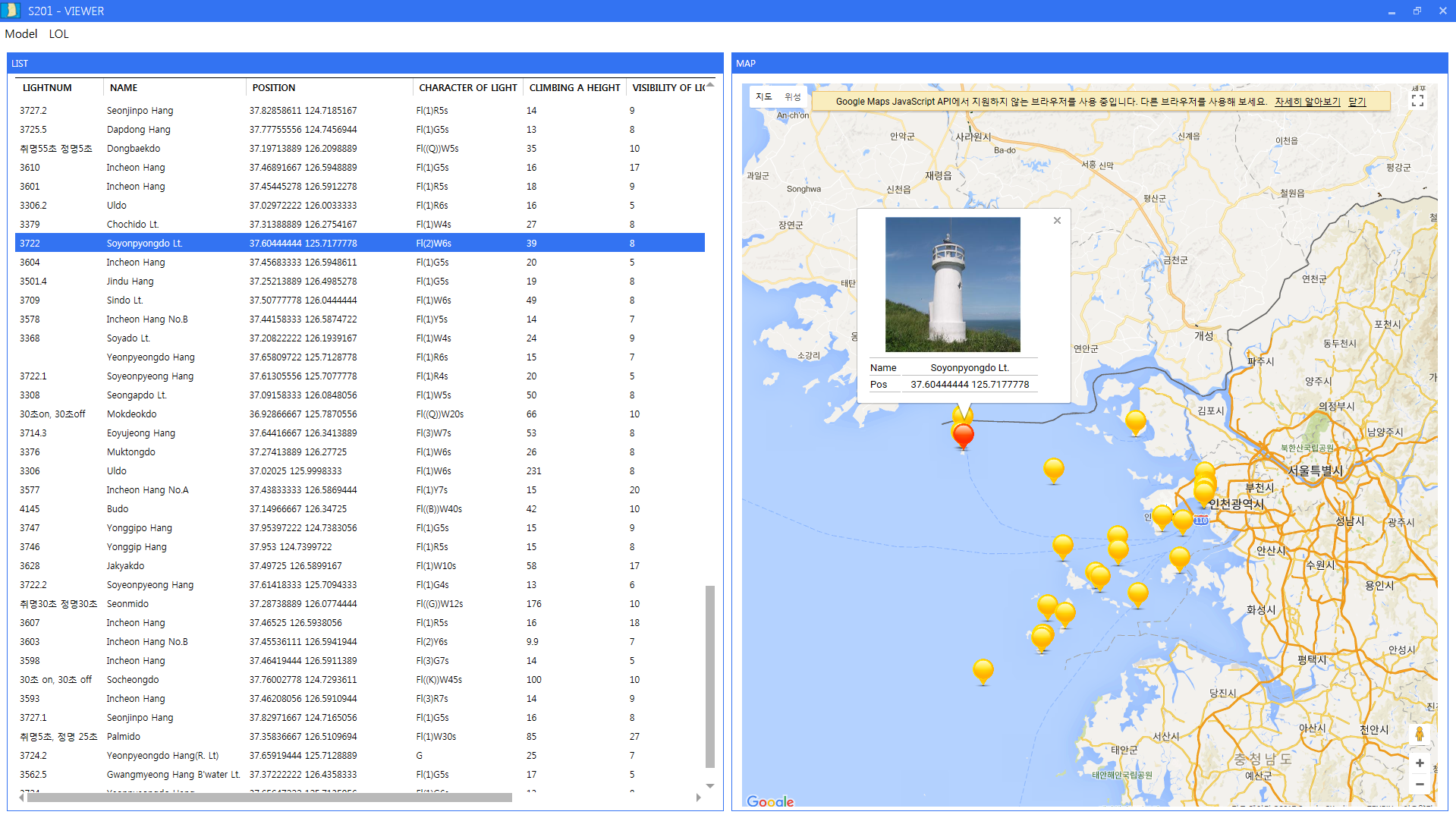


Fig 2. LOL mode in the S-201 Viewer with the AtoN dataset

ROK has been conducting the S-201 research to enhance the understanding of AtoN data model and investigating how to apply it to existing AtoN systems. Test datasets were created and software like S-201 viewer was developed. The feasibility on creating and utilizing AtoN information was tested in the research.

## Future plan of S-201 research

ROK consulted with the coordinator of IALA TG1 about ROK’s contribution to the S-201 development. Comments list on the S-201 edition 0.0.6 were reviewed, which was proposed by ARM, IHO NIPWG and AtoN experts. Some of comments raised was integrated as the edition 0.0.7, which will be submitted to the ENAV21.

ROK was tasked to perform the remainder of the modification requirements and will work focusing the following topics;

* Update of S-201 DCEG (Data Classification Encoding Guide)
* Review of Enumeration types contained in the S-201 AtoN data model
* S-201 Portrayal Catalogue
* Conversion rule from S-201 AtoN to S-57 ENC

With regard to the S-201 portrayal catalogue, S-201 test datasets will be overlaid and verified over S-101 ENC. The research results on the S-201 portrayal will be reported in the next ENAV meeting.

# Action requested of the Committee

The Committee is requested to:

1. Note the progress with the S-201 AtoN study of ROK
2. Provide recommendations on the ROK’s plan

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Leave open if uncertain [↑](#footnote-ref-2)