Input paper: [[1]](#footnote-1) ARM12-8.5.3

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

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

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

Agenda item [[2]](#footnote-2) 8

Technical Domain / Task Number 2 Working Group 2 / Task 5.1.11

Author(s) / Submitter(s) Sewoong OH(KRISO), Youngjae Kim(MOF/ROK),

Kangon Kim(MOF/ROK)

Update of S-201 Testbed

# Summary

## Purpose of the document

ROK has developed the S-201 testbed to support the standard development of IALA and to conduct the study of S-201 application. Since ARM included monitoring the S-201 testbed in the work plan, the research team has reported the progress.

## Related documents

* S-201 AtoN Product Specification, Edition 1.0.0
* S-100 IHO Universal Hydrographic Data Model, Edition 4.0, December 2018

# Background

ROK reported updates of S-201 testbed in the ARM11 committee meeting. The team has improved the spread sheet process and function of Aton data input and inquiry

# Discussion

## Spread sheet for creating S-201 Aton data

The S-201 Aton data model consists of various features like equipment and structure and each feature type includes multiple attribute types. The domain experts responsible for Aton management are unfamiliar with encoding the S-201 datasets (GML).

The research team defined the form of spread sheet to support IALA national members and industries who have interests with S-201 Aton product specification. The spread sheet includes the following contents and the relationship between equipment (Light, Topmark) and structure (Landmark, Buoy, Beacon) can be established by Aton MRN.

* Sheet : Buoy, Beacon, Topmark, Landmark, Light
* Type of Buoy/Beacon : Lateral, Cardinal Safe water, Isolated Danger, Special Purposed General

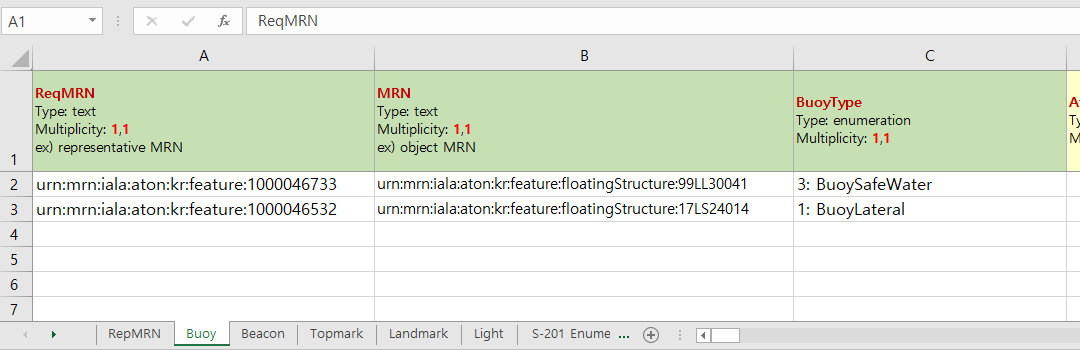


Fig. 1 Spread sheet to support S-201 Aton data creation

## Update of S-201 test bed

The Aton data is encoded using Postgre DBMS and displayed based on the Google Map API service in the S-201 testbed. The Aton symbol on the map was drawn using the S-201 portrayal catalogue.

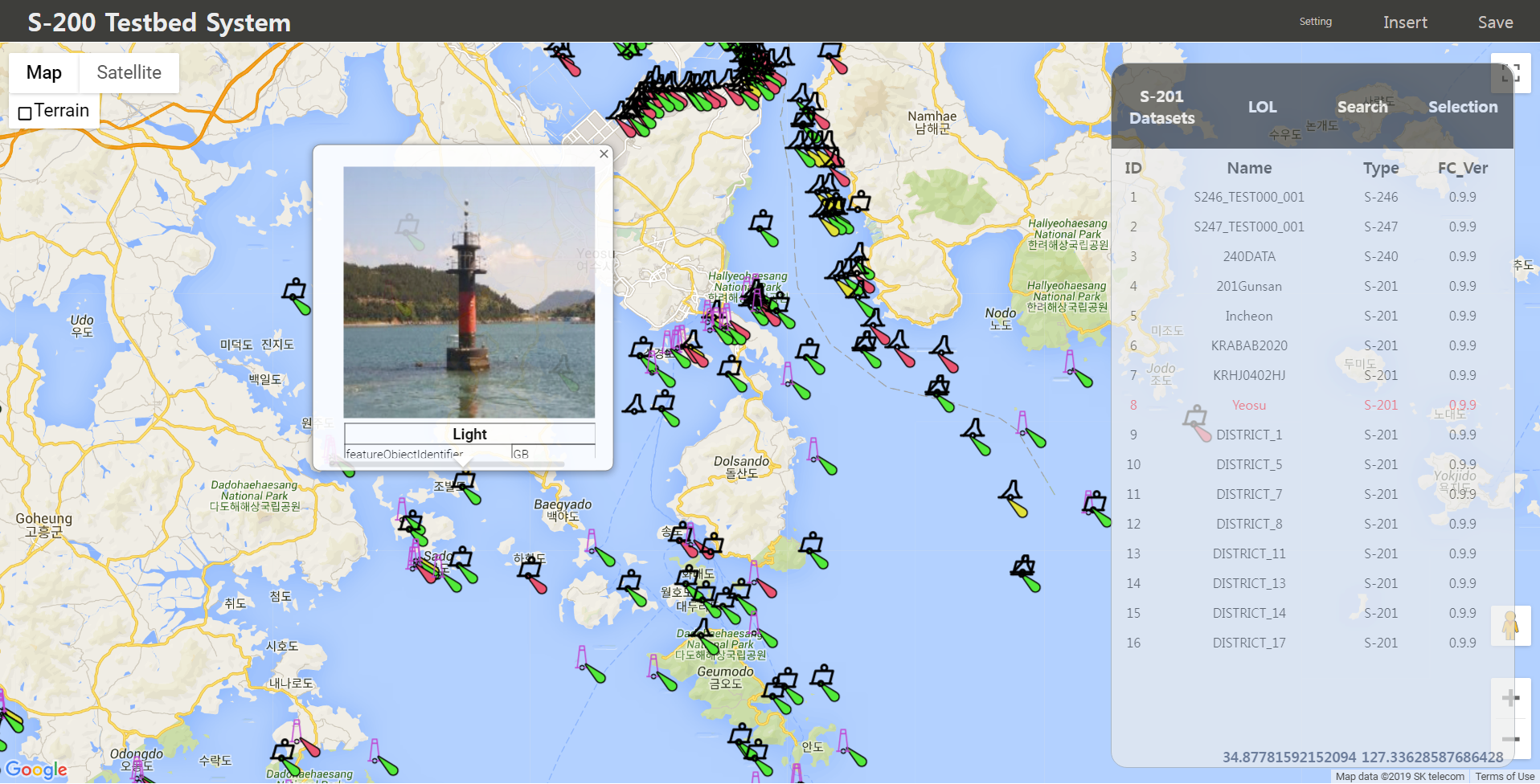


Fig. 2 Screen shot of S-201 test bed

Related to the S-201 testbed, the following functions have been improved.

1. Management of S-201 dataset: Create, Inquiry, Edit, Delete in the user interface
2. Input and download of exchange set: Data input by S-201 exchange set, Download functions were added
3. Validation: Test according to the S-201 feature catalogue and validation guideline
4. Users level: Login function, Users level (Administrator, Editing user, Inquiry user)
5. S-201 Symbol: Display based on the S-201 portrayal catalogue

The update result of S-201 testbed will be demonstrated during the period of ARM12 meeting.

# Action requested of the Committee

The Committee is requested to:

1. Note the update of S-201 testbed
2. Use the Spread sheet form to test S-201 Aton data
3. Review the improvements of S-201 testbed

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