

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

☒ ARM ☐ ENG ☐ PAP
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Purpose of paper:

☐ Input
☒ Information

Agenda item ² 8.4Technical Domain / Task Number ²

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S-200 Testbed Comments and Proposed Aton Portal

1 SUMMARY

MOF/KRISO developed the S-200 test bed to support IALA's S-200 series PS (Product Specification) development and the Aton office's testing of S-201 data. IALA ARM members reviewed the S-200 test bed, provided comments, and KRISO/BlueMap updated functions of S-200 test bed based on the comments.

In order to modernize the IALA Questionnaire currently being implemented at IALA, the IALA Aton Portal was proposed using the S-200 test bed technology. A simple statistical analysis function using S-201 data, a data model design for topic-based research, and a method for creating a web questionnaire were proposed.

1.1 Purpose of the document

This document describes the results of updating the S-200 test bed based on review comments from IALA ARM members and developing Aton Portal functions to modernize the IALA Questionnaire.

1.2 Related documents

S-201 Aids to Navigation Information (Edition 1.1.0, October 2023)

2 BACKGROUND

MOF/KRISO developed the S-200 test bed to support the development of the S-200 series PS and requested S-201 data testing to the IALA members. ARM members provided comments after reviewing the S-200 test bed.

IALA operates a Questionnaire to survey the global status of the Aton and VTS domains, but the need for improvement has been raised. KRISO proposed the Aton Portal concept to modernize the IALA Questionnaire using the S-200 test bed technology.

3 DISCUSSION

3.1 Comments on S-200 testbed

IALA secretariat, Canada, and France input S-201 data into the S-200 test bed and provided review comments. Comments provided are as follows:

- Change the domain address to Official one
- Purpose of country code

¹ Input document number, to be assigned by the Committee Secretary

² Leave open if uncertain

- Include additional values in Light characteristic
- Include additional value in Structure colour
- Add none value in Colour pattern
- Unable to edit entry after entering
- Sometimes, the name of the aid appears as “null.”
- Unable to include additional equipment related to the aid (e.g. adding a bell to a buoy)
- The testbed appears to be “adjusting” the coordinates of most aids slightly.
- “Light beacon” type does not have all the fields necessary to sufficiently capture information for sector and range lights.
- the light colour is not necessarily predicted correctly for “Light buoy” types that are “BuoySpecialPurposeGeneral.”
- the choice of colours and patterns do not match what is used in Canada, as well as the lack of indicating the presence of a daymark,
- There appears to be a typographical error
- French name of the aid was indicated under the “Name in national language” field.
- Only the year could be provided for the “Installation Date” field.

The above comments were reviewed and the S-200 testbed functions were updated, and details will be discussed during the ARM17 meeting.

3.2 Proposed Aton Portal

In order to solve the limitations of the IALA Questionnaire, the Aton Portal concept was proposed using the S-200 test bed technology, S-201 standard, and marine resource name.

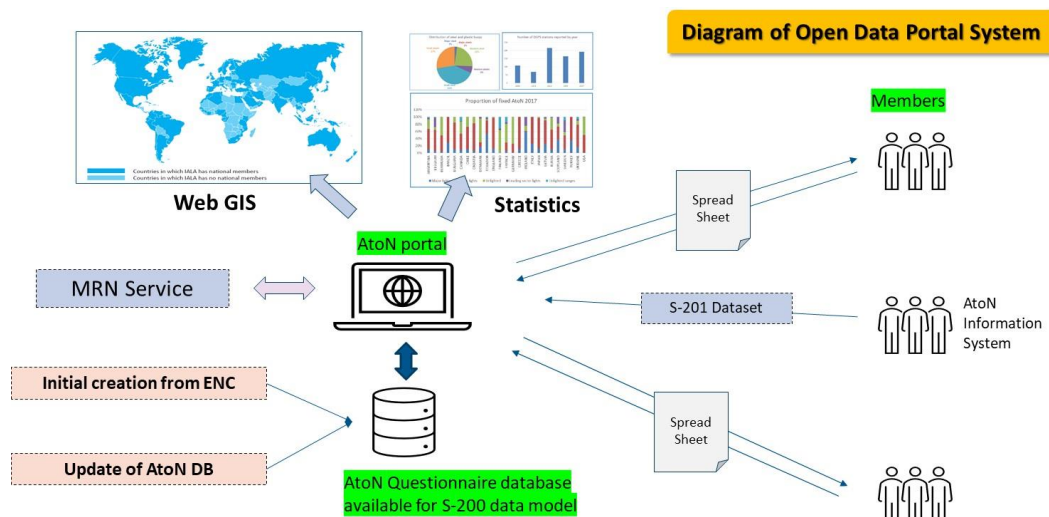
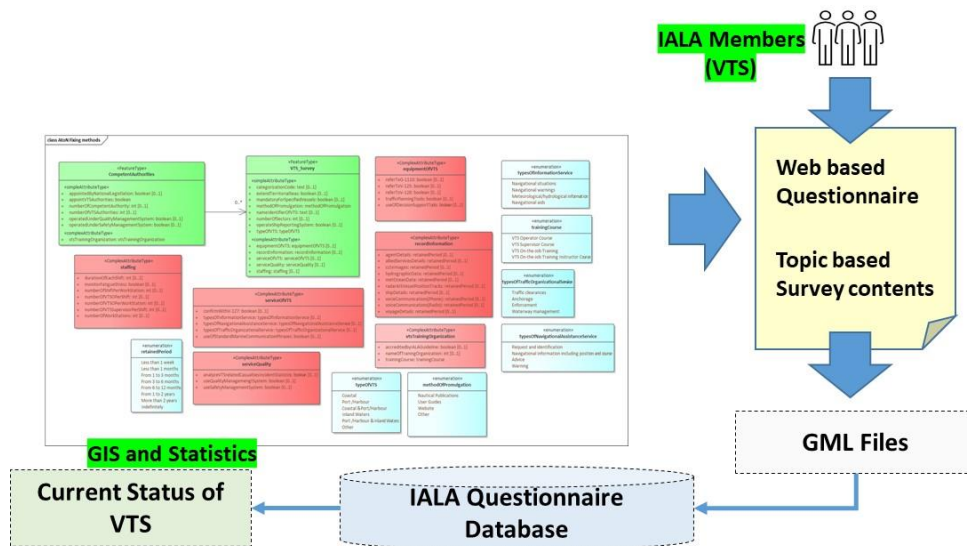


Figure 1. Overview of Proposed Aton Portal

The KRISO/Bluemap research team developed a statistical analysis function for Aton using the S-201 data collected using the S-200 test bed function. Meanwhile, the IALA Questionnaire includes topic-based survey items, and for individual topics, an S-200 data model could be designed, automatic creation of a web-based questionnaire and collection from the questionnaire, creation of GML data and conversion to the DB could be possible. The research team designed the data collection and analysis procedures for topic-based survey items as shown in the figure below.



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Figure 2. Data model for topic-based survey items and how to collect the data

The KRISO/Blumap developed the basic functions of the Aton Portal and will introduce key functions during the ARM17 committee meeting.

4 ACTION REQUESTED OF THE COMMITTEE

The Committee is requested to consider the S-200 testbed and proposed Aton Portal, and take actions as appropriate.