Input paper: [[1]](#footnote-1) ARM10-3.8

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

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

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Agenda item [[2]](#footnote-2) 3

Technical Domain / Task Number 2 Working Group 2 / Task 5.1.3

Author(s) / Submitter(s) Sewoong OH(KRISO), Eivind Mong(CCG),

Youngjae Kim(MOF/ROK), Daewoong Kang(MOF/ROK)

Update of S-201 Aton Product Specification

# Summary

## Purpose of the document

This paper describes the major updates of S-201 AtoN product specification by S-201 Task Group and proposes to discuss the approval process of the document according to IALA regulation.

## Related documents

* S-201 AtoN Product Specification, draft 0.0.8
* S-100 IHO Universal Hydrographic Data Model, Edition 3.0, December 2018
* S-122 Marine Protected Areas, Edition 1.0.0, January 2019
* S-123 Marine Radio Services, Edition 1.0.0, January 2019
* G1106-1 IALA Product Specification Number Template, Edition 1.0, December 2017

# Background

The Aids to Navigation (AtoN) Information Product Specification provides a common structure for the exchange of information about AtoNs. This includes buoys, beacons, racons, lights sound signals and AIS. The product contains the positions, properties, operational status and general comments related to an AtoN.

The Product Specification can be used to exchange AtoN information in a consistent form between Lighthouse Authorities, Hydrographic Offices and other organizations

The S-201 Task group has been developing the S-201 AtoN Product Specification and is supposed to report the major update in ARM10.

# Discussion

## Progress of S-201 Discussion

The WG2 of ARM8 decided to organize the S-201 Task group to proceed the S-201 update and the task group was tasked to finish the S-201 development. The S-201 task group reviewed all comments raised on the S-201 main document and discussed how to include the discussion results in the WG2 of ARM9.

The S-201 development team submitted the new feature object definitions to IHO S-100 Registry. The S-100 registry manager requested to review the source some of the feature object definitions proposed by S-201 team.

While the S-201 Task Group updated the product specification, it’s agreed to create a spread sheet to capture the review the source of feature object definitions used in S-201 AtoN data model.

## Update of S-201

This section describes the progress made in S-201 0.0.8 development to move the document into a state where it is ready to become version 1.0.0.

Main document

* IALA created a template for developing S-200 product specification as G1106-1. All S-200 PS developed at ENG, ENAV and ARM are expected to follow the template. Since the template of S-201 0.0.8 was different from the S-201 draft version 0.0.7, the document structure have been revised to according to the G1106-1.
* The WG2 of ARM9 reviewed the main document and discussed how address the outstanding comments. S-201 TG updated the main document according the decisions. In the application schema of S-201, the identifier was amended to be of URN data type to simplify the use of MRN for unique identifier. Additionally, an identifier of URN data type was added to carry the AtoN number. This dual identifier construction was added to account for the more static nature of the AtoN number, while the equipment identifier may be less static.
* A revision of the dataset and support file naming conventions was required to account for the IHO decision to use 4 digits as an agency code. IHO still needs to finalize the agency code and implement the agency code register in the IHO GI Registry.
* The metadata model was revised to follow the model of S-100 4.0 and simplify it considering the requirement of Aids to Navigation information.

Annex of S-201

* Annex A DCEG: updated based on the revision of S-201 application schema
* Annex B1 Format Schemas: updated based on the S-100 4.0 GML
* Annex B2 Format Schema document: updated
* Annex C Implementation guideline: The draft developed during the ARM9 was included
* Annex D1 Feature Catalogue: updated based on the revision of application schema
* Annex D2 FC XML: updated based on the revision of application schema
* Annex E Portrayal Catalogue: updated according to the changes of S-201 FC
* Annex F Application schema table: deleted because it was overlapped with application schema and feature catalogue
* Annex G Conversion guideline: updated using the proposal by ROK team
* Annex H Data Validation test: updated considering the S-12X NPUB product specification of IHO NIPWG

Spread sheet on new feature data

* The manager of IHO GI Registry requested a review the definitions of new feature concepts proposed by the S-201 development team.
* S-201 TG drafted a spread sheet to review the feature concepts utilized in developing the AtoN data model.

## Proposed way of S-201

S-201 TG updated the main document and various annex of S-201 AtoN product specification and changed the S-201 version information from 0.0.8 to 1.0. S-201 TG recommend that the release follow the IHO Resolution 2/2007 of version 1 being for testing and familiarisation.

# Action requested of the Committee

The Committee is requested to:

1. Note the progress of updating the S-201 packages by S-201 TG
2. Review the S-201 update

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