Input paper: [[1]](#footnote-1) ARM13-8.4.8

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) 8.4

Technical Domain / Task Number 2 Working Group 2 / Task X.X

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

Drafting the S-125 data model

# Summary

## Purpose of the document

ARM12 developed the vision outline on the S-125 Marine Navigational Services Product Specification and exchanged the liaison note with IHO NIPWG. S-201 TG was tasked to develop the S-125 on behalf of IHO. This document describes proposed approaches to draft the S-125 data model.

## Related documents

* S-201 AtoN Product Specification, Edition 1.0.0
* Response on IALA Liaison paper on S-125\_FINAL

# Background

IALA ARM volunteered to develop the S-125 Marine Navigational Services Product Specification for IHO and defined the vision outline to identify the scope of the specification. The committee has been cooperating with IHO NIPWG and ENAV WG2 for the S-125 development.

# Discussion

## Skeleton of S-125 data model

The S-125 data would be created from the S-201 source and be equivalent with the extended list of AtoNs. Drafting the S-125 data model should consider the followings;

* Reuse the feature type and attribute type of S-201 data model
* Filter the feature types considering the purpose for end users
* Filter the attribute types for the purpose of extended list of AtoNs.
* Amend the multiplicity of attribute types
* Add the Aton operating status information into the model

## Addition of Aton status information into the data model

Korea surveyed the examples of NtM and summarized those like the followings;

The basic management are classified into new, changed and deleted.

* Basic management (New, Changed, Removed)

The characteristic change are classified into move, correction and change. The status change are classified into interrupted, restored and missingCharacteristic Change (Moved, Corrected, Changed)

* Status Change (Interrupted, Restored, Missing)

The change description are classified into Aton Type, NominalRange, Light characteristic, Signal period, Height, Position move. Change description (Aton Type, NominalRange, Light characteristic, Signal period, Height, Position move)

The change types are classified into Outages, Planned/Preliminary, Permanent, Temporary.

* Change types (Outages, Planned/Preliminary, Permanent, Temporary)

Above is about the Aton changes and information type should be used to include those requirements in the data model. It’s proposed to name it as “AtoN status information” and have an information association with the top level feature type, AidsToNavigation.

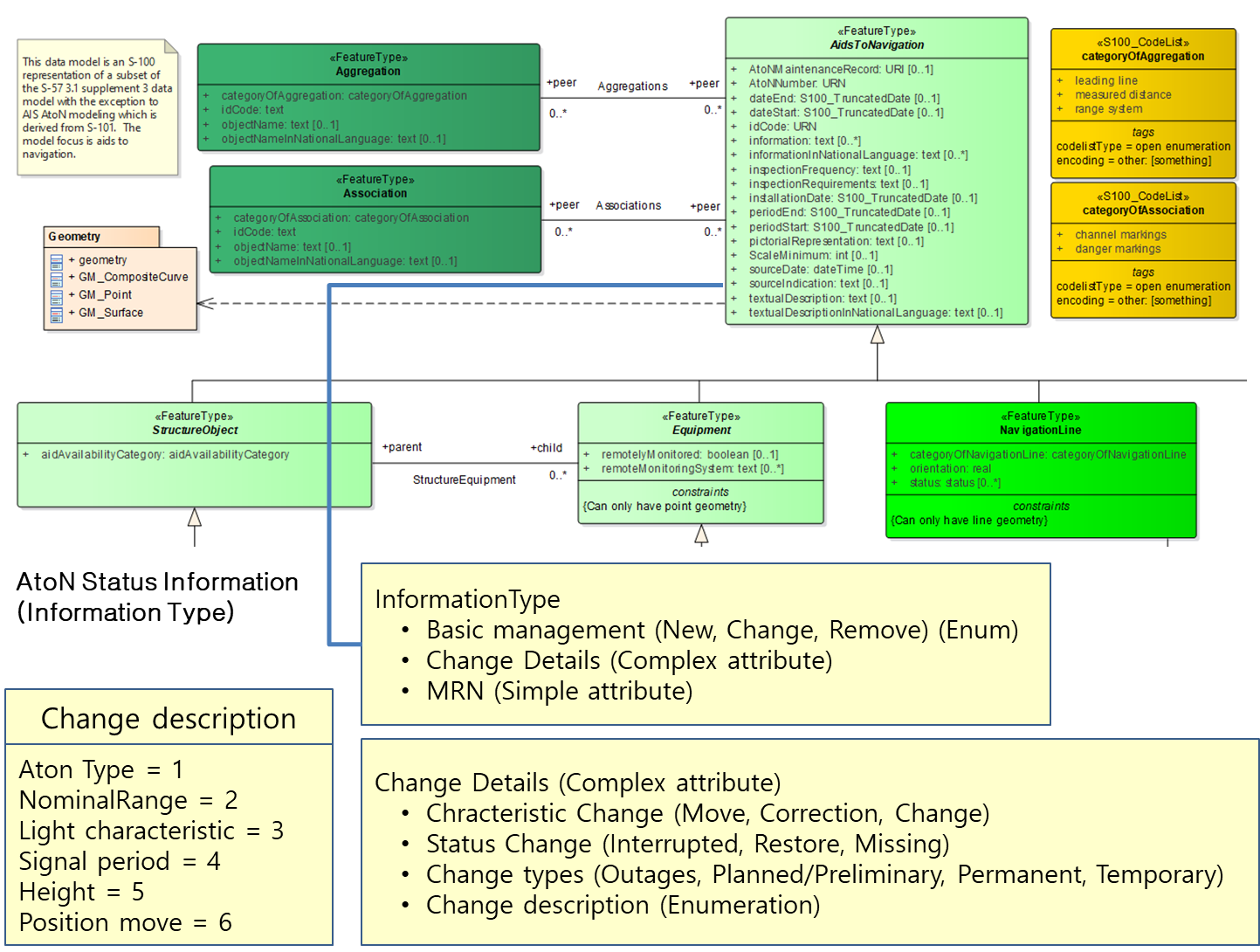


Figure 1. 3.2 Addition of Aton status information into the data model

## How to filter Feature type and Attribute type

As the S-125 is supposed to be the subset of the S-201 data model, it’s possible to draft the S-125 data model filtering the S-201. Attached spread sheet contains all feature and attribute type of S-201. The S-201 TG would be invited to filter the types using the spread sheet.

# Action requested of the Committee

The Committee is requested to:

1. Note this paper
2. Discuss how to select feature types and filter attribute types from the S-201 data model
3. Provide any comment on the proposed approach for S-125 data model

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