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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

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S-201 Implementation Guideline

# Summary

## Purpose of the document

IALA ARM committee drafted the implementation guideline as an annex of the S-201 Aton Product specification. Since the guideline would be helpful for Aton authority to use the S-201, it should be improved based on the lessons learnt from member states.

## Related documents

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

# Background

The S-201 implementation guideline aims to be used for the transition to the Aton system compatible with the S-201 data model. It has been proposed to add flow diagrams reflecting the process and requirements described in the guideline.

# Discussion

The draft of the implementation guideline contains the followings;

* Production system implication
* Mapping existing data model to S-201
* Memorandum of Understanding between AtoN authority and any S-201 recipients (e.g. hydrographic office, neighbouring AtoN authority) to formulate the data exchange process
* Training

When Aton authority addresses the S-201 for the management of Aton information, two methods like new system and existing system could be considered. The approach of using the existing system should choose one of two methods, extending database and creating a codex. Those considerations raised were expressed in below flow chart. The S-201 TG would be invited to review and discuss how to improve the flow chart.

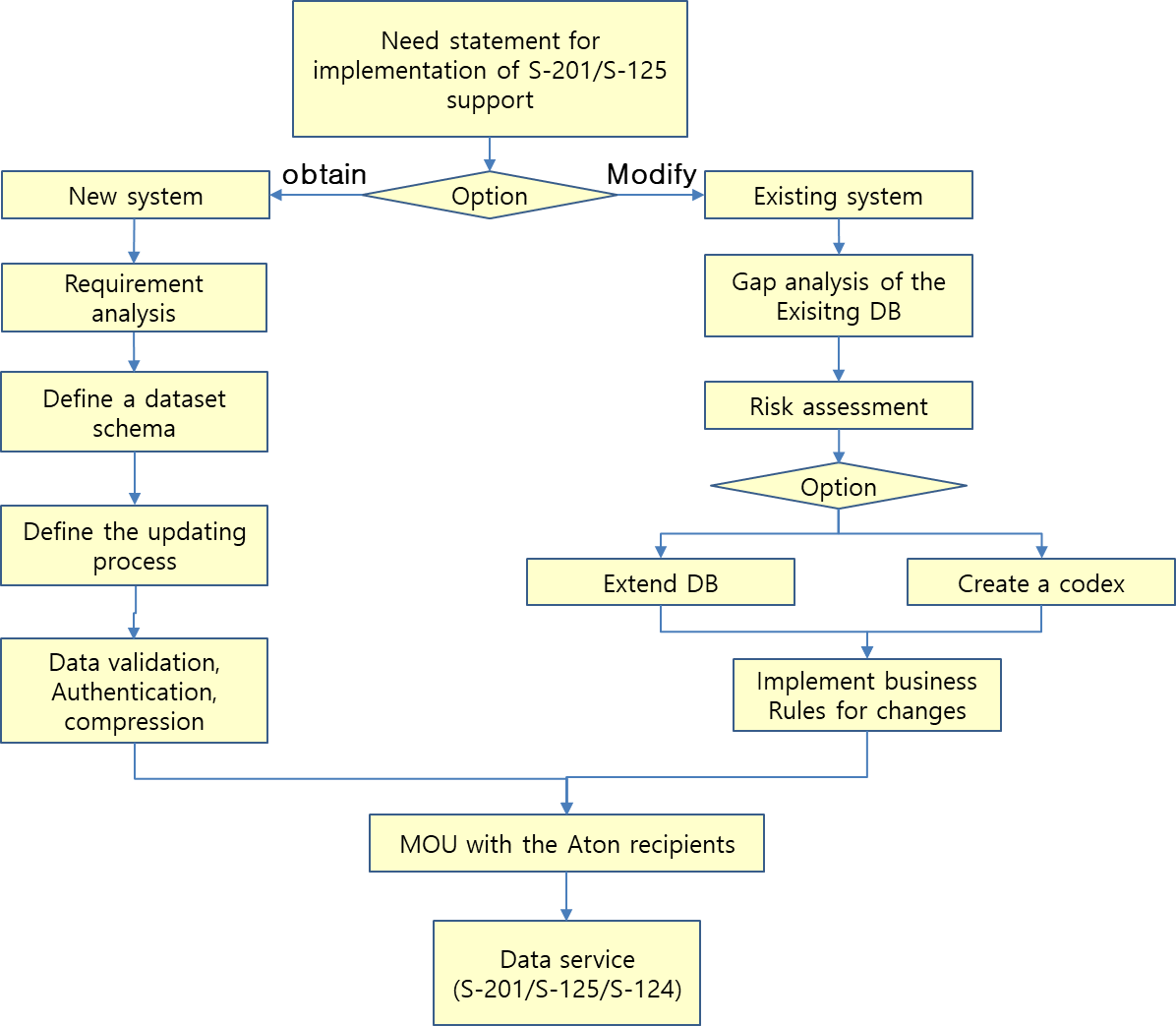


Figure 1. Flow chart to implement the S201

The Aton information management methods are expected to be different for each member state and organization. Korea identified common process and would propose to include it like the following;

- Aton Equipment Management

- Aton Structure Management

- Aton Information Management

- Floating Aton Maintenance Process (Ship scheduling)

- Fixed Aton Maintenance Process (Ship/Car/Helicopter scheduling)

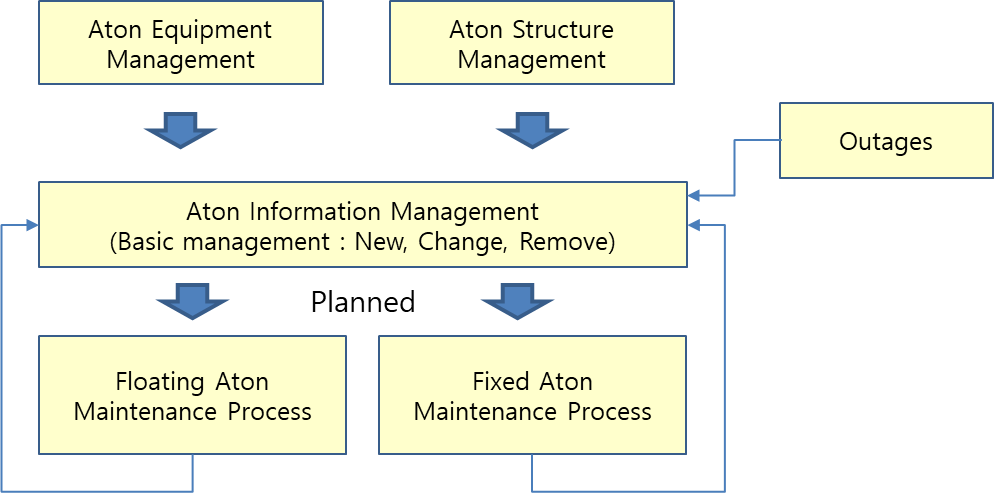


Figure 2. Common process of managing Aton information

As managing the Aton status information like new, change and remove is important, It’s proposed to discuss how to include those information

Overview of management and service of AtoN information

(1) Management of Aton Information

- Basic management (New, Change, Remove)

- Characteristic Change (Move, Correction, Change)

- Status Change (Interrupted, Restore, Missing)

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

(2) Service of Aton information

- Navigation warning service based on the S-124 data model

- Aton changes service based on the S-125 data model

- Digital List of Light service based on the S-125 data model

- Exchanging rich Aton information based on the S-201 data model

- Outages like Interrupted, Missing should create the S-124 NW

- Upon confirmation of the outage, the responsible Aton authority move the NW report of outage from S-124 into S-125

- The authority relieve S-124 of old, but still active information

The capacity building is another important issues to implement the S-201. It’s proposed to include below training subjects.

- Overview of S-100

- S-100 infrastructure including Registry, FCB and PCB

- S-100 Test bed

- Overview of S-57 ENC and S-101 ENC

- S-201 Aton Data Model

- S-201 Product Specification Packages

- Feature Catalogue, Portrayal Catalogue

- Metadata, Exchange set

- Encoding (GML)

- Mapping table example using S-201 data model

- Creation of S-201 Test dataset with XML editor

# Action requested of the Committee

The Committee is requested to:

1. Note this paper
2. Discuss the proposed implementation guideline

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