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Need of open data format for Virtual Aton

# Summary

As the number of virtual Aton increases for Aton operation and service, the need to develop an open data format other than the AIS Aton has emerged, and the development of a new S-200 series product specification for virtual Aton has been proposed.

# Background

IALA G1081 provision of virtual marine aids to navigation offers guidance on the provision of Virtual AtoN. This document provides guidance on the limitations and benefits of Virtual AtoN, criteria for use, notification process, display, application and delivery methods, applicable standards and guidelines, availability and integrity and legal and liability issues. The concept of Virtual AtoN has its roots in AIS, but in the future other means of transmission and presentation may evolve.

# need of open data format for virtual aton

ALA G1081 describes the definition and application of Virtual Aton. Some of the potential benefits of Virtual AtoN are in enhancing safety and environment protection. Other benefits are

* timely notification;
* ease of presentation, where displayed graphically;
* quick deployment, easily amended depending on the situation (storms, marine incidents, etc.);
* direct delivery to navigational systems, limited to relevant areas;
* information readily apparent to the user;
* low cost to install and maintain; and
* marking where traditional physical AtoN or Physical (Real) AIS AtoN are not practical.

ALA G1081 divides delivery methods into near term and longer term. It is possible to provide services through AIS in a near term, but it is difficult to apply Virtual Aton without limits due to MMSI registration and AIS communication characteristics.

In the longer term, competent authorities may expect that other media for information services will become available. This would enable Virtual AtoN services to be transmitted via means other than AIS, for example: satcom /internet; WiMAX; VDES, VDE-SAT, NAVDAT, IALA maritime beacon system; cell phone data transmission protocol, etc.

Since virtual Aton services are expected to be available through various communication networks in the long term, it is believed that there is a need to start developing an open data format for virtual Aton.

# proposal on developing new S-200 product specification

IALA developed S-201 as a Aton product specification and is jointly developing the S-125 with IHO NIPWG. The S-201 and S-125 data models include three feature types for Virtual Aton(Virtual, Synthetic and Physical). However, Virtual Aton in S-125 refers to the list of services being provided through AIS communication network.

In addition, S-125, unlike S-201, is data on the list of Atons going to ships. It is included in Phase 2 of the S-100 implementation roadmap, and aims to provide a list and status by overlaying Aton change symbol.

Since KRISO believes that a new S-200 product specification should be developed to enable marine Aton authorities to actively operate virtual Aton for various purposes, we propose to discuss the need to develop a new product specification for the S-200 series.

# Action requested of the Committee

The Committee is requested to discuss the need of open data format for virtual Aton and take actions as appropriate.

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-2)
2. Leave open if uncertain [↑](#footnote-ref-3)