

**IALA Council  
74<sup>th</sup> session**



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## **Input paper**

# **Shipboard navigation equipment for the management and display of AIS ASM and AtoN**

## **1 INTRODUCTION**

AIS Application-Specific Messages (ASM) and AIS AtoN are used by some national competent authorities, ports and other stakeholders to increase situational awareness by augmenting and enhancing maritime safety information, thus improving navigational safety. Some countries have completed trials or are undergoing trials of various ASM that broadcast important navigational information such as near real-time environmental, meteorological and hydrographical information, air gap, water level, ice route, area notices, etc.

AIS AtoN are still being trialled in some countries, but others have deployed them as temporary or permanent aids. AIS AtoN can be physical, synthetic or virtual.

The process ashore for AIS ASM broadcasts appears to be well structured, with transmission equipment deployed and system capability for encoding and validating this digital service to a high level of detail. However, it has been found that shipborne equipment often has limited technical capability in terms of management of the AIS ASM or AtoN messages, either issues with receiving, integrating, interfacing or displaying these ASM or AtoN symbol and information on the ECDIS, radar or other navigational display.

An input paper (ARM 14-3.2.7 and 14-3.2.7.1) was submitted at ARM14. Co-authored by countries from four continents (Canada, Norway, Australia, Sweden, Finland and the Republic of Korea) and details the current situation where AIS AtoN and ASM broadcasts are not used to their full potential due to shipborne display limitations.

These uncertainties may lead to a lack of harmonization, which is contrary to the objectives set forth by IMO's e-Navigation initiative and reduce the expected efficiencies on many fronts, as laid out in the IMO Strategic Implementation Plan (SIP). The ARM members' will document further shipborne display situations in order to provide an information paper to IMO and eventually request changes to the ECDIS Performance Standard. Although the current target of this survey is ECDIS, the same process could be used in the future to determine necessary changes to the Radar Performance Standard.

To assist this a survey has been initiated of IALA members. The survey has been expanded to also consider shore-based display as there are reports of lack of capability by VTS centres.

The ARM committee and the member nations initiating this consider that it would be beneficial to the overall process to have IALA as a co-sponsor on an IMO submission to be presented at MSC105 informing of IALA efforts to document shipborne display issues. The intention is to move away from the Minimum Keyboard Display (MKD)

as the actual mandatory IMO requirement and to request AIS mandatory connection to shipborne equipment through the ECDIS Performance Standard amendments .

IMO has decided that no new work items will be accepted at MSC105 (MSC104-WP.1-Rev.1, 15.11), therefore, this input will be presented as an information paper. An information paper is generally not under the same strict input deadlines as a regular input paper to IMO MSC meetings. Nevertheless, co-sponsors for such papers still have their internal approval processes, and it should therefore be expected that a submission should be ready in the second half of January, 2022. It is the intention of involved member states to prepare a new work item request for MSC106.

## **2 ACTION REQUESTED**

Council is requested to:

1. To approve IALA as co-sponsor on an input note to be presented at MSC105 informing IMO of the current IALA members' efforts to document shipborne display issues.
2. Given the tight time scale involved permit the secretariat to agree the content of the information paper with the co authors countries.