

**7 – NATIONAL MATTERS***Finland*

National Matters Update by Finland

Impact of COVID-19

So far, the COVID-19 pandemic has not caused problems for the provision of Marine AtoN and VTS services in Finland. Both fairway maintenance work and operation of VTS centres has continued normally and the ongoing fairway investment projects have progressed without delays.

IALA convention

Finland has signed the Convention on the International Organization for Marine Aids to Navigation on June 8th 2021. It is expected that the Finnish Parliament will accept the Convention on late 2022 or early 2023.

Government resolution on promoting transport automation

On 25 November 2021, the Finnish Government adopted a high-level resolution on promoting automation in the transport sector (<http://urn.fi/URN:ISBN:978-952-243-726-6>, in Finnish but abstract in English). The resolution contains a vision, policies and key measures for the development of transport automation. It applies to all modes of transport, not only to maritime domain. Transport automation is considered to be an important means of facilitating safe, efficient and low-emission transport of people and goods. The resolution underlines the importance of an encouraging legislative environment and progress through experiments and piloting.

The key measures identified for the development of transport automation are:

- development of regulation
- development of physical infrastructure
- development of digital infrastructure
- utilisation of data
- increase in experimentation and testing
- competence development
- impact assessment

National regulatory issues

The provision of virtual Marine AtoNs has been added to the national legislation ([Water traffic act](#); Section 47 Navigational Aids). The addition took effect on July 1st 2021. The related national virtual AtoN recommendation was drafted based on the IALA recommendation *R0143 Provision of Virtual Aids to Navigation (O-143)*.



During 2021 the national requirements for the Marine AtoN performance have been aligned with the recommendations given in the IALA recommendation *R0130 Categorisation and Availability Objectives for Short Range Aids to Navigation (O-130)* and guidance given in IALA guideline *1035 Availability and Reliability of Aids to Navigation*.

Marine AtoN technology

A preliminary study on the visibility of Marine AtoNs to LiDAR sensors has been carried out. The study was initiated based on feedback from a research project on autonomous ship technologies ([Maritime AI-NAV](https://urn.fi/URN:ISBN:978-952-317-869-4)) and it showed that the reflector materials currently used in physical AtoNs give quite good LiDAR response. The study is available in the permanent address <https://urn.fi/URN:ISBN:978-952-317-869-4>.

GNSS augmentation

The performance and availability of EGNOS SBAS service in the Northern part of the Baltic Sea has been evaluated in cooperation with the EGNOS service provider ESSP and supported by EUSPA (European Union Agency for the Space Programme). The results show good performance and availability in open sea areas as well as in fairways and in port areas. Finland supports actively the development of maritime SBAS receiver test standard in IEC TC80 that will enable the safe and harmonized use of SBAS also in maritime domain. However, there are no plans to terminate the legacy IALA Beacon DGPS service in the near future.