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7 – NATIONAL MATTERS

7.5 Finland

National Matters Update by Finland

Smart Fairway concept

As part of the Finnish Governments measures to promote transport automation the Finnish Transport Infrastructure Agency (FTIA) has initiated the development of smart fairway concept together with Finnish Transport and Communications Agency, Finnish Meteorological Institute and service providers, such as VTS and pilots. Smart fairway is defined as a fairway where information, new technology and automation solutions are used to improve transport safety, efficiency, and operational reliability, as well as to reduce climate and environmental impacts.

The provision of smart fairway services will require development of physical infrastructure, including AtoN's and sensors along the fairway, enhancement of the digital infrastructure, including connectivity and positioning as well as the development of digital maritime services. The maritime services will be based on the e-navigation services defined by IMO and technical specifications and data models developed by IALA and other international organisations.

AtoN on Demand

FTIA has developed and tested an Aton on Demand (AoD) system for remotely increasing the luminous intensity of AtoN lights in low visibility conditions. The system has been in operation in few selected fairways and has received very positive feedback from users. The system is activated manually by VTS operators based on requests received from vessels. Both the system description and risk assessment has been reviewed based on the experience gained and feedback received. Plan is to extend the use of AoD system in the future and it is counted as one part of our Smart Fairway concept.

Currently we are testing and validating the AoD system also with automated activation method. Automatic activation will be based on real-time AIS data and information received from visibility sensors.