



# Finland is a pioneer in digital seafaring and environmental technology

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In cooperation:



Finland’s maritime cluster is one of the country’s most significant business sectors with annual revenues of EUR 13 billion. The sector employs more than 50,000 people all over the country. The positive outlooks that have prevailed in recent years are down to the development of autonomous maritime traffic among a group of pioneers, successful trials of the deployment of new, environmentally friendly technologies, and an unprecedented upswing in cruise ship construction. The maritime cluster encompasses about 3,000 companies from various sectors, all of which are connected by their maritime expertise. Our diversity differentiates us from many other countries. Among our number are passenger and cargo ship owners, specialist ship owners, marine industries ranging from shipyards to software companies and startups, as well as the ports that handle almost 90 per cent of Finland’s foreign trade. Passenger traffic is also an important category. The Port of Helsinki is the busiest passenger port in Europe. In 2018, more than 12 million international passengers passed through the Port of Helsinki.

Finland’s unique strength is the exceptionally open-minded collaboration between entities, enabling innovative experimentation. Examples of this include the One Sea innovation ecosystem, which is promoting autonomous maritime traffic, the remote pilotage experiment, which is current under preparation, and the smart fairway, which is based on using data and data exchange in an entirely new way. Seafaring history was made in Finland at the beginning of December 2018 when the world’s first fully autonomous ferry sailed through the Turku archipelago.

The Finnish maritime cluster is also a pioneer in environmental innovation and it is at the global spearhead of the development and deployment of low-emission technologies that enhance energy efficiency. Liquefied natural gas (LNG), wind, electricity and biofuels manufactured from waste are already in use – they have long since graduated from the planning phase. Finland also has very strong Arctic expertise. The Baltic Sea could even be considered an “Arctic test laboratory”. Finnish seafaring expertise is unique, and the icy winter and difficult navigation conditions require seafarers and entities in the maritime industry to have special skills.

The entities in the maritime cluster have begun collaborating more closely in recent years. For example, the Breaking Waves 2018 event was held in Helsinki in December 2018, bringing together key players in the European maritime cluster to consider the keys to success in increasingly tough global competition. The event was part of one of Europe’s largest startup events, Slush.

Automation and digitalization will lead to an unprecedented transformation in seafaring. Climate change is challenging the maritime cluster to identify solutions for low-emission maritime traffic. This publication highlights the world-class Finnish expertise and innovations that will address these challenges.

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