Automation in Maritime Transport and Port Industry
Agenda

I. Introduction
II. Current outcomes
III. Plan for future
One Sea Partners

ABB
Cargotec
Ericsson
Finnpilot Pilotage
Kongsberg
Tieto
Wärtsilä
## Ecosystem activities

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- Product & service creation
- Startup ecosystem
- Pilots, PoC’s
- R&D Programs
- Rules & regulations
- Test areas, Labs

Open to all parties
Ecosystem Outcomes 2016-2018

Ecosystem Core Activities
- Product & service creation
- Startup ecosystem
- Pilots, PhDs
- R&D Programs
- Rules & regulations
- Test areas, labs

Ecosystem Program Activities
- Open to all parties

Vision & Strategy
- Roadmaps

Design for Value program
- The DIMECC DfValue program focuses on autonomous supply chain
- Business models and ecosystem transformation & change
- Technology solutions, digital platforms
- Engaging companies and people to new ecosystem, legal, regulatory and societal aspects

Pike Tank
One Sea objectives

• Further internationalisation of core partners
• Promoting and supporting maritime automation efforts globally
• Effective cooperation with international organisations
• Holistic development of autonomous transport system in collaboration with the public sector
Application cases

- Industrial standards
- Research programs Sea4Value
- Tallinn-Helsinki fully digitalised TENT-T maritime corridor
Sea4Value – Value creation via smart and autonomous maritime transport

The program mission is to provide blueprints towards digitalization, service innovation and information flows in maritime transport. Longer term mission is preparing for advanced autonomous operations and navigation.

Planned program outcomes

1. Smart harbour experiments on improved visibility of cargo information suitable for small and medium sized harbours
2. Smart fairway navigation experiments
3. ePilotage working environment (on shore) and remote pilotage experiments
4. Electronic corridor concept defined and experiments between Tallinn and Helsinki

Autonomous maritime transport system

Electronic corridor
- Cross-border corridor
- Information exchange (ship-to-ships, ship-to-shore)
- Situational awareness (shared within actors)

Cargo information (electronic documentation, cargo status...)
- Timing and ETAs
- Route information...

Smart harbour operations and logistics connect the road, rail and maritime transport systems and enable multimodal transportation.

Fairway is the navigation channel by which the existing vessels and future autonomous ships use to travel safely in the transfer of goods.

Asset monitoring, visibility to cargo status, electronic corridors and interconnection are the building blocks of safe, efficient and sustainable shipping in the future.

Joint development between companies, research organizations and authorities to create new knowledge and innovation
Rolls-Royce and Finferries demonstrate world’s first Fully Autonomous Ferry

More about: Press release | Marine | Ship Intelligence | United Kingdom

Rolls-Royce and Finnish state-owned ferry operator Finferries have today successfully demonstrated the world’s first fully autonomous ferry in the archipelago south of the city of Turku, Finland.

The ferry, Aalto, uses a combination of Rolls-Royce Ship Intelligence technologies to successfully navigate autonomously during its voyage between Parainen and Naantali. The return journey was conducted under remote control.

During the demonstration, the Aalto, with 80 invited VIP guests aboard, conducted the voyage under fully autonomous control. The vessel detected objects utilising sensor fusion and artificial intelligence and conducted necessary evasive actions to avoid potential collisions.

Nokia, ABB and Kalmar conduct industry’s first trial with ultra-reliable, low-latency, 5G technology for electricity grid and harbor automation.
DIMECC’s co-creation ecosystem One Sea seeks global partners to join the leading co-creation ecosystem.

Join us!
www.oneseaecosystem.net

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