



Join us to discuss market, technology and policy developments that enable autonomy to impact the waterborne sector in EU with the needed modal shift, more efficient and greener waterborne transport.

Date and time:
November 7th, 2023
09:00 – 16:00 CET

Where:
Europort
Rotterdam Ahoy
Dock 14 (2nd floor)

[Register here](#)



09:00	09:30	Registration, coffee/tea and light snacks.
09:30	09:35	Welcome and introduction : Ørnulf Jan Rødseth (NFAS). <i>The event moderator sets the stage for the day.</i>
09:35	09:50	Keynote speaker 1: Susanne Lanzerstorfer (CINEA). <i>Overview of CINEA on Horizon Europe waterborne automation projects including AEGIS, AUTOSHIP and MOSES.</i>
09:50	10:05	Keynote speaker 2: Alexander Hoffmann (DG MOVE). <i>Priorities of the European Commission including the role of EC funded research.</i>
10:05	11:15	Session 1: How does autonomy enable new business models?
11:15	11:45	Coffee break with light snacks.
11:45	13:00	Session 2: Tech talks – where are we on autonomy?
13:00	14:00	Standing lunch.
14:00	15:40	Session 3: Supporting sustainable development of waterborne transport.
15:40	16:00	Future outlook for autonomous waterborne transport. <i>The project coordinators Nikolaos Ventikos (NTUA, MOSES), Marco Molica Colella (CiaoTech PNO, AUTOSHIP), Odd Erik Mørkrid (SINTEF Ocean, AEGIS) gives insights on future outlooks for autonomous waterborne transport.</i>
16:00		End of event.



These projects have received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements N° 815012, 859992, 861678.



Session 1 - How does autonomy enable new business models?

Introduction – Why business cases matters.

Ørnulf Jan Rødseth, Norwegian Forum for Autonomous Ships.

The hub-and-spoke redesign proposal with small, autonomous feeder shuttles.

Kenneth Johanson, North Sea Container Line.

Zero-emission logistics with uncrewed inland waterway barges and short sea vessels.

Antoon Van Coillie, Zulu Associates.

Autonomous ecosystems: A paradigm shift for maritime business models.

Kristoffer Kloch, DFDS.

New opportunities for ports with automated terminals and ships - Transferability cases.

Nacho Benítez Sánchez, Port of Valencia.

Panel discussion with all speakers.

Moderated by Marco Molica Colella, Ciaotech PNO.

Session 2 - Tech talks – where are we on autonomy?

Introduction - The most important technical challenges.

Ørnulf Jan Rødseth, Norwegian Forum for Autonomous Ships.

Situation awareness – Object detection and classification.

Henrik Foss, Kongsberg Maritime.

Autonomous navigation on inland waterways and open seas.

Knut Eilif Husa, Kongsberg Maritime.

Autonomous container handling with ship cranes.

Janne Suominen, Macgregor.

Remote support of robotic container handling systems.

Mirjam Huis in 't Veld, TNO.

Navigating the future with automated terminal operations.

Christopher Saavedra, Kalmar.

Panel discussion with all speakers.

Moderated by Ørnulf Jan Rødseth, Norwegian Forum for Autonomous Ships.





Session 3 - Supporting sustainable development of waterborne transport.

Introduction

Ørnulf Jan Rødseth, Norwegian Forum for Autonomous Ships

Is automation win-win-win? A perspective on sustainable developments goals and societal benefits.

Harilaos Psaraftis, Technical University of Denmark.

Why is the modal shift important? Zero-emission impact on external transport costs.

Håvard Nordahl, SINTEF Ocean.

Underlying assumptions affecting design in automatization and technology development.

Nanna Thit Hemmingsen, DFDS.

New skills and new training – Where will our employees end up?

Gerasimos Theotokatos, University of Strathclyde.

How safe do we need to be?

Konstantinos Louzis, National Technological University of Athens.

Successful governance of technical innovations in waterborne transport systems.

Nelson F. Coelho, Aalborg University.

Panel discussion with all speakers.

Moderated by Nikolaos Ventikos, National Technological University of Athens.





About the projects

Project	Objective
 <p>AUTOSHIP <i>Autonomous Shipping Initiative for European Waters</i></p> <p>Coordinator: Ciaotech S.r.l. – PNO Group, Italy</p> <p><i>European Union's Horizon 2020 research and innovation program under Grant Agreement N° 815012.</i></p>	<p>AUTOSHIP aims at speeding-up the transition towards a next generation of autonomous ships.</p> <p>The project will build and operate two different autonomous vessels, demonstrating their operative capabilities in Short Sea Shipping and Inland Water Ways scenarios, with a focus on goods mobility.</p> <p>https://www.autoship-project.eu/</p>
 <p>MOSES <i>AutoMated Vessels and Supply Chain Optimisation for Sustainable Short SEa Shipping</i></p> <p>Coordinator: National Technological University of Athens (NTUA), Greece</p> <p><i>European Union's Horizon 2020 research and innovation program under Grant agreement N° 861678.</i></p>	<p>MOSES aims to significantly enhance the SSS component of the European container supply chain by addressing the vulnerabilities and strains that relate to the operation of large containerships. MOSES will follow a two-fold strategy, which consists of reducing the total time to berth for TEN-T Hub Ports and stimulating the use of SSS feeder services to small ports (hub and spoke traffic) that have limited or no infrastructure.</p> <p>https://moses-h2020.eu/</p>
 <p>AEGIS <i>Advanced, efficient and green intermodal systems</i></p> <p>Coordinator: SINTEF Ocean, Norway</p> <p><i>European Union's Horizon 2020 research and innovation program under Grant Agreement N° 859992.</i></p>	<p>AEGIS will integrate new innovations from the area of Connected and Automated Transport (CAT) to design the next generation sustainable and highly competitive waterborne transport system in Europe, including more diverse sizes of ships and more flexible ship systems, automated cargo handling, ports and short sea shuttles, standardized cargo units and new digital technologies.</p> <p>http://aegis.autonomous-ship.org/</p>

The main focus of AUTOSHIP is vessel technology. MOSES focuses on vessel and cargo handling technology and logistics. While AEGIS' main focus is more on the logistics side including digital interconnectivity as well as on cargo handling technology and vessel concept. As such these important projects are all interlinked towards the goals of Connected and Automated Transport as the market opportunity of the technologies being developed is in waterborne logistics.



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