

5th International Ship Autonomy and Sustainability Summit

Digital Hub Logistics (Am Sandtorkai 32, 20457 Hamburg), 2 September 2024

programme version of 30-08-2024

The human-technology interface in autonomous shipping

09:30 Welcome

Magda Kopczyńska | Directorate-General for Mobility and Transport, European Commission

Arsenio Antonio Dominguez Velasco | IMO Secretary General

Even Tronstad Sagebakken | State Secretary, Norwegian Ministry for Fisheries and Ocean Policy

Dr. Melanie Leonhard | Minister for Economy, City of Hamburg

10:15 Setting the scene: Conclusions from the previous Summits

Ørnulf Jan Rødseth | Manager, Norwegian Forum for Autonomous Ships (NFAS)

Fotini Ioannidou | Director Waterborne, DG MOVE, European Commission

Jacob Terling | Principal Administrator, DG MOVE, European Commission

10:30 Inspiration 1: Keynote speech – Human supported by technology vs. technology supported by humans? Impact on the seafaring profession

Prof. Jens-Uwe Schröder-Hinrichs | World Maritime University (WMU), Vice President (Academic Affairs)

10:50 Debate 1: Demystifying MASS and the future of seafaring – will the human become redundant?

The human role in a ship-centric perspective: Communicating with an algorithm? Taking the **human element** out of the loop? For which reasons, for what trades and which parts of the voyages? What new perspectives open up for seafarers (and the groups to recruit them from) and how is the seafarer profession kept attractive? How do we ensure smooth communication (in addition to connectivity)?

Moderator: Alexander Hoffmann (European Commission)

- **Ondrilla Fernandes** | Employment Affairs Advisor, International Chamber of Shipping (ICS)
- **Branko Berlan** | IMO representative, International Transport Workers' Federation (ITF)
- **Lennart Swoboda** | Head of Autonomy, Bernhard Schulte
- **Hans-Christoph Burmeister** | Head of Department 'Sea Traffic and Nautical Solutions', Fraunhofer Center for Maritime Logistics and Services (CML)

Conclusions Debate 1.

12:10 Family photo and Lunch break, followed by coffee

13:25 The Digital Hub Logistics Hamburg

13:30 Inspiration 2: Legal aspects of Remote Operating Centres (ROCs)

Prof. Dr. iur. Anna Petrig, LL.M. (Harvard) | University of Basel (online)

13:45 Debate 2: The evolution of an international legal framework for operating MASS, incl. ROCs

The IMO decided that there should always be a master responsible for a MASS and that the master should have the means to intervene. How can Remote Operating Centres be brought into the existing **legal** framework? How will the interaction between human and machine/automation

be done in practice, including responsibilities for performing/monitoring tasks? Which qualifications do MASS operators in ROCs need? How will jurisdiction be determined? And how will ROCs need to be designed, manned and approved/certified? Many countries are now developing a framework for operation of MASS in national waters. We also see some developments in bilateral agreements for sailing MASS in and between adjacent national waters. An important question remains: What about operation in international waters?

Moderator: Ørnulf Jan Rødseth (NFAS)

- **Diederik Wéreau** | EU Presidency Policy Advisor, DG Shipping - Safety and Environment Policy, Belgium
- **Antonio Hevia Rodriguez** | Competences for MASS Operators in Remote Operating Centres (CMOROC), European Maritime Safety Agency (EMSA)
- **Svein-David Medhaug** | Business Development Manager, REMOTA
- **David Appleton** | International Federation of Shipmasters' Associations (IFSMA)

Conclusions Debate 2.

1500: Coffee break and refreshments

1525: Inspiration 3: Risk-Based Assessment – a “*sine qua non*” for MASS?

Nicolas Charalambous | European Maritime Safety Agency (EMSA): Risk-Based Assessment Tool (RBAT) Demonstration/Experience

1540: Debate 3: The human in the loop - a risk and rescuer?

In the future, increased degrees of autonomous ship will be omnipresent, but so will risks. Do we need a new approach to risk assessment? How can technology remain **secure**, and how will crew be skilled and **remain vigilant**? How to allow predictability of MASS action? Communication and connectivity? What should a MASS fallback state look like?

Moderator: Jacob Terling (European Commission)

- **Sifis Papageorgiou** | Principal Surveyor, Norwegian Maritime Authority
- **Sinikka Hartonen** | Secretary-General, OneSea
- **Are Jørgensen** | Senior Principal Engineer, Digital Ship Systems, Maritime, Det Norske Veritas (DNV)
- **Dr. Sebastian Feuerstack** | Head of Department Safe Automation of Maritime Systems, Deutsches Zentrum für Luft- und Raumfahrt e.V./ German Aerospace Center (DLR)

Conclusions Debate 3.

1700: The Business Case

- **SEAMLESS project - Building the Future Business Case for MASS Logistics: The SEAMLESS Approach**

Presentation of the SEAMLESS project's goals, concept, and ambitions, as well as the development of disruptive business models that aim to harness the capabilities of autonomous maritime technologies and concretely contribute towards seamless freight transport logistics.

- **Nikolaos P. Ventikos** | SEAMLESS Project Coordinator, Professor, National Technical University of Athens
- **Jorge Lara Lopez** | Senior Project Manager, Fundación Valenciaport

1715: Summing-up and overall conclusions

Magda Kopczyńska | Director General DG MOVE, European Commission

Ørnulf Jan Rødseth | Manager, Norwegian Forum for Autonomous Ships (NFAS)

Fotini Ioannidou | Director Waterborne, DG MOVE, European Commission

Jacob Terling | Principal Administrator, DG MOVE, European Commission

1730: End of Summit and Reception