



INTERNATIONAL SYMPOSIUM

Digital Platforms for Maritime Safety and Security Applications

23-24 October 2019, from 9.00h to 17.30h and 9.00h to 16.30h

Forum Fischbahnhof, Am Schaufenster 6, **Bremerhaven, Germany**

22 October 2019 - Preliminary Outdoor-Life-Demonstrations

16.00h – 18.00 **Outdoor Life-Demonstrations**

The outdoor life-demonstrations will be available during the whole symposium.
The indoor exhibition can be visited on 23 to 24 October.
(Further details are displayed at the bottom of this programme.)

23 October 2019 - Programme Day 1

08.00 **REGISTRATION - WELCOME COFFEE AND OPENING OF THE EXHIBITION**

Moderation and introduction: Joachim Brodda; NMMT Office, Bremen, Germany

09.00 **Welcome by the Representative of the Free Hanseatic City of Bremen**

Representative of the Free Hanseatic City of Bremen, Germany

09.10 **Welcome by the German Federal Government Coordinator for the Maritime Industry**

Norbert Brackmann, MdB, Federal Ministry for Economic Affairs and Energy (BMWi), Berlin, Germany

09.30 **Keynote: Strategic Foresight – Maritime Safety and Security Framework Conditions**

Dr. Heiko Borchert, Borchert Consulting & Research AG, Luzern, Switzerland

09.50 **Keynote: Market Foresight – Global Challenges and Prospects**

Rob Grool, ZEABORN Ship Management, Hamburg, Germany (TBC)

10.10 **Impact of Digitalisation on Traffic Monitoring and Management, Maritime Logistic Chains**

Moderation: Michael Bergmann, BM Bergmann-Marine, Grosskrotzenburg, Germany

Digitisation in the port – Finding a balanced way

Andreas Mai, Port of Bremerhaven and Bremen, Bremen, Germany

New thinking in shipping – Advanced services for the National Single Window (NSW+)

Hubert Hoffmann, MSC Germany S.A. & Co. KG, Hamburg, Germany

PortCDM: Digital data sharing as key for collaboration for harmonizing sea transports as part of the inter-modal transport

Mikael Lind, Research Institutes of Sweden, RISE Viktoria, Sweden

Preliminary investigation of straits for the implementation of vessel traffic service

Carsten Hilgenfeld, JAKOTA Design Group GmbH, Rostock, Germany

11.25 **COFFEE BREAK – EXHIBITION – LIFE-DEMONSTRATION SESSION - NETWORKING**



11.55 **Critical Maritime Infrastructures (Ports, Vessels, Waterways etc.)**

Moderation: Dr.-Ing. Jeronimo Dzaack, ATLAS ELEKTRONIK GmbH, Bremen, Germany

How critical are maritime infrastructures and how to live with the risks?

Carl Wrede, German Aerospace Center e.V. (DLR), Institute for the Protection of Maritime Infrastructures, Bremerhaven, Germany

Holistic security measures for Maritime Infrastructures

Dirk Siebels, Risk Intelligence A/S, Hellerup, Denmark

Decision support system for firefighters coping with hazards on board of vessels

Dr. Daniel Feiser, Fraunhofer Institute for Communication, Information Processing and Ergonomics (FKIE), Bonn, Germany

13.10 **LUNCH BREAK – EXHIBITION - DEMONSTRATION SESSION - NETWORKING**

14.30 **Security Challenges on Coastal and Offshore Installations**

Moderation: Carl Wrede, German Aerospace Center e.V. (DLR), Institute for the Protection of Maritime Infrastructures, Bremerhaven, Germany

Maritime spatial planning in light of climate and environmental challenges

John Erik Hagen, Norwegian Coastal Administration, Stavanger, Norway

Digitization: More opportunity than risk for the security of infrastructures

Jan Schäfer-Frey, Fichtner GmbH & Co. KG, Stuttgart, Germany

Airborne systems for maritime missions – Overview and practical example

Dr. Nils Robbe, OPTIMARE Systems GmbH, Bremerhaven, Germany

AUV in operation

Tommy Kaltofen, ATLAS ELEKTRONIK GmbH, Bremen, Germany

15.45 **COFFEE BREAK - EXHIBITION - DEMONSTRATION SESSION - NETWORKING**

16.15 **Testbeds and Simulation**

Moderation: Prof. Dr. Axel Hahn, OFFIS e.V., Oldenburg, Germany

Open Simulation Platform,

Øyvind Smogeli, DNV GL AS, Trondheim, Norway

Enhanced safety during pilot operations in harbours

Sören Kuklau, TRENZ AG, Bremen, Germany

CAPTin Kiel - Clean autonomous public transport in Kiel

Prof. Dr.-Ing. Thomas Meurer, Christian-Albrechts-University, Kiel, Germany

Integrated testbeds in Germany

Dr. André Bolles, OFFIS e.V.; Oldenburg, Germany and Holger Klindt, GMT e.V., Hamburg, Germany

17.30 **END DAY 1 – EXHIBITION OPEN UNTIL 18.00H**

23 October 2019 – Senate Reception

18.30 - 20.30 **Reception by the Senator for Economic Affairs, Labour and Europe of the Free Hanseatic City of Bremen**

Bremerhaven museum “German Immigration Center”, Columbusstraße 65, Bremerhaven

A shuttle service will be available on 17.50h and 18.15h in front of the entrance to the conference venue



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24 October 2019 - Programme Day 2

08.00 REGISTRATION - WELCOME COFFEE AND OPENING OF THE EXHIBITION AND OUTDOOR DEMONSTRATIONS

09.00 **Welcome Day 2**

Introduction: Holger Klindt, German Association for Marine Technology (GMT), Hamburg, Germany

09.10 **Communication Infrastructure, Cyber-Risk-Management**

*Moderation: Thoralf Noack, German Aerospace Center (DLR), Institute of Communication and Navigation
Department Nautical Systems, Neustrelitz, Germany*

Current trends towards reliable and efficient maritime communication technologies

*Dr. Simon Plass, German Aerospace Center e.V. (DLR), Institute of Communications and Navigation,
Oberpfaffenhofen-Wessling, Germany*

Maritime Connectivity Platform

Paul Williams, Ph.D., GLA/Trinity House, London, United Kingdom

SecurePort - From surprise to comprehensive control

Tom Patrik Österreich, Lübecker Hafengesellschaft, Lübeck, Germany

Collection of reliable and secured data with mobile devices and blockchain technology

*Otto Klemke, NautilusLog GmbH, Hamburg, Germany and
Gunar Fiedler, Raytheon Anschütz GmbH, Kiel, Germany*

10.25 COFFEE BREAK - EXHIBITION - DEMONSTRATION SESSION - NETWORKING

11.00 **Resilience in Complex Maritime Systems**

Moderation: Wilko C. Bruhn, Raytheon Anschütz GmbH, Kiel, Germany

Maritime cyber security resilience – DNV GL guidance and rules for the 2020s

Svante Einarsson, Safety & Systems Engineering, DNV GL SE, Hamburg, Germany

IntelliMar - Benchmarking and validation of a semi-automatic anomaly detection system for maritime situation awareness

Sonja Sievi, Airbus Defence and Space GmbH, Bremen, Germany

Cyber security on open waters – How to get ready for the challenge

Jan Lausch, Wärtsilä SAM Electronics GmbH, Hamburg, Germany

Simulation platforms for safe and secure maritime applications

Jan Barnickel, AVL Software and Functions GmbH, Regensburg, Germany

12.15 LUNCH BREAK – EXHIBITION - DEMONSTRATION SESSION - NETWORKING



13.15 **Digital Platforms and Services for Environmental Monitoring and Protection**

Moderation: Dr. Thomas Heege, EOMAP GmbH & Co. KG, Seefeld, Germany

Increasing navigational safety and knowledge with Data Science techniques

Terry Makewell, United Kingdom Hydrographic Office (UKHO), London, United Kingdom

Marine SDI in support of e-Navigation and maritime services portfolio

Rafael Ponce, ESRI, Redlands, California, USA

Maritime surveillance services based on very high-resolution optical imagery

Dr. Melanie Rankl, European Space Imaging EUSI, Munich, Germany

Maritime geospatial portals using earth observation data streams for environmental monitoring

Dr. Knut Hartmann, EOMAP GmbH & Co. KG, Seefeld, Germany

14.30 **COFFEE BREAK - EXHIBITION - DEMONSTRATION SESSION - NETWORKING**

15.00 **Foresight Panel for Maritime Safety and Security Applications and Technologies**

Moderation: Joachim Brodda, NMMT Office, Bremen, Germany

MR'in Anne Jacobs-Schleithoff, Federal Ministry of Economic Affairs and Energy (BMWi), Berlin, Germany

N.N., Federal Ministry of Transport and Digital Infrastructure (BMVI), Berlin, Germany (TBD)

Terry Makewell, United Kingdom Hydrographic Office (UKHO) London, United Kingdom

Ringo Lakeman, Maritime Administration, chair IMO/NCSR, Rotterdam, The Netherlands (TBC)

N.N., Wärtsilä SAM Electronics GmbH, Hamburg, Germany

Dr.-Ing. Jeronimo Dzaack, ATLAS ELEKTRONIK GmbH, Bremen, Germany

Closing Remarks

MR'in Anne Jacobs-Schleithoff, Federal Ministry of Economic Affairs and Energy (BMWi), Berlin, Germany

16.30 **END OF SYMPOSIUM**



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Exhibition

Indoor Exhibition

Available during the conference days:

23 October 2019	8:00h – 18:00h
24 October 2019	8:00h – 17:00h

Institutions and companies present their latest maritime safety projects and technologies as well as mastered challenges in digital platforms:

- Airbus Defence and Space GmbH
- ATLAS ELEKTRONIK GmbH
- Drift Noise GmbH
- EOMAP GmbH & Co. KG
- FICHTNER GmbH & Co. KG
- Fraunhofer Center for Maritime Logistics and Services (CML)
- German Aerospace Center (DLR)
- Hexagon Geospatial
- in-innovative navigation GmbH
- NautiTronix UG
- OPTIMARE Systems GmbH
- Raytheon Anschütz GmbH
- Wärtsilä Deutschland GmbH

Outdoor - Life-Demonstrations

Available during the whole symposium:

22 October 2019	16:00h – 18:00h
23 October 2019	8:00h – 18:00h
24 October 2019	8:00h – 17:00h

Robust PNT Sensors and Alternative PNT Systems

German Aerospace Center e.V., (DLR) Institute of Communications and Navigation
Project GALANT and R-Mode Receiver from R-Mode Baltic

ACTRESS Technology Development Platform:
Integrating test and evaluation reference system. The project consortium is composed of OFFIS e.V., DNVGL SE, BSH, ATLAS ELEKTRONIK GmbH, Raytheon Anschütz GmbH and AVL Deutschland GmbH

Use of the mobile towed sonar explorer Mk-II in the content of surveillance of critical maritime infrastructures

ATLAS North America

Results of research projects developed in collaboration with national and European partners

Fraunhofer Center for Maritime Logistics and Services (CML)

Protection of Maritime Critical Infrastructure by AUVs

German Aerospace Center e.V. (DLR), Institute for the Protection of Maritime Infrastructures & ATLAS ELEKTRONIK GmbH

Registration:

Please register (**free of charge**) under <https://www.nmmt.de/registration.php>.