







Press Release

ATLAS ELEKTRONIK

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"Maritime 2050+": Future study of industry and research institutions demands more responsibility for maritime world and international leadership role of Germany

- Joint future study of ATLAS ELEKTRONIK, DLR and Fraunhofer FKIE handed over to German government in Friedrichshafen
- Higher investment necessary to safeguard maritime interests
- Key areas of action: Common Understanding, International Cooperation, Technological Research, Artificial Intelligence and Cyber Security

The maritime space is essential to human life. Marine resources feed a growing world population, which is increasingly concentrated in coastal areas. Maritime corridors are the backbone of globalization. However, prosperity is not only built upon the unrestricted exchange of resources, goods, information and mobility of people, but especially on the preservation of this unique ecosphere.

"Maritime 2050+" is a joint future study of ATLAS ELEKTRONIK, the German Aerospace Center and the Fraunhofer Institute for Communication, Information Processing and Ergonomics FKIE. It is dedicated to the development of the maritime space in the next decades and shows measures to improve the quality of life by bringing together the different economic and ecological interests. In addition to climate change and immense population growth, the authors of the future study expect an increasing exploitation of the oceans in the coming decades - for drinking water and food, but also in the use of marine resources.

Michael Ozegowski, CEO of ATLAS ELEKTRONIK: "The growing need for maritime resources is increasing the potential for conflicts between countries. We need to work closer together at national and international level, create new technologies and establish rules that will enable a peaceful management while at the same time protecting the maritime space."

Dr. Dennis Göge, Executive Board Representative Defence and Security Research, DLR: "We hope that politicians will maintain and ideally intensify the already existing focus on the maritime domain. In order to better bring technological solutions from research into application, we need targeted funding programs. Independent testing facilities, greater support for qualification and training as well as the creation of cross-sectoral synergies are necessary for a sustainable use of the maritime space."









Prof. Dr. Peter Martini, Head of Fraunhofer Institute for Communication, Information Processing and Ergonomics FKIE: "Digitisation and cyber security are the two drivers to further develop the maritime industry. In doing so, we must find user-friendly solutions, integrate AI responsibly and install pragmatic protection mechanisms."

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The authors of the future study "Maritime 2050+" identified the following fields of action as crucial in order to align the different economic, ecological and security-related interests.

Common understanding and clear rules

All relevant stakeholders should develop a shared holistic view of the maritime domain that reflects the complexity of this fragile system. Careless or even criminal behavior has in the past repeatedly led to serious ecological incidents with dire repercussions. There is a need for rules and strictly enforced limitations that apply to all users.

International cooperation

Governments, businesses, research institutions and other key players need to work together to drive initiatives around the world. Only then we can jointly take responsibility for a living space that we all share. There needs to be a guiding hand, but each government must also contribute its intellectual and budgetary share to support the development of joint solutions.

Technological research

It takes a long-term perspective to solve the technological challenges we face. We need global surveillance solutions for maritime applications, the development of autonomous vehicles for transport, exploration, and maintenance, the seamless integration of heterogeneous systems and the fusion of big data streams to exploit the full potential of digitisation.

Artificial Intelligence

Artificial intelligence will greatly change the ability to use and protect our maritime world. At the same time, intelligent systems cannot completely replace human reasoning in critical situations. Research must therefore deal with responsible decision-making. This includes aspects such as data integrity, causal transparency, or system reliability

Cyber security

Increasing digitisation goes along with increased cyber security threats. With its critical infrastructure, the maritime sector is particularly threatened. In order to be better protected against theft, manipulation, sabotage and disruption, suitable solutions must be developed and implemented in areas such as common standards, certifications, improved system stability and nationwide monitoring. Governments play a key role to achieve this internationally.









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Towards German politics, the authors of the future study see above all the need to invest more so that Germany can effectively pursue its economic, environmental and securityrelated maritime interests.

The report "Maritime 2050+" was handed over on 22 May 2019 in Friedrichshafen, Germany, to the responsible Federal Government Coordinator for the Maritime Industry, Norbert Brackmann. "Maritime 2050+" was jointly created by ATLAS ELEKTRONIK, the German Aerospace Center and the Fraunhofer Institute for Communication, Information Processing and Ergonomics.

About ATLAS ELEKTRONIK

The ATLAS ELEKTRONIK Group stands for maritime and naval solutions above and below the ocean surface. The company holds a leading position in all fields of maritime high technology, from command & control systems including radio & communication systems for submarines, surface combatants and mine warfare systems and ranging to heavyweight torpedoes, coastal surveillance systems and in-service support. ATLAS has established a worldwide customer portfolio. The electronics specialist is an operational unit of thyssenkrupp Marine Systems. The company has a workforce of around 2.200 highly skilled employees.

More information at: www.atlas-elektronik.com

thyssenkrupp Marine Systems is one of the world's leading system suppliers for submarines and naval surface vessels as well as for maritime security technologies. The company has a history of naval shipbuilding that dates back centuries and offers state-of-the-art technologies, innovations and extensive and dependable services to customers around the world. With its Operating Units Submarines, Surface Vessels, Naval Electronic Systems and Services, thyssenkrupp Marine Systems is part of the thyssenkrupp Group.

More information at: www.thyssenkrupp-marinesystems.com

About German Aerospace Center

The German Aerospace Center (DLR) is the national aeronautics and space research centre of the Federal Republic of Germany. Its extensive research and development work in aeronautics, space, energy, transport, digitalisation and security is integrated into national and international cooperative ventures. In addition to its own research, as Germany's space agency, DLR has been given responsibility by the federal government for the planning and implementation of the German space programme. DLR is also the umbrella organisation for one of Germany's largest project management agencies.

More information at: www.dlr.de









About Fraunhofer Institute for Communication, Information Processing and Ergonomics FKIE

At its core, the Fraunhofer Institute for Communication, Information Processing and Ergonomics FKIE is geared towards supporting government institutions in the field of external and internal security. Strategic cooperation with the Ministry of Defense, the Federal Office for Information Security and the Federal Police is of critical importance. In the economic sector, the FKIE focuses on security at airports, in air traffic, for maritime systems and in the IT sector. With its approximately 450 employees at its Bonn and Wachtberg locations, the FKIE is a leading institute for applied research and practical innovation in information and communication technology as well as in the field of human-oriented technology design.

More information at: www.fkie.fraunhofer.de

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