

FRAUNHOFER CENTER FOR MARITIME LOGISTICS AND SERVICES CML

KRISO AND CML LAUNCH ASIA-PACIFIC MARITIME SIMULATOR NETWORK APMSN

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The Coordinator of the European Maritime Simulator Network welcomes the First Member of the APMSN

Hamburg/ Daejeon, June 2019. The Fraunhofer Center for Maritime Logistics and Services CML, and the Korea Research Institute of Ships & Ocean Engineering (KRISO) have made a great step forward in their relationship and for the international nautical research society: Together they inaugurated the Asia-Pacific Maritime Simulator Network APMSN.

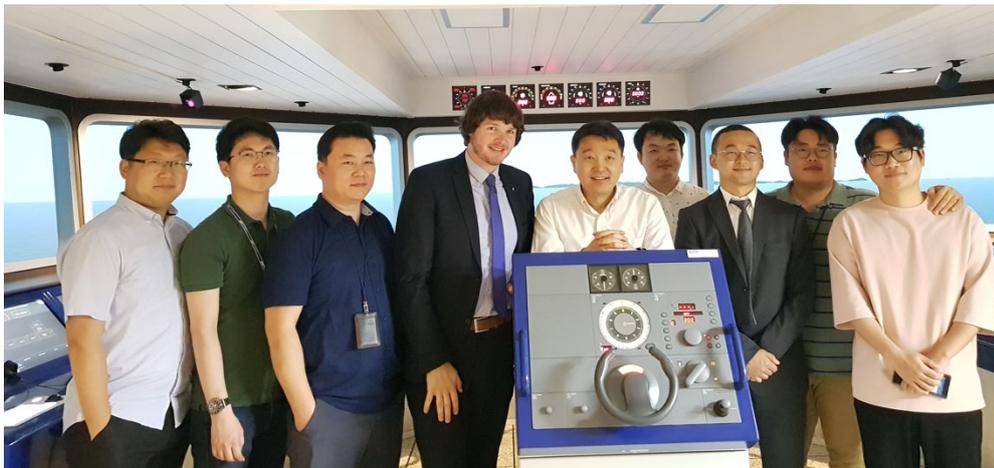


Figure 1: Researchers from Fraunhofer CML and KRISO are looking forward to their cooperation (© KRISO)

Distributed interactive simulator networks aim at bringing together ship handling simulators from research, education, the maritime industry and the shipping companies in a virtual surrounding. Thus, networks like the already established European Maritime Simulator Network (EMSN) and its new Asian branch Asia-Pacific Maritime Simulator Network (APMSN) give the participating partners the opportunity to virtually steer vessels in the same specific sea area, communicate amongst each other and practice joint maneuvers in narrow waters.

APMSN shall serve as a validation platform for Korean SMART-Navigation services (see below) and for future initiatives like autonomous shipping and smart maritime logistics. Furthermore, it shall also intensify the links between

Contact

Claudia Bosse | Fraunhofer Center for Maritime Logistics and Services CML | Tel.: +49 40 42878-4476 |

Am Schwarzenberg-Campus 4, Gebäude D | 21073 Hamburg | Germany | www.cml.fraunhofer.de | claudia.bosse@cml.fraunhofer.de

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Asian Maritime Universities to its European counterparts to improve and internationalize education and thus safety at seas.

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The APMSN is the further development of the EMSN. The EMSN was developed earlier in the EU-funded research projects MONALISA 2.0 and STM Validation, connecting ship handling simulators from different manufacturers at different European locations for the first time. So far, EMSN served as a validation tool for future maritime services and sea traffic management concepts. Thereby EMSN's benefits have been acknowledged by international organizations like IALA, BIMCO and the Nautical Institute, which stated during a joint conference, that it "...has been proven useful in identifying unforeseen consequences of new technologies and such initiatives [EMSN] should be sustained".

Today, the Maritime Simulator Network is maintained by Fraunhofer CML within the EMSN Connect initiative of almost a dozen international simulation and training institutes.

In view of the global nature of ocean shipping and the good contacts that the Fraunhofer CML has already established with KRISO in South Korea, the idea of expanding the network into the Asia-Pacific region and founding the APMSN was obvious. With KRISO as founding partner and first center in the Asia-Pacific branch a new era of interactive maritime simulation has started. Additionally, a fourth simulation manufacturer, the Korean STR SafeTechResearch, has now implemented the EMSN/ APMSN compatible interface also highlighting the acceptance of manufacturers for this manufacturer-open interface.

CML and KRISO hope to expand the APMSN with up to three further centers in the course of the year and aim for executing joint runs between the European and Korean centers. The vision for the years to come is establishing a truly global virtual ocean for the maritime training and research domain.



Figure 2: Logo of APMSN/ EMSN Connect (Fraunhofer CML)

FRAUNHOFER CENTER FOR MARITIME LOGISTICS AND SERVICES CML**About Fraunhofer CML**

The Fraunhofer Center for Maritime Logistics and Services CML develops and optimizes processes and systems along the maritime supply chain. Within practically oriented research projects, CML supports public and private sector clients of port operations and the shipping business as well as from the logistics services and ship building industry.

About KRISO

The Korean research institution KRISO focuses on Naval Engineering, Ocean Engineering, including environmentally friendly advanced ship, offshore plant, maritime ICT, maritime safety and ocean system.

About SMART-Navigation

The SMART-Navigation Project implements the concept of IMO's e-Navigation, providing additional services for Non-SOLAS ships such as fishery boats, coastal vessels and ferries. Funded by the Korean Ministry of Oceans and Fisheries and led by the SMART-Navigation Project Office at KRISO, it has a budget of approximately 115 Mio. USD.

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Fraunhofer-Gesellschaft

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