

## Nr. 5 Training Technologies for the Use of LNG

### Background:

Liquefied natural gas (LNG) is seen as a future-oriented fuel for ships. The introduction of new technologies in the maritime sector, such as the use of LNG as an alternative fuel, requires the education and training of all workforce that will be confronted working with this new fuel, on board of a ship or ashore. New technologies are often highly complex. New processes, equipment and techniques are being introduced for a vessel using LNG as fuel. These previously unknown processes have high safety requirements. Therefore, it is necessary to provide the related comprehensive knowledge and skills efficiently and in a sustainable manner.

### Content:

Blended learning is the provision of content through various teaching methods to increase the speed and effectiveness of learning and knowledge transfer. The project investigated how and with which new technologies the best training concept can be offered to nautical personnel on ships using LNG as fuel and the development of a demonstration/pilot training for LNG Basic training for nautical personnel/seafarers according to STCW V/3. The LNG Training Technologies project focused on a learning management portal with embedded e-learning



module and two augmented- and one virtual reality application (App's). A feasibility study has been executed by a needs analysis, a blue print of the course design and a list of learning platform requirements.

Leadpartner:



Co-partner:

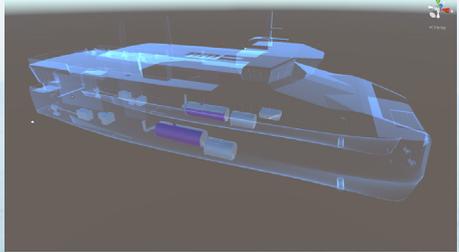


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## Results:

An LNG Training System was developed with the following specifications\*:

- Augmented reality production of an LNG system on board in connection with a mobile device (based on the new LNG ferry from Rederij Doeksen)
- Virtual reality production with multi-device functionality (based on the LNG container vessel „WES AMELIE“ from Reederei Wessels)
- Video-based simulation recorded with a 360° camera
- Online portal with LNG Basic Training learning content



\*all details with reservation

## Advantages:

- The LNG Training System allows personnel to deal intensively with new and complex topics
- The online solutions are available anywhere and anytime
- The visualization of hidden areas or systems will be possible by virtually entering areas of ship operation that would not be accessible in traditional training



The LNG Training System makes the learning more effective and inspiring, thus contributing to a better and more sustainable learning result.

## Partners:



## Contact:

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