LNG REFIT

"EIGER – NORDWAND"

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Vessel particulars
“Eiger-Nordwand”

Built 2000
Overall length 177 meter
Width 11.45 meter
Draft 2.56 meter
Tonnage 5300 tonnes
Capacity (4 layers) 348 TEU
Engines 2x 900 kW
Project Targets

- Meet customer demand; green transportation
- Meet upcoming legislation by ports and governments
- Meet Danser Group strategy: Frontrunner in clean & safe transportation
- Emission meeting (expected) CCR4 requirements
- Pilot for LNG refit on 4 more container vessels

How:
- Installation Dual-Fuel propulsion system (Wärtsilä Engine, Tank/ Coldbox)
- Increased performance; fully redundant
- Safety leading parameter in overall design
REFIT Arrangement

- Proven design of all major components, based on multiple years of experience
- Dual-Fuel Engine: automatic switch over to gasoil in case of failure/ alarm
- Dual-Fuel Engine: designed for LNG as main fuel (minimum 95%)
- Dual-Fuel Engine with a/o double wall piping; gas safe Machinery Room!
- Gas detection and auto shut down of main LNG valve
- Double redundant ventilation
- Trained crew & management
Project Summary

- Feb 2012: Start project, initial discussions
- Jun 2012: Conceptual design by project team
- July 2012: Presentation to LRoS
- Dec 2012: Introduction to Ministry of Infrastructure (IL&T, I&M)
- Feb 2013: Submission call for TEN-T project
- Mar 2013: Start detailed design
- Aug 2013: Presentation at ADN meeting in Geneve
- Sept 2013: Presentation at CCR meeting in Strasbourg
- Oct 2013: HAZID study by LROS
- Feb 2014: Recommendation of CCR is received
- Apr 2014: Start refit
- Jun 2014: Tests, commissioning & trials
- Jul 2014: Refitted ship started its normal operations
In February we received the CCR Recommendation.
First Estimate Reduction of Emissions

Rotterdam – Basel route

Container truck - EURO VI

Container vessel

CO₂

CO₂ + CH₄

Co-financed by European Union
Trans-European Transport Network (TEN-T)

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THANK YOU
QUESTIONS?
www.danser.nl