Bundesministerium für Wirtschaft und Energie

aufgrund eines Beschlusses

des Deutschen Bundestages





Aspects of MU offshore logistics based on the work at the FINO3 Platform

an Offshore Research Laboratory in the North Sea

Date:26.01.2022Speaker:Lisa Schulz





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Projektträger Jülich Forschungszentrum Jülich





1. Introduction – Facts

Owner/Operator: FuE-Zentrum FH Kiel GmbH

Building/Completion: 2007/2009

Location: 80 km west-northwest of Sylt

Operating: unmanned & remote





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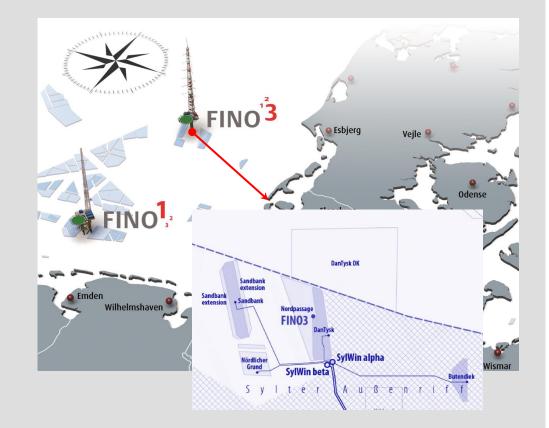
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1. Introduction – Technical Data

Platform Deck:	area: 13x13 m, height: 22 m above sea level
Helicopter Deck:	area: Ø 14 m height: 26 m above sea level
Mast:	3 element-welded, bolted & zinc-coated construction height: 105,9 m above sea lev
Foundation:	Monopile
Anchoring Foundation:	30 m
Water Depth:	21,8 m



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1. Introduction – Technical Data

Container:

emergency shelter, measurement equipment, workshop, power supply, diesel fuel tank & storage container

Energy Supply: three equal generators in alternate operation (two on standby)

Data connection: 2 identically fast SAT-routes, parallel





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1. Introduction – Projects

Ongoing:

hydrographic & meteorologic measurements, testing of lidar buoys, testing of anticorrosive coating, bat monitoring, aquaculture

Accomplished:

Since 2009 about 40 projects e.g. ecological research, lightning occurence, testing of strength & stability









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2. Aspects of offshore logistics – FINO3 platform

- around 50 flights per year
- diving operation around once a year
- refuelling two to three times per year







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- 2. Aspects of offshore logistics Planning of operations
- 1. Weather \Rightarrow access to different forecasts
- 2. Flexible availability of helicopter & vessel
- 3. Good infrastructure
 - Onshore: office space, storage facilities, network of suppliers
 - Offshore: good accessibility of the location, energy supply









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2. Aspects of offshore logistics – Planning of operations

- 4. Qualified operation manager
 - Knowledges about the platform itself, the systems, rescue equipments as well as rescue procedure
 - Helicopter Landing Officer & Helicopter Fire Fighting
 - Company paramedics & First Aid Offshore
 - Rope rescue & Personal Protective Equipment for Rescue and Climbing
 - Sea Survival & Helicopter Underwater Escape Training
 - G41 occupational health check
 - Short range certificate (SRC)





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2. Aspects of offshore logistics – Planning of operations

- Work planning 5.
 - max. 6 people \Rightarrow limitation of emergency shelter equipment
- 6. Verification of workers' qualifications & contractual basis
 - Basic: Sea Survival, Fire Awareness, Helicopter Underwater Escape Training, • First Aid Offshore, G41 - occupational health check
- Flight registration 7.
 - number of passenger, ٠ nationality, ID number, weight of passenger & luggage, start & final destination, arrival & departure time



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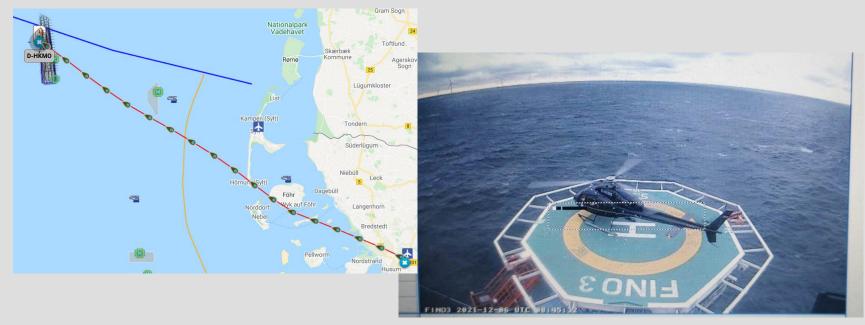






2. Aspects of offshore logistics – In operation

- 1. Safety
 - Safety briefing before departure & on arrival at FINO3 for external
 - Operation monitoring by onshore backup
 - Working in teams if necessary







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2. Aspects of offshore logistics – In operation

- 2. Communication
 - via radio device by work in the pile, in the mast, parallel work, refuelling, ...







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2. Aspects of offshore logistics – Work around FINO3

- 500 m safety zone around FINO3
- Permission required from the Federal Maritime and Hydrographic Agency to bring out an installation on or under water
- Permission required from FuE-Zentrum to enter the safety zone
- Message at FuE-Zentrum by entering/leaving and beginning/ending the work in the safety zone
- More preparation required (costly, time-intense)
- Setting limits of use & method statements





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3. Conclusion

- Good communication
- Good coordination of works before and during an operation
- More and detailed preparation required as nearshore/onshore (costly & time-intense)
- Main factors of offshore work
 ⇒ weather & availability of helicopter & vessel
- Flexibility required
- Always consider safety



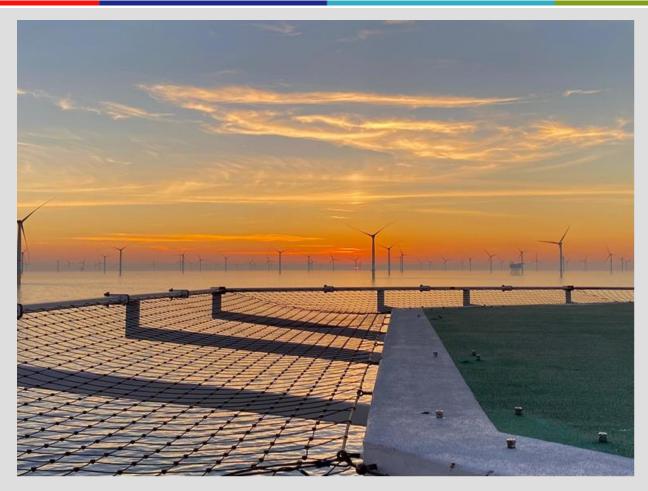
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