Transportens Innovationsnetværk

An introduction to

TINV

at

Global Wind Energy Shipping and Logistics

PhD Research Project Reference Group Meeting

Port of Aalborg, Nov. 12, 2018

Transportens Innovationsnetværk

*A few **facts:***

The Transport Innovation Network (WWW.TINV.DK) has been the **Danish national innovation network for transport and logistics** since 2009.

Funding just granted by the Danish Ministry of Higher Education and Science for the period 2019-2020

➔ No membership fee

Transportens Innovationsnetværk

New grant enables continued focus on:

Transport og logistics – across all transport modes

Focus on **sharing knowledge** and **exploiting synergies** between industries while adressing the major **trends and key challenges**:

- Globalisation
- Digitalization
- Energy efficiency
- Green growth
- Sustainability

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Partners in TINV:

- **Maritime Development Centre** (MDC)
- **Danish Technological Institute**
- **FORCE Technology**
- Universities: **DTU, SDU, AAU** og **CBS**

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Main themes:

1. Vehicle and ship technology
2. Logistics models and processes
3. Infrastructural systems

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1. Vehicle and ship technology

Support efficient green initiatives in the transport sector and assist in exploitation of Denmark's leading position within green technologies:

- Batteries
- Energy efficient propulsion systems
- Sensors, IoT, Big Data, Cybersecurity
- Platooning
- Autonomy
- Advanced decision support
- Emission technologies (filters, scrubbers etc.)

2. Logistics models and processes

Focus areas:

- Digitalisation
- Automation
- Process innovation
- Business innovation
- E- commerce
- Multi/Omni channel commerce
- Intermodal / Multimodal transport
- City logistics (e.g. night distribution)
- Logistics at construction sites

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3. Infrastructural systems

Initiatives supporting efficient and sustainable transport incl.

- ITS and automation and
- Energy infrastructure incl. alternative fuels, biofuels etc.

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Implementation strategies

- Tools & methodologies
- Business concepts
- Education and competences
- Innovation stimulation
- Match-making

- Involvement of members (networks, workshops, project initiation)

Locally, regional, and international collaboration

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Previous activities

TINV in Offshore Wind

Skibsteknisk Selskab · Transportens Innovationsnetværk · IDA VIDEN DER STYRKER

Havvindmøller - DP og personoverførsel

21. oktober 2013

Offshore Center Danmark Renewables · Syddansk Logistik Forum · Transportens Innovationsnetværk

Havvindmøller 6+ MW

Transportmæssige udfordringer

Syddansk Universitet – Esbjerg
24. januar 2013

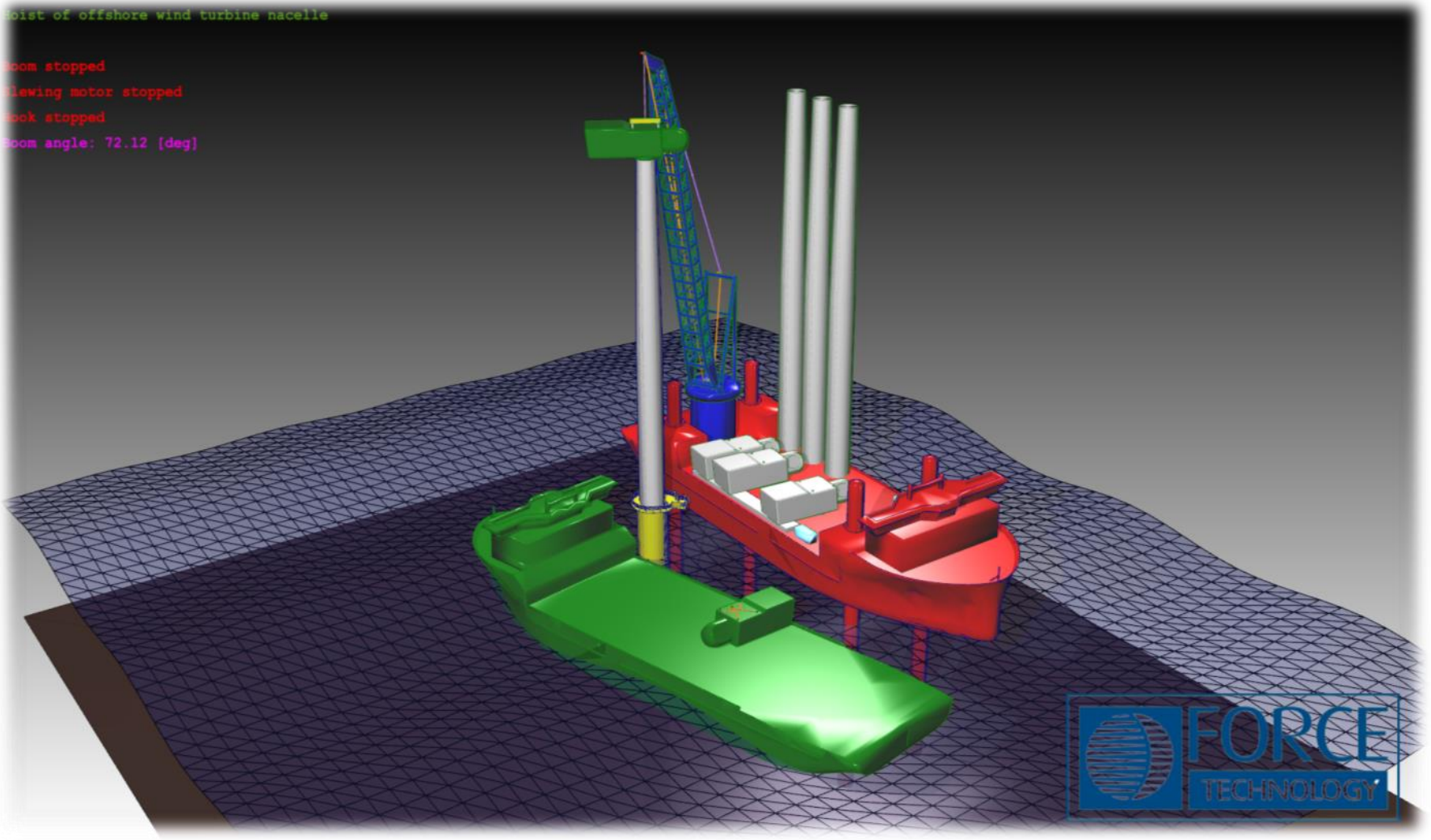
Offshore Wind Lifts Together

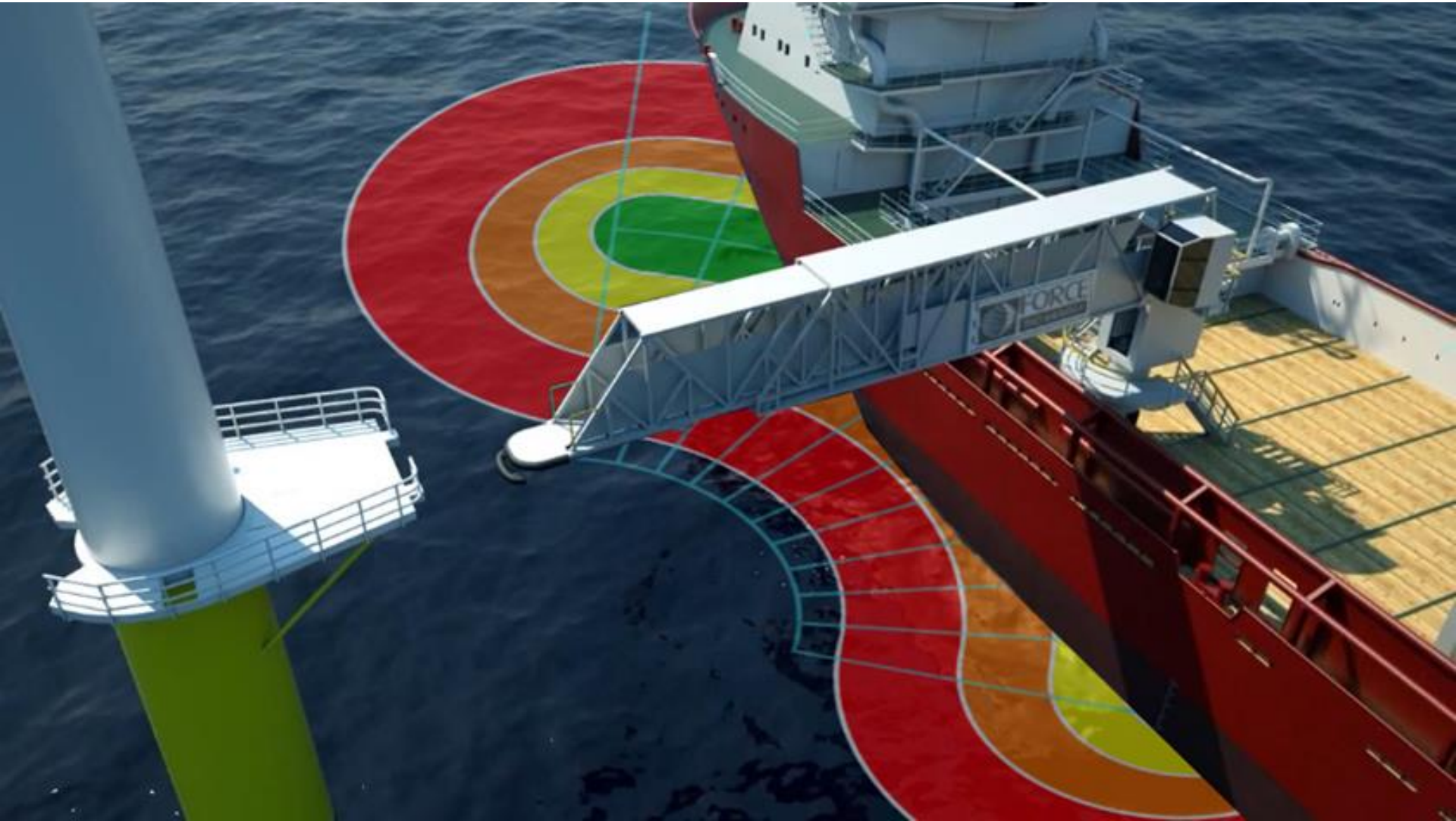
Offshore wind industry frontrunners the likes of Siemens Gamesa Renewable Energy, MHI Vestas Offshore Wind, DONG Energy, Vattenfall, Statoil, A2Sea, Fred. Olsen Windcarrier, Blue Water Shipping and Mammoet Wind all team up in the INNOlog project to define common industry guidelines for execution of lifts in offshore wind.

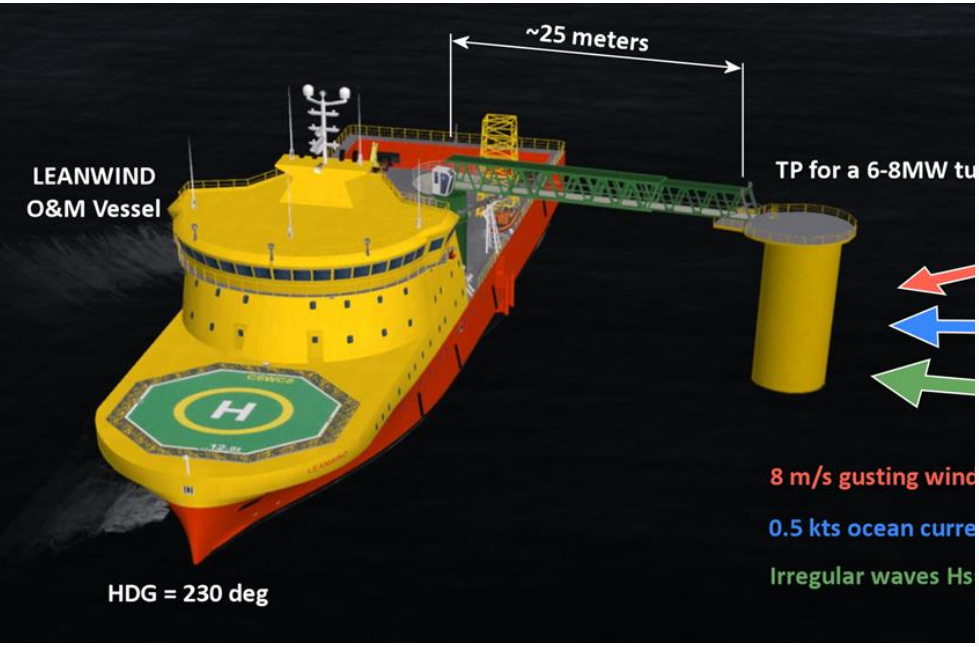
The project is funded by the Ministry of Higher Education and Science.

The participants were from left to right 1st row : John Koch Nielsen, David John Pritchard, Søren Møllgaard, Jan Boyesen, Jannie Jyde Davidsen, Christian Munk Jensen, Joe O'Toole 2nd row: Karstein Kviljo, Svein Gurrik , Glen Andresen, Kristian Pedersen, Søren Andersen, Jan Sand Schanke-Jørgensen, Pete Geddes 3rd row: Andrija Risteski, Søren Messmann, Hans A. Hansen, Jesper Møller.

John Koch Nielsen
M.Sc. Control Engineering
R&D Coordinator, FORCE Technology,
Division for Maritime Industry






~25 meters
LEANWIND
O&M Vessel
TP for a 6-8MW tu
8 m/s gusting winc
0.5 kts ocean curre
Irregular waves Hs
HDG = 230 deg


Slewing
281.5°
Luffing
5.7°
5.8°
Telescoping
26.8m
26.9m

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Thank You !

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