

Wind Logistics Group

Continuation of PhD Reference Group

Web update meeting

In advance of 3rd meeting

Altered meeting schedule (COVID-19)

Venue: Online

Wind Logistics Group, Meeting #3, June 18, 2020

Global Wind Energy Shipping and Logistics PhD project Reference Group meeting (#12)

Agenda

1. Role call and brief introduction
2. Changed schedule of Wind Logistics Group meetings (COVID-19)
3. Update from speed boats
4. Around the room
5. Wrap-up, actions, and next steps

Goals of today

- a) Understand impact of COVID-19 to Wind Logistics Group members
- b) Review speed boat progress
- c) Review third speed boat initiative that was deferred
- d) Support speed boats
- e) Understand challenges during COVID-19 as well as new collaboration ideas

1. Role call and introduction

Briefly around the room

Company by company

Names, background of company, background of persons

1. Role call and brief introduction

Name	Company	Name	Company
Confirmed:			
Henrik Dalsgaard	DHL Global Forwarding	Hans K. Jepsen	NorSea Group
Morten Basse	DIS/CREADIS	Martin Andreasen	NorSea Group
Christian Munk Jensen	Energy Innovation Cluster	Knut Magne Johannessen	NorSea Group
Dennis Jul Pedersen	Esbjerg Havn	Søren Schmidt Kellenberger	R&D
Jesper Bank	Esbjerg Havn	Eskild Strøm	Siemens Gamesa
John Koch Nielsen	FORCE Technology	Thomas Poulsen	TINV/Panticon
Jacob Michelsen	FORCE Technology	Joris Kofman	Vestas
Anders Frederiksen	Head Energy	Jeppe Faber	Aalborg Havn
Søren Rønnow Poulsen	Head Energy	Kjartan Ross	Aalborg Havn
Thomas Sender Mehl	KK Wind Solutions		
Anne Rothe Haakansson	LM Wind Power		
Kirsten Christensen	LM Wind Power		
Tentative:			
Thomas Sylvest	Danish Shipping		
Not advised:			
Per Fenger/Carsten Bjerre	Liftra		
Feng Zhao	GWEC		
Jens Elnegaard Juul	Maersk Line		

2. Changed schedule

COVID-19

Health precautions

Online update meetings in lieu of face-to-face meetings

2. Changed schedule (COVID-19)

- Originally face-to-face May 12, 2020 at LM Wind Power in Kolding
- Then face-to-face June 18, 2020 (today)
- Face-to-face rescheduled again for September 22, 2020 at 1200 CET
 - Still at LM Wind Power, Lunderskov near Kolding, Denmark
- Two interim web calls:
 - Today and August 19, 2020 at 1300 CET

2. Health precautions vs. momentum

- Access to facilities
 - Policies
 - Social distancing / disinfectant
- Keep the momentum going...
- ✓ Web call before the holidays (today)
 - ✓ Web call after the holidays (August)

3. Speed boats

Progress made

Comments and discussion

Support needed from Wind Logistics Group

3. Update from speed boats on progress made

- 2 speed boats launched at last meeting November 4, 2019
 - Transport concept for big wind turbines
 - Lack of USA infrastructure
- A third speed boat was considered and not launched:
 - Green fuels

3. General speed boat observations


- Speed boat members are busy
- COVID-19 has amplified this
- Hard to "get homework done" between meetings

3a. Transport concept for big wind turbines

- Group met on January 30, 2020 at LM Wind Power in Kolding
 - *BBC, DIS, MHI Vestas, LM Wind Power, NorSea Group, Head Energy, Siemens Gamesa, Vestas, R&D, FORCE Technology, TINV/Panticon*
- A subsequent survey was performed online and results shared on February 27, 2020
- Additional input sought

Speed boat opportunities:

- Captain has withdrawn candidacy, new captain sought
- More members needed
- Scope to be finally agreed



Wind Logistics Group
Transport concept for big wind turbines
November 2019 – May 2020

Original project idea title: New shipping concept needed for large new offshore turbines like GE 12 MW

Summary of November 4, 2019 group discussions:

Funnel criteria	Reduce cost, international focus, increase efficiency, reduce risk
Desired outcome	Streamlined process, standard concept, and agreed guideline
Scope	Onshore and offshore wind
Supply chain	Factory to site included (rest not included)
Wind components	Blades/nacelle/hub/towers included Foundation/cables/substation excluded (not believed to change significantly)
Equipment	Lifting equipment and transport equipment included
Assets	Trailers, SPMTs, shortsea vessels, deep sea vessels included
Constraints identified	SPMT and trailer asset shortages Ports and equipment Limited vessel availability shortsea as well as long haul
Methodology	Initial understanding of what a wind turbine will look like 3-5 years later
Skills	The Wind Logistics Group cannot resolve this project idea alone and additional skills and competencies need to be infused (logistics companies, vessel operators, and others)
Things to watch out	Traditional “catch 22” of whether OEMs should issue “requirements specifications” versus providers should innovate: Idea is to get together...

Volunteers:

Speedboat captain	BBC Chartering (Mads Poulsen)
Speedboat crew members	Siemens Gamesa (TBD), NorSea Denmark (Hans Jepsen), LM Wind Power (Anne Håkansson), Head Energy (Anders Frederiksen), MHI Vestas (Lars Harrit), R&D (Soren Kellenberger), Energy Innovation Cluster (Christian Munk Jensen), DIS (TBD)

Notes prepared by Thomas Poulsen, November 14, 2019
Notes reviewed by Anne Håkansson, Mads Poulsen, and Anders Frederiksen, November 18-19, 2019


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3b. Lack of USA infrastructure

- Group met online on April 22, 2020
 - DIS, Vestas, NorSea, DHL Global Forwarding, DSV, TINV/Panticon
- A subsequent information request was issued on May 11, 2020
- Results to be collated and shared

Speed boat opportunities:

- More members needed



Wind Logistics Group
USA infrastructure speedboat
November 2019 – May 2020

Original project idea title: Lack of USA infrastructure for offshore wind

Summary of November 4, 2019 group discussions:

Funnel criteria: Believed to meet criteria of ROI, Scalability (can be run for Asia-Pacific markets in parallel), Geographies (US East Coast and US West Coast), Time to complete, and Skills

Scoping: Onshore and offshore wind infrastructure (not just offshore)

Geography: Focus on US East Coast first (US West Coast 2nd priority)

Supply chain: Inbound, port, and outbound (outbound for onshore wind only)

Modes of transport: Road, rail, barges, port, cranes, space, land

Timing: Project can be completed by working group in 6 months' time using a 3-staged methodology

Methodology:

1. Mapping of issues/challenges (for example port capacity, storage/space needs, equipment, trailer shortage, quay side, etc.)
2. Feasibility study (with upsides for example HSSEQ, standardization, risk mitigation) which to be reviewed with Wind Logistics Group when completed
3. Business case (funding secured if business case is positive and activity can be realized in 2020-2021)

Skills/competencies: Wind Logistics Group is not able to realize this project internally. External skills will be needed especially legal support, US ports/infrastructure providers, and key US stake-holders (suppliers, OEMs, operators/developers)

Things to watch out for: Legislation, political context, and local contents requirements

Volunteers:

Speedboat captain: DIS (Morten Basse)

Speedboat crew members: Vestas (TBD), DHL (Dorte Frandsen), NorSea Group (Knut Magne Johannessen)

Notes prepared by Thomas Poulsen, November 14, 2019
Notes reviewed by Morten Basse and Dorte Frandsen, December 4, 2019

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3c. Green Fuels

This speed boat was not launched

- Energy Innovation Cluster had a similar speed boat in the making
- It was hard for the Wind Logistics Group team members to qualify the contents of the speed boat
- Since then, Energy Innovation Cluster did not get funding for the project

Speed boat opportunities:

- We can decide to launch this speed boat or “put it back” in the pool for next meeting?

3. Support to speed boats

- Discussion of progress
- Questions and answers
- Speed boat needs
- Support from Wind Logistics Group

4. Around the room

Your thoughts and input

Company by company

4. Around the room

Company by company:

1. Impact of COVID-19 to transport, logistics, and shipping
2. Comments to ongoing speed boat efforts
3. Ideas for additional speed boats (will be consolidated at the September 22, 2020 face-to-face meeting)

5. Wrap-up

Actions

Next steps

Date in calendar

5. Wrap up, actions, and next steps

- We heard from the speed boats
- We heard from you
- We noted the ideas, thoughts, and challenges faced

Thank you for joining up today!

Next meeting (online update):

Wednesday, August 19, 2020

1300 – 1430 CET

Next face-to-face meeting:

Tuesday, September 22, 2020

LM Wind Power

Lunderskov near Kolding

1200 – 1600

...and after work (gå-hjem)

1600 – 1800

Second 2020 meeting proposed:

November 19, 2020

Thank you for today's meeting!

We meet again (online) on August 19, 2020 at 1300 – 1430 PM CET