

## Minutes of meeting from the 2<sup>nd</sup> meeting

### Reference Group for overall project steering, management, and scoping Global wind energy shipping and logistics Ph.d. research project

<b><u>Date and time:</u></b>	March 20, 2014 from 14:00 to 16:00	
<b><u>Venue:</u></b>	DONG Energy, Gentofte, Copenhagen (DONG E CPH)	
<b><u>Participants:</u></b>	Carsten Melchior	The Danish Maritime Foundation (DDMF)
	Hilmar Eliassen	Danish Shipowners' Association (DSA)
	Morten Basse	offshoreenergy.dk (OEDK)
	Christina Aabo	DONG Energy
	Ole Ingrisch	Port of Esbjerg
	Lars Møldrup	J Poulsen Shipping/Combi-Lift
	Kim Sønderby Hansen	DHL Global Forwarding Industrial Projects
	Martin Heide Jørgensen	Aalborg University, Aalborg
	Niels G M Rytter	Aalborg University, Copenhagen Campus
	Gang Chen	Aalborg University, Copenhagen Campus
	Thomas Poulsen	Aalborg University, Copenhagen Campus
<b><u>Excused:</u></b>	Tim Johansen	DHL Global Forwarding Industrial Projects
	Per W Christensen	Danish Shipowners' Association
	Birger T. Madsen	BTM part of Navigant
	Per Krogsgaard	BTM part of Navigant
	Feng Zhao	BTM part of Navigant
	Finn Poulsen	J Poulsen Shipping/Combi-Lift
	Florian Heinemann	Siemens Wind Power
	Søren Vittarp	Siemens Wind Power
	Søren Clemmensen	Port of Esbjerg
	Lars Bo Henriksen	Aalborg University, Aalborg

#### **High level agenda:**

1. Meeting opening and welcome
2. New/changed Reference Group participants – introduction and background
3. DDMF and DSA short introduction to BTM Navigant study performed for DSA
4. Research progress:
  - a. Achievements during the first year of the research project
  - b. Empirical data gathering – interviews: Industry challenges
  - c. Anholt offshore wind farm – case study part I
  - d. China and South Korea offshore wind initial study trips
  - e. Milestones planned for 2014
5. Short workshop with group work on the afternoon's panel discussion topic(s)
6. Review of scoping exercise performed at last Reference Group meeting



## 7. Wrap-up, preparation for gå-hjem meeting, and date/venue for next meeting

**Prior to** the official Reference Group meeting, an introduction and recap meeting took place to introduce new participants to the Reference Group forum and the key decisions made at the kick-off meeting on August 28, 2013. This meeting was preceded by a networking lunch and at the meeting, Carsten Melchior from DDMF first motivated the need for the Reference Group and then Thomas Poulsen from AAU went through the purposes/objectives of the Reference Group as discussed at the kick-off meeting. A discussion ensued and it was agreed that the research project should:

- meet the formal academic requirements
- include focus on local content rules and the impact of these
- consider overlaps to oil & gas (for example de-commissioning)
- concurrently deliver results and disseminate findings in order to stay relevant
- add particular value for offshore wind farms given the larger WTG sizes and larger sized parks; not so much onshore wind

The official meeting minutes can be summarized as follows including key discussions and decisions:

1. **Opening & welcome.** The meeting was opened by the host of the day, Christina Aabo from DONG Energy.
2. **Introduction & backgrounds.** Each Reference Group meeting participant introduced themselves and their background briefly as well as their organization.
3. **Research progress part I.** Here, Thomas Poulsen presented the AAU work streams during the first year, the progress made, and a number of items were discussed within the group:
  - Danish shipowners are lagging behind
  - SDU has launched an initiative about reducing the cost of energy (ReCoE) in the supply chain and this is backed by international partners and AAU
  - Contractual terms for each offshore wind farm vary from case to case and for shipping, BIMCO is introducing a new charter party (windtime)
  - The sequence of installation is done differently for each offshore wind farm and the structure and set-up varies (in the case of Anholt, Grenaa acted as both the export and installation port)
  - The Chinese wind market was discussed in terms of the opportunity there, grid connection, offshore wind, and the meeting a week earlier organized by OEDK, The Danish Trade Council in Beijing, and this research project
4. **DSA study.** Hilmar Eliassen from DSA briefly introduced a study funded by DDMF and made by BTM Navigant for DSA. Hilmar also presented the DSA wishes to harmonize legislation across EU to lower cost and make market access more equal. This stimulated a discussion along the following key items:



- The EU targets for 2020 and beyond were discussed including the definition of offshore in terms of distance from shore, water depth, etc.
- Supply and demand for different vessel types were discussed and a total of 18 types of vessels were included in the study
- For O&M, different topics were discussed including R+D efforts to enable crew transfer with wave heights of 3 meters instead of present max. of 1.5 meter. The concept of floating hotels (floatels) and helicopter transfers was contrasted to ocean going vessels and different regulations in different EU countries discussed (e.g. converted yachts allowed as crew transfer vessels in the UK but not in Denmark)
- In terms of rules and regulations, many examples were mentioned that all outlined that harmonization is very much needed between countries

5. **Research progress part II.** Thomas Poulsen continued the update on the progress of the research project and handed out the year 1 industry report to the participants. Key discussion items included:

- South Korea activity is picking up with more visitors coming through and for example the new test machine in the UK consisting largely of European supply chain parts
- The topic of IPR was discussed and this influences decisions on where to locate production facilities: Design of for example blades and R+D in general will be kept under very controlled conditions whereas production of e.g. towers (considered largely “dumb steel”) can be done locally in many cases (perhaps with the exception of the tower for the new Vestas 8 MW WTG which Vestas is having challenges with in terms of outsourced production)
- The focus of the project was discussed and Carsten Melchior mentioned that he hopes the project stays on track to also include detailed research on shipping and logistics. A discussion ensued and Thomas Poulsen summarized by outlining that the sequence of the research questions and agenda for this 2<sup>nd</sup> Reference Group meeting were designed in such a way that this meeting was not centered around shipping and logistics per se, rather some of the other topics laying the foundation for the also ongoing shipping/logistics research. It was agreed that on-going efforts of for example master students could keep track of the ever changing technology landscape and changes in WTG output. In that way, the research project can concentrate to a higher degree on the real objectives of the project which have to do with derived market for wind energy shipping and logistics with focus on the different supply chain constituencies and their strategies/business models

6. **Short workshop.** Due to time constraints, it was agreed that all participants would provide an emailed response to the group work questions by Monday, March 24, 2014 afternoon. This would be emailed to Thomas Poulsen ([tp@m-tech.aau.dk](mailto:tp@m-tech.aau.dk)) and the planned group work session was eliminated to provide for more discussion among the participants.

7. **Scoping exercise from kick-off.** Thomas Poulsen went through the scoping exercise performed at the kick-off meeting and this triggered a discussion about the scope as follows:



- The vantage point of the supply chain used in the research project will be that of the shipping/logistics/SCM providers performing the global wind energy shipping and logistics activities
- The objective of the research is to define the winning business models/strategies for shipping/logistics/SCM providers to compete successfully either locally, regionally, and/or globally. This can then be applied to for example the Blue Denmark and/or the Danish shipping companies
- Academically, the content of the research project is defined in the 2-month plan (due April 1, 2014) and finally “locked” in the 11-month plan (due January 1, 2015). It was agreed that at the next Reference Group meeting, the academic plan should be presented with an aim towards creating a “bridge” between the academic and more practical industry objectives

8. **Conclusion.** Niels G M Rytter briefly outlined some of the work to be done during the research project and the need for standardization was discussed as it was agreed that variation entails high cost also within shipping and logistics (an example of sea fastening was used). It was agreed that if the research project itself is metaphorically depicted as a “super tanker” project, it will be very important to stay relevant by continuously launching a number of smaller and more nimble “speed boats” of relevance to each Reference Group organization and participants in the regional case studies.

9. **Next meeting.** OEDK volunteered to host the next meeting at their premises in Esbjerg and the date was agreed to be September 2, 2014.

*After the* official Reference Group meeting, the first so-called “gå-hjem” meeting about global wind energy shipping and logistics topics took place from 16:00 to 17:30 PM. These “gå-hjem” meetings will take place at 16:00 PM going forward after each Reference Group meeting in order to stimulate a wider ranging debate about shipping and logistics topics related to wind energy. Including the Reference Group members, approximately 30 people participated in the meeting and Christina Aabo from DONG Energy opened the meeting with a presentation about DONG Energy and their involvement in offshore wind as a market leader. Subsequently, Klaasjaap Buijs from DONG Energy gave a presentation about the foundation installation and some of the developments and challenges faced here. Thomas Poulsen from AAU gave the last presentation which focused on the general challenges faced by the wind energy industry with shipping and logistics as derived from initial academic and practical research efforts as well as published conference papers. All three presentations stimulated extensive discussion among the participants in the “gå-hjem” meeting which was rated as being very successful by the different participants.