

Regional Economy meeting

Henrik Egholm
1 November 2018



Ørsted

Ørsted team participating at todays event



Claus Bøjle Møller

Programme Director



Flemming Thomsen

Programme Director



Chris de Borst

Finance Manager



Klaasjaap Bujs

Construction Manager



Marjolein Hormes

Asset Manager



Steven Engels

General Manager Continental
Western Euro



Joyce Goijaarts

HR Business Partner



Steen Carsten Larsen

Operations Manager



Henrik Egholm

EPC Director



Filip Engel

Sustainability Public Affairs &
Branding



Stefan De Bruijn

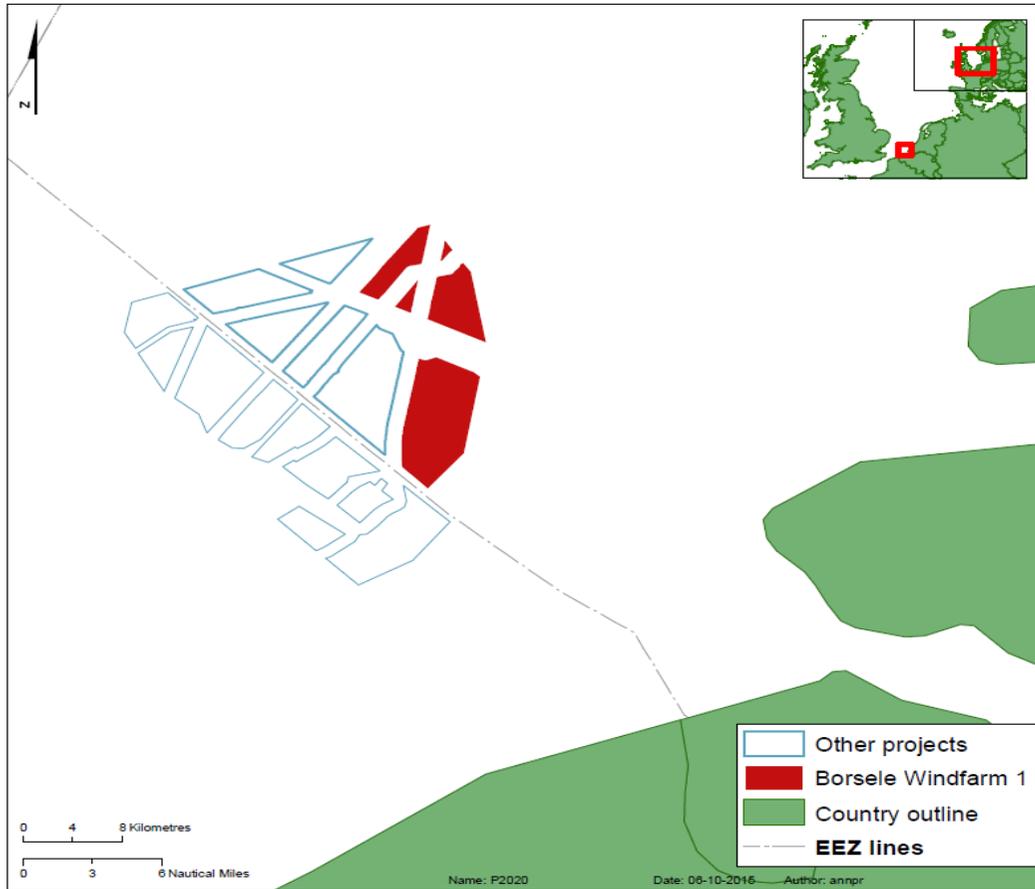
Media Relations NL

Project summary

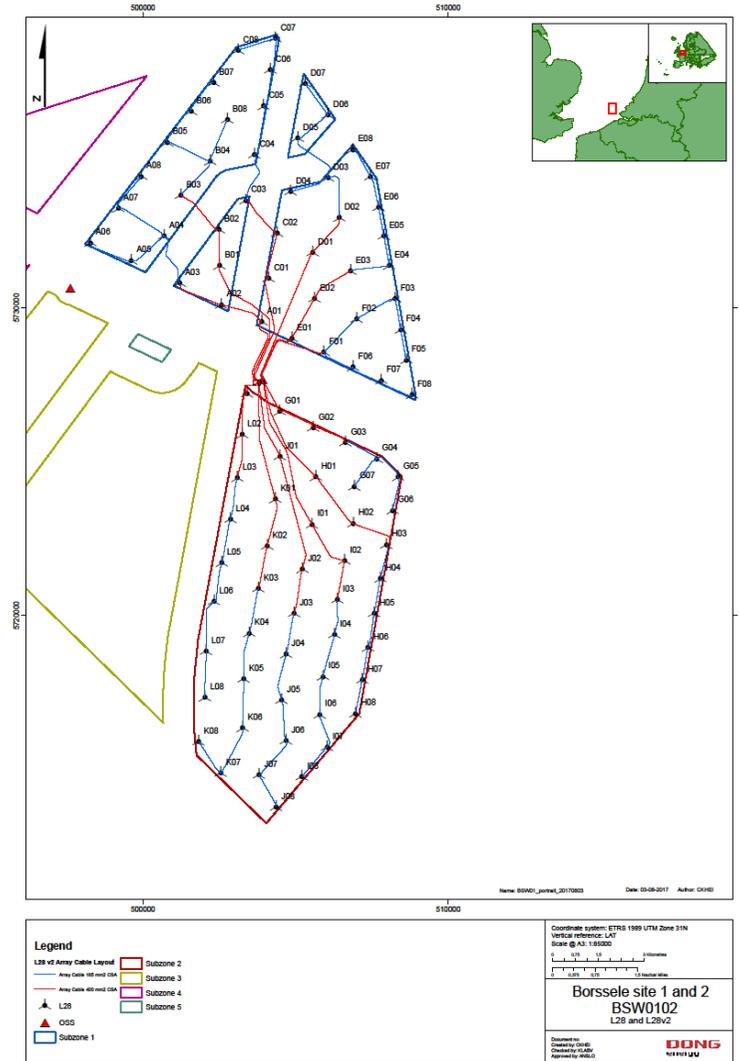
Project Specific Characteristics		Key data and location	
Location	<ul style="list-style-type: none"> Borssele site 1 & 2 (BSW01+02), Zeeland, South West of The Netherlands Two adjacent 380MW sites 	Capacity	752 MW
Subsidy	<ul style="list-style-type: none"> CFD: 72.7 EUR/MWh (nom.) w. floor price of 29 EUR/MWh Duration: 15 years fixed + 1 year extension 	Size of the site	112 km ²
Modules	<ul style="list-style-type: none"> Monopiles Array cable voltage 66kV On/offshore substation and export cable build by TenneT BSW01 and BSW02 connecting to the same offshore substation with a capacity of 700MW 	Turbine type	Siemens – Gamesa 8MW
Key Project dates	<ul style="list-style-type: none"> Project award: 5 July 2016 Substation energized: August 2019 Construction: 2020 First power deadline 5 July 2021 (5 years after award) 	Number of turbines	94
Borssele map		Water depth	39.7 m to 14.0 m
		Distance to shore (shortest)	22 km
		Wind resource (at hub height)	9.5 m/s
		Length of offshore cable route	TenneT scope
		Length of onshore cable route	TenneT scope
		O&M harbour	Vlissingen*
		Construction harbour	TBC
		Offshore substation	TenneT scope: 700 MW
		Onshore substation	TenneT scope
		Ørsted Ownership	100%
		Subsidy regime	CFD: 72.7 EUR/MWh

*Subject to final agreement

Borssele Site Overview and windfarm Layout

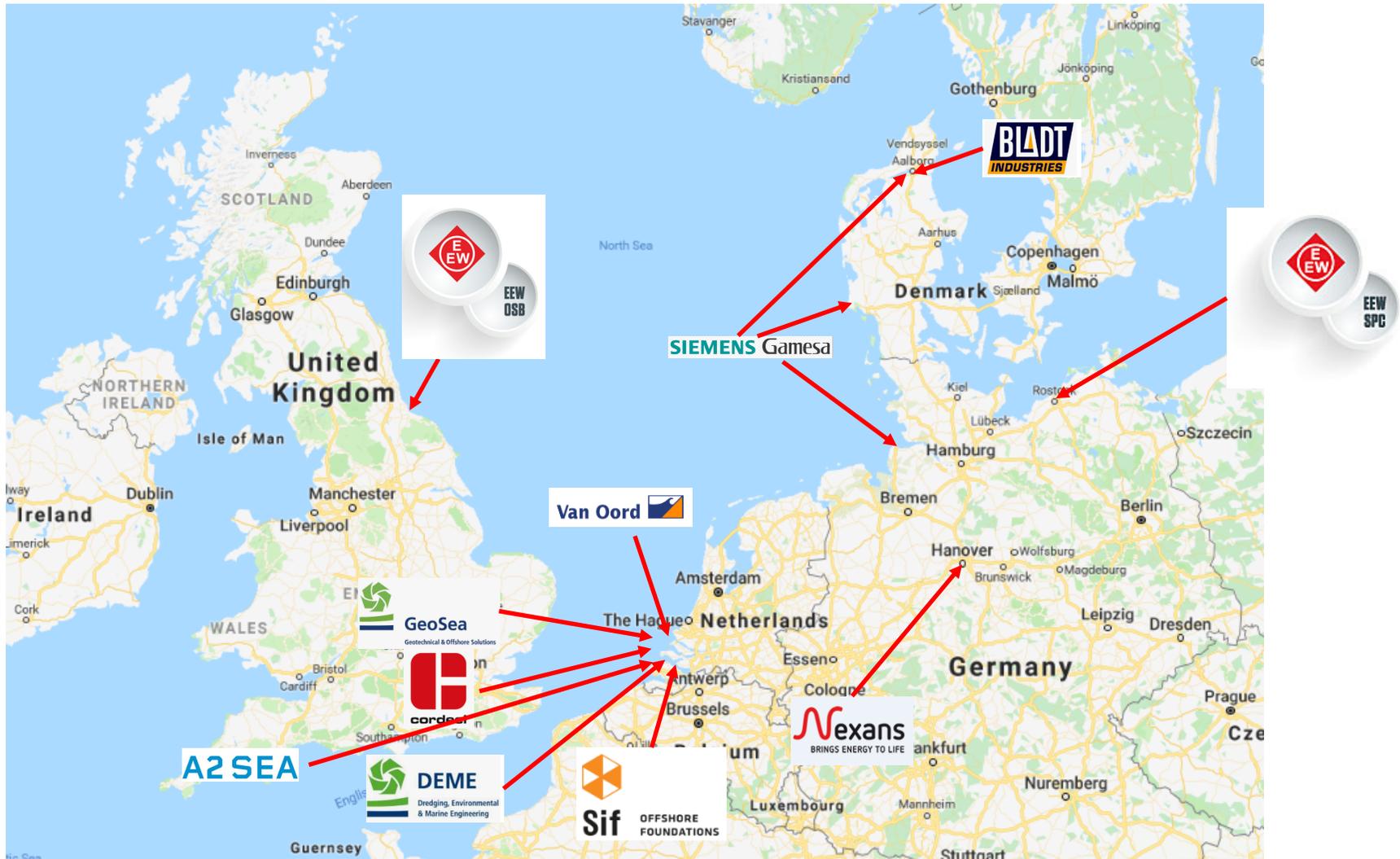


DONG
ENERGY

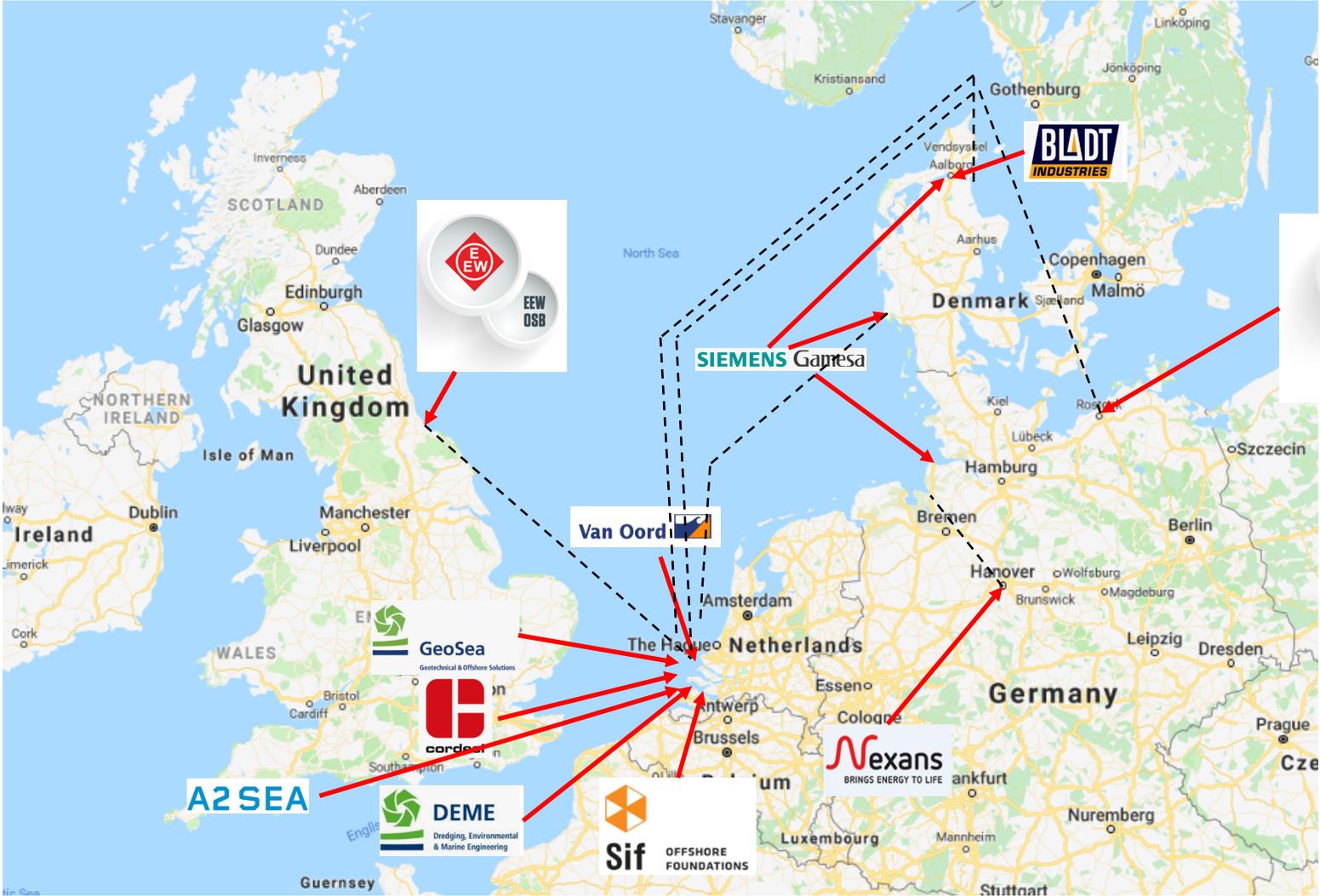


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Main Contractors for the assets and installation



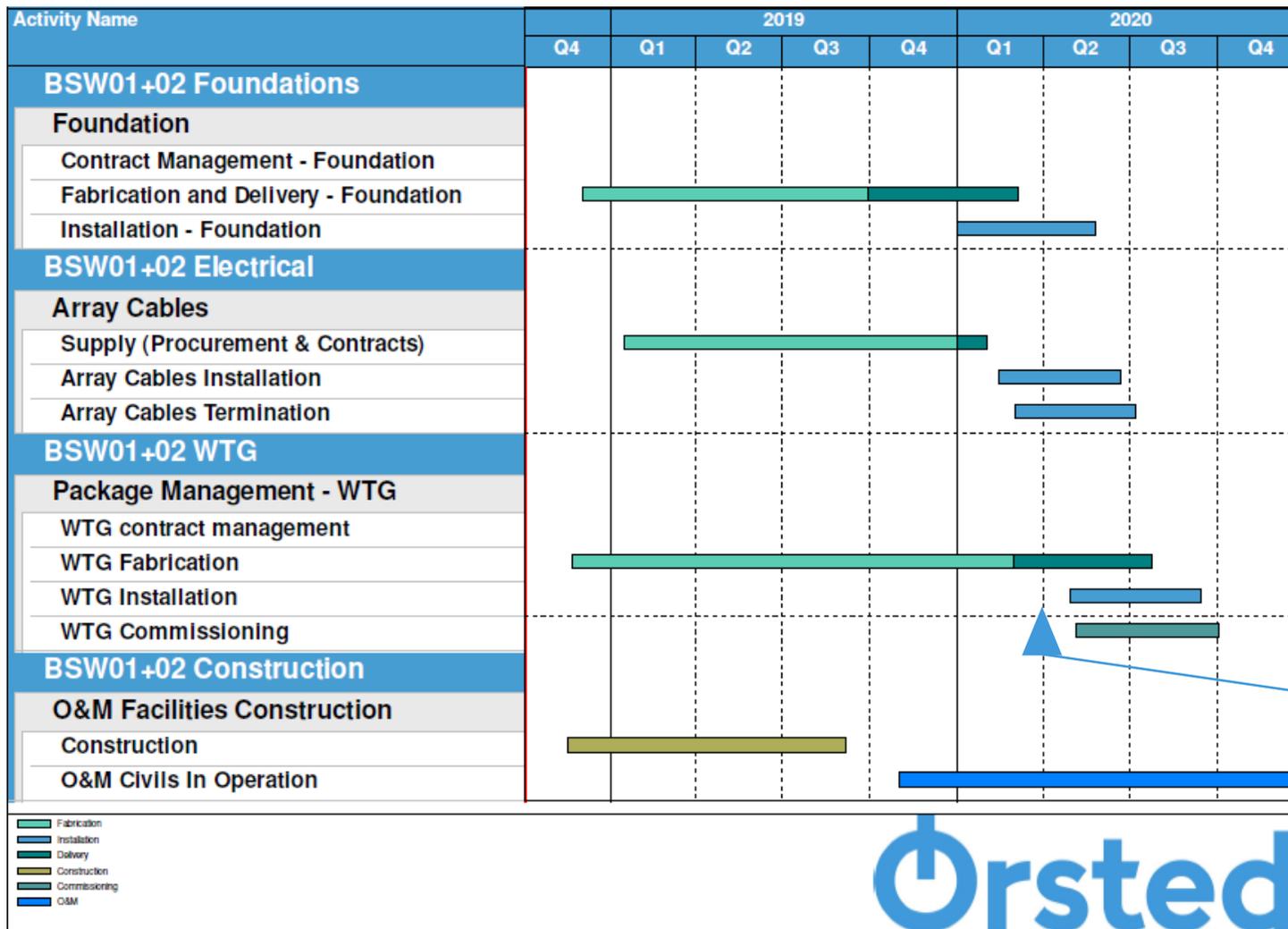
Transport



BSW01+02 Construction building, Dutch companies to bring construction building



Time Schedule



Operations start offshore



BSW0102 Operational Set-up

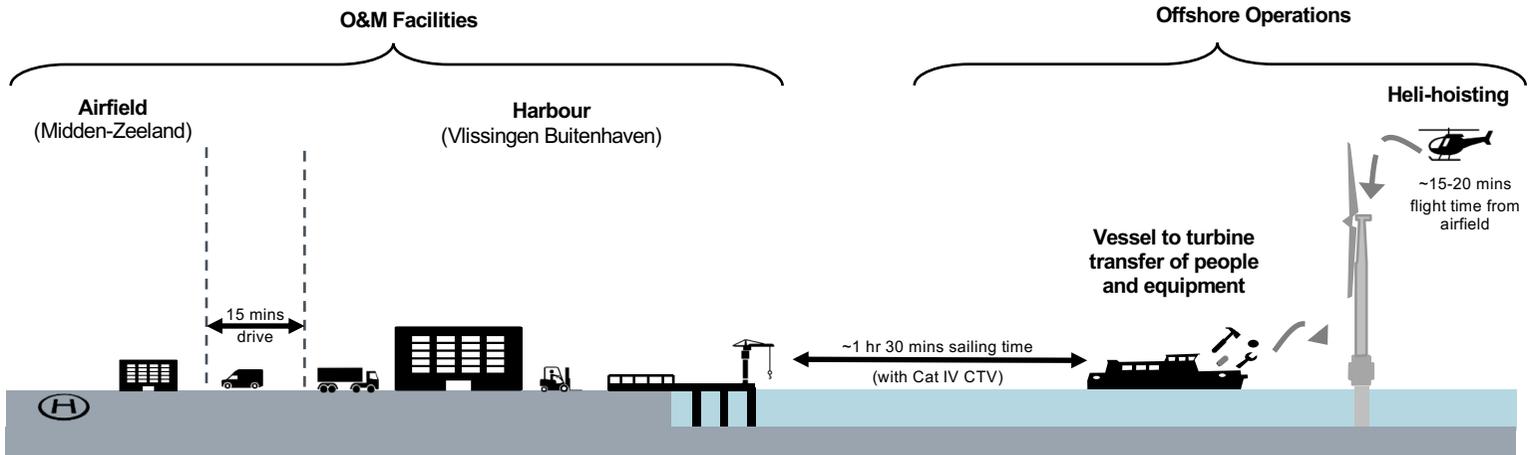
Steen Carsten Larsen

Operations Manager



FACILITIES	LOGISTICS	OFFSHORE SITE
<ul style="list-style-type: none"> Hangar and helipad at airfield Office and warehouse at harbour Quay, cranes & pontoon for loading CTVs 	<ul style="list-style-type: none"> 2 full time CTVs 1 campaign CTV 1 Helicopter (400hrs/yr) 	<ul style="list-style-type: none"> 94 x SWT-8.0-167 752 MW park capacity WTGs installed 2020 Operations start 2020

STAFF	
35-40 Technicians	15 – 20 Vessel crew
10 - 20 Site management and administration staff	4 Helicopter crew



O&M Facilities

Safety & sustainability through design

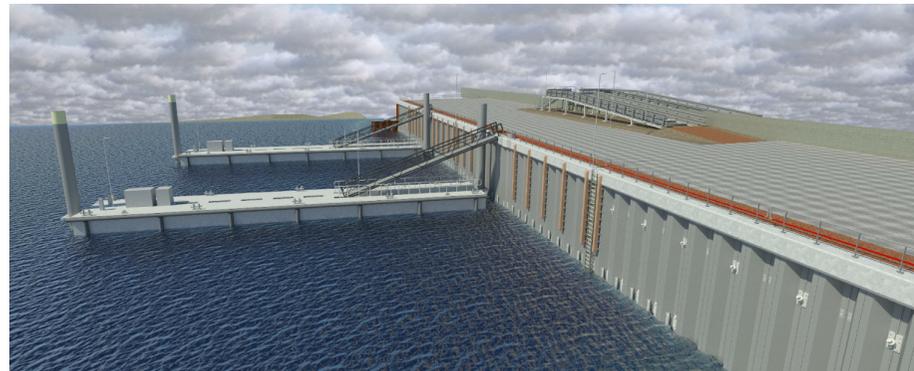
- Robust separation between people and vehicles with dedicated delivery area.
- Building creates more power than it uses.

Designed for flexible and efficient operations

- Sized for up to 60 technicians (i.e. 50% over staffing to provide flexibility for campaigns) and up to 20 office staff
- 2 floors: Mix of offices/changing rooms (~900 m²) and warehousing (~1,100 m²)
- Designed for efficient vessel operations:
 - Pontoons with berthing for 4 CTVs (incl. 1 maxi-CTV and compatibility with SES vessel confirmed)
 - Bunkering available at all pontoon berths.
 - Loading of CTVs at all berths possible with quayside cranes

Timed to facilitate knowledge transfer

- EPC and site operations team to both use the O&M facilities during construction phase.



Helicopter Operations Set-up

Midden Zeeland Airport: Helicopter Supplier Scope

- Hangar & offices
- Security & customs service desk
- Passenger check-in & weighing
- Passenger handling + waiting area
- Cargo handling incl. dangerous goods
- Access to fuel facilities

