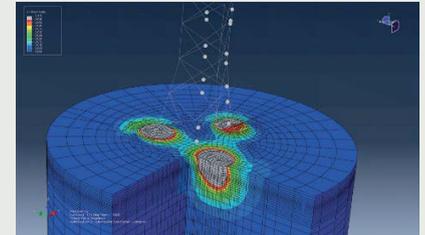
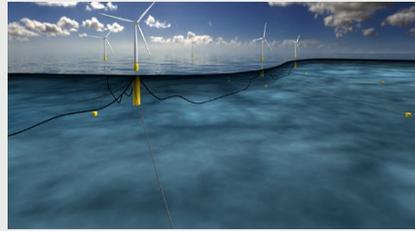
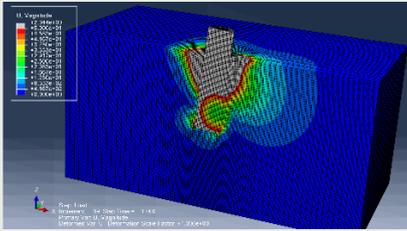


Invitation to Workshop on 31 may 2018 at WH Ming Hotel, Shanghai, China

## “Geotechnical Engineering for Offshore Wind Infrastructure”



On behalf of the Norwegian Geotechnical Institute (NGI) and Huadong Engineering Corporation (HDEC), we are pleased to invite you to a workshop on "Geotechnical Engineering for Offshore Wind Infrastructure". The global installed offshore wind capacity was almost 17GW by end of 2017 and annual growth is forecast to exceed 11% in the next 5 years. The offshore wind market is therefore an exciting industry, providing excellent opportunities for technology development across all project phases, requiring close interaction between disciplines, and also requiring strong links between research and practice.

To facilitate the interaction, this one-day workshop, organised by NGI and HDEC, will provide an arena to stimulate discussion and interaction around the current state-of-practice and knowledge in offshore wind. The workshop will highlight how experience from the oil and gas industry can be used for the development of the offshore wind farms in China together with local partners to help contribute to the global green transition.

### Agenda:

9:30 – 10:00 Registration with coffee

10:00 – 10:20 Welcome and introduction by NGI (Noel Boylan, Ph.D., Managing Director NGI Perth)

10:20 – 10:30 Recent developments within the European Offshore Wind market  
(Dr.-Ing. Hendrik Sturm, Technical Lead Offshore Renewables)

10:30 – 11:15 Site investigations and soil parameters for OWT foundation design  
(Shaoli Yang, Ph.D., Senior Engineer)

11:15 – 12:00 Geotechnical design of bottom-fixed OWT foundations (Dr.-Ing. Hendrik Sturm)

12:00 – 13:00 Lunch

13:00 – 13:45 Offshore windfarm developments in China (Ben He, Ph.D.)

13:45 – 14:30 Geotechnical design of mooring systems for floating OWTs  
(Hongjie Zhou, Ph.D., Senior Engineer)

14:30 – 14:45 Coffee break

14:45 – 15:15 Geotechnical earthquake design of foundations for OWTs  
(Amir Kaynia, Prof., Technical Expert)

15:15 – 15:45 Best practice logistics and installation of OWT support structures (Deme-group)

15:45 – 16:15 R&D needs for OWT foundation design  
(Youhu Zhang, Ph.D., Technical Lead Offshore Geotechnics)

16:15 – 16:30 Closing (Noel Boylan, Ph.D., Managing Director NGI Perth)

16:30 – 18:30 Networking session

The workshop will be held at the WH Ming Hotel in Haungxing Park, No.777 Jiamusi Road, Yangpu District, Shanghai 200433, China. Lunch and refreshments will be served to all registered attendees.

The workshop is free to attend. Advanced registration is required since there will be a limited number of places.

To register for the workshop, please send an email to [shaoli.yang@ngi.no](mailto:shaoli.yang@ngi.no) by Monday 30 April 2018.

We look forward to hearing from you, and hopefully seeing you in Shanghai. Please do not hesitate to contact us if you have any questions.

### **About NGI and HDEC**

NGI is a leading geotechnical engineering research and consultancy foundation located in Oslo, Norway, with offices in Houston (USA) and Perth (Australia). NGI and has been working worldwide in the offshore geotechnical engineering for several decades, providing services covering geotechnical site characterization, soil testing, interpretation, foundation design, installation, and monitoring. In recent years, NGI has also been actively involved in numerous offshore wind farm projects both in Europe and worldwide, by leveraging knowledge and technologies accumulated from a long history of working in offshore oil and gas industry.

HDEC completed the standard for offshore wind power design in China. HDEC is the only design institute in China with experiences on various types of intertidal zones, offshore wind turbine foundations, offshore pressure stations, and high-pressure submarine cables and more than 500 foundations have been designed and built. HDEC Obtained more than 100 offshore wind power technology patents, more than 20 offshore pressure station technology patents, and 30 offshore wind power awards.

Please visit <http://www.ngi.no/en/> and <http://www.ecidi.com/en/index.aspx> for more details.

### **About the Workshop**

Objective of the workshop is provide an introduction to the best-practice geotechnical design of foundations for offshore wind turbines including the required input from site and soil investigations. Sufficient time is allowed in between the presentations for questions and discussions.

Sincerely yours,



Thomas Langford,  
Director for offshore energy, NGI Oslo



Noel Boylan,  
Managing Director NGI Perth