

OFFSHORE WIND ACCELERATOR S4Y5

Clarification Question Responses

TWG-F – Interaction of Drilled Monopiles in Rock (IDMR)

10th May 2024



#	Type	Question	Response
1	General	<p>Section 4, scope of work:</p> <p>We understand five summary presentations of the work packages will be required and a final presentation to the TWG. Please confirm/advise how many of these meetings are intended to be face-to-face meetings at your premises, and how many as remote meetings (via e.g. Microsoft Teams)?</p>	<p>It is anticipated that these meetings will all be held virtually via Microsoft Teams. However, there may be an occasion where a meeting is held in-person.</p> <p>Expenses for in-person meetings should be allowed for as part of the Expenses work package; please refer to both section 4.0 scope of work and section 6.0 in the ITT document.</p>
2	Project specific	<p>Section 2.1:</p> <p>It is stated that "The OWA TWG Foundations would like to investigate the interaction of drilled monopiles in rock to develop a better understanding of the remaining soil capacity left from relief drilling of large monopiles for offshore wind turbine generators, to better inform monopile design." What is the reference to the soil capacity?</p>	<p>Soil capacity is referred to here in the context of monopile design and the soil properties used for pile design including the calculation of bearing and shaft capacity. We would like to understand the soil capacity after relief drilling and consider how this affects monopile design and pile capacity.</p>
3	Project specific	<p>Section 2.1:</p> <p>Is the intention that the study focus on drilled and grouted monopiles in rock. To best enable the load-transfer to the rock, grouting is to be employed. However, no indication of grouting has been included in the document.</p>	<p>In this study we would like to focus on Drive-Drill-Drive monopiles.</p>

<p>4</p> <p>Project specific</p>	<p>Section 2.2:</p> <p>It is stated that "However, the lack of knowledge of the remaining soil capacity left from relief drilling or underreaming, such as the uncertainty in axial/lateral capacity of the disturbed rock layers, brings risks for monopile design".</p> <p>Can it be made clear that the study focuses on the lateral capacity only? The axial capacity employs a completely different failure mechanism.</p>	<p>In this study we would like to consider both axial and lateral capacity, if possible.</p>
<p>5</p> <p>Project specific</p>	<p>Section 4 Scope of Work WP1:</p> <p>Please confirm that greatest emphasis will be placed on the p-y curves for piles in rock and the impact of these on the installation process. t-z and Q-z soil reaction curves are not critical as these are monopiles.</p>	<p>We would like p-y curves to be considered primarily, but t-z and Q-z curves should also be considered.</p>

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