



**Federico Pisanò:**  
**Cyclic performance of monopile  
foundations in sandy soil**

Report on OSIGp Lunch Technical Meeting (LTM)

Held online (Teams)

Chair: Raffaele Ragni, OSIGp Committee Member



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On 21 July 2020, OSIGp held their first online Lunch Technical Meeting (LTM) via Microsoft Teams. The event was chaired by OSIGp committee member Raffaele Ragni and presented by Federico Pisanò, Ass. Prof. at TU Delft (The Netherlands). The contribution of committee members Laith Tapper and Cathal Colreavy to the organization of the event is also acknowledged.

Laith Tapper provided an introductory overview on the activities of OSIGp and SUT in the role of OSIGp committee chair and acknowledged the sponsor for the event, the Norwegian Geotechnical Institute.

The LTM provided an update on the recent research carried out in the Netherlands at TU Delft on the performance of pile foundations in sandy soils. The topic was extremely timely and relevant, given its applicability to the fast-growing offshore wind energy sector. The seminar reviewed TU Delft research carried out in collaboration with offshore industry partners. Recent findings concerning the cyclic performance of monopiles in sandy soil were illustrated, focusing on recent numerical modelling developments. A recent plasticity-based approach to model the cyclic response of sand was presented, along with its use in advanced 3D FE modelling related to SLS checks for tilting monopiles. Finally, research emerging from ongoing joint industry projects, GDP and MIDAS, was also be introduced, with emphasis on the combination of experimental and numerical activities to conceive new geo-solutions for the offshore wind industry. The chair Raffaele Ragni opened a 20-minute Q&A session after a well-timed presentation, which led to the end of the event at 1PM. Questions were addressed to the speaker via the Teams chat box.

This first OSIGp LTM was a free event for all and 77 people attended the event. Overall, the event was positively received by the audience, with attendees dialling in from three different continents. The OSIGp committee thanks Federico for giving his time (at a very early hour in The Netherlands due to the time zone difference) to present this inaugural OSIGp LTM.



*The speaker: Federico Pisanò*