Market orientation "Seabed Morpholgical and Scour Assessment Study for Nederwiek (noord) and (zuid)" for the Netherlands Enterprise Agency

The Netherlands Enterprise Agency (in Dutch: Rijksdienst voor Ondernemend Nederland, RVO) encourages entrepreneurs in sustainable, agrarian, innovative and international business. It helps with grants, finding business partners, know-how and compliance with laws and regulations. The Netherlands Enterprise Agency is part of the Ministry of Economic Affairs and Climate Policy.

Background
RVO has been requested to prepare and collect site data that will be beneficial for commercial developers in preparation of competitive bids for the proposed development of offshore windfarms. As part of the future concession tender document(s), the participants will receive information packages in which detailed information on the offshore site is included. Detailed information on the Seabed Morphological and Scour Assessment Study will be part of this information package. Nederwiek (noord) and (zuid) Wind Farm Zones, (NWNWFZ and NWZWFZ), are the Wind Farm Zones for which a concession tender will be organized for wind farm development in the near future.

Purpose of this market orientation
The purpose of this market orientation is to determine which parties have the capability, and would be interested, to perform a Seabed Morphological and Scour Assessment Study for the NWNWFZ and NWZWFZ sites.

Extent and duration
The study is scheduled to commence in April/May 2024 and to be completed during the course of 2024.

Description of the assignment
Conduct a study, utilising available data from surveys and other sources of information, to improve the understanding of the seabed morphology and morphodynamics of the Nederwiek (noord) and (zuid) Wind Farm Zones. The study will consist of analyses of the autonomous seabed dynamics and also the potential for scouring that is to be expected as a result of the installation, and operation and maintenance, of offshore wind farm infrastructure at the sites.

<u>Main objectives:</u>

1. To identify and characterize the seabed morphology, bedforms and associated features and morphodynamics across the NWNWFZ and NWZWFZ sites, including potential interaction between the individual NWNWFZ and NWZWFZ sites that are to be tendered by RVO for offshore wind farm development;
2. Assessment and interpretation of the surficial sedimentology and shallow geology across the NWNWFZ and NWZWFZ sites, focused on the implications for sediment transport and future morphological response of the seabed;
3. Assessment, prediction and quantification of the likely spatiotemporal variability in seabed levels across the NWNWFZ and NWZWFZ sites over the proposed life cycle of a wind farm to support the design, installation, and maintenance of wind turbines, substations, and their foundations, and inter array cables;
4. Utilising the hydro-sedimentary process understanding developed in delivery of Main Objectives 1–3, identify and categorise (based on the scour magnitude and extent) the NWNWFZ and NWZWFZ sites in relation to the scour potential that may be anticipated as a result of the installation and long-term presence of typical wind farm infrastructure, and;
5. Provide an overview of potential scour mitigation measures deemed applicable and appropriate at the NWNWFZ and NWZWFZ sites, for different wind farm infrastructure types.

Deliverables:

1. Production of descriptive reports in English and a summary in Dutch containing at least:
    a. Utilising the available data and relevant literature provide a description of the prevailing hydrodynamic, wave and sediment regimes across the region and the NWNWFZ and NWZWFZ sites
    b. Description of the applied methodology, assumptions/uncertainties, analyses and key definitions;
    c. Results of the analyses including determination of the Highest Seabed Level (HSBL and LSBL anticipated to occur across the life cycle of the wind farms;
    d. Discussion of the findings of the study in relation to seabed morphodynamics and scour in the context of the development of offshore wind farms across the NWNWFZ and NWZWFZ sites;
    e. Conclusions of the assessment.
2. Associated GIS shapefiles and layers form the analyses completed, including appropriate metadata (to be supplied in accordance with RVO metadata standards and requirements).

Minimum requirements

1. Supplier should have experience with similar seabed morphology and scour assessments performed for offshore infrastructure developments.
2. Supplier should have experience with assessment of the offshore seabed morphology in the North Sea and/or similar coastal shelf sea environments.
3. Supplier should be able to provide an expert in morphodynamics with at least 5 years of demonstrable experience in this area to supervise the delivery of the project.

In the request for proposal the above mentioned minimum requirements will be set.

Expression of interest

Interested parties, fitting the above mentioned requirements, are invited to send an expression of interest to the Netherlands Enterprise Agency, for the attention of Paula Boom of the Procurement Office by e-mail iucezteam1@rvo.nl. Please state the name of the contact person of your company and his or her e-mail address.

At this stage of the procedure you do not have to send in any documents, only a response if you are interested.

The deadline for responding to this market orientation is set at **29 January, 2024, 5.00 P.M. CEST** After this, the Netherlands Enterprise Agency will invite the interested parties to submit a proposal.