

www.gov.uk/naturalengland

Request for Quotation

**Request for Quotation**

**Understanding the relationship between mobile bedforms and cable installations in the North Sea**

You are invited to submit a quotation for the requirement described in the specification below.

Please confirm, by email, receipt of these documents and whether you intend to submit a quote.

Your response should be returned to the following email addresses by 12:00 BST on 9th September 2022:

Email: Lucy.Crooks@naturalengland.org.uk

Date: 09/09/22

Time: 12:00

Reference: Cables NS 22

Ensure you state the reference number and ‘Final Submission’ in the subject field to make it clear that it is your response.

**Contact Details and Timeline**

Lucy Crooks will be your contact for any questions linked to the content of the quote pack or the process. Please submit any questions by email and note that, unless commercially sensitive, both the question and the response will be circulated to all tenderers.

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| --- | --- |
| Action | Date |
| Date of issue to Contact Finder | 25/08/22 |
| Deadline for clarifications questions | 07/09/22 (12:00 BST) |
| Deadline for receipt of Quotation | 09/09/22 (15:00 BST) |
| Intended date of Contract Award | 14/09/22 |
| Intended Contract Start Date | 15/09/22 |
| Intended Delivery Date / Contract Duration  | 31st January 2023 submission of draft report.28th February 2023 submission of final outputs and report. |
| \* Where there is no availability within these timescales, NE would be pleased to understand timescales and availability for the survey to be undertaken. |

**Glossary**

Unless the context otherwise requires the following words and expressions used within this Request for Quotation shall have the following meanings (to be interpreted in the singular or plural as the context requires):

|  |  |
| --- | --- |
| “Authority” | Means the Department for Environment, Food and Rural Affairs acting as part of Natural England |
| “RFQ” | Means this Request for Quotation and all related documents published by the Authority and made available to suppliers |
| “Contract” | Means the contract to be entered into by the Authority and the successful supplier. |

**Conditions applying to the RFQ**

You should examine your response to the RFQ and related documents ensuring it is complete prior to submitting your completed quotation.

Your quotation must contain sufficient information to enable the Authority to evaluate it fairly and effectively. You should ensure that you have prepared your quotation fully and accurately and that prices quoted are arithmetically correct for the units stated.

The supplier by submitting a quotation is deemed to accept the terms and conditions in the RFQ. Failure to comply with the instructions set out in the RTQ may result in the supplier’s exclusion from this procurement.

**Acceptance of Quotations**

By issuing this RFQ the Authority does not bind itself to accept any quotation and reserves the right not to award a contract to any supplier who submits a quotation.

**Costs**

The Authority will not reimburse you for any costs and expenses which you incur preparing and submitting your quotation, even if the Authority amends or terminates the procurement process.

**Mandatory Requirements**

The RFQ includes mandatory requirements and, if you do not comply with them, your quotation will not be evaluated.

**Clarifications**

The Authority reserves the right to discuss, confidentially, any aspect of your quotation with you prior to any award of Contract to clarify matters.

**Amendments**

The Authority may amend the RFQ at any time prior to the deadline for receipt. If it amends the RFQ the Authority will notify you in writing and may extend the deadline for receipt in order to give you a reasonable time in which to take the amendment into account.

**Conditions of Contract**

The terms and conditions: [Condensed Terms and Conditions](https://www.gov.uk/government/organisations/natural-england/about/procurement) will be included in any contract awarded as a result of this RFQ process. The Authority will not accept any material changes to these terms and conditions proposed by a supplier.

**Specification**

The Authority is Natural England. The Authority’s priorities are to secure a healthy natural environment; a sustainable, low-carbon economy; a thriving farming sector and a sustainable, healthy and secure food supply. Further information about the Authority can be found at: [Natural England](http://www.naturalengland.org.uk/)

**Specification**

1. **Introduction**

**Background to Natural England**

Natural England is the Government’s adviser for the natural environment in England with a purpose to conserve, enhance and manage the natural environment for the benefit of present and future generations.

Natural England’s vision is a ‘thriving nature for people and planet’ which it aims to achieve through its mission of ‘Building partnerships for Nature’s recovery’. Its priorities, which also support the ambitions of the government’s 25 Year Environmental Plan, are;

* a well-managed Nature Recovery Network across land, water and sea, which creates and protects resilient ecosystems rich in wildlife and natural beauty, enjoyed by people and widely benefiting society
* people connected to the natural environment for their own and society’s wellbeing, enjoyment and prosperity
* Nature-based solutions contributing fully to tackling the climate change challenge and wider environmental hazards and threats
* improvements in the natural capital that drives sustainable economic growth, healthy food systems and prospering communities
* evidence and expertise being used by a broad range of partnerships, organisations and communities to achieve Nature recovery and enable effective regulation and accreditation being a values-led organisation that delivers excellent service standards to all partners, organisations and communities engaged in achieving Nature’s recovery

**Background to the specific Natural England work area relevant to this purchase:**

Achieving UK’s Net Zero targets represents a central aim of the Government and the ten-point plan set out within the British Energy Security Strategy (BESS) will accelerate progress towards this aim. The Government originally committed to increasing the Offshore Wind Sector Deal, published in March 2019, from 30 GW to 40 GW, by 2030. In April 2022, however, this target was raised to 50 GW of energy from offshore wind, with a further 5 GW from floating wind, and an increase in the number of interconnectors to facilitate efficient electricity trading with European partners (BESS, 2022). Meeting these targets will require significant offshore developments and associated infrastructure, sub-sea cables, export cables, inter-array cables and HVDC electricity cables (i.e. interconnectors).

**Requirement (and Rationale)**

A recurring issue for cable installations within territorial and offshore waters is the exposure of cables post installation and the subsequent need for external cable protection (e.g. Race Bank, BritNed, IFA2, Nemo, London Array). Mobile sediment bedforms (such as sandwaves and megaripples) which actively migrate across the seabed, have the potential to expose cables. In turn, cable exposure could result in scour (or secondary scour) and the removal of seabed sediments. Uncertainty regarding cable burial success and maintaining cable burial status for the lifetime of a project, needs to be addressed. Therefore, it is important to consider the risk of cable exposure or damage at the seabed and, in turn, whether there is a greater requirement for additional external protection. These protection measures could not only alter the hydrodynamics and sediment transport and lead to morphological change (Brooks *et al*., 2018[[1]](#footnote-2)), but also lead to habitat loss. Therefore, in order to be able to predict where cable exposure might occur, we first need to address the dynamics and stability of the seabed, and establish whether a particular site is an erosional or depositional environment (Judd, 2012[[2]](#footnote-3)). Understanding how mobile bedforms migrate and evolve within the lifetime of a development is key to predicting the success of cable installations and it would assist in the prevention of external cable protection and the consequent habitat loss.

Marine benthic habitats within UK waters are increasingly affected by cable operations.A key concern of sub-sea cabling activities is the potential pressures on benthic mobile habitats within MPAs as well as habitats outside of MPAs (such as Annex I habitats), especially habitat loss. A pressure is defined as the mechanism through which an activity has an effect on any part of the ecosystem (JNCC, 2019) and cable installations involve a sequence of activities; seabed preparation, cable burial, external cable protection, operation and maintenance and decommissioning over the lifecycle of cable, all of which have associated pressures. It is considered that cable burial, external cable protection (such as rock placement), landfall of the cable and seabed preparation of the cable route (such as pre-sweeping) are the activities which have the potential to cause the most significant environmental issues during cable operations.

When advising industry on cable installations the mitigation hierarchy should be followed, avoidance is the first option advised. If avoiding a MPA or sensitive habitat outside a MPA is not possible then ways in which a project can reduce impacts needs to be considered. Understanding the behaviour of sediment over a period of time will facilitate our advice to a developer. If it is possible to predict the migration of bedforms on the seabed, there would be greater confidence that cable burial would be successful, not only initially, but for the lifetime of the project. This is particularly prevalent in areas of high levels of anthropogenic impacts in the marine environment with regards to reducing impacts and ensuring the conservation objectives of MPAs are met. There is a clear need to gain a better understanding of how to achieve and maintain successful cable burial within MPAs, as well as sensitive habitats outside MPAs. Kenyon and Cooper (2005) [[3]](#footnote-4)discuss sandbank classification and the morphological context for the main sandbank types with a view to assisting the evaluation of the influence of offshore wind developments on the local equilibrium conditions. This study provides a useful overview of the sandbanks and sediment transport present in the shallow waters of the UK continental shelf, and the context of Round 2 offshore wind farm developments. It also examined sandbank structure, formation, and their relationship to local and regional sand transport paths. In addition, the study highlights data gaps such as the amount and the duration of available monitoring, and field evidence on the direct effects arising from an offshore windfarm. However, the primary emphasis of this study was the siting of offshore wind farm arrays on areas of mobile sand, without any particular consideration of the potential impacts of cable installation (or cable repair, cable replacement, cable protection) on these areas, or vice versa. Thus, there exists an evidence gap in our understanding of the relationship between mobile bedforms and cable installation. By improving this understanding, we aim to inform guidance on Best Practice and, in turn, provide consistency within Natural England’s advice.

The first stage of this study will be a desk-based review of the best available information from industry and other stakeholders. This information includes (high-resolution) bathymetric survey data (from different time periods), geophysical survey data, seabed sediment composition, sub-surface stratigraphy, water depths, sediment transport maps, and seabed geology. This information will provide the baseline description for existing offshore developments, seabed mobility and the process mechanism in operation. Using site-specific information that has been collected by developers pre- and post- cable installation, data will be analysed in order to determine the behavioural characteristics of the seabed, trends in seabed mobility, large-scale bedform migration, and areas susceptible to cable exposure. A further aim is to gather and analyse evidence from sites where cable exposure has occurred since installation during the construction stage of a development. This information will be used to develop a standard which can be used by industry and SNCBs to predict the success of cable burial in an area. The aim will be to apply knowledge from the outcomes of this project to future developments in the marine environment. There is no expectation for any surveys to be undertaken as part of this work.

We wish to develop confidence in our advice with regards to cable burial and reducing any impact of this activity and associated activities (such as external cable protection) for individual projects, as well as to standardise a general approach to developers wishing to undertake cable operations within MPAs and sensitive habitats outside of designated sites. These requirements will underpin the main work specification objectives which are listed as follows:

1. Literature review of current information on seabed mobility projects and outcomes
2. Collation of current data available from developers
3. Analysis of available data to identify seabed changes over time, bedform migration rates and trends in erosion/accretion
4. Correlation of data and instances of cable exposure to ascertain patterns in the seabed changes and occurrences of cable exposure
5. Categorise the seabed geomorphodynamics and sediment types
6. Classify sediment mobilisation to facilitate predictions of future sediment distribution
7. Ascertain whether other marine users (ie fisheries, aggregates) influence the requirement of external protection
8. Provide recommendations as to how the outcomes of this project could be furthered in future projects

**Outputs and Contract Management**

This contract shall be managed on behalf of the Authority by Dr Lucy Crooks, Marine Industries Senior Specialist (mailto:lucy.crooks@natural.england.org.uk)

The final outputs expected are:

* A fully referenced report in Microsoft Word and PDF format, which includes a clear conclusion of the main findings and also an executive summary.
* Deliverables will need to be in the Natural England Evidence Report format (which will be supplied) and conform to the Accessibility requirements.

This is a desk based study, field based data collection is not expected.

Natural England would expect to discuss and review timelines with the successful contractor in the start-up meeting and throughout the duration of the contract. Any delays to this timetable should be discussed with the Natural England Project Officer and delays not outside the control of the contractor will be penalised.

**Contract Award Criteria**

We will award this contract in line with the most economically advantageous tender (MEAT) as set out in the following award criteria:

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| **Criteria** | **Weighting** | **Scores** |
| Cost | 40% | Ranked in cost order |
| Availability/ capacity | n/a | Pass/fail |
| Quality of proposal for report writing | 30% | Using scoring criteria set out below |
| Experience and skill of the proposed scientists and supplier.Specific relevance to providing scientifically rigorous evidence reviews in the specified field. | 30% | Using scoring criteria set out below |

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| **Score** | **Justification** |
| For a score of hundred (100):   | Excellent - Response is completely relevant and excellent overall.  The response is comprehensive, unambiguous and demonstrates a thorough understanding of the requirement and provides details of how the requirement will be met in full. |
| For a score of seventy (70):   | Good - Response is relevant and good.  The response demonstrates a good understanding and provides details on how the requirements will be fulfilled.  |
| For a score of fifty (50):   | Acceptable - Response is relevant and acceptable.  The response provides sufficient evidence to fulfil basic requirements. |
| For a score of twenty (20):   | Poor - Response is partially relevant and/or poor.  The response addresses some elements of the requirements but contains insufficient / limited detail or explanation to demonstrate how the requirement will be fulfilled. |
| For a score of zero (0):   | Unacceptable - Nil or inadequate response.  Fails to demonstrate an ability to meet the requirement. |

**Contract Management**

This contract shall be managed on behalf of the Authority by Dr Lucy Crooks (lucy.crooks@naturalengland.org.uk)

Once the contract has been awarded a start up meeting will be organised.

**Disclosure**

All Central Government Departments, their Executive Agencies and Non-Departmental Public Bodies are subject to control and reporting within Government. In particular, they report to the Cabinet Office and HM Treasury for all expenditure. Further the Cabinet Office has a cross-Government role delivering overall Government policy on public procurement, including ensuring value for money and related aspects of good procurement practice.

For these purposes, the Authority may disclose within Government any details contained in your quotation. The information will not be disclosed outside Government during the procurement.

In addition, the Authority is subject to the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, which provide a public right of access to information held by public bodies. In accordance with these two statutes, the Authority may be required to disclose information contained in your quotation to any person who submits a request for information pursuant to those statutes.

By submitting a quotation, you consent to these terms as part of the procurement.

**Disclaimers**

Whilst the information in this RFQ and any supporting information referred to herein or provided to you by the Authority have been prepared in good faith the Authority does not warrant that this information is comprehensive or that it has been independently verified.

The Authority does not:

* make any representation or warranty (express or implied) as to the accuracy, reasonableness or completeness of the RFQ;
* accept any liability for the information contained in the RFQ or for the fairness, accuracy or completeness of that information; or
* accept any liability for any loss or damage (other than in respect of fraudulent misrepresentation or any other liability which cannot lawfully be excluded) arising as a result of reliance on such information or any subsequent communication.

Any supplier considering entering into contractual relationships with the Authority following receipt of the RFQ should make its own investigations and independent assessment of the Authority and its requirements for the goods and/or services and should seek its own professional financial and legal advice.

**Protection of Personal Data**

In order to comply with the General Data Protection Regulations 2018, the contractor must agree to the following:

* You must only process any personal data in strict accordance with instructions from the Authority
* You must ensure that all the personal data that we disclose to you, or you collect on our behalf under this agreement are kept confidential.
* You must take reasonable steps to ensure the reliability of employees who have access to personal data.
* Only employees who may be required to assist in meeting the obligations under this agreement may have access to the personal data.
* Any disclosure of personal data must be made in confidence and extend only so far as that which is specifically necessary for the purposes of this agreement.
* You must ensure that there are appropriate security measures in place to safeguard against any unauthorised access or unlawful processing or accidental loss, destruction or damage or disclosure of the personal data.
* On termination of this agreement, for whatever reason, the personal data must be returned to us promptly and safely, together with all copies in your possession or control.

**General Data Protection Regulations 2018**

For the purposes of the Regulations the Authority is the data processor.

The personal information that we have asked you provide on individuals (data subjects) that will be working for you on this contract will be used in compiling the tender list and in assessing your offer. If you are unsuccessful the information will be **held and destroyed within two years** of the award of contracts. If you are awarded a contract, it will be retained for the duration of the contract and destroyed within **seven years** of the contract’s expiry.

We may monitor the performance of the individuals during the execution of the contract, and the results of our monitoring, together with the information that you have provided, will be used in determining what work is allocated under the contract, and in any renewal of the contract or in the award of future contracts of a similar nature. The information will not be disclosed to anyone outside the Authority without the consent of the data subject, unless the Authority is required by law to make such disclosures.

1. Brooks, A.J.; Whitehead, P. A. and Lambkin, D. O. (2018). Guidance on best practice for marine and coastal physical processes baseline survey and monitoring requirements to inform EIA of major development projects. NRW Evidence Report 243, 119pp., Natural Resources Wales, Cardiff. [↑](#footnote-ref-2)
2. Judd, A. (2012) Guidelines for data acquisition to support environmental assessments for offshore renewable energy projects, Cefas Contract Report: ME5403-Module 15, 99pp. [↑](#footnote-ref-3)
3. Kenyon, N. H. and Cooper, B. (2005). Sand banks, sand transport and offshore wind farms. 106pp. [↑](#footnote-ref-4)