



# Update to the Maritime Cliff and Slope Priority Habitat Inventory Layer

Date: August 2025

# Request for Quotation

## Update to the Maritime Cliff and Slope Priority Habitat Inventory Layer

You are invited to submit a quotation for the requirement described in the specification, Section 2.

Please confirm by email, receipt of these documents and whether you intend to submit a quote or not.

Your response should be returned to the following email addresses by:

[Louise.denning@naturalengland.org.uk](mailto:Louise.denning@naturalengland.org.uk) and  
[Elizabeth.hopley@naturalengland.org.uk](mailto:Elizabeth.hopley@naturalengland.org.uk)

Date: **16th September 2025**

Time: **12:00 noon**

Ensure you include the name of the quotation and '**Final Submission**' in the subject field to make it clear that it is your response.

### Contact Details and Timetable

Dr Louise Denning and Dr Elizabeth Hopley will be your contacts for any questions linked to the content of the quote or the process. Please submit any clarification questions via email and note that, unless commercially sensitive, both the question and the response will be circulated to all tenderers.

Action	Date
Date of issue of RFQ	<b>22-08-2025</b>
Deadline for clarifications questions	<b>15-08-2025 at 16:00 BST</b>
Deadline for receipt of Quotation	<b>16-09-2025 at 12:00 noon BST</b>
Intended date of Contract Award	<b>Week of 22nd September 2025</b>
Intended Contract Start Date	<b>29-09-2025</b>
Intended Delivery Date / Contract Duration	<b>13-03-2026</b>

# Section 1: General Information

## 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 Natural England who is the Contracting Authority.
“Contract”	means the contract to be entered into by the Authority and the successful supplier.
“Response”	means the information submitted by a supplier in response to the RFQ.
“RFQ”	means this Request for Quotation and all related documents published by the Authority and made available to suppliers.

## Conditions applying to the RFQ

You should examine your Response and related documents ensuring it is complete and in accordance with the stated instructions prior to submission.

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

By submitting a Response, you, the supplier, are deemed to accept the terms and conditions provided in the RFQ. Confirmation of this is required in Annex 2.

Failure to comply with the instructions set out in the RFQ may result in the supplier's exclusion from this quotation process.

## 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.

## **Self-Declaration and Mandatory Requirements**

The RFQ includes a self-declaration response (Annex 1) which covers basic information about the supplier, as well as any grounds for exclusion. If you do not comply with them, your quotation will not be evaluated.

Any mandatory requirements will be set out in Section 2, Specification of Requirements and, if you do not comply with them, your quotation will not be evaluated.

## **Clarifications**

Any request for clarification regarding the RFQ and supporting documentation must be submitted via email no later than the deadline for clarifications set out in the Timetable. The Authority shall be under no obligation to respond to queries raised after the clarification deadline.

The Authority will respond to all reasonable clarifications as soon as possible but cannot guarantee a minimum response time. The Authority will publish all clarifications and its responses to all suppliers via email unless deemed commercially sensitive.

If a supplier believes that a request for clarification is commercially sensitive, it should clearly state this when submitting the clarification request. However, if the Authority considers either that:

- the clarification and response are not commercially sensitive; and
- all suppliers may benefit from its disclosure,

then the Authority will notify the supplier (via email), and the supplier will have an opportunity to withdraw the request for clarification by sending a further message requesting the withdrawal of the clarification request. If not withdrawn by the supplier within 2 working days of the Authority's notification, the Authority may publish the clarification request and its response to all suppliers and the Authority shall not be liable to the supplier for any consequences of such publication.

The Authority reserves the right to seek clarification of any aspect of a quotation and/or provide additional information during the evaluation phase to carry out a fair evaluation. Where the Authority seeks clarification on any aspect of the quotation, the supplier must respond within the timeframe requested by the Authority.

## **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 via email.

Suppliers may modify their quotation prior to the deadline for Responses. No Responses may be modified after the deadline for Responses.

Suppliers may withdraw their quotations at any time by submitting a notice via the email to the named contact.

## **Conditions of Contract**

The Authority's Standard Good and Services Terms & Conditions (used for purchases under £50k) can be located on the [Natural England website](#) and will be applicable to any contract awarded as a result of this quotation process. The Authority will not accept any changes to these terms and conditions proposed by a supplier.

Suppliers should note that the quotation provided by the successful bidder will form part of the Contract.

## **Prices**

Prices must be submitted in £ sterling, exclusive of VAT.

## **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.

Further to the Government's transparency agenda, all UK Government organisations must advertise on Find a Tender Service (FTS) in accordance with the following publication thresholds:

- Central Contracting Authority's: £12,000
- Sub Central Contracting Authority's and NHS Trusts: £30,000

For the purpose of this RFQ the Authority is classified as a Central Contracting Authority with a publication threshold of £12,000 inclusive of VAT.

If this opportunity is advertised via FTS, we are obliged to publish details of the awarded contract. A copy of the contract must also be published with confidential information redacted.

By submitting a Response, 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.

## **Information Security requirements**

The Government Security Classification Policy (GSCP) sets out the administrative system used by HM Government (HMG) to protect information and data assets appropriately against prevalent threats through the use of 'classification tiers'. HMG uses three classification tiers; OFFICIAL, SECRET and TOP SECRET. Each tier provides a set of recommended baseline behaviours and a set of protective controls, which are proportionate to the threat profile for that tier AND the potential impact of a compromise, accidental loss or incorrect disclosure of information held within that tier.

Tenderers and suppliers must ensure that appropriate protective security controls are in place to comply with the GSCP and manage the information shared and received as part of this tender exercise.

A full suite of guidance documents is available on GOV.UK, with specific guidance for tenderers and suppliers set out in [Guidance 1.6 - Contractors and Contracting Authorities.docx \(publishing.service.gov.uk\)](#).

## **Use of Artificial Intelligence**

The Authority expects suppliers to declare where they have used AI software in the creation of Tender responses or intend to use AI software in the performance of the contract. How any AI software was, or will be, used should be to be declared within the technical submission part of the tender. We may require you to answer specific question/s on this topic, particularly where the Authority expects that usage is highly likely or clearly relates to the contract requirements.

Suppliers must follow any guidelines or regulations related to AI use and declarations as indicated in the [PPN 2/24 Improving Transparency of AI use in Procurement](#).

Any information, instructions, or data provided by the Authority to suppliers as part of this tender, the requirements, or contract should not be directly inserted into Generative AI software (such as Gemini, ChatGPT, or CoPilot) without prior permission, unless this information is clearly published in the public domain.

Use of any Authority confidential tender information for training AI software is prohibited. It is advised that Defra's data or instructions, or anything marked as confidential should not be directly inserted into AIs. For example, putting Authority's instruction email into Gemini, ChatGPT, or CoPilot is not recommended.

If you intend to use AI to provide goods or services to the Authority, then you are required to complete a declaration which is simply answering the question stated within the 'Information to be returned'. The answer to this question will not be used in scoring your quote.

## **Protection of Personal Data**

In order to comply with the General Data Protection Regulations 2018 the supplier 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.

## **Equality, Diversity & Inclusion (EDI)**

The Client is striving to create a diverse and inclusive working environment where every individual has equality of opportunity to progress and to apply their unique insights to making the UK a great place for living. The Service Provider is expected to respect this commitment in all dealings Natural England staff and service users.

Suppliers are expected to;

- support Defra group to achieve its Public Sector Equality Duty as defined by the Equality Act 2010, and to support delivery of [Defra group's Equality & Diversity Strategy](#).
- meet the standards set out in the [Government's Supplier Code of Conduct](#)
- work with Defra group to ensure equality, diversity and inclusion impacts are addressed (positive and negative) in the goods, services and works we procure, barriers are removed and opportunities realised.

## **Sustainable Procurement**

Addressing global sustainability impacts and realising additional community benefits within commercial activity is core to Defra group's approach, working with its supply chain is key to achieving sustainable outcomes. In addition to supporting Defra group to meet its outcomes we look to understand and reduce negative sustainability impacts associated with our commercial activity and realise benefits.

The Client encourages its suppliers to share these values, work to address negative impacts and realise opportunities, measure performance and success.

Suppliers are expected to have an understanding of the Sustainable Development Goals, the interconnections between them and the relevance to the Goods, Services and works procured on the Client's behalf

## **Conflicts of Interest**

The concept of a conflict of interest includes but is not limited to any situation where an Involved Person or Relevant Body has directly or indirectly, a financial, economic or other personal interest which might be perceived to compromise their impartiality and independence in the context of the procurement procedure and/or affect the integrity of the contract award.

We expect suppliers to mitigate appropriately against any real or perceived conflict of interest through their work with government. A supplier with a position of influence gained through a contract should not use that position to unfairly disadvantage any other supplier or reduce the potential for future competition

Where the supplier is aware of any circumstances giving rise to a conflict of interest or has any indication that a conflict of interest exists or may arise you should inform the Authority

of this as soon as possible (whether before or after they have submitted a quotation). Tenderers should remain alert to the possibility of conflicts of interest arising at all stages of the procurement and should update the Authority if any new circumstances or information arises, or there are any changes to information already provided to the Authority. Failure to do so, and/or to properly manage any conflicts of interest may result in a quotation being rejected.

Provided that it has been carried out in an open, fair and transparent manner, routine pre-market engagement carried out by the Authority should not represent a conflict of interest for the supplier.

# Section 2: The Invitation

## Specification of Requirements

### Background to Natural England

Natural England is the Government's adviser for the natural environment in England. We help protect and restore our natural world. Our job is to help create the conditions for nature to thrive and in turn, people can too. A healthy environment and a vibrant economy must go hand in hand - our economic prosperity and well-being depends upon doing so. By working together to restore our depleted natural world we can secure the building blocks of clean water, food security and biodiversity, that the economy needs to prosper in the long term. At the same time, we can unlock the Nature-Based Solutions, (NBS), reduce and mitigate the impacts of climate change. We will be maximising the contribution that NBS makes to our net zero ambitions, tackling the climate change challenge and wider environmental hazards and threats with a particular emphasis on developing Nature Recovery Networks and improving the resilience of our protected sites through SSSI reform.

Our approach is to work at scale, collaborating with a diverse range of delivery partners. We will provide our expertise, evidence and partnership-building skills, working within communities, recovering nature together.

### Title of Proposed Project - Update to the Maritime Cliff and Slope Priority Habitat Inventory Layer

#### Background to the specific work area relevant to this purchase

In summary this is a 2-stage project:

2. Stage 1 – to produce an updated Priority Habitat Inventory layer for Maritime Cliff and Slope with enhanced attribution and corrected extents to its current and predicted future position taking into consideration key datasets such as NCERM2.

Stage 2 – further survey of prioritised locations based on the approaches used in GeoData (2025), to identify areas for potential boundary adjustment with ground-truthing or locally derived data, together with 3D surface models and 'fly-through's illustrating the key features and changes.

The key output of this project will be an update to the Maritime Cliff and Slope PHI layer for England, which will be released as an open dataset under Open Government Licence (OGL). The data will highlight those priority habitat areas that are at high risk of erosion and could provide a mechanism to focus survey effort on areas of greatest change not only now but into the future. This work will also help target potential future habitat creation and restoration but considering adjacent land uses and erosion/ recession rates. In effect it will help us to achieve Environmental Improvement Plan (EIP) objectives to restore 15% of our priority habitats along the English Coasts by 2043, as part of the National Adaptation Programme, as well as restoring or creating 500,000 ha of wildlife-rich habitat

in England outside protected areas by 2042. The data will also provide the evidence we need to review designated site boundaries to protect habitats both now and into the future.

## **Requirement**

### *Background*

Maritime Cliff and Slope is one of the trickiest habitats to record. Estimates suggest there are around 14,000ha<sup>1</sup> of this habitat type incorporating cliff face and cliff top, extending along roughly 1,100km of the English coast. Access, health and safety limitations and recording extent on vertical or near-vertical faces means we are very data deficient. The last national assessment - The Maritime Cliff and Slope Inventory (Hill and others 2001) pulled together data from numerous individual surveys (the majority completed by others prior to 2000) as part of a desk study. A further review was undertaken in 2007 capturing new datasets. However there has never been a consistent England-wide survey of Maritime Cliff and Slope; and as a result, it is not possible to provide a meaningful account of change in extent or condition as noted by the Coastal Margins project (Jones and others 2011). This data deficiency was highlighted during the recent Regulation 9a assessment which pulled together data on the distribution, range, extent, condition and future prospects of the Annex I habitat H1230 Vegetated Sea Cliffs (which closely ties to Maritime Cliff and Slope).

A further challenge which has been identified in recent years is that areas of previously mapped Maritime Cliff and Slope (whether designated and mapped as a SAC, SSSI, or part of the Priority Habitat Inventory) have shifted position in relation to the cliff line and cliff face with the associated polygons now lying over the beach or sea due to erosion. Natural England (and before that English Nature) have experienced challenges in handling coastal casework where the features of interest have migrated outside of the protected area boundary due to coastal recession (e.g. at Birling Gap, Sussex and Easton Bavents, Suffolk). These had an impact on our reputation with local communities, were expensive and could arguably have been avoided if the protected site boundary had allowed for future coastal change. Coastal site designations should reflect the fact that change is both expected and indeed desirable when it is driven by natural processes both in how they are delineated and managed. Similarly, the coastal cliff mass movements means that the constituent habitats of Maritime Cliff and Slope may be subject to rapid change.

The change in the delineation of protected site boundaries to account for coastal evolution and climate change is supported by the following:

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<sup>1</sup> The recent 2019-2024 Regulations 9a assessment provided a minimum area of 13,818ha (based on latest version of the PHI V3.0 (July 24) and a maximum area of 14,080ha (based on the PHI extent given in FCS definition based on V. 2.3 (Denning, 2022)).

Natural England's climate change risk assessment and adaptation plan (2021) states that "We will ensure that climate change is considered in the designation of new biological and geological SSSIs and in the review of SSSI boundaries and citations"

1. The Natural England and RSPB Climate Change Adaptation Manual (2019) states that the appropriate adaptation response for Maritime Cliff and Slope is to "Develop information to support necessary adjustment of designated site boundaries and interest features as coasts evolve, allowing for between 30 to 50 years of change." This principle of adjustment is further supported by the approach
2. used in the Marine and Coastal Access Act 2009 which allows for a route to be adjusted ('to be determined at any time') in response to potential for physical change.

NE has established 50 years as an 'appropriate' allowance for coastal recession when determining protected area boundaries on changing coastlines and embraces climate change predictions that the rate of recession will increase with rising sea-levels however this has only been applied to a handful of sites leaving coastal features at risk of not being protected.

All coastal cliffs erode, whether through wave or wind erosion (abrasion, attrition, solution, or hydraulic action) or rainwater infiltration causing coastal landslip (where the rainwater lubricates the geological strata causing rotational slippage). This is particularly an issue on soft (i.e. predominantly boulder clay or other unconsolidated material) and intermediate cliff types (e.g. chalk) where erosion rates are greatest. For example, a review of mapped sections of cliff along the North-east coast by NE found that by when an updated version of MasterMap was used, some areas of cliff were now in the sea or overlapped with the beach. In addition, the Mean High Water Springs (MHWS) line as shown on OS MasterMap (which is itself subject to continuous change) was also used to identify cliff polygons that needed to be modified. However, it is not just a simple as moving the polygon inland as the land (use) behind the cliff also needs to be considered.

Timing for this proposed project is in many ways perfect. The recent development of the SMP Explorer and the recent publication of the National Coastal Erosion Risk Map (NCERM2) provides the most up to date national picture of coastal erosion risk for England. Data on maritime cliff and slope in terms of cliff stability, erosion rates, position of the cliff line and coastal defence measures (assets) are now more easily obtained and of greater accuracy compared to the earlier inventories. That along with advancements in Earth Observation technology means that we have better opportunities to capture data at a landscape scale. The data will also support and inform work undertaken by the Flood and Coastal Resilience Innovation Projects ([FCRIP](#)) such as the Coastal Transition Accelerator programme ([CTAP](#)), [Coast-R](#), future resilient coasts, sediment supply work, and help inform future protected site redesignation of cliffs as they erode. Alongside this, roll-back opportunities along our cliffs are being explored, providing additional room for cliff-top habitats to develop, so providing resilience through habitat creation and restoration. This works closely with the new Environmental Land Management Countryside Stewardship Higher Tier options for both "Maritime Cliff and Slope ([CCT10](#))"

and a roll-back option focused on providing space at the coast “Make Space for New Coastal Habitat ([CCT2](#))” so that it can function naturally, allowing coastal processes.

This project is fundamental to our work on protected cliff sites, particularly the whole feature-based approach and Habitats Directive Regulation 9A reporting. But it will also help provide a national picture on the health of our cliff systems and habitats, allowing more targeted approaches to restoration and identifying the most appropriate locations for habitat creation.

### *The ask*

## **Step 1 – Review of existing Priority Habitat Inventory layer for Maritime Cliff and Slope**

Undertake a review of the existing mapped areas of Maritime Cliff and Slope included on the Priority Habitat Inventory (and SSSI boundary's where this overlaps with cliff habitat). We know that several datasets could be used to improve the quality and accuracy of the layer including:

1. review and update against the latest OS MasterMap and associated MHWS line. As part of this, the contractor will need to determine a suitable process to ensure the history of change is captured within the dataset, so to allow future analysis and reporting on change. This will involve working with Natural England's Mapping and Earth Observation Team.
2. review and update against the recently published NCERM2 capturing relevant data from that dataset. For eroding and receding cliffs<sup>2</sup>, erosion hotspots where erosion rates of more than 2m (on average) per year should be flagged. With erosion rates for other areas expressed as a suitable range i.e. 0-0.5m, 0.5-1m, 1-1.5m, 1.5-2m and over 2m. In addition, the ground instability layer (which flags areas at risk of land slip in the next 100 years) should be captured. These are likely to coincide where there is the greatest risk of the Priority Habitat Inventory layer becoming outdated and the polygons needing modification. The [NCERM2 data](#) includes the most up-to-date cliff line<sup>3</sup>, current and future plans to manage the

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<sup>2</sup> This should include both unprotected receding cliffs (likely erosion dominant) and cliffs receding despite coastal protection (where subaerial processes are dominant rather than coastal erosion).

<sup>3</sup> As part of the professional user's package the EA's feature line is available. The NCERM2 Feature Line (previously referred to as the baseline) is a line that follows a coastal feature, which forms the starting point for the projections of estimated future change. The coastal features commonly selected are the cliff top, back of beach (defined

coastline (i.e. Shoreline Management Plan policy), details on coastal defence assets (which may restrict erosion) and considers future climate scenarios based on the UK Climate Projections (UKCP18) which includes allowances for sea level rise.

3. evaluation of existing land cover (along the cliff top and immediately behind the cliff line) using open government licenced (OGL) compliant data. This data should be of sufficient quality to provide habitat classification levels to distinguish Maritime Cliff and Slope habitat. Datasets to consider using include the Regional Coastal Monitoring Programme habitat mapping available through the [Coastal Monitoring map viewer](#) (which captures habitat data from most of the English coast extending 1-2km inland on a rolling programme), local data collected by LPAs (where available) and potentially data from Local Nature Recovery Strategy (LNRS) actions using the [LNRS Data Viewer](#). The sources/ metadata of any land cover data that contribute to the mapping should be collated. When considering land this should also consider cliff recession rates to give an indication of adjacent land use in the medium (2055) and long-term (2105). This will help identify where roll-back and habitat creation/ restoration could be targeted.

4. the latest versions of the priority habitat inventory allow for the ability to map overlapping habitats where priority habitat definitions allow different priority habitats to coexist in the same place. This is especially important for Maritime Cliff and Slope as it is a complex of habitat types that can incorporate areas of open vegetation, grassland, mires, swamps, wetland, heathland, scrub, woodland, perched saltmarsh and sand dune. These vegetation types are all recognised by the SSSI guidelines for coastal habitats (Rees and others 2019). Part of the review of the PHI layer should be to identify and capture polygons along cliff top that are classified as another semi-natural habitat i.e. lowland heath and flag these as maritime cliff and slope. This should be recorded in the Main Habitats field and MCSLP in the Habitat Codes field (along with the other habitats/codes). Further guidance on the PHI is available [User Guide for Natural England's Priority Habitats' Inventory](#).
- 5.

SSSI site data including boundary lines and SSSI units to identify those SSSI sites (or parts of the site) with cliff habitat that are or will be subject to coastal erosion and cliff recession. Note a crude review of whether SSSIs designated for Maritime Cliff and Slope fall outside of the 50-year NCERM2 predictions (NFI. 95CC) has been undertaken by NE staff and this can be made available as a starting point for further work.

The review should consider the current situation, as well as in the future (i.e. to tie with the SMP epochs of medium, 2055 and long-term 2105). An interim period of 2040 would also be useful to tie with Natural England's statutory habitat targets.

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by the seaward extent of vegetation) or a backshore defence structure so might give an indication of where any changes to the landward boundary might be needed.

## Step 1 Project Outputs

The output of this exercise (step 1) will be a new maritime cliff and slope GI dataset, which contains the following information:

An updated maritime cliff and slope PHI layer with additional attributes from NCERM2 etc (as a separate spatial data layer). Attributes should contain data on erosion/ recession rates, geology, adjacent land use, asset details if influential on natural processes, and additional habitats present. Polygons should be clipped (where appropriate) to the OS MasterMap and MHWS line. The project should

1.

consider the data recording structure to allow for this reporting, including domain lists, units etc. It is unlikely that the PHI later can adopt changes to the structure - so the outputs might be:

an updated MCS layer with additional attributes from NCERM etc (as a separate spatial data layer)

2.

an updated PHI layer for MCS that derives from the above item that conforms to the PHI data structure.

3.

4. Identification of those PHI locations (and SSSIs) where maritime cliff and slope polygons currently fall beyond the cliff line / cliff face i.e. over the beach or sea (i.e. where the polygons have been clipped).

5.

Identification of those PHI locations (and SSSIs) where the maritime cliff and slope polygons may fall beyond the cliff line / cliff face in the future i.e. in the medium and long-term.

6.

7. A geospatial layer (with a summary list of sites for discussion) of those areas where erosion/ recession is greatest likely to be those areas where erosion rates are over 2m per year. This will provide a focus for targeted surveys and more detailed analysis.

8.

Using the above information provide an informed decision where the maritime cliff and slope polygons could be extended inland (to allow for 50 years of future roll-back/ accommodation space accounting for climate change). Work by Mark Lee undertaken for Natural England previously will be shared with the contractor to support this. This could include areas of semi-natural habitat that is not currently assigned as a Priority Habitat but with time could provide future Maritime Cliff and Slope habitat resource.

All data produced should meet NE's Data Governance Standard including provision of metadata that meets our standards.

As much of this data has already been produced as part of NCERM2 (i.e. producing zones of risk from recession with climate change and asset constraints) we envisage this aspect of the work to be undertaken quickly. A meeting following the completion of step 1 with NE's coastal specialists will be held, providing an opportunity to discuss step 1 outputs and to consider locations for step 2.

## **Step 2 – Capture more detailed data using earth observation and ground-truthing on specific locations identified in Step 1 subject to rapid erosion**

Traditionally surveys of soft and vertical cliff sites in England have been extremely limited, either being undertaken by desk-based methods i.e. measuring length from OS maps or assessing habitat using aerial photographs; or small-scale field visits where the habitat is viewed from a distance using binoculars, or by roped ecologists. Survey work is often difficult to undertake due to over-riding H&S concerns in particular when surveying soft and unstable cliffs. For example, recent surveys undertaken on the Isle of Wight as part of condition assessment work have used a mixture of aerial photograph and site visit, with the collection of vegetation data limited to accessible, stable slopes where H&S risks can be managed. This means there are sections of cliff where data is not available.

In 2022, we commissioned the GeoData Institute, University of Southampton to determine a consistent method using innovative earth observation (EO) techniques to map and inform condition of MC&S habitats (GeoData Institute, University of Southampton, 2025). The trial took place in two locations, one in Yorkshire on soft cliffs and one on the Lizard, Cornwall on hard cliffs. The team looked at various EO techniques such as using drones (UAVs) collecting RGB and multispectral data, lidar, satellite imagery and aerial photography as well as using innovative analysis methods such as Structure from Motion (SfM) models (producing 3D models and orthomosaics), DSM, NDVI (vegetation index), morphological classification. The next phase of the project is to use the novel learning from the trial to improve knowledge of our MC&S habitat resource in areas which are subject to the highest erosion.

At key locations (minimum of 3) identified during step 1, we wish to build on the approach set out by GeoData Institute, University of Southampton (GeoData, 2025). Site selection will aim to encompass a range of sites across varying morphological process and ecological composition, capturing a minimum of 500m of coastline. The aim of the data capture at these locations is to more accurately capture cliff features, both in terms of cliff morphology (cliff geomorphology) but also to identify broad vegetation types and vegetation structure, which because of rapid erosion rates will be subject to change. This data can be used to consider cliff condition (in terms of its ecological function based on the Common Monitoring Standards). Data capture should include imagery, lidar and morphological ground-truth data to enable validation and verification during processing. Additional datasets may be available through Natural England or local partners. In addition, the trial showed the value of using 3D models to identify hidden cliff geomorphology (which would otherwise be obscured by vegetation) for example local differences in slope gradient and angle and areas of erosion/slumping. It is highly likely that this exercise will generate more detailed data that will support the updated Priority Habitat Inventory mapping layer. While the PHI itself will not be able to retain this level of detail it is important that it is described in the metadata.

To facilitate site access, it is likely that the locations identified for step 2 will lie within SSSI site boundaries.

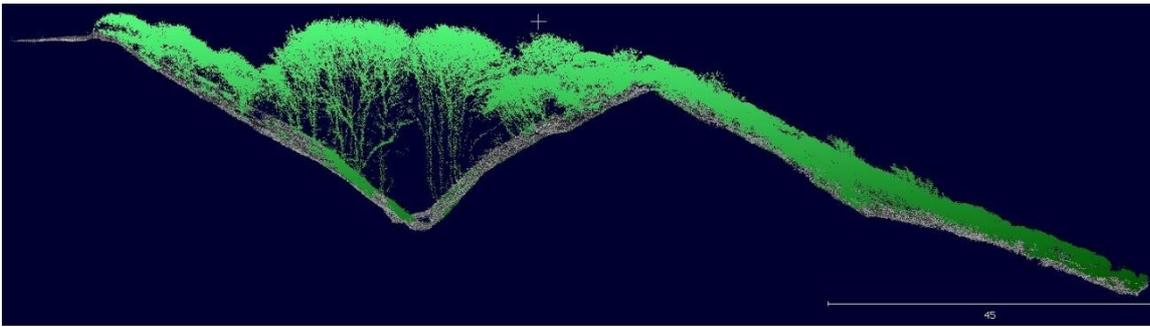


Figure 1 Example showing, cross section showing vegetated vs ground points across a gully

In addition, the production of 3D surface models capturing cliff cross-sections could be an important tool for public engagement in helping to explain important cliff features and natural processes i.e. in terms of their ecology, hydrology and geology. In particular, illustrating those changes to the coast over time and highlighting changes needed in designated site boundaries to protect features. Therefore, one suggested output of step 2 would be a fly-through video explaining the key features of maritime cliff and slope and how they are impacted by climate change for engagement purposes. The 3D surface model and fly-through video could also illustrate the NCERM2 data in a more accessible way. Many of the areas at greatest risk of cliff erosion/ recession are in close proximity to local communities that are having to deal with these changes. The 3D model/ fly-through could therefore also be used for engagement around coastal adaptation, e.g. highlighting hidden changes to illustrate scale of risk and need for urgent action, including - and arguably in particular - on coastlines with coastal protection where recession continues due to sub-aerial processes. There are several Defra projects such as Our Future Coast, Coast-R, FCRIP, and Championing Coastal Coordination (3C's) that are trying to engage coastal communities around climate change and sea-level rise. As such, for this aspect of the project it would be beneficial to work with Natural England's local teams as well link up with key individuals from the Environment Agency and partner organisations.

For example, Ventnor, located on the Isle of Wight, is known for its complex coastal geology and susceptibility to cliff erosion and landslides. The town is situated on what's described as the largest urbanized landslide complex in Northwest Europe. Recent events, including a large landslide in December 2023 and a rockfall on Belgrave Road in March 2025, have highlighted the ongoing challenges of managing coastal erosion in the area. Parts of this coast are designated as a SSSI namely Compton Chine to Steephill Cove SSSI and Bonchurch Landslips SSSI which abut the town. As with Step 1 all data produced should meet NE's Data Governance Standard including provision of standardised metadata.

### *Step 2 Project Outputs*

The output of this exercise (step 2) will be:

Further survey of prioritised locations (minimum of 3) identified during step 1, based on the approaches used in GeoData (2025), to identify areas for potential boundary adjustment

with ground-truthing or locally derived data, together with 3D surface models and ‘fly-through’s illustrating the key features and changes.

It is highly likely that this exercise will generate more detailed data that will support the updated Priority Habitat Inventory mapping layer. While the Priority Habitat Inventory itself will not be able to retain this level of detail it is important that it is described in the metadata.

Outputs of data (e.g. 3D surface models and ‘fly-through’s) produced during this stage should be shared with Natural England in a suitable compatible format (which may require discussion with NE's Mapping and Earth Observation Team).

A final summary report detailing the survey methods, site locations and future recommendations should be produced - this should use NE's commissioned report template - [NE Commissioned report \(NECR\) Accessible Template - Microsoft Word V2.4.docx](#) and meet NE's publishing standards - [Natural England publishing standards for commissioned reports - NECR000](#).

### Key References

Denning, L. (2023). Definition of Favourable Conservation Status for maritime cliff and slope Defining Favourable Conservation Status Project. Natural England. <https://publications.naturalengland.org.uk/publication/6567406819082240>

GeoData Institute, Southampton University (2025). Maritime Cliff and Slope, Yorkshire and Cornwall trial to map maritime cliff and slope habitats and characteristics and provide a cliff survey protocol. Natural England. Unpublished.

Natural England (2022). User Guide for Natural England’s Priority Habitats’ Inventory Version 3.0 November 2022. [User Guide for Natural England’s Priority Habitats’ Inventory](#).

### Outputs and Contract Management

Reference	Deliverable	Responsible Party	Date of completion
1	Start-up meeting between project officer and supplier. This will include a review of the methods, timeframes and deadlines.	Natural England	Anticipated as Week of 29th September 2025

Reference	Deliverable	Responsible Party	Date of completion
2	Step 1 - completion of step 1 with the provision of outputs as described above.	Supplier	Anticipated as Week of 1st December 2025
3	Meeting with Natural England with short-listed sites identified during Step 1. This will allow an opportunity to discuss which locations should be taken forward to Step 2.	Natural England and Supplier	Anticipated as Week of 8th December 2025
4	Step 2 - completion of step 2 including provision of draft summary report and submission of geospatial layers in digital format via email or data transfer.	Supplier	Anticipated as Week of 23rd February 2026
6	Natural England to review and QA all documents - comments to be returned to Supplier - for amendments if needed.	Natural England	Anticipated as Week of 2nd March 2026
7	Final meeting and end of contract	Natural England	15th March 2026

During Step 1 and Step 2 fortnightly meetings using Microsoft Teams may be arranged to allow an opportunity for both the supplier and Natural England to discuss the project progress.

The Supplier may also wish to present the results of the project at a future Coastal Leadership online meeting.

## Payment

The Authority will raise purchase orders to cover the cost of the services and will issue to the awarded supplier following contract award.

The Authority's preference is for all invoices to be sent electronically, quoting a valid Purchase Order number. The payment schedule will be agreed on contract award, but is likely to be based on the completion of Step's 1 and 2 with the final payment on the completion of the project.

It is anticipated that this contract will be awarded for a period of seven months to end no later than 15th March 2026. Prices will remain fixed for the duration of the contract award period. We may at our sole discretion extend this contract to include related or further work. Any extension shall be agreed in writing in advance of any work commencing and may be subject to further competition.

## Evaluation Methodology

We will award this contract in line with the most advantageous tender (MAT). See award criteria:

Technical – 60%

Commercial – 40%

Evaluation criteria

Evaluation weightings are 60% technical and 40% commercial, the winning tenderer will be the highest scoring combined score.

Award Criteria	Weighting (%)	Evaluation Topic & Weighting	Sub-Criteria	Weighted Question
Technical	60%	Proposal	Methodology	Please provide details of the methodology and approaches proposed to deliver the requirements of this project.  Your response should:  1) Demonstrate a clear understanding of the nature of the requirements.  2) Be a clear, practical, achievable, and cost-effective

Award Criteria	Weighting (%)	Evaluation Topic & Weighting	Sub-Criteria	Weighted Question
				<p>methodology to deliver these requirements.</p> <p>3) Have information in sufficient detail to allow a full appraisal of the suitability of the approach to deliver for the project.</p> <p>60% of technical score available</p>
			Key personnel	<p>Key personnel who will be directly involved in this contract and recent experience of carrying out similar projects.</p> <p>20% of technical score available</p>
			Quality Assurance measures	<p>Please explain how you ensure projects are delivered on time and to the required standards? In addition, what contingency plans are in place to deal with unforeseen circumstances?</p> <p>10% of technical score available</p>
			Health & Safety	<p>Please provide an example risk assessment for the field element of this work, including the use of Unmanned Aerial</p>

Award Criteria	Weighting (%)	Evaluation Topic & Weighting	Sub-Criteria	Weighted Question
				Vehicles (drones) and how this element of the work will be planned.  10% of technical score available
Commercial	40%	Whole life cost of the proposed Contract	Commercial Model	Ability to deliver within budget & contract period.  100% of commercial score available

### Technical (60%)

Technical evaluations will be based on responses to specific questions covering key criteria which are outlined below. Scores for questions will be based on the following:

Description	Score	Definition
Very good	100	Addresses all the Authority's requirements with all the relevant supporting information set out in the RFQ. There are no weaknesses and therefore the tender response gives the Authority complete confidence that all the requirements will be met to a high standard.
Good	70	Addresses all the Authority's requirements with all the relevant supporting information set out in the RFQ. The response contains minor weaknesses and therefore the tender response gives the Authority confidence that all the requirements will be met to a good standard.

Description	Score	Definition
Moderate	50	Addresses most of the requirements with most of the relevant supporting information set out in the RFQ. The response contains moderate weaknesses and therefore the tender response gives the Authority confidence that most of the requirements will be met to a suitable standard.
Weak	20	Substantially addresses the requirements but not all and provides supporting information that is of limited or no relevance or a methodology containing significant weaknesses and therefore raises concerns for the Authority that the requirements may not all be met.
Unacceptable	0	No response or provides a response that gives the Authority no confidence that the requirement will be met.

### Commercial (40%)

The Contract is to be awarded as a 'fixed price' which will be paid according to the completion of the deliverables stated in the Specification of Requirements.

Suppliers are required to submit a total cost to provide the deliverables stated in the Specification of Requirements. In addition to this the Commercial Response template must be completed to provide a breakdown of the whole life costs against each deliverable (Steps 1 and 2) used in the delivery of this requirement.

#### Calculation Method

The method for calculating the individual weighted scores is as follows:

- Commercial

Score = (Lowest Quotation Price / Supplier's Quotation Price) x 40% (Maximum available marks)

- Technical

Score = (Bidder's Total Technical Score / Highest Technical Score) x 60% (Maximum available marks)

The total score (weighted) (TWS) is then calculated by adding the total weighted commercial score (WC) to the total weighted technical score (WT):  $WC + WT = TWS$ .

Once all evaluators have completed their individual evaluations and provided their final scores, an average score will be calculated which will be multiplied by the selected weighting to give a weighted score representing the views of all evaluators.

### **Information to be returned**

Please note, the following information requested must be provided. Incomplete tender submissions may be discounted.

Please complete and return the following information:

- completed Commercial Response template
- separate response submission for each technical question (in accordance with the response instructions)
- complete AI question "Do you use Artificial Intelligence (AI) or machine learning tools, including large language models within your quote submission or service delivery processes.?" response which will not be scored, is to be returned within technical response
- completed Mandatory Requirements (Annex 1)
- completed Acceptance of Terms and Conditions (Annex 2)

### **Award**

Once the evaluation of the Response(s) is complete suppliers will be notified of the outcome via email. The successful supplier will be issued the contract, incorporating their Response, for signature. The Authority will then counter sign'.

# Annex 1 Mandatory Requirements

## Part 1 Potential Supplier Information

Please answer the following self-declaration questions in full and include this Annex in your quotation response.

### Part 1.1 Potential Supplier Information:

Question no.	Question	Response
1.1(a)	Full name of the potential supplier submitting the information	
1.1(b)	Registered office address (if applicable)	
1.1(c)	Company registration number (if applicable)	
1.1(d)	Charity registration number (if applicable)	
1.1(e)	Head office DUNS number (if applicable)	
1.1(f)	Registered VAT number	
1.1(g)	Are you a Small, Medium or Micro Enterprise (SME)?	(Yes / No)

Note: See EU definition of SME [https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition\\_en](https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en)

### Part 1.2 Contact details and declaration

By submitting a quotation to this RFQ I declare that to the best of my knowledge the answers submitted and information contained in this document are correct and accurate.

I declare that, upon request and without delay you will provide the certificates or documentary evidence referred to in this document.

I understand that the information will be used in the selection process to assess my organisation's suitability to be invited to participate further in this procurement.

I understand that the authority may reject this submission in its entirety if there is a failure to answer all the relevant questions fully, or if false/misleading information or content is provided in any section.

I am aware of the consequences of serious misrepresentation.

Question no.	Question	Response
1.2(a)	Contact name	
1.2(b)	Name of organisation	
1.2(c)	Role in organisation	
1.2(d)	Phone number	
1.2(e)	E-mail address	
1.2(f)	Postal address	
1.2(g)	Signature (electronic is acceptable)	
1.2(h)	Date	

## Part 2 Exclusion Grounds

### Part 2.1 Grounds for mandatory exclusion, including being on the Government Debarment List.

Question no.	Question	Response
2.1(a)	Please indicate if, within the past five years you, your organisation or any other person who has powers of representation, decision or control in the organisation been convicted anywhere in the world of any of the offences within the summary below.	

Question no.	Question	Response
	Participation in a criminal organisation.	(Yes / No)  If yes please provide details at 2.1 (b)
	Corruption.	((Yes / No)  If yes please provide details at 2.1 (b)
	Fraud.	(Yes / No)  If yes please provide details at 2.1 (b)
	Terrorist offences or offences linked to terrorist activities	(Yes / No)  If yes please provide details at 2.1 (b)
	Money laundering or terrorist financing	(Yes / No)  If yes please provide details at 2.1 (b)
	Child labour and other forms of trafficking in human beings	(Yes / No)  If yes please provide details at 2.1 (b)
2.1(b)	<p>If you have answered yes to question 2.1(a), please provide further details.</p> <p>Date of conviction, specify which of the grounds listed the conviction was for, and the reasons for conviction.</p>	

Question no.	Question	Response
	<p>Identity of who has been convicted</p> <p>If the relevant documentation is available electronically please provide the web address, issuing authority, precise reference of the documents.</p>	
2.1 (c)	<p>If you have answered Yes to any of the points above have measures been taken to demonstrate the reliability of the organisation despite the existence of a relevant ground for exclusion? (i.e. Self-Cleaning)</p>	(Yes / No)
2.1(d)	<p>Has it been established, for your organisation by a judicial or administrative decision having final and binding effect in accordance with the legal provisions of any part of the United Kingdom or the legal provisions of the country in which the organisation is established (if outside the UK), that the organisation is in breach of obligations related to the payment of tax or social security contributions?</p>	(Yes / No)
2.1(e)	<p>If you have answered yes to question 2.3(a), please provide further details. Please also confirm you have paid or have entered into a binding arrangement with a view to paying, the outstanding sum including where applicable any accrued interest and/or fines.</p>	

**Part 2.2 Grounds for discretionary exclusion**

Question no.	Question	Response
2.2(a)	<p>The detailed grounds for discretionary exclusion of an organisation are set out on this <a href="#">webpage</a>, which should be referred to before completing these questions.</p> <p>Please indicate if, within the past three years, anywhere in the world any of the following situations have applied to you, your organisation or any other person who has powers of representation, decision or control in the organisation</p>	
2.2(b)	Breach of environmental obligations?	<p>(Yes / No)</p> <p>If yes please provide details at 2.2 (f)</p>
2.2(c)	Breach of social obligations?	<p>(Yes / No)</p> <p>If yes please provide details at 2.2 (f)</p>
2.2(d)	Breach of labour law obligations?	<p>(Yes / No)</p> <p>If yes please provide details at 2.2 (f)</p>
2.2(e)	Shown significant or persistent deficiencies in the performance of a substantive requirement under a prior public contract, a prior contract with a contracting entity, or a prior concession contract, which led to early termination of that prior contract, damages or other comparable sanctions?	<p>(Yes / No)</p> <p>If yes please provide details at 2.2 (f)</p>
2.2 (f)	If you have answered Yes to any of the above, explain what measures been taken to demonstrate the reliability of the organisation despite the existence of a relevant ground for exclusion? (Self Cleaning)	

# Annex 2 Acceptance of Terms and Conditions

I/We accept in full the terms and conditions appended to this Request for Quote document.

Company \_\_\_\_\_

Signature \_\_\_\_\_

Print Name \_\_\_\_\_

Position \_\_\_\_\_

Date \_\_\_\_\_

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