Request for Quotation

Integrating Mycorrhiza into Nutrient Management Planning

30/08/2024

Request for Quotation

Integrating Mycorrhiza into Nutrient Management Planning

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 address by:

Email: [jonny.griffiths@naturalengland.org.uk](mailto:jonny.griffiths@naturalengland.org.uk)

[matthew.j.shepherd@naturalengland.org.uk](mailto:matthew.j.shepherd@naturalengland.org.uk)

Date: 13/09/2024

Time: 17:00

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

Jonathan Griffiths and Matthew Shepherd 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 | 02/09/2024at12:00 |
| Deadline for clarifications questions | 20/09/2024 at 17:00 |
| Deadline for receipt of Quotation | 27/09/2024 at 17:00 |
| Intended date of Contract Award | 07/10/2024 |
| Intended Contract Start Date | 09/10/2024 |
| Intended Delivery Date | 28/03/2025 |

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 [here](https://www.gov.uk/government/publications/natural-england-terms-and-conditions-for-goods-and-services/standard-goods-and-services-terms-and-conditions-10000-to-50000) (https://www.gov.uk/government/publications/natural-england-terms-and-conditions-for-goods-and-services/standard-goods-and-services-terms-and-conditions-10000-to-50000)

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 Contract Finder 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 Contracts Finder, we are obliged to publish details of the awarded contract including who has won the contract, the contract value, and indicate whether the winning supplier is a small and medium-sized enterprise (“SMEs”) or voluntary organisation or charity. 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)](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1166155/Guidance_1.6_-_Contractors_and_Contracting_Authorities.pdf).

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](https://www.gov.uk/government/publications/ppn-0224-improving-transparency-of-ai-use-in-procurement/ppn-0224-improving-transparency-of-ai-use-in-procurement-html).

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 with 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](https://www.gov.uk/government/publications/defra-group-equality-diversity-and-inclusion-strategy-2020-to-2024/defra-group-equality-diversity-and-inclusion-strategy-2020-to-2024).
* meet the standards set out in the [Government’s Supplier Code of Conduct](https://www.gov.uk/government/publications/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 advisor on the natural environment. We provide practical advice, grounded in science, on how best to safeguard England’s natural wealth for the benefit of everyone.

Our remit is to ensure sustainable stewardship of the land and sea so that people and nature can thrive. It is our responsibility to see that England’s rich natural environment can adapt and survive intact for future generations to enjoy.

Natural England's purpose is to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development.

This purpose includes:

* ​​promoting nature conservation and protecting biodiversity
* conserving and enhancing the landscape
* securing the provision and improvement of facilities for the study, understanding and enjoyment of the natural environment
* promoting access to the countryside, open spaces and encouraging open air recreation
* contributing in other ways to social and economic wellbeing through management of the natural environment

Integrating mycorrhiza into nutrient management planning

Background to the specific work area relevant to this purchase

This specification relates to work to be carried out for Natural England's Geology, Landscape and Soils Team, and aims to provide evidence to support the government's ambitions to deliver sustainable management for 60% of agricultural soils by 2030. The project requires a literature review to gather and synthesis knowledge relating to whether and how our current understanding of mycorrhizal nutrient supply can be integrated into nutrient management planning. Mycorrhizal fungi have been forming mutualistic associations with terrestrial plants since they first began to spread onto land, and provide nutrients, water and disease resistance to the plants, in return for photosynthetic carbon. The mutualism, however, is abandoned by the plant in circumstances of high mineral nutrient availability, such as is promoted under currently encouraged nutrient application rates. Besides supporting plants mycorrhizal fungi also deliver significant benefits to soil carbon storage and soil coherence, helping to prevent erosion and sediment pollution. In order to secure ecosystem benefits from mycorrhizal fungi we need to understand whether and how we can advise farmers to encourage mycorrhizae in their crops, and what this would mean for farm nutrient management regimes. To achieve this aim, we need to collate and analyse existing data and understand where we have strong evidence to underpin management advice, and where there are key evidence gaps to resolve.

The work will take place between September 2024 and March 2025, and will deliver a report, a presentation and infographics to help communicate the findings.

Requirement

*Rationale and Background*

Mycorrhiza refers to a symbiotic association between fungi and plant roots, and this plays a pivotal role in delivering nutrient supply to plants. This mutualistic relationship has existed since the earliest land plants, effectively enabling their colonisation of land, and is crucial for the function of many ecosystems. Mycorrhizal fungi colonize plant roots and extend their hyphae into the soil, significantly increasing the surface area for nutrient and water absorption, while benefiting from, and often completely relying upon, photosynthetic carbon from the plant as an energy supply.

Mycorrhizal fungi improve the uptake of essential nutrients, particularly phosphorus (P), nitrogen (N), potassium (K), and micronutrients such as zinc (Zn) and copper (Cu). Phosphorus is often present in soil in insoluble forms as complexes with iron, aluminium or calcium, but becomes more accessible to plants through the enzymatic actions of mycorrhizal fungi. The extensive hyphal networks allow for the exploration of larger soil volumes, and soil particle surface areas, capturing nutrients beyond the reach of plant roots. They also act as conduits for water, which is transported along the external surfaces of the hyphae to the roots. Other plant benefits conferred by mycorrhiza include improved disease resistance, which is thought to result from both better health, as mediated by better nutrient and water supply, but also by the mycorrhizal priming the plant’s defence mechanisms against pathogens. Mycorrhizal also help to shield plants from toxic elements in contaminated soils, and can preferentially support germination and recruitment of young plants, as well as representing a mechanisms whereby plants communicate environmental stresses between each other.

Besides the direct benefit to the plant, mycorrhizal fungi also contribute to the formation of stable soil aggregates both by enmeshment of aggregates with hyphae, and by production of structural glycoproteins which, when hyphae decay, are highly adhesive to soil particles, resistant to degradation and retentive of water and nutrient cations. The resulting soil aggregates provide an ideal growing medium for many plants, suggesting that this soil structure co-evolved with mycorrhizal mutualism, along with similar mutualistic associations between soil organisms and the plants which supply their energy. Furthermore, the carbon stored in mycorrhizal glycoproteins represents a huge store of terrestrial organic carbon, which helps to maintain climate stability.

Overall, mycorrhiza, as we’d expect from an ecological arrangement that has dominated the planet’s terrestrial ecosystems for over 400 million years, are an integral part of the function of terrestrial ecosystems.

Modern conventional agriculture, however, has been developed largely independently from the concept of mycorrhiza, which were only discovered in the late 19th century, and not extensively studied until the mid 20th century. The agricultural “green revolution” that changed agriculture after the 2nd world war focussed on taking advantage of industrial chemical processes to generate readily available nutrients for crop plants, alongside further ranges of chemical tools to control pests and diseases. Drought or disease stress was also addressed by intensive breeding programmes which attempted to produce crops that maximised yield of the saleable products, while providing adequate resistance to diseases and drought, with trials of new strains being assessed without consideration of their mycorrhizal characteristics. Physical advances in technology enabled more intensive irrigation using abstracted or groundwater, and the delivery of the open soil structure required by plant roots was seen to be the job of intensive mechanical tillage.

All these processes represent a technological approach to replace the natural functions delivered by mycorrhiza and other soil organisms. However, in replacing these functions, industrial agriculture also actively disadvantages mycorrhiza. Because the fungi require a contribution of C from the plant, there is a cost to the plant in maintaining this relationship, and plants have been shown to respond to abundance of accessible mineral forms of nutrients by abandoning the mycorrhizal partnership, thereby saving the energy cost of maintaining a mycorrhiza where alternative nutrient supplies are available. Application of pesticides can also adversely affect mycorrhiza. Many fungicides kill or damage mycorrhizal fungi, but other plant protection products such as herbicides can have adverse effects, too. For example, exposure to glyphosate can reduce the germination potential of mycorrhizal spores. Intensive cultivation and regular disturbance of the soil destroys the delicate network of fungal hyphae, so that any mycorrhiza forming must grow again, from spores or fragments, in between cultivations, while soil bacteria thrive. Finally, crop breeding has favoured strains which perform best under chemical fertiliser regimes, which has resulted in modern strains that may be ill-equipped or unable to form mycorrhizal partnerships, and the suite of modern agricultural practices described above, has resulted in crop choices and food types that are inherently non-mycorrhizal (e.g. brassicas, beets) being bred from plants that thrive in disturbed habitats.

If we are to tackle the widespread environmental challenges facing us – pollution, climate change, biodiversity decline, food security – the integration of mycorrhiza into the way we grow our food will be a vital part of the solution.

However, current government-sponsored nutrient planning advice does not recognise the possibility of nutrient supply from mycorrhiza. The recommendations for application of mineral nutrients seek to supply all the requirements of the crop, topping up the available mineral nutrient supplied by the soil, and include a buffer for some possible nutrient loss. The resulting soil nutrient regime is therefore likely to encourage any plants capable of forming mycorrhizal associations to abandon them, with likely deleterious results for soil structure, disease, pollution, and climate change. This regime is likely to have contributed to declines in water and environmental quality.

We urgently need to review and apply knowledge of how mycorrhiza work in agroecosystems, to enable us to take advantage of their ability to take advantage of stable, plant-inaccessible nutrients to enable us to reduce nutrient application, loss, transport and production, while providing a wide range of associated ecosystem benefits.

Approach

This project aims to review the current knowledge of the occurrence of mycorrhiza in agroecosystems, and develop conclusions and recommendations on how farm management can best encourage and take advantage of mycorrhizal function. Specifically we would like the review to explore:

A review of the key mycorrhizal crops for current and future UK agriculture, and their mycorrhizal symbionts, identifying those naturally present in UK soil and those requiring inoculation.

Tipping points in nutrient application regimes that encourage mycorrhizal or non- mycorrhizal nutrient acquisition by these crops, and the likely impact of reliance on mycorrhiza on nutrient supply, and crop yield and profitability.

The benefits of crop inoculation against practices which develop mycorrhizal diversity in the soil.

The identification of farm system practices which may be necessary to enable a switch to mycorrhizal nutrient supply – considering cultivation, agrochemicals, crop choice (strains, alternatives to non-mycorrhizal crops), cover cropping, weed control, etc.

A conceptual exploration of whether the wider ecosystem services delivered by mycorrhiza in agroecosystems justify societal payments to encourage the practice and buffer unpredictability.

Key conclusions and recommendations, ideally highlighting any which can be included in future government nutrient planning advice, and identifying key evidence gaps where rapid research could enable development of new advice and guidance on this topic

We envisage this work to include a literature review, and where appropriate, limited meta-analysis, to encompass studies of crops and systems suited to the UK’s current and near-future climate, as well as studies elucidating the mechanisms of mycorrhizal symbioses on suitable crop plants. We expect the contractor to access both published and “grey” literature.

**Deliverables**

We require that the project deliver:

* A written literature review, in Natural England's standard report format, in a structure suitable for adaptation for submission to a peer reviewed journal. This report should include:
* a brief rationale and background for the project.
* a clear description of the approaches taken to identify and review evidence sources
* systematic review of meta-analysis results where appropriate
* a full referenced bibliography
* metrics and figures showing the synthesis of data from any meta-analyses
* tabulated results from any systematic collation of studies.
* recommendations for advice which can be currently given to farmers on how to manage, and benefit from, mycorrhizal supply of nutrients, where the evidence base is strong, along with an indication of its likely impacts of following this advice on management requirements, yield, and farm profitability.
* Identification of evidence gaps, especially where additional research would be needed to provide robust evidence-based advice on how to manage mycorrhizal crops for reduced nutrient inputs and enhanced crop and ecosystem benefits.
* A 20-minute presentation, suitable for delivery at a soil health conference (such as that held in Sheffield by Natural England in July 2024), explaining the project's rationale, approach, results, and conclusions.
* One or more infographics which can be used to rapidly communicate the project (graphical abstract).
* All data collated from studies (if meta-analysis carried out), which should be supplied to Natural England in the form of an excel spreadsheet, along with any appropriate metadata, including any onward licencing agreements in place relating to that data.

Skills required

We would expect the successful contract to have expertise in:

* Mycorrhizal fungi, and their function
* Plant physiology
* Agricultural management
* Crop nutrition
* Literature review (including Meta-analysis and Systematic Review)

The successful contractor would benefit from additional expertise in:

* Agricultural economics
* Wider soil biology
* Regenerative agriculture

Project Management

As part of their tender, we require that potential contractors submit:

* A project risk assessment, which should identify risks to successful delivery of the project, and suggest appropriate mitigation actions, along with who would be responsible for delivering these.
* A description of the qualifications and experience of all key personnel delivering this project, and why they are suitable to deliver the role.
* A simple Gannt chart identifying key milestones for delivery, who would be responsible for specific milestones, and highlighting any interdependencies in the project's delivery.

It is not envisaged that the project will involve any fieldwork or significant travel. The successful contractor is invited to consder whether liaison with experts or industry (e.g. suppliers of mycorrhizal inoculants) would be beneficial to the project and engage with these if necessary, however, the conclusions of this report should be based on robust evidence, rather than expert opinion.

It is envisaged that the work to be undertaken for this project will take approximately 60 staff days.

Sustainability

Natural England protects and improves the environment and is committed to reducing the sustainability impacts of its activities directly and through its supply chains. We expect the Contractor to share this commitment and adopt a sound, proactive sustainable approach in keeping with the 25 yr environmental plan/our commitments compliant with all applicable legislation. This includes understanding and reducing direct and indirect sustainability impacts and realising opportunities, including but not restricted to; resilience to climate change, reducing greenhouse gas emissions, water use and quality, biosecurity, resource efficiency and waste, reducing the risk of pollution, biodiversity, modern slavery and equality, diversity & inclusion, negative community impacts.

As a delivery partner, the successful contractor is expected to pursue sustainability in their operations, thereby ensuring the Contracting Authority is not contracting with a supplier whose operational outputs run contrary to the Contracting Authority’s objectives. The successful contractor will need to approach the project with a focus on the entire life cycle of the project

Outputs and Contract Management

The table below provides a suggested project outline and dates for key deliverables. The contractor, however, is asked to provide their own project outline, reflecting their delivery capabilities and plans.

|  |  |  |  |
| --- | --- | --- | --- |
| Reference | Deliverable | Responsible Party | Date of completion |
|  | Project initiation meeting |  | Sept 2024 |
|  | 1st project meeting |  | Oct 2024 |
|  | Delivery of outline report structure. |  | Early Nov 2024 |
|  | 2nd project meeting |  | Nov 2024 |
|  | 3rd project meeting |  | Dec 2024 |
|  | 4th project meeting |  | Jan 2025 |
|  | 5th project meeting |  | Feb 2025 |
|  | Delivery of draft report |  |  |
|  | Meeting to discuss draft report |  | 15 Mar 2025 |
|  | Final project wrap-up meeting |  | End Mar 2025 |

The project will be managed by Jonathan Griffiths and Matthew Shepherd for Natural England, with regular (at least monthly) online meetings organised by the contractor, to provide updates and clarify issues and risks. Any risks identified by the contractor to the delivery of this project should be raised as early as possible by email or telephone to the project manager. All deliverables will be supplied as electronic copies. We would value suggestions from the contractor on how best to proceed with publication of the report, or a paper closely derived from it, in a peer reviewed academic journal.

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. We expect the successful contractor to submit 1 invoice at the end of the project covering all work completed.

It is anticipated that this contract will be awarded for a period of 25 weeks to end no later than 28/03/2025. 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 evaluate tenders for this contract using 2 main considerations: technical (quality) and commercial (price). A percentage weighting is applied to each element to indicate its level of importance.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Evaluation criteria | What we're looking for | Weighting | Evaluation criteria | Minimum accepatble score (%) |
| Methodology | Clear structure of review presented in tender  Evidence of good access to academic and grey literature sources  Presentation of approaches to use of metaananalysis and systematic review.  Presentation of approaches to prioritisation of evidence gaps. | 40% | Your response should:  1) Demonstrate a clear understanding of the nature of the requirements.  2) Be a clear, practical, achievable, and cost-effective methodology to deliver these requirements.  3) Have information in sufficient detail to allow a full appraisal of the suitability of the approach to deliver for the project. | 70 |
| Personnel | Please indicate the level of experience and expertise the proposed delivery personnel have in the following areas  Essential:   * Mycorrhizal fungi, and their function * Plant physiology * Agricultural management * Crop nutrition * Literature review (including Meta-analysis and Systematic Review)   Desirable:   * Agricultural economics * Wider soil biology * Regenerative agriculture | 30% | Your response should:  Provide brief overviews of the experience and expertise of personnel.  List relevant projects achieved by the staff involved.  Indicate any specific training courses or academic qualificaitons or awards relevant to the skills indicated. | 50 |
| Project planning | List of key personnel involved including description of tasks they will undertake.  Project gannt chart  Risk assessment identifying key risks to project delivery and identifiying mitigation actions that will be undertaken in their event.  Presentation of a clear communications strategy, with key contacts. | 30% | Your response should:  Provide a clear overview of how you will deliver the outcomes of the project.  Identify any problems in the project's delivery and suggest realistic ways to overcome these. | 50 |
|  |  | Total 100% |  | Overall weighted minimum 58% |

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

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. |
| 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. |

Technical evaluation is assessed using the evaluation topics and sub-criteria stated in the Evaluation Criteria section above.

Separate submissions for each technical question should be provided and will be evaluated in isolation. Tenderers should provide answers that meet the criteria of each technical question.

Commercial (**40**%) [Insert correct weighting above as appropriate]

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 any work packages proposed by the contractor and used in the delivery of this requirement.

Calculation Method

The method for calculating the 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 Possible 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.

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 all 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>

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

|  |  |  |
| --- | --- | --- |
| 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. | |
|  | 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) | If you have answered yes to question 2.1(a), please provide further details.  Date of conviction, specify which of the grounds listed the conviction was for, and the reasons for conviction.  Identity of who has been convicted  If the relevant documentation is available electronically please provide the web address, issuing authority, precise reference of the documents. |  |
| 2.1 (c) | 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) | (Yes / No) |
| 2.1(d) | 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? | (Yes / No) |
| 2.1(e) | 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. |  |

Part 2.2 Grounds for discretionary exclusion

|  |  |  |
| --- | --- | --- |
| Question no. | Question | Response |
| 2.2(a) | The detailed grounds for discretionary exclusion of an organisation are set out on this [webpage](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/551130/List_of_Mandatory_and_Discretionary_Exclusions.pdf), which should be referred to before completing these questions.  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 | |
| 2.2(b) | Breach of environmental obligations? | (Yes / No)  If yes please provide details at 2.2 (f) |
| 2.2(c) | Breach of social obligations? | (Yes / No)  If yes please provide details at 2.2 (f) |
| 2.2(d) | Breach of labour law obligations? | (Yes / No)  If yes please provide details at 2.2 (f) |
| 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? | (Yes / No)  If yes please provide details at 2.2 (f) |
| 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 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_