-Add NE Logo

**Standard Contract for Goods and/or Services - Order Form**

|  |  |
| --- | --- |
| 1. **Purchase Order Number**
 | [**Insert** Customer's purchase order number – to be confirmed when known |
| 1. **Customer**
 | Natural England |
| 1. **Contractor(s)**
 | [**Insert** *Contractor’s name, registered address (if registered), and registration number (if registered),* |
| 1. **Defra Group Members**
 | The following Defra Group members will receive the benefit of the Deliverables:Natural England |
| 1. **The Agreement**
 | This Order is part of the Agreement and is subject to the terms and conditions referenced at Appendix 1 and shall come into effect on the Start Date.Unless the context otherwise requires, capitalised expressions used in this Order have the same meanings as in the terms and conditions. The following documents are incorporated into the Agreement. If there is any conflict, the following order of precedence applies (in descending order):1. this Order;
2. the terms and conditions at Appendix 1; and
3. the remaining Appendices (if any) in equal order of precedence.
 |
| 1. **Deliverables**
 | **Applicable Deliverables**  | **Goods Only:**[ ] **Services Only:**[x] **Good and Services:**[ ]  |
| **Goods** | N/A |
| **Services** | **Review and analysis of metabarcoding primers and DNA reference libraries for mammals occurring in the UK****Background to the specific work area relevant to this purchase**DNA-based applications are rapidly changing how we approach biodiversity monitoring and assessment. The DNA team aims to operationalise DNA-based methods for use within Natural England and produces guidance for using DNA-based methods in monitoring projects. In order to provide sound recommendations, it is important that we understand the limitations of DNA-based methods.Metabarcoding is now commonly used for biodiversity assessment; however, there remain challenges to standardised applications including primer biases and gaps in reference libraries.  This project aims to: investigate the most frequently used primers when investigating mammals through eDNA metabarcoding; look at the sequence coverage of these markers for mammals occurring in the UK ([Species Dictionary | Natural History Museum (nhm.ac.uk))](https://www.nhm.ac.uk/our-science/data/uk-species.html) in open access reference libraries and the confidence we can have in the sequences; look at primer bias through *in silico* analysis; and bring this information together into a single document that can be referred to when providing guidance. **Requirements** Please provide a quote for undertaking each requirement separately, but assuming requirement 1 will be completed before requirement 3. Natural England reserves the right to let only one of these requirements. The requirements of this project are to:1. Undertake a literature review of the most frequently used primer sets for mammal eDNA work identifying the top 10 (not limited to the UK);
2. Using the primer sets identified in requirement 1, undertake a review of open access reference libraries for mammals occurring in the UK, specifically:
3. Are the DNA fragments or barcodes targeted by these primer sets represented in an open access reference library for each species? Specify which species are represented, by which genes (e.g. CO1 or 12S rRNA), in which reference library. Reference sequences must include the target DNA fragment. Omit genes that only have partial sequences which do not include the target DNA fragment
4. Is a complete mitochondrial or nuclear genome present?
5. What percentage of records for each species are from UK specimens?
6. Conduct *in silico* PCR analysis to evaluate amplification bias in the top 10 metabarcoding primer pairs identified in requirement 1.

The results should be compiled into a final detailed report (see outputs for details). **Outputs and Contract Management**The final report must follow the [Natural England report writing guidance](https://publications.naturalengland.org.uk/publication/5790636781600768) including use of template and adherence to the accessibility requirements. The format of the report is to be agreed upon by the successful contractor and Natural England project officer.The data and report produced will be made available by Natural England under an Open Government Licence.  The Final Report must include (depending on the requirements included in the tender award): Requirement 1* Clear and detailed methodology of literature search and refinement including databases and queries used.
* A list of the most frequently used metabarcoding primer sets for the amplification of mammals occurring in the UK and the proportion of studies they have been used in.

Requirement 2* Clear table of mammal species occurring in the UK, DNA record present (barcode or genome), the open access reference libraries they occur in and percentage of reference library records from UK specimens

Requirement 3* Introduction into the theory behind amplification bias.
* Clear and detailed methodology for *in silico* analysis, including retrieval of sequences and software used for *in silico* PCR.
* Results showing the *in silico* amplification results for each analysed primer set, including taxonomic resolution and coverage for mammal species occurring in the UK.
* Discussion on the biases identified in the analysed primers and a table of the recommended primer set to use for each species based on the results

 Please note that it is Natural England’s intention to publish this report and make it publicly available on our Access to Evidence portal.Following the completion of this project the report will be evaluated and reviewed by Natural England, and any next steps decided on. |
| 1. **Start Date**
 | *23/09/2024*  |
| 1. **Expiry Date**
 | *31/01/2025* |
| 1. **Charges**
 | The Charges for the Goods and/or Services shall be as set out [below ***[insert details]*** / in [Appendix 3 – Charges]]. The Charges are fixed for the duration of the Agreement.  |
| 1. **Payment**
 | P*ayments will be made in pounds by BACS transfer using the details provided by the supplier on submission of a compliant invoice.]* |
| 1. **Contractor’s Liability Cap (Clause 13.2.1)**
 | A sum equal to £5,000,000. |
| 1. **Customer’s Authorised Representative(s)**
 | For general liaison your contact will continue to be Debbie Leatherland; Debbie.Leatherland@naturalengland.org.ukor, in their absence, Lynsey Harper; Lynsey.Harper@naturalengland.org.uk |
| 1. **Contractor’s Authorised Representative**
 | For general liaison your contact will continue to be [**Insert *contract manager name and contact details***] or, in their absence, [**Insert *secondary name and contact details***]. |
| 1. **Optional Intellectual Property Rights (“IPR”) Clauses**
 | The Customer has chosen Option **B** in respect of intellectual property rights provisions for the Agreement as set out in the terms and conditions. |
| 1. **Progress Meetings and Progress Reports**
 | * The Contractor shall attend progress meetings with the Customer every month
* The Contractor shall provide the Customer with progress reports every 2 weeks
 |
| 1. **Address for notices**
 |

|  |  |
| --- | --- |
| **Customer:** | **Contractor:** |
| Natural England; Apex Court; City LinkNottingham; NG2 4LAAttention: Debbie LeatherlandEmail: Debbie.leatherland@naturalengland.org.uk | [**insert *nameand address of Contractor*]**Attention: **[insert *title***]Email: [**insert *email address***] |

 |
| 1. **Key Personnel of the Contractor**
 |

|  |  |  |
| --- | --- | --- |
| **Key Personnel Role:** | **Key Personnel Name:** | **Contact Details:** |
|  |  |  |
|  |
|  |  |  |

 |
| 1. **Procedures and Policies**
 | For the purposes of the Agreement: The Customer’s security / data security requirements are: To comply with best practice in relation to data security and ensure any data transfer is done securely.  |
| 1. **Special Terms**
 | N/A |
| 1. **Additional Insurance**
 | N/A |
| 1. **Further Data Protection Provisions**
 | The further data protection provisions contained within Annex 4 of the terms and conditions are applicable to this Agreement where indicated below:**Yes:**[ ] **No:**[x]  |

|  |  |
| --- | --- |
| Signed for and on behalf of the **Customer** | Signed for and on behalf of the **Contractor**   |
| Name: [**Insert** name] [**Insert** job title] | Name: [**Insert** name][**Insert** job title] |
| Date:  | Date: |
| Signature: | Signature: |

**Appendix 1: Terms and Conditions**

The Customer’s Standard Good & Services Terms and Conditions which can be located on the [Natural England Website](https://eur05.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.gov.uk%2Fgovernment%2Forganisations%2Fnatural-england%2Fabout%2Fprocurement&data=05%7C01%7Cdaniel.lavender%40dlapiper.com%7Ce61b389c5e15470f278e08dbcc060e37%7Ce855e7acc54640d299f7a100522010f9%7C1%7C0%7C638328098969691096%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=ymInFtzabvMF3T9or361i03D%2B4kyuzgt8T5CzJeS7Gc%3D&reserved=0) and which are called ‘Standard Goods & Services Terms and Conditions’

**Appendix 2: Specification/Description**

**Appendix 3: Charges**

**Appendix 4: Processing Personal Data**

|  |  |
| --- | --- |
|  |   |
| **Review and analysis of metabarcoding primers and DNA reference libraries for mammals occurring in the UK**  |
| **Contract:** |
| **Date:** | **[XXXX]** |
| **Description of authorised processing** | **Details** |
| Identity of Controller and Processor for each category of Personal Data |  |
| Subject matter of the processing |   |
| Duration of the processing |   |
| Nature and purposes of the processing |   |
| Type of Personal Data |   |
| Categories of Data Subject |   |
| Plan for return and destruction of the data once the processing is complete UNLESS requirement under law to preserve that type of data |  |
| Locations at which the Contractor and/or its subcontractors process Personal Data under this Agreement |  |
| Protective Measures that the Contractor and, where applicable, its subcontractors have implemented to protect Personal Data processed under this Agreement against a breach of security (insofar as that breach of security relates to data) or a Personal Data Breach |  |