



Department  
for Environment  
Food & Rural Affairs

**Order Form – Contract for Research and Development Services**

**Procurement of services to test and validate the use of LiDAR-coupled digital aerial surveys for quantifying seabird flight heights**





**Contract Reference P- 35414**

<b>1. Purchase Order Number</b>	TBC – Following Contract Signature
<b>2. Customer</b>	Natural England Foss House, Kings Pool 1-2 Peasholme Green York YO1 7PX United Kingdom
<b>3. Contractor(s)</b>	APEM Limited Riverview A17 Embankment Business Park Vale Road Stockport SK4 3GN United Kingdom  Company registration number: 02530851  [REDACTED]
<b>4. Co-Funder(s)</b>	N/A  All funding is provided by The Crown Estate through the Offshore Wind Evidence & Change (OWEC) Programme.
<b>5. Defra Group Members</b>	The following Defra Group members will receive the benefit of the Deliverables: <ul style="list-style-type: none"><li>• The Department for Environment Food &amp; Rural Affairs (DEFRA)</li><li>• Natural England</li></ul>
<b>6. The Agreement</b>	This Order is part of the Agreement and is subject to the terms and conditions appended at Appendix 1 and shall come into effect on the Start Date.

	<p>Unless the context otherwise requires, capitalised expressions used in this Order have the same meanings as in the terms and conditions.</p> <p>The following documents are incorporated into the Agreement. If there is any conflict, the following order of precedence applies (in descending order):</p> <ol style="list-style-type: none"> <li>this Order;</li> <li>the terms and conditions at Appendix 1; and</li> <li>the remaining Appendices (if any) in equal order of precedence.</li> </ol>
<b>7. Deliverables</b>	<p><b>Services:</b> The services to be delivered are as outlined in the Specification of Requirements within 'Section 2: The Invitation' in the RFQ document. The services will be subject to further refinement during the initial phases of contract delivery in coordination between the Customer and the Contractor.</p> <p><b>Site:</b> The location for the study has not yet been confirmed, but the Authority will consider a disused, or repurposed, airfield or similar area of land, with no associated flight restriction, that would provide a suitable space to establish a target array of known heights across the realistic swath width of a LiDAR-DAS survey.</p> <p><b>Date(s) of Delivery:</b> Dates to be agreed with the Authority in accordance with the Contract Duration Period and the Project management details and milestones dates specified within Appendix 4.</p>
<b>8. Milestone Delays (Clause 18.2.10)</b>	A milestone delay can be 30 calendar days before the Authority has the right to terminate under Clause 18.2.
<b>9. Start Date</b>	29 July 2024
<b>10. Expiry Date</b>	<p>29 December 2024</p> <p>(5 months)</p>
<b>11. Extension Period (Clause 5.2)</b>	A zero rated (£0.00), 12-month contract extension/provision would be considered, subject to the Authority's discretion, if risks impact the current delivery.
<b>12. Charges</b>	The Charges for the Deliverables shall be as set out in <b>Appendix 3 – Charges</b> . Unless and to the extent otherwise expressly stated in Appendix 3, the Charges are fixed for the duration of the Agreement.
<b>13. Payment including Payment by Co-funder(s)</b>	<p>Payments will be made to accordance with;</p> <p>Appendix 3: Charges</p> <p>Annex 2 Acceptance of Terms and Conditions (7. Charges and payment)</p> <p><b>Research and development terms and conditions - GOV.UK (<a href="http://www.gov.uk">www.gov.uk</a>)</b></p>

<b>14. Customer's Authorised Representative(s)</b>	<p>For general liaison your contact will continue to be</p> <p>[REDACTED]</p> <p>Natural England 2 Marsham Street London SW1P 4DF United Kingdom</p> <p>[REDACTED]</p> <p>or, in their absence,</p> <p>[REDACTED]</p> <p>Natural England Defra GRP Dragonfly House 2 Gilders Way Norwich NR3 1UB United Kingdom</p> <p>[REDACTED]</p>
<b>15. Contractor's Authorised Representative</b>	<p>For general liaison your contact will continue to be</p> <p>[REDACTED]</p> <p>APEM Limited Riverview A17 Embankment Business Park Vale Road Stockport SK4 3GN United Kingdom</p> <p>[REDACTED]</p>
<b>16. Optional Intellectual Property Rights ("IPR") Clauses</b>	<p>The Customer has chosen <b>Option B - Default</b> in respect of intellectual property rights provisions for the Agreement as set out in the terms and conditions.</p> <p><i>Option B: Customer ownership of all New IPR with limited Contractor rights to all New IPR in order to deliver the Agreement.</i></p>
<b>17. Contractor's general liability cap</b>	<p>The liability of the Contractor as set out in Clause 16.2.1 of the terms and conditions is limited to [the greater of:</p> <p>(a) an amount equal to 100% of the Charges paid or payable to the Contractor; and</p> <p>(b) £5,000,000</p>

<b>18. Progress Meetings and Progress Reports</b>	The Contractor shall attend progress meetings with the Customer every week, and as required with representatives of the site for the land-based field trial
<b>19. Address for notices</b>	<div> <div> <b>Customer:</b>   Natural England  Foss House, Kings Pool  1-2 Peasholme Green  York  YO1 7PX  United Kingdom   [REDACTED] </div> <div> <b>Contractor:</b>   APEM Limited  Riverview A17 Embankment  Business Park Vale Road  Stockport  SK4 3GN  United Kingdom   [REDACTED] </div> </div>
<b>20. Key Personnel of the Contractor</b>	<div> [REDACTED]   APEM Limited  Suites B2 &amp; C2  Higher Mill  Higher Mill Lane  Buckfastleigh  Devon, TQ11 0EN   [REDACTED] </div>
<b>21. Procedures and Policies</b>	For the purposes of the Agreement all Key Personal of the Contractor have been provided within the Tender/RFQ – Reference Appendix 2.
<b>22. Commercial Exploitation (Clause 11)</b>	Clause 11 (Commercial Exploitation) shall apply to this Agreement:  No
<b>23. Special Terms</b>	N/A
<b>24. Additional Insurance</b>	N/A
<b>25. Further Data Protection Provisions</b>	N/A

Signed for and on behalf of the <b>Customer</b>	Signed for and on behalf of the <b>Contractor</b>
<p>Name:</p> <p></p> <p>Monitoring and Related Services DEFRA Mallard House Kings Pool 3 Peasholme Green York YO1 7PX</p> <p>Senior Commercial Manager</p>	<p>Name:</p> <p></p> <p>APEM Limited Riverview A17 Embankment Business Park Heaton Mersey Stockport SK4 3GN, UK</p> <p>Sector Managing Director</p>
<p>Date: 29/07/2024</p>	<p>Date: 26<sup>th</sup> Aug 2024</p>
<p>Signature:</p> <p></p>	<p>Signature:</p> <p></p>

## **Appendix 1: R&D Terms and Conditions**

*The terms and conditions applicable to this requirement can be found on the website below*  
[Research and development terms and conditions - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/procurement/r-and-d-terms-and-conditions)

## **Appendix 2: Specification/Description**

### ***Tender specification and Contractor's tender response***

#### **Specification of Requirements**

- **Background to Natural England**

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

- **Background to the specific work area relevant to this purchase**

Reducing Seabird Collisions Using Evidence (ReSCUE) is a multi-year, multi-partner project led by Natural England that is due to conclude in March 2027. The project is funded through The Crown Estates Offshore Wind Evidence and Change (OWEC) Programme. OWEC seeks to facilitate the sustainable and coordinated expansion of offshore wind to help meet the UK's commitments to low carbon energy transition whilst supporting clean, healthy, productive, and biologically diverse seas.

By making use of existing sources of data and innovative technologies such as LiDAR, ReSCUE will provide a better understanding of seabird flight heights and vulnerability to collision with wind turbines. Better data, and reduced uncertainty, will provide increased confidence in the assessment of potential impacts and aid the development of design standards to mitigate impacts. This will help us achieve our vision of: Evidence led mitigation and consenting, contributing to seabird conservation and low impact expansion of offshore wind.

As part of the ReSCUE project, Natural England are looking to commission combined LiDAR - digital aerial surveys (DAS) to inform a validation study and subsequent best practice guidance for the collection and processing of data relating to seabird flight heights. During a recent workshop, with an expert panel of industry representatives, we agreed a general approach to the study which involves three aspects:

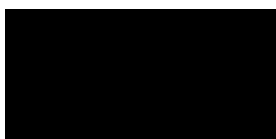
1. A land-based study to calibrate, validate and compare different methods for deriving flight heights using an array of targets of known altitude;
2. At-sea surveys of an area expected to have high densities of seabirds to validate and compare LiDAR methods under real conditions; and
3. Additional telemetry studies to explore bird-borne tag methods in more detail.

Upon successful completion of the study, we will seek to progress a framework contract for provision of a wider campaign of LiDAR surveys in UK waters. This will be open to bids from suppliers, which we would anticipate including any successful suppliers that are commissioned for this study.

- **Requirement**

Natural England are seeking LiDAR-DAS providers ("Suppliers") to carry out work in support of both the land-based and at-sea elements of the study (i.e. elements 1 and 2 above). The requirement is therefore to undertake two LiDAR-DAS surveys, one on land and one at-sea, process the data to agree standards and to produce the required deliverables.

#### **Authority's RFQ**



## Contractor's Tender





## Appendix 3: Charges

### Annex 4: Pricing table – Costs per objective

Total project cost (exclusive of VAT):				£	[REDACTED]	
VAT				£	[REDACTED]	
Total project cost (inclusive of VAT):				£	[REDACTED]	
Breakdown of total costs (exclusive of VAT):						
Objective	Item	Applicable daily staff rates (£)	Number of staff days (where applicable)	Applicable total staff costs (£)	Other costs (£)	Total value (£)
1. Land-based survey and reporting	Survey planning and delivery (please cost for delivery of a survey at the National Drone Hub, Cornwall)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	Post-survey completion report	[REDACTED]	[REDACTED]	[REDACTED]		[REDACTED]
	Post-survey image processing to identify and characterise all targets and provide image-based altitude estimates (including QA)	[REDACTED]	[REDACTED]	[REDACTED]		[REDACTED]

	Post-survey image and LiDAR processing to characterise survey parameters and effort					
2. At-sea survey and reporting	Survey planning and delivery (please cost for the delivery of a survey offshore of Flamborough and Filey Coast SPA)					
	Post-survey completion report					
	Post-survey image processing to identify and characterise all objects (seabirds, marine mammals and other objects) and provide image-based altitude estimates (including QA)					

	Post-survey image and LiDAR processing to characterise survey parameters and effort					
3. Final reporting	Delivery of a final report covering the work completed for both objectives 1 and 2 and providing a discussion of the outcomes.					
Any other cost element not listed above (please specify and provide a cost for each additional item separately)		n/a				

#### **Appendix 4: Project Management**

**Please find enclosed a Project Management Summary with an updated Milestone Table.**

