

Award Form

This Award Form creates the Contract. It summarises the main features of the procurement and includes the Buyer and the Supplier's contact details.

1.	Buyer	Centre for Environment, Fisheries and Aquaculture Science (the Buyer). Its offices are on: Pakefield Road, Lowestoft, Suffolk NR33 0HT, UK
2.	Supplier	Name: Houlder Limited Registered Address: Leytonstone House, 3 Hanbury Drive, London E11 1GA Registration number: 04400298
3.	Contract	This Contract between the Buyer and the Supplier is for the supply of Deliverables. This opportunity is advertised in the Contract Notice in Find A Tender, reference 2023/S 000-019480 (FTS Contract Notice).
4.	Contract reference	CEFAS23-18
5.	Deliverables	See Schedule 2 (Specification) for further details.
6.	Buyer Cause	Any breach of: <ul style="list-style-type: none">the obligations of the Buyer or any other default, act, omission, negligence or statement of the Buyer, of its employees, servants, agents in connection with or in relation to the subject-matter of the Contract and in respect of which the Buyer is liable to the Supplier.
7.	Collaborative working principles	The Collaborative Working Principles apply to this Contract. See Clause 3.1.3 for further details.
8.	Financial Transparency Objectives	The Financial Transparency Objectives do not apply to this Contract. See Clause 6.3 for further details.
9.	Start Date	01 November 2023

10.	Expiry Date	<p>Initial Period (Parts A and B): 01 November 2025 (with extension of Initial Period, 01 November 2026).</p> <p>Extension Period (Parts C and or D): maximum Expiry Date 01 November 2033</p>
11.	Extension Period	<p>The Initial Period of the Contract shall be for the delivery of Parts A and B only. The Initial Period shall be a period of 2 (two) years from the Start Date. The Buyer reserves the right to extend the Initial Period by 1 (one) year by giving the Supplier no less than two (2) Months' written notice before the two-year anniversary of the Start Date; any such extension shall be considered part of the Initial Period of the Contract.</p> <p>The Buyer reserves the right to extend the Contract beyond the Initial Period to the Extension Period to include Activities required for the 'Preferred Option' under Part C (upon conclusion of Part B), and Part D (upon conclusion of Part C), until a maximum Expiry Date of the Contract of 01 November 2033. The Buyer shall exercise the right to extend the Contract to the Extension Period by giving the Supplier no less than three (3) Months' written notice before the Initial Contract Period is due to expire or conclusion of Part C, whichever applicable.</p>
12.	Expiry of the Contract after the Initial Period	<p>If the Buyer does not exercise its right to extend the Contract beyond the Initial Period to the Extension Period, the Contract shall end on the Expiry Date of the Initial Period and;</p> <ol style="list-style-type: none"> 1. each party must cover its own Losses; and 2. The Buyer's payment obligations under the Contract stop immediately. 3. Accumulated rights of the Parties are not affected. 4. The Supplier must promptly delete or return the Government Data except where required to retain copies by Law. 5. The Supplier must promptly return any of the Buyer's property provided under the terminated Contract. 6. The Supplier must, at no cost to the Buyer, co-operate fully in the handover and re-procurement (including to a Replacement Supplier), if applicable. 7. The Supplier must repay to the Buyer all the Charges that it has been paid in advance for Deliverables that it has not provided as at the date of expiry. 8. The following Clauses survive the expiry of the Contract: 3.2.10, 6, 7.2, 10, 15, 18, 19, 20, 21, 22, 39, 40, Schedule 36 (Intellectual Property Rights) and any Clauses and Schedules which are expressly or by implication intended to continue.

13.	Ending the Contract without a reason	The Buyer shall also be able to terminate the Contract in accordance with Clause 14.3.
14.	Incorporated Terms (together these documents form the " the Contract ")	<p>The following documents are incorporated into the Contract. Where numbers are missing we are not using these Schedules. If the documents conflict, the following order of precedence applies:</p> <ul style="list-style-type: none"> a) This Award Form b) Any Special Terms (see Section 14 (Special Terms) in this Award Form) c) Core Terms d) Schedule 36 (Intellectual Property Rights) e) Schedule 1 (Definitions) f) Schedule 6 (Transparency Reports) g) Schedule 20 (Processing Data) h) The following Schedules (in equal order of precedence): <ul style="list-style-type: none"> a. Schedule 2 (Specification) b. Schedule 3 (Charges) c. Schedule 5 (Commercially Sensitive Information) d. Schedule 8 (Implementation Plan & Testing) e. Schedule 11 (Continuous Improvement) f. Schedule 12 (Benchmarking) g. Schedule 13 (Contract Management) h. Schedule 14 (Business Continuity and Disaster Recovery) i. Schedule 16 (Security) j. Schedule 19 (Cyber Essentials Scheme) k. Schedule 21 (Variation Form) l. Schedule 22 (Insurance Requirements) m. Schedule 24 (Financial Difficulties) n. Schedule 25 (Rectification Plan) o. Schedule 26 (Sustainability) p. Schedule 29 (Key Supplier Staff) i) Schedule 4 (Tender), unless any part of the Tender offers a better commercial position for the Buyer (as decided by the Buyer, in its absolute discretion), in which case that

		aspect of the Tender will take precedence over the documents above.
15.	Special Terms	N/A
16.	Sustainability	The Supplier agrees, in providing the Deliverables and performing its obligations under the Contract, that it will comply with Schedule 26 (Sustainability).
17.	Buyer's Environmental Policy	Cefas CPP031 Environmental Policy available online at: cpp031-environmental-policy-v2-may-2022-accessibility-checked.pdf (cefas.co.uk)
18.	Social Value Commitment	The Supplier agrees, in providing the Deliverables and performing its obligations under the Contract, to deliver the Social Value outcomes in Schedule 4 (Tender) and provide the Social Value Reports as set out in Schedule 26 (Sustainability)
19.	Buyer's Security Policy	Schedule 16 (Security)
20.	Commercially Sensitive Information	Supplier's Commercially Sensitive Information: Schedule 5 (Commercially Sensitive Information)
21.	Charges	Details in Schedule 3 (Charges)
22.	Reimbursable expenses	Recoverable as set out in Schedule 3 (Charges)]
23.	Payment method	The Supplier shall submit all invoices and any requested supporting documentation through the Authority's e-invoicing system or if that is not possible to: Finance@cefas.co.uk or Cefas, Pakefield Road, Lowestoft, Suffolk NR33 0HT with a copy (again including any supporting documentation) to such other person and at such place as the Authority may notify to the Supplier from time to time. Invoicing shall be against the agreed Implementation Plan.
24.	Service Levels	Not applicable
25.	Insurance	Details for the Initial Period and any extension to the Initial Period in Annex of Schedule 22 (Insurance Requirements).

		Insurance requirements for the Extension Period (Parts C and or D) shall be agreed at the time of any relevant extension.
26.	Liability	<p>In accordance with Clause 15.1 each Party's total aggregate liability in each year of the Initial Period and any extension of the Initial Period under the Contract (whether in tort, contract or otherwise) is no more than the greater of £5 million or 150% of the Estimated Yearly Charges.</p> <p>Where the Buyer extends the Contract beyond the Initial Period to the Extension Period, in accordance with Clause 15.1, each Party's total aggregate liability in each year of the Extension Period will be set at the Tendered value for the Preferred Option for Parts C and or D.</p> <p>In accordance with Clause 15.5, the Supplier's total aggregate liability under Clause 18.8.5 in each Contract Year (whether in the Initial Period or the Extension Period) is no more than the Data Protection Liability, being £10 million.</p>
27.	Cyber Essentials Certification	<ul style="list-style-type: none"> • Cyber Essentials Scheme Plus Certificate (or equivalent). Details in Schedule 19 (Cyber Essentials Scheme)
28.	Progress Meetings and Progress Reports	<ul style="list-style-type: none"> • The Supplier shall attend Progress Meetings with the Buyer every month • The Supplier shall provide the Buyer with Progress Reports every month
29.	Guarantee	Not applicable
30.	Virtual Library	Not applicable
31.	Supplier Contract Manager	<p>██████████</p> <p>Principal Marine Engineer</p> <p>██</p> <p>████████████████</p>
32.	Supplier Authorised Representative	<p>██████████</p> <p>Director - Ship Design & Engineering</p> <p>██</p> <p>████████████████</p>
33.	Supplier Compliance Officer	<p>██████████</p> <p>Chief Financial Officer</p> <p>██</p>

34.	Supplier Data Protection Officer	<div></div> Business Operations Manager <div></div> <div></div>
35.	Supplier Marketing Contact	<div></div> Chief Financial Officer <div></div> <div></div>
36.	Key Subcontractors	Not applicable
37.	Buyer Authorised Representative	<div></div> Head of Marine Operations <div></div> <div></div>

For and on behalf of the Supplier:		For and on behalf of the Buyer:	
Signature:		Signature:	
Name:		Name:	
Role:	Chief Financial Officer	Role:	
Date:		Date:	

[Subject to Contract]

Core Terms – Mid-tier

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1. Definitions used in the contract

Interpret this Contract using Schedule 1 (Definitions).

2. How the contract works

- 2.1 If the Buyer decides to buy Deliverables under the Contract it must state its requirements using the Award Form. If allowed by the Regulations, the Buyer can:
 - 2.1.1 make changes to the Award Form;
 - 2.1.2 create new Schedules;
 - 2.1.3 exclude optional template Schedules; and
 - 2.1.4 use Special Terms in the Award Form to add or change terms.
- 2.2 The Contract:
 - 2.2.1 is between the Supplier and the Buyer; and
 - 2.2.2 includes Core Terms, Schedules and any other changes or items in the completed Award Form.
- 2.3 The Supplier acknowledges it has all the information required to perform its obligations under the Contract before entering into it. When information is provided by the Buyer no warranty of its accuracy is given to the Supplier.
- 2.4 The Supplier acknowledges that, subject to the Allowable Assumptions set out in Annex 2 of Schedule 3 (Charges) (if any), it has satisfied itself of all details relating to:
 - 2.4.1 the Buyer's requirements for the Deliverables;
 - 2.4.2 the Buyer's operating processes and working methods; and
 - 2.4.3 the ownership and fitness for purpose of the Buyer Assets, and it has advised the Buyer in writing of:
 - 2.4.4 each aspect, if any, of the Buyer's requirements for the Deliverables, operating processes and working methods that is not suitable for the provision of the Services;
 - 2.4.5 the actions needed to remedy each such unsuitable aspect; and
 - 2.4.6 a timetable for and, to the extent that such costs are to be payable to the Supplier, the costs of those actions, and such actions, timetable and costs are fully reflected in this Contract.

- 2.5 The Supplier won't be excused from any obligation, or be entitled to additional Costs or Charges because it failed to either:
 - 2.5.1 verify the accuracy of the Due Diligence Information; and
 - 2.5.2 properly perform its own adequate checks.
- 2.6 The Buyer will not be liable for errors, omissions or misrepresentation of any information.
- 2.7 The Supplier warrants and represents that all statements made and documents submitted as part of the procurement of Deliverables are and remain true and accurate.

3. What needs to be delivered

3.1 All deliverables

- 3.1.1 The Supplier must provide Deliverables:
 - a) that comply with the Specification, the Tender Response and the Contract;
 - b) using reasonable skill and care;
 - c) using Good Industry Practice;
 - d) using its own policies, processes and internal quality control measures as long as they don't conflict with the Contract;
 - e) on the dates agreed; and
 - f) that comply with Law.
- 3.1.2 The Supplier must provide Deliverables with a warranty of at least 90 days from Delivery against all obvious defects or for such other period as specified in the Award Form.
- 3.1.3 Where the Award Form states that the Collaborative Working Principles will apply, the Supplier must co-operate and provide reasonable assistance to any Buyer Third Party notified to the Supplier by the Buyer from time to time and act at all times in accordance with the following principles:
 - a) proactively leading on, mitigating and contributing to the resolution of problems or issues irrespective of its contractual obligations, acting in accordance with the principle of "fix first, settle later";
 - b) being open, transparent and responsive in sharing relevant and accurate information with Buyer Third Parties;
 - c) where reasonable, adopting common working practices, terminology, standards and technology and a collaborative approach to service development and resourcing with Buyer Third Parties;
 - d) providing reasonable cooperation, support, information and assistance to Buyer Third Parties in a proactive, transparent

- and open way and in a spirit of trust and mutual confidence;
and
- e) identifying, implementing and capitalising on opportunities to improve deliverables and deliver better solutions and performance throughout the relationship lifecycle.

3.2 **Goods clauses**

- 3.2.1 All Goods delivered must be new, or as new if recycled, unused and of recent origin.
- 3.2.2 All manufacturer warranties covering the Goods must be assignable to the Buyer on request and for free.
- 3.2.3 The Supplier transfers ownership of the Goods on Delivery or payment for those Goods, whichever is earlier.
- 3.2.4 Risk in the Goods transfers to the Buyer on Delivery of the Goods, but remains with the Supplier if the Buyer notices damage following Delivery and lets the Supplier know within 3 Working Days of Delivery.
- 3.2.5 The Supplier warrants that it has full and unrestricted ownership of the Goods at the time of transfer of ownership.
- 3.2.6 The Supplier must deliver the Goods on the date and to the specified location during the Buyer's working hours.
- 3.2.7 The Supplier must provide sufficient packaging for the Goods to reach the point of Delivery safely and undamaged.
- 3.2.8 All deliveries must have a delivery note attached that specifies the order number, type and quantity of Goods.
- 3.2.9 The Supplier must provide all tools, information and instructions the Buyer needs to make use of the Goods.
- 3.2.10 The Supplier must indemnify the Buyer against the costs of any Recall of the Goods and give notice of actual or anticipated action about the Recall of the Goods.
- 3.2.11 The Buyer can cancel any order or part order of Goods which has not been Delivered. If the Buyer gives less than 14 days' notice then it will pay the Supplier's reasonable and proven costs already incurred on the cancelled order as long as the Supplier uses all reasonable endeavours to minimise these costs.
- 3.2.12 The Supplier must at its own cost repair, replace, refund or substitute (at the Buyer's option and request) any Goods that the Buyer rejects because they don't conform with Clause 3. If the Supplier doesn't do this it will pay the Buyer's costs including repair or re-supply by a third party.

3.3 Services clauses

- 3.3.1 Late Delivery of the Services will be a Default of the Contract.
- 3.3.2 The Supplier must co-operate with the Buyer and third party suppliers on all aspects connected with the Delivery of the Services and ensure that Supplier Staff comply with any reasonable instructions of the Buyer or third party suppliers.
- 3.3.3 The Supplier must at its own risk and expense provide all Supplier Equipment required to Deliver the Services.
- 3.3.4 The Supplier must allocate sufficient resources and appropriate expertise to the Contract.
- 3.3.5 The Supplier must take all reasonable care to ensure performance does not disrupt the Buyer's operations, employees or other contractors.
- 3.3.6 The Supplier must ensure all Services, and anything used to Deliver the Services, are of good quality and free from defects.
- 3.3.7 The Buyer is entitled to withhold payment for partially or undelivered Services, but doing so does not stop it from using its other rights under the Contract.

4. Pricing and payments

- 4.1 In exchange for the Deliverables, the Supplier must invoice the Buyer for the Charges in the Award Form.
- 4.2 All Charges:
 - 4.2.1 exclude VAT, which is payable on provision of a valid VAT invoice; and
 - 4.2.2 include all costs connected with the Supply of Deliverables.
- 4.3 The Buyer must pay the Supplier the Charges within 30 days of receipt by the Buyer of a valid, undisputed invoice, in cleared funds using the payment method and details stated in the Award Form.
- 4.4 A Supplier invoice is only valid if it:
 - 4.4.1 includes all appropriate references including the Contract reference number and other details reasonably requested by the Buyer; and
 - 4.4.2 includes a detailed breakdown of Delivered Deliverables and Milestone(s) (if any).
- 4.5 The Buyer may retain or set-off payment of any amount owed to it by the Supplier under this Contract or any other agreement between the Supplier and the Buyer if notice and reasons are provided.

- 4.6 The Supplier must ensure that all Subcontractors are paid, in full, within 30 days of receipt of a valid, undisputed invoice. If this does not happen, the Buyer can publish the details of the late payment or non-payment.
- 4.7 The Supplier has no right of set-off, counterclaim, discount or abatement unless they're ordered to do so by a court.

5. The buyer's obligations to the supplier

- 5.1 If Supplier Non-Performance arises from a Buyer Cause:
 - 5.1.1 the Buyer cannot terminate the Contract under Clause 14.4.1;
 - 5.1.2 the Supplier is entitled to reasonable and proven additional expenses and to relief from Delay Payments, liability and Deduction under this Contract;
 - 5.1.3 the Supplier is entitled to additional time needed to make the Delivery;
 - 5.1.4 the Supplier cannot suspend the ongoing supply of Deliverables.
- 5.2 Clause 5.1 only applies if the Supplier:
 - 5.2.1 gives notice to the Buyer of the Buyer Cause within 10 Working Days of becoming aware;
 - 5.2.2 demonstrates that the Supplier Non-Performance only happened because of the Buyer Cause; and
 - 5.2.3 mitigated the impact of the Buyer Cause.

6. Record keeping and reporting

- 6.1 The Supplier must attend Progress Meetings with the Buyer and provide Progress Reports when specified in the Award Form.
- 6.2 The Supplier must keep and maintain full and accurate records and accounts in respect of the Contract during the Contract Period and for 7 years after the End Date and in accordance with the UK GDPR or the EU GDPR as the context requires, including the records and accounts which the Buyer has a right to Audit.
- 6.3 Where the Award Form states that the Financial Transparency Objectives apply, the Supplier must co-operate with the Buyer to achieve the Financial Transparency Objectives and, to this end, will provide a Financial Report to the Buyer:
 - 6.3.1 on or before the Start Date;
 - 6.3.2 at the end of each Contract Year; and
 - 6.3.3 within 6 Months of the end of the Contract Period,

and the Supplier must meet with the Buyer if requested within 10 Working Days of the Buyer receiving a Financial Report.

- 6.4 If the Supplier becomes aware of an event that has occurred or is likely to occur in the future which will have a material effect on the:

6.4.1 Supplier's currently incurred or forecast future Costs; and

6.4.2 forecast Charges for the remainder of the Contract,

then the Supplier must notify the Buyer in writing as soon as practicable setting out the actual or anticipated effect of the event.

- 6.5 The Supplier must allow any Auditor access to their premises and the Buyer will use reasonable endeavours to ensure that any Auditor:

6.5.1 complies with the Supplier's operating procedures; and

6.5.2 does not unreasonably disrupt the Supplier or its provision of the Deliverables.

- 6.6 During an Audit, the Supplier must provide information to the Auditor and reasonable co-operation at their request including access to:

6.6.1 all information within the permitted scope of the Audit;

6.6.2 any Sites, equipment and the Supplier's ICT system used in the performance of the Contract; and

6.6.3 the Supplier Staff.

- 6.7 The Parties will bear their own costs when an Audit is undertaken unless the Audit identifies a material Default by the Supplier, in which case the Supplier will repay the Buyer's reasonable costs in connection with the Audit.

- 6.8 The Supplier must comply with the Buyer's reasonable instructions following an Audit, including:

6.8.1 correcting any identified Default;

6.8.2 rectifying any error identified in a Financial Report; and

6.8.3 repaying any Charges that the Buyer has overpaid.

- 6.9 If the Supplier is not providing any of the Deliverables, or is unable to provide them, it must immediately:

6.9.1 tell the Buyer and give reasons;

6.9.2 propose corrective action; and

6.9.3 provide a deadline for completing the corrective action.

- 6.10 Except where an Audit is imposed on the Buyer by a regulatory body or where the Buyer has reasonable grounds for believing that the Supplier has not complied with its obligations under this Contract, the Buyer may

not conduct an Audit of the Supplier or of the same Key Subcontractor more than twice in any Contract Year.

7. Supplier staff

- 7.1 The Supplier Staff involved in the performance of the Contract must:
 - 7.1.1 be appropriately trained and qualified;
 - 7.1.2 be vetted using Good Industry Practice and the Security Policy; and
 - 7.1.3 comply with all conduct requirements when on the Buyer's Premises.
- 7.2 Where the Buyer decides one of the Supplier's Staff is not suitable to work on the Contract, the Supplier must replace them with a suitably qualified alternative.
- 7.3 If requested, the Supplier must replace any person whose acts or omissions have caused the Supplier to breach Clauses 31.1 to 31.4.
- 7.4 The Supplier must provide a list of Supplier Staff needing to access the Buyer's Premises and say why access is required.
- 7.5 The Supplier indemnifies the Buyer against all claims brought by any person employed by the Supplier caused by an act or omission of the Supplier or any Supplier Staff.

8. Supply chain

8.1 Appointing Subcontractors

- 8.1.1 The Supplier must exercise due skill and care when it selects and appoints Subcontractors to ensure that the Supplier is able to:
 - a) manage Subcontractors in accordance with Good Industry Practice;
 - b) comply with its obligations under this Contract; and
 - c) assign, novate or transfer its rights and/or obligations under the Sub-Contract that relate exclusively to this Contract to the Buyer or a Replacement Supplier.

8.2 Mandatory provisions in Sub-Contracts

- 8.2.1 The Supplier will ensure that all Sub-Contracts in the Supplier's supply chain entered into after the Effective Date wholly or substantially for the purpose of performing or contributing to the

performance of the whole or any part of this Contract contain provisions that:

- a) allow the Supplier to terminate the Sub-Contract if the Subcontractor fails to comply with its obligations in respect of environmental, social, equality or employment Law;
- b) require the Supplier to pay all Subcontractors in full, within 30 days of receiving a valid, undisputed invoice; and
- c) allow the Buyer to publish the details of the late payment or non-payment if this 30-day limit is exceeded.

8.2.2 The Supplier will take reasonable endeavours to ensure that all Sub-Contracts in the Supplier's supply chain entered into before the Effective Date but made wholly or substantially for the purpose of performing or contributing to the performance of the whole or any part of this Contract contain provisions that:

- a) allow the Supplier to terminate the Sub-Contract if the Subcontractor fails to comply with its obligations in respect of environmental, social, equality or employment Law;
- b) require the Supplier to pay all Subcontractors in full, within 30 days of receiving a valid, undisputed invoice; and
- c) allow the Buyer to publish the details of the late payment or non-payment if this 30-day limit is exceeded.

8.3 **When Sub-Contracts can be ended**

8.3.1 At the Buyer's request, the Supplier must terminate any Sub-Contracts in any of the following events:

- a) there is a Change of Control of a Subcontractor which isn't pre-approved by the Buyer in writing;
- b) the acts or omissions of the Subcontractor have caused or materially contributed to a right of termination under Clause 14.4;
- c) a Subcontractor or its Affiliates embarrasses or brings into disrepute or diminishes the public trust in the Buyer;
- d) the Subcontractor fails to comply with its obligations in respect of environmental, social, equality or employment Law; and/or
- e) the Buyer has found grounds to exclude the Subcontractor in accordance with Regulation 57 of the Public Contracts Regulations 2015.

8.4 **Competitive terms**

8.4.1 If the Buyer can get more favourable commercial terms for the supply at cost of any materials, goods or services used by the Supplier to provide the Deliverables and that cost is reimbursable by the Buyer, then the Buyer may require the Supplier to replace

its existing commercial terms with the more favourable terms offered for the relevant items.

8.4.2 If the Buyer uses Clause 8.4.1 then the Charges must be reduced by an agreed amount by using the Variation Procedure.

8.5 Ongoing responsibility of the Supplier

8.5.1 The Supplier is responsible for all acts and omissions of its Subcontractors and those employed or engaged by them as if they were its own.

9. Rights and protection

9.1 The Supplier warrants and represents that:

9.1.1 it has full capacity and authority to enter into and to perform the Contract;

9.1.2 the Contract is executed by its authorised representative;

9.1.3 it is a legally valid and existing organisation incorporated in the place it was formed;

9.1.4 there are no known legal or regulatory actions or investigations before any court, administrative body or arbitration tribunal pending or threatened against it or its Affiliates that might affect its ability to perform the Contract;

9.1.5 all necessary rights, authorisations, licences and consents (including in relation to IPRs) are in place to enable the Supplier to perform its obligations under the Contract and for the Buyer to receive the Deliverables;

9.1.6 it doesn't have any contractual obligations which are likely to have a material adverse effect on its ability to perform the Contract;

9.1.7 it is not impacted by an Insolvency Event or a Financial Distress Event; and

9.1.8 neither it nor, to the best of its knowledge the Supplier Staff, have committed a Prohibited Act prior to the Start Date or been subject to an investigation relating to a Prohibited Act.

9.2 The warranties and representations in Clauses 2.7 and 9.1 are repeated each time the Supplier provides Deliverables under the Contract.

9.3 The Supplier indemnifies the Buyer against each of the following:

9.3.1 wilful misconduct of the Supplier, Subcontractor and Supplier Staff that impacts the Contract; and

9.3.2 non-payment by the Supplier of any tax or National Insurance.

9.4 All claims indemnified under this Contract must use Clause 30.

- 9.5 The Buyer can terminate the Contract for breach of any warranty or indemnity where they are entitled to do so.
- 9.6 If the Supplier becomes aware of a representation or warranty that becomes untrue or misleading, it must immediately notify the Buyer.
- 9.7 All third party warranties and indemnities covering the Deliverables must be assigned for the Buyer's benefit by the Supplier.

10. Intellectual Property Rights (IPRs)

- 10.1 The Parties agree that the terms set out in Schedule 36 (Intellectual Property Rights) shall apply to this Contract.
- 10.2 If there is an IPR Claim, the Supplier indemnifies the Buyer against all losses, damages, costs or expenses (including professional fees and fines) incurred as a result.
- 10.3 If an IPR Claim is made or anticipated the Supplier must at its own expense and the Buyer's sole option, either:
 - 10.3.1 obtain for the Buyer the rights to continue using the relevant item without infringing any third party IPR; or
 - 10.3.2 replace or modify the relevant item with substitutes that don't infringe IPR without adversely affecting the functionality or performance of the Deliverables.
- 10.4 If the Buyer requires that the Supplier procures a licence in accordance with Schedule 36 or to modify or replace an item pursuant to Schedule 36, but this has not avoided or resolved the IPR Claim, then the Buyer may terminate this Contract by written notice with immediate effect.

11. Rectifying issues

- 11.1 If there is a Notifiable Default, the Supplier must notify the Buyer within 3 Working Days of the Supplier becoming aware of the Notifiable Default and the Buyer may request that the Supplier provide a Rectification Plan within 10 Working Days of the Buyer's request alongside any additional documentation that the Buyer requires.
- 11.2 When the Buyer receives a requested Rectification Plan it can either:
 - 11.2.1 reject the Rectification Plan or revised Rectification Plan giving reasons; or
 - 11.2.2 accept the Rectification Plan or revised Rectification Plan (without limiting its rights) in which case the Supplier must immediately start work on the actions in the Rectification Plan at its own cost.
- 11.3 Where the Rectification Plan or revised Rectification Plan is rejected, the Buyer:

11.3.1 will give reasonable grounds for its decision; and

11.3.2 may request that the Supplier provides a revised Rectification Plan within 5 Working Days.

12. Escalating issues

12.1 If the Supplier fails to:

12.1.1 submit a Rectification Plan or a revised Rectification Plan within the timescales set out in Clauses 11.1 or 11.3; and

12.1.2 adhere to the timescales set out in an accepted Rectification Plan to resolve the Notifiable Default.

or if the Buyer otherwise rejects a Rectification Plan, the Buyer can require the Supplier to attend an Escalation Meeting on not less than 5 Working Days' notice. The Buyer will determine the location, time and duration of the Escalation Meeting(s) and the Supplier must ensure that the Supplier Authorised Representative is available to attend.

12.2 The Escalation Meeting(s) will continue until the Buyer is satisfied that the Notifiable Default has been resolved, however, where an Escalation Meeting(s) has continued for more than 5 Working Days, either Party may treat the matter as a Dispute to be handled through the Dispute Resolution Procedure.

12.3 If the Supplier is in Default of any of its obligations under this Clause 12, the Buyer shall be entitled to terminate this Agreement and the consequences of termination set out in Clause 14.5.1 shall apply as if the contract were terminated under Clause 14.4.1.

13. Step-in rights

13.1 If a Step-In Trigger Event occurs, the Buyer may give notice to the Supplier that it will be taking action in accordance with this Clause 13.1 and setting out:

13.1.1 whether it will be taking action itself or with the assistance of a third party;

13.1.2 what Required Action the Buyer will take during the Step-In Process;

13.1.3 when the Required Action will begin and how long it will continue for;

13.1.4 whether the Buyer will require access to the Sites; and

13.1.5 what impact the Buyer anticipates that the Required Action will have on the Supplier's obligations to provide the Deliverables.

- 13.2 For as long as the Required Action is taking place:
 - 13.2.1 the Supplier will not have to provide the Deliverables that are the subject of the Required Action;
 - 13.2.2 no Deductions will be applicable in respect of Charges relating to the Deliverables that are the subject of the Required Action; and
 - 13.2.3 the Buyer will pay the Charges to the Supplier after subtracting any applicable Deductions and the Buyer's costs of taking the Required Action.
- 13.3 The Buyer will give notice to the Supplier before it ceases to exercise its rights under the Step-In Process and within 20 Working Days of this notice the Supplier will develop a draft Step-Out Plan for the Buyer to approve.
- 13.4 If the Buyer does not approve the draft Step-Out Plan, the Buyer will give reasons and the Supplier will revise the draft Step-Out Plan and re-submit it for approval.
- 13.5 The Supplier shall bear its own costs in connection with any step-in by the Buyer under this Clause 13, provided that the Buyer shall reimburse the Supplier's reasonable additional expenses incurred directly as a result of any step-in action taken by the Buyer under:
 - 13.5.1 limbs (f) or (g) of the definition of a Step-In Trigger Event; or
 - 13.5.2 limbs (h) and (i) of the definition of a Step-in Trigger Event (insofar as the primary cause of the Buyer serving a notice under Clause 13.1 is identified as not being the result of the Supplier's Default).

14. Ending the contract

- 14.1 The Contract takes effect on the Start Date and ends on the End Date or earlier if terminated under this Clause 14 or if required by Law.
- 14.2 The Buyer can extend the Contract for the Extension Period by giving the Supplier written notice before the Contract expires as described in the Award Form.
- 14.3 **Ending the contract without a reason**

The Buyer has the right to terminate the Contract at any time without reason or (unless the Award Form states something different) liability by giving the Supplier not less than 90 days' notice (unless a different notice period is set out in the Award Form) and if it's terminated Clauses 14.5.1b) to 14.5.1h) applies.

14.4 **When the Buyer can end the Contract**

14.4.1 If any of the following events happen, the Buyer has the right to immediately terminate the Contract by issuing a Termination Notice to the Supplier:

- a) there's a Supplier Insolvency Event;
- b) the Supplier fails to notify the Buyer in writing of any Occasion of Tax Non-Compliance
- c) there's a Notifiable Default that is not corrected in line with an accepted Rectification Plan;
- d) the Buyer rejects a Rectification Plan or the Supplier does not provide it within 10 days of the request;
- e) there's any material Default of the Contract;
- f) a Default that occurs and then continues to occur on one or more occasions within 6 Months following the Buyer serving a warning notice on the Supplier that it may terminate for persistent breach of the Contract;
- g) there's any material Default of any Joint Controller Agreement relating to the Contract;
- h) there's a Default of Clauses 2.7, 10, 12, 18, 19, 31, 36, Schedule 19 (Cyber Essentials) (where applicable) or Schedule 36 (Intellectual Property Rights) relating to the Contract;
- i) the performance of the Supplier causes a Critical Service Level Failure to occur;
- j) there's a consistent repeated failure to meet the Service Levels in Schedule 10 (Service Levels);
- k) there's a Change of Control of the Supplier which isn't pre-approved by the Buyer in writing;
- l) the Buyer discovers that the Supplier was in one of the situations in 57 (1) or 57(2) of the Regulations at the time the Contract was awarded;
- m) the Supplier or its Affiliates embarrass or bring the Buyer into disrepute or diminish the public trust in them; or
- n) the Supplier fails to comply with its legal obligations in the fields of environmental, social, equality or employment Law when providing the Deliverables.

14.4.2 The Buyer also has the right to terminate the Contract in accordance with Clauses 9.5 and 24.3, Paragraph 4.1 of Schedule 37 (Corporate Resolution Planning) (where applicable) and Paragraph 7 of Schedule 24 (Financial Difficulties) (where applicable).

- 14.4.3 If any of the events in 73 (1) (a) or (b) of the Regulations happen, the Buyer has the right to immediately terminate the Contract and Clauses 14.5.1b) to 14.5.1h) applies.

14.5 What happens if the contract ends

- 14.5.1 Where the Buyer terminates the Contract under Clauses 14.4.1 and 9.5, Paragraph 4.1 of Schedule 37 (Corporate Resolution Planning) (where applicable) or Paragraph 7 of Schedule 24 (Financial Difficulties) (where applicable). all of the following apply:
- a) The Supplier is responsible for the Buyer's reasonable costs of procuring Replacement Deliverables for the rest of the Contract Period.
 - b) The Buyer's payment obligations under the terminated Contract stop immediately.
 - c) Accumulated rights of the Parties are not affected.
 - d) The Supplier must promptly delete or return the Government Data except where required to retain copies by Law.
 - e) The Supplier must promptly return any of the Buyer's property provided under the terminated Contract.
 - f) The Supplier must, at no cost to the Buyer, co-operate fully in the handover and re-procurement (including to a Replacement Supplier).
 - g) The Supplier must repay to the Buyer all the Charges that it has been paid in advance for Deliverables that it has not provided as at the date of termination or expiry.
 - h) The following Clauses survive the termination of the Contract: 3.2.10, 6, 7.2, 10, 15, 18, 19, 20, 21, 22, 39, 40, Schedule 36 (Intellectual Property Rights) and any Clauses and Schedules which are expressly or by implication intended to continue.
- 14.5.2 If either Party terminates the Contract under Clause 24.3:
- a) each party must cover its own Losses; and
 - b) Clauses 14.5.1b) to 14.5.1h) applies.

14.6 When the Supplier can end the contract

- 14.6.1 The Supplier can issue a Reminder Notice if the Buyer does not pay an undisputed invoice on time. The Supplier can terminate the Contract if the Buyer fails to pay an undisputed invoiced sum due and worth over 10% of the total Contract Value within 30 days of the date of the Reminder Notice.
- 14.6.2 The Supplier also has the right to terminate the Contract in accordance with Clauses 24.3 and 27.5.

14.6.3 Where the Buyer terminates the Contract under Clause 14.3 or the Supplier terminates the Contract under Clause 14.6.1 or 27.5:

- a) the Buyer must promptly pay all outstanding Charges incurred to the Supplier;
- b) the Buyer must pay the Supplier reasonable committed and unavoidable Losses as long as the Supplier provides a fully itemised and costed schedule with evidence – the maximum value of this payment is limited to the total sum payable to the Supplier if the Contract had not been terminated; and
- c) Clauses 14.5.1(b)) to 14.5.1(h) apply.

14.7 Partially ending and suspending the contract

14.7.1 Where the Buyer has the right to terminate the Contract it can terminate or suspend (for any period), all or part of it. If the Buyer suspends the Contract it can provide the Deliverables itself or buy them from a third party.

14.7.2 The Buyer can only partially terminate or suspend the Contract if the remaining parts of the Contract can still be used to effectively deliver the intended purpose.

14.7.3 The Parties must agree any necessary Variation required by this Clause 14.7 using the Variation Procedure, but the Supplier may not either:

- a) reject the Variation; or
- b) increase the Charges, except where the right to partial termination is under Clause 14.3.

14.7.4 The Buyer can still use other rights available, or subsequently available to it if it acts on its rights under this Clause 1.1.

15. How much you can be held responsible for

15.1 Each Party's total aggregate liability in each Contract Year under the Contract (whether in tort, contract or otherwise) is no more than the greater of £5 million or 150% of the Estimated Yearly Charges unless specified otherwise in the Award Form.

15.2 Neither Party is liable to the other for:

15.2.1 any indirect Losses; and

15.2.2 Loss of profits, turnover, savings, business opportunities or damage to goodwill (in each case whether direct or indirect).

15.3 In spite of Clause 15.1, neither Party limits or excludes any of the following:

15.3.1 its liability for death or personal injury caused by its negligence, or that of its employees, agents or Subcontractors;

- 15.3.2 its liability for bribery or fraud or fraudulent misrepresentation by it or its employees; and
- 15.3.3 any liability that cannot be excluded or limited by Law.
- 15.4 In spite of Clause 15.1, the Supplier does not limit or exclude its liability for any indemnity given under Clauses 7.5, 9.3, 10.2.1, 16.3 or Schedule 7 (Staff Transfer) of the Contract.
- 15.5 In spite of Clause 15.1, but subject to Clauses 15.2 and 15.3, the Supplier's total aggregate liability in each Contract Year under Clause 18.8.5 is no more than the Data Protection Liability Cap.
- 15.6 Each Party must use all reasonable endeavours to mitigate any Loss or damage which it suffers under or in connection with the Contract, including any indemnities.
- 15.7 When calculating the Supplier's liability under Clause 15.1 the following items will not be taken into consideration:
 - 15.7.1 Deductions; and
 - 15.7.2 any items specified in Clause 15.4.
- 15.8 If more than one Supplier is party to the Contract, each Supplier Party is fully responsible for both their own liabilities and the liabilities of the other Suppliers.

16. Obeying the law

- 16.1 The Supplier shall comply with the provisions of Schedule 26 (Sustainability).
- 16.2 The Supplier shall comply with the provisions of:
 - 16.2.1 the Official Secrets Acts 1911 to 1989; and
 - 16.2.2 section 182 of the Finance Act 1989.
- 16.3 The Supplier indemnifies the Buyer against any costs resulting from any Default by the Supplier relating to any applicable Law.
- 16.4 The Supplier must appoint a Compliance Officer who must be responsible for ensuring that the Supplier complies with Law, Clause 16.1 and Clauses 31 to 36.

17. Insurance

The Supplier must, at its own cost, obtain and maintain the Required Insurances in Schedule 22 (Insurance Requirements).

18. Data protection

- 18.1 The Supplier must process Personal Data and ensure that Supplier Staff process Personal Data only in accordance with Schedule 20 (Processing Data).
- 18.2 The Supplier must not remove any ownership or security notices in or relating to the Government Data.
- 18.3 The Supplier must make accessible back-ups of all Government Data, stored in an agreed off-site location and send the Buyer copies every 6 Months.
- 18.4 The Supplier must ensure that any Supplier system holding any Government Data, including back-up data, is a secure system that complies with the Security Policy and any applicable Security Management Plan.
- 18.5 If at any time the Supplier suspects or has reason to believe that the Government Data is corrupted, lost or sufficiently degraded, then the Supplier must immediately notify the Buyer and suggest remedial action.
- 18.6 If the Government Data is corrupted, lost or sufficiently degraded so as to be unusable the Buyer may either or both:
 - 18.6.1 tell the Supplier to restore or get restored Government Data as soon as practical but no later than 5 Working Days from the date that the Buyer receives notice, or the Supplier finds out about the issue, whichever is earlier; and
 - 18.6.2 restore the Government Data itself or using a third party.
- 18.7 The Supplier must pay each Party's reasonable costs of complying with Clause 18.6 unless the Buyer is entirely at fault.
- 18.8 The Supplier:
 - 18.8.1 must provide the Buyer with all Government Data in an agreed open format within 10 Working Days of a written request;
 - 18.8.2 must have documented processes to guarantee prompt availability of Government Data if the Supplier stops trading;
 - 18.8.3 must securely destroy all Storage Media that has held Government Data at the end of life of that media using Good Industry Practice;
 - 18.8.4 securely erase all Government Data and any copies it holds when asked to do so by the Buyer unless required by Law to retain it; and
 - 18.8.5 indemnifies the Buyer against any and all Losses incurred if the Supplier breaches Clause 18 or any Data Protection Legislation.

19. What you must keep confidential

19.1 Each Party must:

- 19.1.1 keep all Confidential Information it receives confidential and secure;
- 19.1.2 not disclose, use or exploit the Disclosing Party's Confidential Information without the Disclosing Party's prior written consent, except for the purposes anticipated under the Contract; and
- 19.1.3 immediately notify the Disclosing Party if it suspects unauthorised access, copying, use or disclosure of the Confidential Information.

19.2 In spite of Clause 19.1, a Party may disclose Confidential Information which it receives from the Disclosing Party in any of the following instances:

- 19.2.1 where disclosure is required by applicable Law, a regulatory body or a court with the relevant jurisdiction if the Recipient Party notifies the Disclosing Party of the full circumstances, the affected Confidential Information and extent of the disclosure;
- 19.2.2 if the Recipient Party already had the information without obligation of confidentiality before it was disclosed by the Disclosing Party;
- 19.2.3 if the information was given to it by a third party without obligation of confidentiality;
- 19.2.4 if the information was in the public domain at the time of the disclosure;
- 19.2.5 if the information was independently developed without access to the Disclosing Party's Confidential Information;
- 19.2.6 on a confidential basis, to its auditors or for the purpose of regulatory requirements;
- 19.2.7 on a confidential basis, to its professional advisers on a need-to-know basis; and
- 19.2.8 to the Serious Fraud Office where the Recipient Party has reasonable grounds to believe that the Disclosing Party is involved in activity that may be a criminal offence under the Bribery Act 2010.

19.3 The Supplier may disclose Confidential Information on a confidential basis to Supplier Staff on a need-to-know basis to allow the Supplier to meet its obligations under the Contract. The Supplier Staff must enter into a direct confidentiality agreement with the Buyer at its request.

- 19.4 The Buyer may disclose Confidential Information in any of the following cases:
- 19.4.1 on a confidential basis to the employees, agents, consultants and contractors of the Buyer;
 - 19.4.2 on a confidential basis to any other Central Government Body, any successor body to a Central Government Body or any company that the Buyer transfers or proposes to transfer all or any part of its business to;
 - 19.4.3 if the Buyer (acting reasonably) considers disclosure necessary or appropriate to carry out its public functions;
 - 19.4.4 where requested by Parliament; and
 - 19.4.5 under Clauses 4.6 and 20.
- 19.5 For the purposes of Clauses 19.2 to 19.4 references to disclosure on a confidential basis means disclosure under a confidentiality agreement or arrangement including terms as strict as those required in Clause 19.
- 19.6 Transparency Information and any Information which is exempt from disclosure by Clause 20 is not Confidential Information.
- 19.7 The Supplier must not make any press announcement or publicise the Contracts or any part of them in any way, without the prior written consent of the Buyer and must use all reasonable endeavours to ensure that Supplier Staff do not either.

20. When you can share information

- 20.1 The Supplier must tell the Buyer within 48 hours if it receives a Request For Information.
- 20.2 In accordance with a reasonable timetable and in any event within 5 Working Days of a request from the Buyer, the Supplier must give the Buyer full co-operation and information needed so the Buyer can:
- 20.2.1 publish the Transparency Information;
 - 20.2.2 comply with any Freedom of Information Act (FOIA) request; and
 - 20.2.3 comply with any Environmental Information Regulations (EIR) request.
- 20.3 To the extent that it is allowed and practical to do so, the Buyer will use reasonable endeavours to notify the Supplier of a FOIA request and may talk to the Supplier to help it decide whether to publish information under Clause 20.1. However, the extent, content and format of the disclosure is the Buyer's decision in its absolute discretion.

21. Invalid parts of the contract

- 21.1 If any part of the Contract is prohibited by Law or judged by a court to be unlawful, void or unenforceable, it must be read as if it was removed from the Contract as much as required and rendered ineffective as far as possible without affecting the rest of the Contract, whether it's valid or enforceable.
- 21.2 If any removal under Clause 21.1 is so fundamental that it prevents the purpose of the Contract from being achieved or it materially changes the balance of risk and rewards between the Parties, either Party may give notice to the other Party requiring the Parties to commence good faith negotiations to rectify these issues and to amend the Contract accordingly so that, as amended, it is valid and enforceable, preserves the balance of risks and rewards in this Contract and, to the extent that it is reasonably possible, achieves the Parties' original commercial intention.
- 21.3 If the Parties cannot agree on what amendments are required within 5 Working Days, the matter will be dealt with via commercial negotiation as set out in Clause 39.2 and, if there is no resolution within 30 Working Days of the matter being referred, the Contract will terminate automatically and immediately with costs lying where they fall.

22. No other terms apply

The provisions incorporated into the Contract are the entire agreement between the Parties. The Contract replaces all previous statements, or agreements whether written or oral. No other provisions apply.

23. Other people's rights in the Contract

No third parties may use the Contracts (Rights of Third Parties) Act (CRTPA) to enforce any term of the Contract unless stated (referring to CRTPA) in the Contract. This does not affect third party rights and remedies that exist independently from CRTPA.

24. Circumstances beyond your control

- 24.1 Any Party affected by a Force Majeure Event is excused from performing its obligations under the Contract while the inability to perform continues, if it both:
- 24.1.1 provides a Force Majeure Notice to the other Party; and
 - 24.1.2 uses all reasonable measures practical to reduce the impact of the Force Majeure Event.
- 24.2 Any failure or delay by the Supplier to perform its obligations under this Contract that is due to a failure or delay by an agent, Subcontractor or supplier will only be considered a Force Majeure Event if that third party is

itself prevented from complying with an obligation to the Supplier due to a Force Majeure Event.

- 24.3 Either party can partially or fully terminate the Contract if the provision of the Deliverables is materially affected by a Force Majeure Event which lasts for 90 days continuously.

25. Relationships created by the contract

The Contract does not create a partnership, joint venture or employment relationship. The Supplier must represent themselves accordingly and ensure others do so.

26. Giving up contract rights

A partial or full waiver or relaxation of the terms of the Contract is only valid if it is stated to be a waiver in writing to the other Party.

27. Transferring responsibilities

- 27.1 The Supplier cannot assign, novate or in any other way dispose of the Contract or any part of it without the Buyer's written consent.
- 27.2 Subject to Schedule 27 (Key Subcontractors), the Supplier cannot sub-contract the Contract or any part of it without the Buyer's prior written consent. The Supplier shall provide the Buyer with information about the Subcontractor as it reasonably requests. The decision of the Buyer to consent or not will not be unreasonably withheld or delayed. If the Buyer does not communicate a decision to the Supplier within 10 Working Days of the request for consent then its consent will be deemed to have been given. The Buyer may reasonably withhold its consent to the appointment of a Subcontractor if it considers that:
- 27.2.1 the appointment of a proposed Subcontractor may prejudice the provision of the Deliverables or may be contrary to its interests;
 - 27.2.2 the proposed Subcontractor is unreliable and/or has not provided reliable goods and or reasonable services to its other customers; and/or
 - 27.2.3 the proposed Subcontractor employs unfit persons
- 27.3 The Buyer can assign, novate or transfer its Contract or any part of it to any Crown Body, public or private sector body which performs the functions of the Buyer.
- 27.4 When the Buyer uses its rights under Clause 27.3 the Supplier must enter into a novation agreement in the form that the Buyer specifies.
- 27.5 The Supplier can terminate the Contract novated under Clause 27.3 to a private sector body that is experiencing an Insolvency Event.

- 27.6 The Supplier remains responsible for all acts and omissions of the Supplier Staff as if they were its own.
- 27.7 If at any time the Buyer asks the Supplier for details about Subcontractors, the Supplier must provide details of Subcontractors at all levels of the supply chain including:
 - 27.7.1 their name;
 - 27.7.2 the scope of their appointment;
 - 27.7.3 the duration of their appointment; and
 - 27.7.4 a copy of the Sub-Contract.

28. Changing the contract

- 28.1 Either Party can request a Variation to the Contract which is only effective if agreed in writing, including where it is set out in the Variation Form, and signed by both Parties.
- 28.2 The Supplier must provide an Impact Assessment either:
 - 28.2.1 with the Variation Form, where the Supplier requests the Variation; and
 - 28.2.2 within the time limits included in a Variation Form requested by the Buyer.
- 28.3 If the Variation to the Contract cannot be agreed or resolved by the Parties, the Buyer can either:
 - 28.3.1 agree that the Contract continues without the Variation; and
 - 28.3.2 refer the Dispute to be resolved using Clause 39 (Resolving Disputes).
- 28.4 The Buyer is not required to accept a Variation request made by the Supplier.
- 28.5 The Supplier may only reject a Variation requested by the Buyer if the Supplier:
 - 28.5.1 reasonably believes that the Variation would materially and adversely affect the risks to the health and safety of any person or that it would result in the Deliverables being provided in a way that infringes any Law; or
 - 28.5.2 demonstrates to the Buyer's reasonable satisfaction that the Variation is technically impossible to implement and that neither the Tender nor the Specification state that the Supplier has the required technical capacity or flexibility to implement the Variation.
- 28.6 If there is a General Change in Law, the Supplier must bear the risk of the change and is not entitled to ask for an increase to the Charges.

- 28.7 If there is a Specific Change in Law or one is likely to happen during the Contract Period the Supplier must give the Buyer notice of the likely effects of the changes as soon as reasonably practical. They must also say if they think any Variation is needed either to the Deliverables, the Charges or the Contract and provide evidence:
- 28.7.1 that the Supplier has kept costs as low as possible, including in Subcontractor costs; and
- 28.7.2 of how it has affected the Supplier's costs.
- 28.8 Any change in the Charges or relief from the Supplier's obligations because of a Specific Change in Law must be implemented using Clauses 28.1 to 28.4.

29. How to communicate about the contract

- 29.1 All notices under the Contract must be in writing and are considered effective on the Working Day of delivery as long as they're delivered before 5:00pm on a Working Day. Otherwise the notice is effective on the next Working Day. An email is effective at 9am on the first Working Day after sending unless an error message is received.
- 29.2 Notices to the Buyer must be sent to the Buyer Authorised Representative's address or email address in the Award Form.
- 29.3 This Clause does not apply to the service of legal proceedings or any documents in any legal action, arbitration or dispute resolution.

30. Dealing with claims

- 30.1 If a Beneficiary is notified of a Claim then it must notify the Indemnifier as soon as reasonably practical and no later than 10 Working Days.
- 30.2 At the Indemnifier's cost the Beneficiary must both:
- 30.2.1 allow the Indemnifier to conduct all negotiations and proceedings to do with a Claim; and
- 30.2.2 give the Indemnifier reasonable assistance with the claim if requested.
- 30.3 The Beneficiary must not make admissions about the Claim without the prior written consent of the Indemnifier which cannot be unreasonably withheld or delayed.
- 30.4 The Indemnifier must consider and defend the Claim diligently using competent legal advisors and in a way that doesn't damage the Beneficiary's reputation.
- 30.5 The Indemnifier must not settle or compromise any Claim without the Beneficiary's prior written consent which it must not unreasonably withhold or delay.

- 30.6 Each Beneficiary must use all reasonable endeavours to minimise and mitigate any losses that it suffers because of the Claim.
- 30.7 If the Indemnifier pays the Beneficiary money under an indemnity and the Beneficiary later recovers money which is directly related to the Claim, the Beneficiary must immediately repay the Indemnifier the lesser of either:
 - 30.7.1 the sum recovered minus any legitimate amount spent by the Beneficiary when recovering this money; and
 - 30.7.2 the amount the Indemnifier paid the Beneficiary for the Claim.

31. Preventing fraud, bribery and corruption

- 31.1 The Supplier must not during the Contract Period:
 - 31.1.1 commit a Prohibited Act or any other criminal offence in the Regulations 57(1) and 57(2);
 - 31.1.2 do or allow anything which would cause the Buyer, including any of their employees, consultants, contractors, Subcontractors or agents to breach any of the Relevant Requirements or incur any liability under them.
- 31.2 The Supplier must during the Contract Period:
 - 31.2.1 create, maintain and enforce adequate policies and procedures to ensure it complies with the Relevant Requirements to prevent a Prohibited Act and require its Subcontractors to do the same;
 - 31.2.2 keep full records to show it has complied with its obligations under this Clause 31 and give copies to the Buyer on request; and
 - 31.2.3 if required by the Buyer, within 20 Working Days of the Start Date of the Contract, and then annually, certify in writing to the Buyer, that they have complied with this Clause 31, including compliance of Supplier Staff, and provide reasonable supporting evidence of this on request, including its policies and procedures.
- 31.3 The Supplier must immediately notify the Buyer if it becomes aware of any breach of Clauses 31.1 or has any reason to think that it, or any of the Supplier Staff, have either:
 - 31.3.1 been investigated or prosecuted for an alleged Prohibited Act;
 - 31.3.2 been debarred, suspended, proposed for suspension or debarment, or are otherwise ineligible to take part in procurement programmes or contracts because of a Prohibited Act by any government department or agency;
 - 31.3.3 received a request or demand for any undue financial or other advantage of any kind related to the Contract; and

31.3.4 suspected that any person or Party directly or indirectly related to the Contract has committed or attempted to commit a Prohibited Act.

31.4 If the Supplier notifies the Buyer as required by Clause 31.3, the Supplier must respond promptly to their further enquiries, co-operate with any investigation and allow the Audit of any books, records and relevant documentation.

31.5 If the Supplier is in Default under Clause 31.1 the Buyer may:

31.5.1 require the Supplier to remove any Supplier Staff from providing the Deliverables if their acts or omissions have caused the Default; and

31.5.2 immediately terminate this agreement.

31.6 In any notice the Supplier gives under Clause 31.4 it must specify the:

31.6.1 Prohibited Act;

31.6.2 identity of the Party who it thinks has committed the Prohibited Act; and

31.6.3 action it has decided to take.

32. Equality, diversity and human rights

32.1 The Supplier must follow all applicable equality Law when they perform their obligations under the Contract, including:

32.1.1 protections against discrimination on the grounds of race, sex, gender reassignment, religion or belief, disability, sexual orientation, pregnancy, maternity, age or otherwise; and

32.1.2 any other requirements and instructions which the Buyer reasonably imposes related to equality Law.

32.2 The Supplier must use all reasonable endeavours, and inform the Buyer of the steps taken, to prevent anything that is considered to be unlawful discrimination by any court or tribunal, or the Equality and Human Rights Commission (or any successor organisation) when working on the Contract.

33. Health and safety

33.1 The Supplier must perform its obligations meeting the requirements of:

33.1.1 all applicable Law regarding health and safety; and

33.1.2 the Buyer's current health and safety policy while at the Buyer's Premises, as provided to the Supplier.

- 33.2 The Supplier must as soon as possible notify the other of any health and safety incidents or material hazards they're aware of at the Buyer Premises that relate to the performance of the Contract.

34. Environment

- 34.1 When working on Site the Supplier must perform its obligations under the Buyer's current Environmental Policy, which the Buyer must provide.
- 34.2 The Supplier must ensure that Supplier Staff are aware of the Buyer's Environmental Policy.

35. Tax

- 35.1 The Supplier must not breach any tax or social security obligations and must enter into a binding agreement to pay any late contributions due, including where applicable, any interest or any fines. The Buyer cannot terminate the Contract where the Supplier has not paid a minor tax or social security contribution.
- 35.2 Where the Charges payable under the Contract are or are likely to exceed £5 million at any point during the relevant Contract Period, and an Occasion of Tax Non-Compliance occurs, the Supplier must notify the Buyer of it within 5 Working Days including:
 - 35.2.1 the steps that the Supplier is taking to address the Occasion of Tax Non-Compliance and any mitigating factors that it considers relevant; and
 - 35.2.2 other information relating to the Occasion of Tax Non-Compliance that the Buyer may reasonably need.
- 35.3 Where the Supplier or any Supplier Staff are liable to be taxed or to pay National Insurance contributions in the UK relating to payment received under the Contract, the Supplier must both:
 - 35.3.1 comply with the Income Tax (Earnings and Pensions) Act 2003 and all other statutes and regulations relating to income tax, the Social Security Contributions and Benefits Act 1992 (including IR35) and National Insurance contributions; and
 - 35.3.2 indemnify the Buyer against any Income Tax, National Insurance and social security contributions and any other liability, deduction, contribution, assessment or claim arising from or made during or after the Contract Period in connection with the provision of the Deliverables by the Supplier or any of the Supplier Staff.

- 35.4 If any of the Supplier Staff are Workers who receive payment relating to the Deliverables, then the Supplier must ensure that its contract with the Worker contains the following requirements:
- 35.4.1 the Buyer may, at any time during the Contract Period, request that the Worker provides information which demonstrates they comply with Clause 35.3.1, or why those requirements do not apply, the Buyer can specify the information the Worker must provide and the deadline for responding;
 - 35.4.2 the Worker's contract may be terminated at the Buyer's request if the Worker fails to provide the information requested by the Buyer within the time specified by the Buyer;
 - 35.4.3 the Worker's contract may be terminated at the Buyer's request if the Worker provides information which the Buyer considers isn't good enough to demonstrate how it complies with Clause 35.3.1 or confirms that the Worker is not complying with those requirements; and
 - 35.4.4 the Buyer may supply any information they receive from the Worker to HMRC for revenue collection and management.

36. Conflict of interest

- 36.1 The Supplier must take action to ensure that neither the Supplier nor the Supplier Staff are placed in the position of an actual, potential or perceived Conflict of Interest.
- 36.2 The Supplier must promptly notify and provide details to the Buyer if an actual, potential or perceived Conflict of Interest happens or is expected to happen.
- 36.3 The Buyer will consider whether there are any appropriate measures that can be put in place to remedy an actual, perceived or potential Conflict of Interest. If, in the reasonable opinion of the Buyer, such measures do not or will not resolve an actual or potential Conflict of Interest, the Buyer may terminate its Contract immediately by giving notice in writing to the Supplier where there is or may be an actual or potential Conflict of Interest.

37. Reporting a breach of the contract

- 37.1 As soon as it is aware of it the Supplier and Supplier Staff must report to the Buyer any actual or suspected breach of:
 - 37.1.1 Law;
 - 37.1.2 Clause 16.1; and
 - 37.1.3 Clauses 31 to 36.

- 37.2 The Supplier must not retaliate against any of the Supplier Staff who in good faith reports a breach listed in Clause 37.1 to the Buyer or a Prescribed Person.

38. Further Assurances

Each Party will, at the request and cost of the other Party, do all things which may be reasonably necessary to give effect to the meaning of this Contract.

39. Resolving disputes

- 39.1 If there is a Dispute, the senior representatives of the Parties who have authority to settle the Dispute will, within 28 days of a written request from the other Party, meet in good faith to resolve the Dispute by commercial negotiation.
- 39.2 If the Parties cannot resolve the Dispute via commercial negotiation, they can attempt to settle it by mediation using the Centre for Effective Dispute Resolution (CEDR) Model Mediation Procedure current at the time of the Dispute. If the Parties cannot agree on a mediator, the mediator will be nominated by CEDR. If either Party does not wish to use, or continue to use mediation, or mediation does not resolve the Dispute, the Dispute must be resolved using Clauses 39.4 to 39.6.
- 39.3 Unless the Buyer refers the Dispute to arbitration using Clause 39.5, the Parties irrevocably agree that the courts of England and Wales have the exclusive jurisdiction to:
- 39.3.1 determine the Dispute;
 - 39.3.2 grant interim remedies; and
 - 39.3.3 grant any other provisional or protective relief.
- 39.4 The Supplier agrees that the Buyer has the exclusive right to refer any Dispute to be finally resolved by arbitration under the London Court of International Arbitration Rules current at the time of the Dispute. There will be only one arbitrator. The seat or legal place of the arbitration will be London and the proceedings will be in English.
- 39.5 The Buyer has the right to refer a Dispute to arbitration even if the Supplier has started or has attempted to start court proceedings under Clause 39.4, unless the Buyer has agreed to the court proceedings or participated in them. Even if court proceedings have started, the Parties must do everything necessary to ensure that the court proceedings are stayed in favour of any arbitration proceedings if they are started under Clause 39.5.
- 39.6 The Supplier cannot suspend the performance of the Contract during any Dispute.

40. Which law applies

This Contract and any issues or Disputes arising out of, or connected to it, are governed by English law.

Schedule 1 (Definitions)

1. Definitions

- 1.1 In the Contract, unless the context otherwise requires, capitalised expressions shall have the meanings set out in this Schedule 1 (Definitions) or the relevant Schedule in which that capitalised expression appears.
- 1.2 If a capitalised expression does not have an interpretation in this Schedule or any other Schedule, it shall, in the first instance, be interpreted in accordance with the common interpretation within the relevant market sector/industry where appropriate. Otherwise, it shall be interpreted in accordance with the dictionary meaning.
- 1.3 In the Contract, unless the context otherwise requires:
 - 1.3.1 the singular includes the plural and vice versa;
 - 1.3.2 reference to a gender includes the other gender and the neuter;
 - 1.3.3 references to a person include an individual, company, body corporate, corporation, unincorporated association, firm, partnership or other legal entity or Crown Body;
 - 1.3.4 a reference to any Law includes a reference to that Law as amended, extended, consolidated or re-enacted from time to time;
 - 1.3.5 the words "**including**", "**other**", "**in particular**", "**for example**" and similar words shall not limit the generality of the preceding words and shall be construed as if they were immediately followed by the words "**without limitation**";
 - 1.3.6 references to "**writing**" include typing, printing, lithography, photography, display on a screen, electronic and facsimile transmission and other modes of representing or reproducing words in a visible form, and expressions referring to writing shall be construed accordingly;
 - 1.3.7 references to "**representations**" shall be construed as references to present facts, to "**warranties**" as references to present and future facts and to "**undertakings**" as references to obligations under the Contract;
 - 1.3.8 references to "**Clauses**" and "**Schedules**" are, unless otherwise provided, references to the clauses and schedules of the Core Terms and references in any Schedule to parts, paragraphs, annexes and tables are, unless otherwise provided, references to the parts, paragraphs, annexes and tables of the Schedule in which these references appear;
 - 1.3.9 references to "**Paragraphs**" are, unless otherwise provided, references to the paragraph of the appropriate Schedules unless otherwise provided; and
 - 1.3.10 references to a series of Clauses or Paragraphs shall be inclusive of the clause numbers specified.

- 1.3.11 the headings in the Contract are for ease of reference only and shall not affect the interpretation or construction of the Contract; and
- 1.3.12 where the Buyer is a Crown Body it shall be treated as contracting with the Crown as a whole.
- 1.3.13 Any reference in this Contract which immediately before IP Completion Day (or such later date when relevant EU law ceases to have effect pursuant to Section 1A of the European Union (Withdrawal) Act 2018) is a reference to (as it has effect from time to time):
- (i) any EU regulation, EU decision, EU tertiary legislation or provision of the EEA agreement ("**EU References**") which is to form part of domestic law by application of Section 3 of the European Union (Withdrawal) Act 2018 and which shall be read on and after IP Completion Day as a reference to the EU References as they form part of domestic law by virtue of Section 3 of the European Union (Withdrawal) Act 2018 as modified by domestic law from time to time; and
 - (ii) any EU institution or EU authority or other such EU body shall be read on and after IP Completion Day as a reference to the UK institution, authority or body to which its functions were transferred.

1.4 In the Contract, unless the context otherwise requires, the following words shall have the following meanings:

"Achieve"	in respect of a Test, to successfully pass such Test without any Test Issues and in respect of a Milestone, the issue of a Satisfaction Certificate in respect of that Milestone and " Achieved ", " Achieving " and " Achievement " shall be construed accordingly;
"Additional FDE Group Member"	means any entity (if any) specified as an Additional FDE Group Member in Part A of Annex 3 of Schedule 24 (Financial Difficulties);
"Affected Party"	the party seeking to claim relief in respect of a Force Majeure Event;
"Affiliates"	in relation to a body corporate, any other entity which directly or indirectly Controls, is Controlled by, or is under direct or indirect common Control of that body corporate from time to time;
"Allowable Assumptions"	means the assumptions (if any) set out in Annex 2 of Schedule 3 (Charges);
"Annex"	extra information which supports a Schedule;

"Approval"	the prior written consent of the Buyer and "Approve" and "Approved" shall be construed accordingly;
"Associates"	means, in relation to an entity, an undertaking in which the entity owns, directly or indirectly, between 20% and 50% of the voting rights and exercises a degree of control sufficient for the undertaking to be treated as an associate under generally accepted accounting principles;
"Audit"	<p>the Buyer's right to:</p> <ul style="list-style-type: none"> (a) verify the integrity and content of any Financial Report; (b) verify the accuracy of the Charges and any other amounts payable by the Buyer under a Contract (including proposed or actual variations to them in accordance with the Contract); (c) verify the costs of the Supplier (including the costs of all Subcontractors and any third party suppliers) in connection with the provision of the Services; (d) verify the Open Book Data; (e) verify the Supplier's and each Subcontractor's compliance with the applicable Law; (f) identify or investigate actual or suspected breach of Clauses 3 to 37 and/or Schedule 26 (Sustainability), impropriety or accounting mistakes or any breach or threatened breach of security and in these circumstances the Buyer shall have no obligation to inform the Supplier of the purpose or objective of its investigations; (g) identify or investigate any circumstances which may impact upon the financial stability of the Supplier, any Guarantor, and/or any Subcontractors or their ability to provide the Deliverables; (h) obtain such information as is necessary to fulfil the Buyer's obligations to supply information for parliamentary, ministerial, judicial or administrative purposes including the supply of information to the Comptroller and Auditor General; (i) review any books of account and the internal contract management accounts kept by the Supplier in connection with the Contract; (j) carry out the Buyer's internal and statutory audits and to prepare, examine and/or certify the Buyer's annual and interim reports and accounts; (k) enable the National Audit Office to carry out an examination pursuant to Section 6(1) of the National Audit Act 1983 of the economy, efficiency and effectiveness with which the Buyer has used its resources;

"Auditor"	<ul style="list-style-type: none"> (a) the Buyer's internal and external auditors; (b) the Buyer's statutory or regulatory auditors; (c) the Comptroller and Auditor General, their staff and/or any appointed representatives of the National Audit Office; (d) HM Treasury or the Cabinet Office; (e) any party formally appointed by the Buyer to carry out audit or similar review functions; and (f) successors or assigns of any of the above;
"Award Form"	the document outlining the Incorporated Terms and crucial information required for the Contract, to be executed by the Supplier and the Buyer;
"Beneficiary"	a Party having (or claiming to have) the benefit of an indemnity under this Contract;
"Buyer"	the public sector purchaser identified as such in the Order Form;
"Buyer Assets"	the Buyer's infrastructure, data, software, materials, assets, equipment or other property owned by and/or licensed or leased to the Buyer and which is or may be used in connection with the provision of the Deliverables which remain the property of the Buyer throughout the term of the Contract;
"Buyer Authorised Representative"	the representative appointed by the Buyer from time to time in relation to the Contract initially identified in the Award Form;
"Buyer Cause"	has the meaning given to it in the Award Form;
"Buyer Data"	<p>means the data, text, drawings, diagrams, images or sounds (together with any database made up of any of these) which are embodied in any electronic, magnetic, optical or tangible media, including any Buyer's or End User's Confidential Information, and which:</p> <ul style="list-style-type: none"> (a) are supplied to the Supplier by or on behalf of the Buyer, or End User; or (b) the Supplier is required to generate, process, store or transmit pursuant to this Contract; or (c) any Personal Data for which the Buyer or End User is the Controller;
"Buyer Existing IPR"	means any and all IPR that are owned by or licensed to the Buyer, and where the Buyer is a Central Government Body, any Crown

	IPR, and which are or have been developed independently of the Contract (whether prior to the Start Date or otherwise)
"Buyer Premises"	premises owned, controlled or occupied by the Buyer which are made available for use by the Supplier or its Subcontractors for the provision of the Deliverables (or any of them);
"Buyer Third Party"	means any supplier to the Buyer (other than the Supplier), which is notified to the Supplier from time to time;
"Buyer's Confidential Information"	<p>(a) all Personal Data and any information, however it is conveyed, that relates to the business, affairs, developments, property rights, trade secrets, Know-How and IPR of the Buyer (including all Buyer Existing IPR and New IPR);</p> <p>(b) any other information clearly designated as being confidential (whether or not it is marked "confidential") or which ought reasonably be considered confidential which comes (or has come) to the Buyer's attention or into the Buyer's possession in connection with the Contract; and</p> <p>information derived from any of the above;</p>
"Central Government Body"	<p>a body listed in one of the following sub-categories of the Central Government classification of the Public Sector Classification Guide, as published and amended from time to time by the Office for National Statistics:</p> <p>(a) Government Department;</p> <p>(b) Non-Departmental Public Body or Assembly Sponsored Public Body (advisory, executive, or tribunal);</p> <p>(c) Non-Ministerial Department; or</p> <p>(d) Executive Agency;</p>
"Change in Law"	any change in Law which impacts on the supply of the Deliverables and performance of the Contract which comes into force after the Start Date;
"Change of Control"	a change of control within the meaning of Section 450 of the Corporation Tax Act 2010;
"Charges"	the prices (exclusive of any applicable VAT), payable to the Supplier by the Buyer under the Contract, as set out in the Award Form, for the full and proper performance by the Supplier of its obligations under the Contract less any Deductions;
"Claim"	any claim which it appears that a Beneficiary is, or may become, entitled to indemnification under this Contract;

"Commercially Sensitive Information"	the Confidential Information listed in the Award Form (if any) comprising of commercially sensitive information relating to the Supplier, its IPR or its business or which the Supplier has indicated to the Buyer that, if disclosed by the Buyer, would cause the Supplier significant commercial disadvantage or material financial loss;
"Comparable Supply"	the supply of Deliverables to another Buyer of the Supplier that are the same or similar to the Deliverables;
"Compliance Officer"	the person(s) appointed by the Supplier who is responsible for ensuring that the Supplier complies with its legal obligations;
"Confidential Information"	means any information, however it is conveyed, that relates to the business, affairs, developments, trade secrets, Know-How, personnel and suppliers of the Buyer or the Supplier, including IPRs, together with information derived from the above, and any other information clearly designated as being confidential (whether or not it is marked as "confidential") or which ought reasonably to be considered to be confidential;
"Conflict of Interest"	a conflict between the financial or personal duties of the Supplier or the Supplier Staff and the duties owed to the Buyer under the Contract, in the reasonable opinion of the Buyer;
"Contract"	the contract between the Buyer and the Supplier, which consists of the terms set out and referred to in the Award Form;
"Contract Period"	the term of the Contract from the earlier of the: (a) Start Date; or (b) the Effective Date (c) until the End Date;
"Contract Value"	the higher of the actual or expected total Charges paid or payable under the Contract where all obligations are met by the Supplier;
"Contract Year"	a consecutive period of twelve (12) Months commencing on the Start Date or each anniversary thereof;
"Control"	control in either of the senses defined in sections 450 and 1124 of the Corporation Tax Act 2010 and "Controlled" shall be construed accordingly;
"Controller"	has the meaning given to it in the UK GDPR or the EU GDPR as the context requires;
"Core Terms"	the Buyer's terms and conditions which apply to and comprise one part of the Contract set out in the document called "Core Terms";

"Costs"	<p>the following costs (without double recovery) to the extent that they are reasonably and properly incurred by the Supplier in providing the Deliverables:</p> <ul style="list-style-type: none"> (a) the cost to the Supplier or the Key Subcontractor (as the context requires), calculated per Work Day, of engaging the Supplier Staff, including: <ul style="list-style-type: none"> (i) base salary paid to the Supplier Staff; (ii) employer's National Insurance contributions; (iii) pension contributions; (iv) car allowances; (v) any other contractual employment benefits; (vi) staff training; (vii) work place accommodation; (viii) work place IT equipment and tools reasonably necessary to provide the Deliverables (but not including items included within limb (b) below); and (ix) reasonable recruitment costs, as agreed with the Buyer; (b) costs incurred in respect of Supplier Assets which would be treated as capital costs according to generally accepted accounting principles within the UK, which shall include the cost to be charged in respect of Supplier Assets by the Supplier to the Buyer or (to the extent that risk and title in any Supplier Asset is not held by the Supplier) any cost actually incurred by the Supplier in respect of those Supplier Assets; (c) operational costs which are not included within (a) or (b) above, to the extent that such costs are necessary and properly incurred by the Supplier in the provision of the Deliverables; and (d) Reimbursable Expenses to the extent these have been specified as allowable in the Award Form and are incurred in delivering any Deliverables; <p>but excluding:</p> <ul style="list-style-type: none"> (e) Overhead; (f) financing or similar costs; (g) maintenance and support costs to the extent that these relate to maintenance and/or support Deliverables provided beyond the Contract Period whether in relation to Supplier Assets or otherwise; (h) taxation;
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	<ul style="list-style-type: none"> (i) fines and penalties; (j) amounts payable under Schedule 12 (Benchmarking) where such Schedule is used; and (k) non-cash items (including depreciation, amortisation, impairments and movements in provisions);
"Critical Service Level Failure"	has the meaning given to it in the Award Form;
"Crown Body"	the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Government and the National Assembly for Wales), including government ministers and government departments and particular bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;
"Crown IPR"	means any IPR which is owned by or licensed to the Crown, and which are or have been developed independently of the Contract (whether prior to the Start Date or otherwise);
"CRTPA"	the Contract Rights of Third Parties Act 1999;
"Data Protection Impact Assessment"	an assessment by the Controller of the impact of the envisaged Processing on the protection of Personal Data;
"Data Protection Legislation"	(i) the UK GDPR, (ii) the DPA 2018 to the extent that it relates to processing of personal data and privacy; (iii) all applicable Law about the processing of personal data and privacy; and (iv) (to the extent that it applies) the EU GDPR
"Data Protection Liability Cap"	has the meaning given to it in the Award Form
"Data Protection Officer"	has the meaning given to it in the UK GDPR or the EU GDPR as the context requires;
"Data Subject"	has the meaning given to it in the UK GDPR or the EU GDPR as the context requires;
"Data Subject Access Request"	a request made by, or on behalf of, a Data Subject in accordance with rights granted pursuant to the Data Protection Legislation to access their Personal Data;
"Deductions"	all Service Credits, Delay Payments (if applicable), or any other deduction which the Buyer is paid or is payable to the Buyer under the Contract;

"Default"	any breach of the obligations of the Supplier (including abandonment of the Contract in breach of its terms) or any other default (including material default), act, omission, negligence or statement of the Supplier, of its Subcontractors or any Supplier Staff howsoever arising in connection with or in relation to the subject-matter of the Contract and in respect of which the Supplier is liable to the Buyer;
"Delay Payments"	the amounts (if any) payable by the Supplier to the Buyer in respect of a delay in respect of a Milestone as specified in the Implementation Plan;
"Deliverables"	Goods and/or Services that may be ordered under the Contract including the Documentation;
"Delivery"	delivery of the relevant Deliverable or Milestone in accordance with the terms of the Contract as confirmed and accepted by the Buyer by the either (a) confirmation in writing to the Supplier; or (b) where Schedule 8 (Implementation Plan and Testing) is used issue by the Buyer of a Satisfaction Certificate. "Deliver" and "Delivered" shall be construed accordingly;
"Dependent Parent Undertaking"	means any Parent Undertaking which provides any of its Subsidiary Undertakings and/or Associates, whether directly or indirectly, with any financial, trading, managerial or other assistance of whatever nature, without which the Supplier would be unable to continue the day to day conduct and operation of its business in the same manner as carried on at the time of entering into this Contract, including for the avoidance of doubt the provision of the Services in accordance with the terms of this Contract;
"Disaster"	the occurrence of one or more events which, either separately or cumulatively, mean that the Deliverables, or a material part thereof will be unavailable (or could reasonably be anticipated to be unavailable) for the period specified in the Award Form (for the purposes of this definition the "Disaster Period");
"Disclosing Party"	the Party directly or indirectly providing Confidential Information to the other Party in accordance with Clause 19 (What you must keep confidential);
"Dispute"	any claim, dispute or difference (whether contractual or non-contractual) arising out of or in connection with the Contract or in connection with the negotiation, existence, legal validity, enforceability or termination of the Contract, whether the alleged liability shall arise under English law or under the law of some other country and regardless of whether a particular cause of action may successfully be brought in the English courts;

"Dispute Resolution Procedure"	the dispute resolution procedure set out in Clause 39 (Resolving disputes);
"Documentation"	<p>descriptions of the Services and Service Levels, technical specifications, user manuals, training manuals, operating manuals, process definitions and procedures, system environment descriptions and all such other documentation (whether in hardcopy or electronic form) is required to be supplied by the Supplier to the Buyer under the Contract as:</p> <ul style="list-style-type: none"> (a) would reasonably be required by a competent third party capable of Good Industry Practice contracted by the Buyer to develop, configure, build, deploy, run, maintain, upgrade and test the individual systems that provide the Deliverables (b) is required by the Supplier in order to provide the Deliverables; and/or (c) has been or shall be generated for the purpose of providing the Deliverables;
"DOTAS"	the Disclosure of Tax Avoidance Schemes rules which require a promoter of tax schemes to tell HMRC of any specified notifiable arrangements or proposals and to provide prescribed information on those arrangements or proposals within set time limits as contained in Part 7 of the Finance Act 2004 and in secondary legislation made under vires contained in Part 7 of the Finance Act 2004 and as extended to National Insurance Contributions;
"DPA 2018"	The Data Protection Act 2018
"Due Diligence Information"	any information supplied to the Supplier by or on behalf of the Buyer prior to the Start Date;
"Effective Date"	the date on which the final Party has signed the Contract;
"EIR"	the Environmental Information Regulations 2004;
"Employment Regulations"	the Transfer of Undertakings (Protection of Employment) Regulations 2006 (SI 2006/246) as amended or replaced;
"End Date"	<p>the earlier of:</p> <ul style="list-style-type: none"> (a) the Expiry Date as extended by the Buyer under Clause 14.2; or (b) if the Contract is terminated before the date specified in (a) above, the date of termination of the Contract;

"End User"	means a party that is accessing the Deliverables provided pursuant to this Contract (including the Buyer where it is accessing services on its own account as a user);
"Environmental Policy"	to conserve energy, water, wood, paper and other resources, reduce waste and phase out the use of ozone depleting substances and minimise the release of greenhouse gases, volatile organic compounds and other substances damaging to health and the environment, including any written environmental policy of the Buyer;
"Equality and Human Rights Commission"	the UK Government body named as such as may be renamed or replaced by an equivalent body from time to time;
"Escalation Meeting"	means a meeting between the Supplier Authorised Representative and the Buyer Authorised Representative to address issues that have arisen during the Rectification Plan Process;
"Estimated Year 1 Charges"	the anticipated total Charges payable by the Buyer in the first Contract Year specified in the Award Form;
"Estimated Yearly Charges"	means for the purposes of calculating each Party's annual liability under Clause 15.1 : (a) in the first Contract Year, the Estimated Year 1 Charges; or (b) in any subsequent Contract Years, the Charges paid or payable in the previous Contract Year; or (c) after the end of the Contract, the Charges paid or payable in the last Contract Year during the Contract Period;
"EU"	European Union
"EU GDPR"	Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation) as it has effect in EU law;
"Existing IPR"	any and all IPR that are owned by or licensed to either Party and which are or have been developed independently of the Contract (whether prior to the Start Date or otherwise);
"Exit Plan"	has the meaning given to it in Paragraph 4.1 of Schedule 30 (Exit Plan);
"Expiry Date"	the date of the end of the Contract as stated in the Award Form;

"Extension Period"	such period or periods beyond which the Initial Period may be extended, specified in the Award Form;
"FDE Group"	the Supplier and any Additional FDE Group Member;
"Financial Distress Event"	<p>The occurrence of one or more the following events:</p> <ul style="list-style-type: none"> (a) the credit rating of any FDE Group entity drops below the applicable Credit Rating Threshold of the relevant Rating Agency; (b) any FDE Group entity issues a profits warning to a stock exchange or makes any other public announcement, in each case about a material deterioration in its financial position or prospects; (c) there being a public investigation into improper financial accounting and reporting, suspected fraud or any other impropriety of any FDE Group entity; (d) any FDE Group entity commits a material breach of covenant to its lenders; (e) a Key Subcontractor notifies the Buyer that the Supplier has not paid any material sums properly due under a specified invoice and not subject to a genuine dispute; (f) any FDE Group entity extends the filing period for filing its accounts with the Registrar of Companies so that the filing period ends more than 9 months after its accounting reference date without an explanation to the Buyer which the Buyer (acting reasonably) considers to be adequate; (g) any FDE Group entity is late to file its annual accounts without a public notification or an explanation to the Buyer which the Buyer (acting reasonably) considers to be adequate; (h) the directors and/or external auditors of any FDE Group entity conclude that a material uncertainty exists in relation to that FDE Group entity's going concern in the annual report including in a reasonable but plausible downside scenario. This includes, but is not limited to, commentary about liquidity and trading prospects in the reports from directors or external auditors; (i) any of the following: <ul style="list-style-type: none"> (i) any FDE Group entity makes a public announcement which contains commentary with regards to that FDE Group entity's liquidity and trading and trading prospects, such as but not limited to, a profit warning or ability to trade as a going concern;

	<ul style="list-style-type: none"> (ii) commencement of any litigation against any FDE Group entity with respect to financial indebtedness greater than £5m or obligations under a service contract with a total contract value greater than £5m; (iii) non-payment by any FDE Group entity of any financial indebtedness; (iv) any financial indebtedness of any FDE Group entity becoming due as a result of an event of default; (v) the cancellation or suspension of any financial indebtedness in respect of any FDE Group entity; or (vi) an external auditor of any FDE Group entity expressing a qualified opinion on, or including an emphasis of matter in, its opinion on the statutory accounts of that FDE Group entity, in each case which the Buyer reasonably believes (or would be likely reasonably to believe) could directly impact on the continued provision of the Deliverables in accordance with the Contract; or <p>(j) any one of the Financial Indicators set out in Part C of Annex 2 of Schedule 24 for any of the FDE Group entities failing to meet the required Financial Target Threshold.</p>
"Financial Report"	<p>a report provided by the Supplier to the Buyer that:</p> <ul style="list-style-type: none"> (a) to the extent permitted by Law, provides a true and fair reflection of the Costs and Supplier Profit Margin forecast by the Supplier; (b) to the extent permitted by Law, provides detail a true and fair reflection of the costs and expenses to be incurred by Key Subcontractors (as requested by the Buyer); (c) is in the same software package (Microsoft Excel or Microsoft Word), layout and format as the blank templates which have been issued by the Buyer to the Supplier on or before the Start Date for the purposes of this Contract; and (d) is certified by the Supplier's Chief Financial Officer or Director of Finance;
"Financial Transparency Objectives"	<p>means:</p> <ul style="list-style-type: none"> (a) the Buyer having a clear analysis of the Costs, Overhead recoveries (where relevant), time spent by Supplier Staff in

	<p>providing the Services and the Supplier Profit Margin so that it can understand any payment sought by the Supplier;</p> <p>(b) the Parties being able to understand Cost forecasts and to have confidence that these are based on justifiable numbers and appropriate forecasting techniques;</p> <p>(c) the Parties being able to understand the quantitative impact of any Variations that affect ongoing Costs and identifying how these could be mitigated and/or reflected in the Charges;</p> <p>(d) the Parties being able to review, address issues with and re-forecast progress in relation to the provision of the Services;</p> <p>(e) the Parties challenging each other with ideas for efficiency and improvements; and</p> <p>(f) enabling the Buyer to demonstrate that it is achieving value for money for the tax payer relative to current market prices;</p>
"FOIA"	<p>the Freedom of Information Act 2000 and any subordinate legislation made under that Act from time to time together with any guidance and/or codes of practice issued by the Information Commissioner or relevant Government department in relation to such legislation;</p>
"Force Majeure Event"	<p>any event, circumstance, matter or cause affecting the performance by either the Buyer or the Supplier of its obligations arising from:</p> <p>(a) acts, events, omissions, happenings or non-happenings beyond the reasonable control of the Affected Party which prevent or materially delay the Affected Party from performing its obligations under a Contract;</p> <p>(b) riots, civil commotion, war or armed conflict, acts of terrorism, nuclear, biological or chemical warfare;</p> <p>(c) acts of a Crown Body, local government or regulatory bodies;</p> <p>(d) fire, flood or any disaster; or</p> <p>(e) an industrial dispute affecting a third party for which a substitute third party is not reasonably available but excluding:</p> <p>(i) any industrial dispute relating to the Supplier, the Supplier Staff (including any subsets of them) or any other failure in the Supplier or the Subcontractor's supply chain;</p> <p>(ii) any event, occurrence, circumstance, matter or cause which is attributable to the wilful act, neglect or failure to take reasonable precautions against it by the Party concerned; and</p>

	(iii) any failure of delay caused by a lack of funds, and which is not attributable to any wilful act, neglect or failure to take reasonable preventative action by that Party;
"Force Majeure Notice"	a written notice served by the Affected Party on the other Party stating that the Affected Party believes that there is a Force Majeure Event;
"General Anti-Abuse Rule"	(a) the legislation in Part 5 of the Finance Act 2013 and; and (b) any future legislation introduced into parliament to counteract tax advantages arising from abusive arrangements to avoid National Insurance contributions;
"General Change in Law"	a Change in Law where the change is of a general legislative nature (including taxation or duties of any sort affecting the Supplier) or which affects or relates to a Comparable Supply;
"Goods"	goods made available by the Supplier as specified in Schedule 2 (Specification) and in relation to a Contract as specified in the Award Form;
"Good Industry Practice"	standards, practices, methods and procedures conforming to the Law and the exercise of the degree of skill and care, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced person or body engaged within the relevant industry or business sector;
"Government"	the government of the United Kingdom (including the Northern Ireland Assembly and Executive Committee, the Scottish Government and the National Assembly for Wales), including government ministers and government departments and other bodies, persons, commissions or agencies from time to time carrying out functions on its behalf;
"Government Data"	the data, text, drawings, diagrams, images or sounds (together with any database made up of any of these) which are embodied in any electronic, magnetic, optical or tangible media, including any of the Buyer's Confidential Information, and which: (a) are supplied to the Supplier by or on behalf of the Buyer; or (b) the Supplier is required to generate, process, store or transmit pursuant to the Contract;
"Government Procurement Card"	the Government's preferred method of purchasing and payment for low value goods or services https://www.gov.uk/government/publications/government-procurement-card--2 ;

"Guarantor"	the person (if any) who has entered into a guarantee in the form set out in Schedule 23 (Guarantee) in relation to this Contract;
"Halifax Abuse Principle"	the principle explained in the CJEU Case C-255/02 Halifax and others;
"HMRC"	Her Majesty's Revenue and Customs;
"ICT Policy"	the Buyer's policy in respect of information and communications technology, referred to in the Award Form, which is in force as at the Start Date (a copy of which has been supplied to the Supplier), as updated from time to time in accordance with the Variation Procedure;
"Impact Assessment"	<p>an assessment of the impact of a Variation request by the Buyer completed in good faith, including:</p> <ul style="list-style-type: none"> (a) details of the impact of the proposed Variation on the Deliverables and the Supplier's ability to meet its other obligations under the Contract; (b) details of the cost of implementing the proposed Variation; (c) details of the ongoing costs required by the proposed Variation when implemented, including any increase or decrease in the Charges (as applicable), any alteration in the resources and/or expenditure required by either Party and any alteration to the working practices of either Party; (d) a timetable for the implementation, together with any proposals for the testing of the Variation; and (e) such other information as the Buyer may reasonably request in (or in response to) the Variation request;
"Implementation Plan"	the plan for provision of the Deliverables set out in Schedule 8 (Implementation Plan and Testing) where that Schedule is used or otherwise as agreed between the Supplier and the Buyer;
"Incorporated Terms"	the contractual terms applicable to the Contract specified in the Award Form;
"Indemnifier"	a Party from whom an indemnity is sought under this Contract;
"Independent Controller"	a party which is Controller of the same Personal Data as the other Party and there is no element of joint control with regards to that Personal Data;
"Indexation"	the adjustment of an amount or sum in accordance with the Award Form;

"Information"	has the meaning given under section 84 of the Freedom of Information Act 2000;
"Information Commissioner"	the UK's independent authority which deals with ensuring information relating to rights in the public interest and data privacy for individuals is met, whilst promoting openness by public bodies;
"Initial Period"	the initial term of the Contract specified in the Award Form;
"Insolvency Event"	<p>with respect to any person, means:</p> <ul style="list-style-type: none"> (a) that person suspends, or threatens to suspend, payment of its debts, or is unable to pay its debts as they fall due or admits inability to pay its debts, or: <ul style="list-style-type: none"> (i) (being a company or a LLP) is deemed unable to pay its debts within the meaning of section 123 of the Insolvency Act 1986, or (ii) (being a partnership) is deemed unable to pay its debts within the meaning of section 222 of the Insolvency Act 1986; (b) that person commences negotiations with one or more of its creditors (using a voluntary arrangement, scheme of arrangement or otherwise) with a view to rescheduling any of its debts, or makes a proposal for or enters into any compromise or arrangement with one or more of its creditors or takes any step to obtain a moratorium pursuant to Section 1A and Schedule A1 of the Insolvency Act 1986 other than (in the case of a company, a LLP or a partnership) for the sole purpose of a scheme for a solvent amalgamation of that person with one or more other companies or the solvent reconstruction of that person; (c) another person becomes entitled to appoint a receiver over the assets of that person or a receiver is appointed over the assets of that person; (d) a creditor or encumbrancer of that person attaches or takes possession of, or a distress, execution or other such process is levied or enforced on or sued against, the whole or any part of that person's assets and such attachment or process is not discharged within fourteen (14) days; (e) that person suspends or ceases, or threatens to suspend or cease, carrying on all or a substantial part of its business; (f) where that person is a company, a LLP or a partnership: <ul style="list-style-type: none"> (i) a petition is presented (which is not dismissed within fourteen (14) days of its service), a notice is given, a

	<p>resolution is passed, or an order is made, for or in connection with the winding up of that person other than for the sole purpose of a scheme for a solvent amalgamation of that person with one or more other companies or the solvent reconstruction of that person;</p> <p>(ii) an application is made to court, or an order is made, for the appointment of an administrator, or if a notice of intention to appoint an administrator is filed at Court or given or if an administrator is appointed, over that person;</p> <p>(iii) (being a company or a LLP) the holder of a qualifying floating charge over the assets of that person has become entitled to appoint or has appointed an administrative receiver; or</p> <p>(iv) (being a partnership) the holder of an agricultural floating charge over the assets of that person has become entitled to appoint or has appointed an agricultural receiver; or</p> <p>(a) any event occurs, or proceeding is taken, with respect to that person in any jurisdiction to which it is subject that has an effect equivalent or similar to any of the events mentioned above;</p>
"Installation Works"	all works which the Supplier is to carry out at the beginning of the Contract Period to install the Goods in accordance with the Contract;
"Intellectual Property Rights" or "IPR"	<p>(a) copyright, rights related to or affording protection similar to copyright, rights in databases, patents and rights in inventions, semi-conductor topography rights, trade marks, rights in internet domain names and website addresses and other rights in trade or business names, goodwill, designs, Know-How, trade secrets and other rights in Confidential Information;</p> <p>(b) applications for registration, and the right to apply for registration, for any of the rights listed at (a) that are capable of being registered in any country or jurisdiction; and</p> <p>(c) all other rights having equivalent or similar effect in any country or jurisdiction;</p>
"Invoicing Address"	the address to which the Supplier shall Invoice the Buyer as specified in the Award Form;

"IP Completion Day"	has the meaning given to it in the European Union (Withdrawal Agreement) Act 2020;
"IPR Claim"	any claim of infringement or alleged infringement (including the defence of such infringement or alleged infringement) of any IPR, used to provide the Deliverables or otherwise provided and/or licensed by the Supplier (or to which the Supplier has provided access) to the Buyer in the fulfilment of its obligations under the Contract;
"IR35"	the off-payroll rules requiring individuals who work through their company pay the same tax and National Insurance contributions as an employee which can be found online at: https://www.gov.uk/guidance/ir35-find-out-if-it-applies ;
"Joint Controller Agreement"	the agreement (if any) entered into between the Buyer and the Supplier substantially in the form set out in Annex 2 of Schedule 20 (Processing Data);
"Joint Control"	where two or more Controllers jointly determine the purposes and means of Processing;
"Joint Controllers"	where two or more Controllers jointly determine the purposes and means of Processing;
"Key Staff"	the persons who the Supplier shall appoint to fill key roles in connection with the Services as listed in Annex 1 of Schedule 29 (Key Supplier Staff);
"Key Sub-Contract"	each Sub-Contract with a Key Subcontractor;
"Key Subcontractor"	<p>any Subcontractor:</p> <ul style="list-style-type: none"> (a) which is relied upon to deliver any work package within the Deliverables in their entirety; and/or (b) which, in the opinion of the Buyer performs (or would perform if appointed) a critical role in the provision of all or any part of the Deliverables; and/or (c) with a Sub-Contract with the Contract value which at the time of appointment exceeds (or would exceed if appointed) 10% of the aggregate Charges forecast to be payable under the Contract, <p>and the Supplier shall list all such Key Subcontractors in section 29 of the Award Form;</p>
"Know-How"	all ideas, concepts, schemes, information, knowledge, techniques, methodology, and anything else in the nature of know-how relating

	to the Deliverables but excluding know-how already in the other Party's possession before the Start Date;
"Law"	any law, subordinate legislation within the meaning of Section 21(1) of the Interpretation Act 1978, bye-law, right within the meaning of the European Union (Withdrawal) Act 2018 as amended by European Union (Withdrawal Agreement) Act 2020, regulation, order, regulatory policy, mandatory guidance or code of practice, judgment of a relevant court of law, or directives or requirements of any regulatory body with which the Supplier is bound to comply;
"Law Enforcement Processing"	processing under Part 3 of the DPA 2018;
"Losses"	all losses, liabilities, damages, costs, expenses (including legal fees), disbursements, costs of investigation, litigation, settlement, judgment, interest and penalties whether arising in contract, tort (including negligence), breach of statutory duty, misrepresentation or otherwise and "Loss" shall be interpreted accordingly;
"Marketing Contact"	shall be the person identified in the Award Form;
"Milestone"	an event or task described in the Implementation Plan;
"Milestone Date"	the target date set out against the relevant Milestone in the Implementation Plan by which the Milestone must be Achieved;
"Month"	a calendar month and "Monthly" shall be interpreted accordingly;
"National Insurance"	contributions required by the Social Security Contributions and Benefits Act 1992 and made in accordance with the Social Security (Contributions) Regulations 2001 (SI 2001/1004);
"New IPR"	<p>(a) IPR in items created by the Supplier (or by a third party on behalf of the Supplier) specifically for the purposes of the Contract and updates and amendments of these items including database schema; and/or</p> <p>(b) IPR in or arising as a result of the performance of the Supplier's obligations under the Contract and all updates and amendments to the same;</p> <p>but shall not include the Supplier's Existing IPR. Unless otherwise agreed in writing, any New IPR should be recorded in Schedule 36 and updated regularly;</p>

"New IPR Item"	means a deliverable, document, product or other item within which New IPR subsists;
"Notifiable Default"	means: (a) the Supplier commits a material Default; and/or (b) the performance of the Supplier is likely to cause or causes a Critical Service Level Failure;
"Occasion of Tax Non – Compliance"	where: (a) any tax return of the Supplier submitted to a Relevant Tax Authority on or after 1 October 2012 which is found on or after 1 April 2013 to be incorrect as a result of: (i) a Relevant Tax Authority successfully challenging the Supplier under the General Anti-Abuse Rule or the Halifax Abuse Principle or under any tax rules or legislation in any jurisdiction that have an effect equivalent or similar to the General Anti-Abuse Rule or the Halifax Abuse Principle; (ii) the failure of an avoidance scheme which the Supplier was involved in, and which was, or should have been, notified to a Relevant Tax Authority under the DOTAS or any equivalent or similar regime in any jurisdiction; and/or (b) any tax return of the Supplier submitted to a Relevant Tax Authority on or after 1 October 2012 which gives rise, on or after 1 April 2013, to a criminal conviction in any jurisdiction for tax related offences which is not spent at the Start Date or to a civil penalty for fraud or evasion;
"Open Book Data"	complete and accurate financial and non-financial information which is sufficient to enable the Buyer to verify the Charges already paid or payable and Charges forecast to be paid during the remainder of the Contract, including details and all assumptions relating to: (a) the Supplier's Costs broken down against each Good and/or Service and/or Deliverable, including actual capital expenditure (including capital replacement costs) and the unit cost and total actual costs of all Deliverables; (b) operating expenditure relating to the provision of the Deliverables including an analysis showing: (i) the unit costs and quantity of Goods and any other consumables and bought-in Deliverables; (ii) manpower resources broken down into the number and grade/role of all Supplier Staff (free of any

	<p>contingency) together with a list of agreed rates against each manpower grade;</p> <p>(iii) a list of Costs underpinning those rates for each manpower grade, being the agreed rate less the Supplier Profit Margin; and</p> <p>(iv) Reimbursable Expenses, if allowed under the Award Form;</p> <p>(c) Overheads;</p> <p>(d) all interest, expenses and any other third party financing costs incurred in relation to the provision of the Deliverables;</p> <p>(e) the Supplier Profit achieved over the Contract Period and on an annual basis;</p> <p>(f) confirmation that all methods of Cost apportionment and Overhead allocation are consistent with and not more onerous than such methods applied generally by the Supplier;</p> <p>(g) an explanation of the type and value of risk and contingencies associated with the provision of the Deliverables, including the amount of money attributed to each risk and/or contingency; and</p> <p>(h) the actual Costs profile for each Service Period;</p>
"Open Licence"	<p>means any material that is published for use, with rights to access and modify, by any person for free, under a generally recognised open licence including Open Government Licence as set out at http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/ and the Open Standards Principles documented at https://www.gov.uk/government/publications/open-standards-principles/open-standards-principles;</p>
"Open Licence Publication Material"	<p>means items created pursuant to the Contract which the Buyer may wish to publish as Open Licence which are supplied in a format suitable for publication under Open Licence;</p>
"Overhead"	<p>those amounts which are intended to recover a proportion of the Supplier's or the Key Subcontractor's (as the context requires) indirect corporate costs (including financing, marketing, advertising, research and development and insurance costs and any fines or penalties) but excluding allowable indirect costs apportioned to facilities and administration in the provision of Supplier Staff and accordingly included within limb (a) of the definition of "Costs";</p>
"Parent Undertaking"	<p>has the meaning set out in section 1162 of the Companies Act 2006;</p>
"Parliament"	<p>takes its natural meaning as interpreted by Law;</p>

"Party"	the Buyer or the Supplier and "Parties" shall mean both of them where the context permits;
"Personal Data"	has the meaning given to it in the UK GDPR or the EU GDPR as the context requires;
"Personal Data Breach"	has the meaning given to it in the UK GDPR or the EU GDPR as the context requires;
"Prescribed Person"	a legal adviser, an MP or an appropriate body which a whistle-blower may make a disclosure to as detailed in 'Whistleblowing: list of prescribed people and bodies', 24 November 2016, available online at: https://www.gov.uk/government/publications/blowing-the-whistle-list-of-prescribed-people-and-bodies--2/whistleblowing-list-of-prescribed-people-and-bodies ;
"Processing"	has the meaning given to it in the UK GDPR or the EU GDPR as the context requires;
"Processor"	has the meaning given to it in the UK GDPR or the EU GDPR as the context requires;
"Processor Personnel"	all directors, officers, employees, agents, consultants and suppliers of the Processor and/or of any Subprocessor engaged in the performance of its obligations under the Contract;
"Progress Meeting"	a meeting between the Buyer Authorised Representative and the Supplier Authorised Representative;
"Progress Report"	a report provided by the Supplier indicating the steps taken to achieve Milestones or delivery dates;
"Prohibited Acts"	<ul style="list-style-type: none"> (a) to directly or indirectly offer, promise or give any person working for or engaged by the Buyer or any other public body a financial or other advantage to: <ul style="list-style-type: none"> (i) induce that person to perform improperly a relevant function or activity; or (ii) reward that person for improper performance of a relevant function or activity; (b) to directly or indirectly request, agree to receive or accept any financial or other advantage as an inducement or a reward for improper performance of a relevant function or activity in connection with the Contract; or (c) committing any offence: <ul style="list-style-type: none"> (i) under the Bribery Act 2010 (or any legislation repealed or revoked by such Act); or

	<ul style="list-style-type: none"> (ii) under legislation or common law concerning fraudulent acts; or (iii) defrauding, attempting to defraud or conspiring to defraud the Buyer or other public body; or (d) any activity, practice or conduct which would constitute one of the offences listed under (c) above if such activity, practice or conduct had been carried out in the UK;
"Protective Measures"	<p>technical and organisational measures which must take account of:</p> <ul style="list-style-type: none"> (a) the nature of the data to be protected (b) harm that might result from Data Loss Event; (c) state of technological development (d) the cost of implementing any measures <p>including pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the such measures adopted by it;</p>
"Public Sector Body "	means a formally established organisation that is (at least in part) publicly funded to deliver a public or government service;
"Recall"	a request by the Supplier to return Goods to the Supplier or the manufacturer after the discovery of safety issues or defects (including defects in the IPR rights) that might endanger health or hinder performance;
"Recipient Party"	the Party which receives or obtains directly or indirectly Confidential Information;
"Rectification Plan"	<p>the Supplier's plan (or revised plan) to rectify its breach using the template in Schedule 25 (Rectification Plan) which shall include:</p> <ul style="list-style-type: none"> (a) full details of the Notifiable Default that has occurred, including a root cause analysis; (b) the actual or anticipated effect of the Notifiable Default; and (c) the steps which the Supplier proposes to take to rectify the Notifiable Default (if applicable) and to prevent such Notifiable Default from recurring, including timescales for such steps and for the rectification of the Notifiable Default (where applicable);

"Rectification Plan Process"	the process set out in Clause 11;
"Regulations"	the Public Contracts Regulations 2015 and/or the Public Contracts (Scotland) Regulations 2015 (as the context requires);
"Reimbursable Expenses"	<p>the reasonable out of pocket travel and subsistence (for example, hotel and food) expenses, properly and necessarily incurred in the performance of the Services, calculated at the rates and in accordance with the Buyer's expenses policy current from time to time, but not including:</p> <ul style="list-style-type: none"> (a) travel expenses incurred as a result of Supplier Staff travelling to and from their usual place of work, or to and from the premises at which the Services are principally to be performed, unless the Buyer otherwise agrees in advance in writing; and (b) subsistence expenses incurred by Supplier Staff whilst performing the Services at their usual place of work, or to and from the premises at which the Services are principally to be performed;
"Relevant Requirements"	all applicable Law relating to bribery, corruption and fraud, including the Bribery Act 2010 and any guidance issued by the Secretary of State pursuant to section 9 of the Bribery Act 2010;
"Relevant Tax Authority"	HMRC, or, if applicable, the tax authority in the jurisdiction in which the Supplier is established;
"Reminder Notice"	a notice sent in accordance with Clause 14.6.1 given by the Supplier to the Buyer providing notification that payment has not been received on time;
"Replacement Deliverables"	any deliverables which are substantially similar to any of the Deliverables and which the Buyer receives in substitution for any of the Deliverables, whether those goods are provided by the Buyer internally and/or by any third party;
"Replacement Supplier"	any third party provider of Replacement Deliverables appointed by or at the direction of the Buyer from time to time or where the Buyer is providing Replacement Deliverables for its own account, shall also include the Buyer;
"Request For Information"	a request for information or an apparent request relating to the Contract for the provision of the Deliverables or an apparent request for such information under the FOIA or the EIRs;
"Required Action"	means the action the Buyer will take and what Deliverables it will control during the Step-In Process;

"Required Insurances"	the insurances required by Schedule 22 (Insurance Requirements);
"Satisfaction Certificate"	the certificate (materially in the form of the document contained in Annex 2 of Part B of Schedule 8 (Implementation Plan and Testing) or as agreed by the Parties where Schedule 8 is not used in this Contract) granted by the Buyer when the Supplier has Achieved a Milestone or a Test;
"Schedules"	any attachment to the Contract which contains important information specific to each aspect of buying and selling;
"Security Management Plan"	the Supplier's security management plan prepared pursuant to Schedule 16 (Security) (if applicable);
"Security Policy"	the Buyer's security policy, referred to in the Award Form, in force as at the Start Date (a copy of which has been supplied to the Supplier), as updated from time to time and notified to the Supplier;
"Serious Fraud Office"	the UK Government body named as such as may be renamed or replaced by an equivalent body from time to time;
"Service Credits"	any service credits specified in the Annex to Part A of Schedule 10 (Service Levels) being payable by the Supplier to the Buyer in respect of any failure by the Supplier to meet one or more Service Levels;
"Service Levels"	any service levels applicable to the provision of the Deliverables under the Contract (which, where Schedule 10 (Service Levels) is used in this Contract, are specified in the Annex to Part A of such Schedule);
"Service Period"	has the meaning given to it in the Award Form;
"Services"	services made available by the Supplier as specified in Schedule 2 (Specification) and in relation to a Contract as specified in the Award Form;
"Sites"	any premises (including the Buyer Premises, the Supplier's premises or third party premises) from, to or at which: <ul style="list-style-type: none"> (a) the Deliverables are (or are to be) provided; or (b) the Supplier manages, organises or otherwise directs the provision or the use of the Deliverables; (c) those premises at which any Supplier Equipment or any part of the Supplier System is located (where ICT Services are being provided)

"SME"	an enterprise falling within the category of micro, small and medium sized enterprises defined by the Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium enterprises;
"Social Value"	the additional social benefits that can be achieved in the delivery of the Contract set out in Schedule 2 (Specification) and either (i) Schedule 10 (Service Levels) (where used) or (ii) Part C of Schedule 26 (Sustainability) (where Schedule 10 (Service Levels) is not used)
"Social Value KPIs"	the Social Value priorities set out in Schedule 2 (Specification) and either (i) Schedule 10 (Service Levels) (where used) or (ii) Part C of Schedule 26 (Sustainability) (where Schedule 10 (Service Levels) is not used)
"Social Value Report"	the report the Supplier is required to provide to the Buyer pursuant to Paragraph 1 of Part C of Schedule 26 (Sustainability) where Schedule 10 (Service Levels) is not used
"Special Terms"	any additional terms and conditions set out in the Award Form incorporated into the Contract;
"Special IPR Terms"	any additional terms and conditions relating to IPR set out in the Award Form incorporated into the Contract;
"Specific Change in Law"	a Change in Law that relates specifically to the business of the Buyer and which would not affect a Comparable Supply where the effect of that Specific Change in Law on the Deliverables is not reasonably foreseeable at the Start Date;
"Specification"	the specification set out in Schedule 2 (Specification), as may, in relation to the Contract, be supplemented by the Award Form;
"Standards"	any: <ul style="list-style-type: none"> (a) standards published by BSI British Standards, the National Standards Body of the United Kingdom, the International Organisation for Standardisation or other reputable or equivalent bodies (and their successor bodies) that a skilled and experienced operator in the same type of industry or business sector as the Supplier would reasonably and ordinarily be expected to comply with; (b) standards detailed in the specification in Schedule 2 (Specification); (c) standards detailed by the Buyer in the Award Form or agreed between the Parties from time to time;

	(d) relevant Government codes of practice and guidance applicable from time to time;
"Start Date"	the date specified on the Award Form;
"Step-In Process"	the process set out in Clause 13;
"Step-In Trigger Event"	<p>means:</p> <ul style="list-style-type: none"> (a) the Supplier's level of performance constituting a Critical Service Level Failure; (b) the Supplier committing a material Default which is irremediable; (c) where a right of termination is expressly reserved in this Contract; (d) an Insolvency Event occurring in respect of the Supplier or any Guarantor required under the Award Form; (e) a Default by the Supplier that is materially preventing or materially delaying the provision of the Deliverables or any material part of them; (f) the Buyer considers that the circumstances constitute an emergency despite the Supplier not being in breach of its obligations under this agreement; (g) the Buyer being advised by a regulatory body that the exercise by the Buyer of its rights under Clause 13 is necessary; (h) the existence of a serious risk to the health or safety of persons, property or the environment in connection with the Deliverables; and/or (i) a need by the Buyer to take action to discharge a statutory duty;
"Step-Out Plan"	means the Supplier's plan that sets out how the Supplier will resume the provision of the Deliverables and perform all its obligations under the Contract following the completion of the Step-In Process;
"Storage Media"	the part of any device that is capable of storing and retrieving data;
"Sub-Contract"	<p>any contract or agreement (or proposed contract or agreement), other than the Contract, pursuant to which a third party:</p> <ul style="list-style-type: none"> (a) provides the Deliverables (or any part of them); (b) provides facilities or services necessary for the provision of the Deliverables (or any part of them); and/or

	(c) is responsible for the management, direction or control of the provision of the Deliverables (or any part of them);
"Subcontractor"	any person other than the Supplier, who is a party to a Sub-Contract and the servants or agents of that person;
"Subprocessor"	any third Party appointed to process Personal Data on behalf of the Supplier related to the Contract;
"Subsidiary Undertaking"	has the meaning set out in section 1162 of the Companies Act 2006;
"Supplier"	the person, firm or company identified in the Award Form;
"Supplier Assets"	all assets and rights used by the Supplier to provide the Deliverables in accordance with the Contract but excluding the Buyer Assets;
"Supplier Authorised Representative"	the representative appointed by the Supplier named in the Award Form, or later defined in a Contract;
"Supplier Equipment"	the Supplier's hardware, computer and telecoms devices, equipment, plant, materials and such other items supplied and used by the Supplier (but not hired, leased or loaned from the Buyer) in the performance of its obligations under this Contract;
"Supplier Existing IPR"	any and all IPR that are owned by or licensed to the Supplier and which are or have been developed independently of the Contract (whether prior to the Start Date or otherwise)
"Supplier Existing IPR Licence"	means a licence to be offered by the Supplier to the Supplier Existing IPR as set out in Para 1.3 of Schedule 36.
"Supplier Group"	means the Supplier, its Dependent Parent Undertakings and all Subsidiary Undertakings and Associates of such Dependent Parent Undertakings;
"Supplier Non-Performance"	where the Supplier has failed to: <ul style="list-style-type: none"> (a) Achieve a Milestone by its Milestone Date; (b) provide the Goods and/or Services in accordance with the Service Levels ; and/or (c) comply with an obligation under the Contract;
"Supplier Profit"	in relation to a period, the difference between the total Charges (in nominal cash flow terms but excluding any Deductions and total Costs (in nominal cash flow terms) in respect of the Contract for the relevant period;

"Supplier Profit Margin"	in relation to a period or a Milestone (as the context requires), the Supplier Profit for the relevant period or in relation to the relevant Milestone divided by the total Charges over the same period or in relation to the relevant Milestone and expressed as a percentage;
"Supplier Staff"	all directors, officers, employees, agents, consultants and contractors of the Supplier and/or of any Subcontractor engaged in the performance of the Supplier's obligations under the Contract;
"Supplier's Confidential Information"	<p>(a) any information, however it is conveyed, that relates to the business, affairs, developments, IPR of the Supplier (including the Supplier Existing IPR) trade secrets, Know-How, and/or personnel of the Supplier;</p> <p>(b) any other information clearly designated as being confidential (whether or not it is marked as "confidential") or which ought reasonably to be considered to be confidential and which comes (or has come) to the Supplier's attention or into the Supplier's possession in connection with the Contract;</p> <p>Information derived from any of (a) and (b) above;</p>
"Supplier's Contract Manager"	the person identified in the Award Form appointed by the Supplier to oversee the operation of the Contract and any alternative person whom the Supplier intends to appoint to the role, provided that the Supplier informs the Buyer prior to the appointment;
"Supply Chain Information Report Template"	the document at Annex 1 of Schedule 18 (Supply Chain Visibility);
"Supporting Documentation"	sufficient information in writing to enable the Buyer to reasonably assess whether the Charges, Reimbursable Expenses and other sums due from the Buyer under the Contract detailed in the information are properly payable;
"Tender Response"	the tender submitted by the Supplier to the Buyer and annexed to or referred to in Schedule 4 (Tender);
"Termination Assistance"	the activities to be performed by the Supplier pursuant to the Exit Plan, and other assistance required by the Buyer pursuant to the Termination Assistance Notice;
"Termination Assistance Notice"	has the meaning given to it in Paragraph 5.1 of Schedule 30 (Exit Management);
"Termination Notice"	a written notice of termination given by one Party to the other, notifying the Party receiving the notice of the intention of the Party

	giving the notice to terminate the Contract on a specified date and setting out the grounds for termination;
"Test Issue"	any variance or non-conformity of the Deliverables or Deliverables from their requirements as set out in the Contract;
"Test Plan"	a plan: (a) for the Testing of the Deliverables; and (b) setting out other agreed criteria related to the achievement of Milestones;
"Tests and Testing"	any tests required to be carried out pursuant to the Contract as set out in the Test Plan or elsewhere in the Contract and "Tested" shall be construed accordingly;
"Third Party IPR"	Intellectual Property Rights owned by a third party which is or will be used by the Supplier for the purpose of providing the Deliverables;
"Third Party IPR Licence"	means a licence to the Third Party IPR as set out in Paragraph 1.6 of Schedule 36
"Transparency Information"	the Transparency Reports and the content of the Contract, including any changes to this Contract agreed from time to time, except for – (a) any information which is exempt from disclosure in accordance with the provisions of the FOIA, which shall be determined by the Buyer; and (b) Commercially Sensitive Information;
"Transparency Reports"	the information relating to the Deliverables and performance pursuant to the Contract which the Supplier is required to provide to the Buyer in accordance with the reporting requirements in Schedule 6 (Transparency Reports);
"UK GDPR"	Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (United Kingdom General Data Protection Regulation), as it forms part of the law of England and Wales, Scotland and Northern Ireland by virtue of section 3 of the European Union (Withdrawal) Act 2018, together with the Data Protection, Privacy and Electronic Communications (Amendments etc.) (EU Exit) Regulations 2019
"Variation"	means a variation to the Contract;
"Variation Form"	the form set out in Schedule 21 (Variation Form);

"Variation Procedure"	the procedure set out in Clause 28 (Changing the contract);
"VAT"	value added tax in accordance with the provisions of the Value Added Tax Act 1994;
"VCSE"	a non-governmental organisation that is value-driven and which principally reinvests its surpluses to further social, environmental or cultural objectives;
"Verification Period"	has the meaning given to it in the table in Annex 2 of Schedule 3 (Charges);
"Work Day"	7.5 Work Hours, whether or not such hours are worked consecutively and whether or not they are worked on the same day;
"Work Hours"	the hours spent by the Supplier Staff properly working on the provision of the Deliverables including time spent travelling (other than to and from the Supplier's offices, or to and from the Sites) but excluding lunch breaks;
"Worker"	any one of the Supplier Staff which the Buyer, in its reasonable opinion, considers is an individual to which Procurement Policy Note 08/15 (Tax Arrangements of Public Appointees) (https://www.gov.uk/government/publications/procurement-policy-note-0815-tax-arrangements-of-appointees) applies in respect of the Deliverables; and
"Working Day"	any day other than a Saturday or Sunday or public holiday in England and Wales unless specified otherwise by the Parties in the Award Form.

Schedule 2 (Specification)

This Schedule sets out what the Buyer wants.

For all Deliverables, the Supplier must help the Buyer comply with any specific applicable Standards of the Buyer.

Our social value priorities

These are our priorities in this procurement:

- Fighting Climate Change

SPECIFICATION OF REQUIREMENTS

Introduction

Cefas (The Centre for Environment, Fisheries and Aquaculture Science) is an executive agency of Defra. It is an applied science agency that primarily supports government decision making whilst extending its reach across public sector, the EU and wider markets where possible in regards to marine and closely related environments.

Our work takes us from freshwater to the open ocean, and includes both wild and farmed fish.

Our influence and leadership spans a wide spectrum of issues, including:

- climate change impacts and adaptation
- marine planning and environmental licensing
- sustainable fisheries management
- marine biodiversity and habitats
- fish and shellfish health and hygiene
- emergency response.

For further background information on Cefas, please visit our website at <http://www.cefas.co.uk>

Background

Cefas underpin the development of key government policy and UK national and international obligations with respect to the sustainable use of the seas through the generation of expert science and evidence. Access to assets that enable the generation and collection of key data are essential to this critical role. Primary amongst these assets is the research vessel (RV) Cefas Endeavour.

RV Cefas Endeavour enables the collection of marine scientific data and evidence to underpin our critical role in support of Defra and other government departments. RV Cefas Endeavour is also the primary vehicle through which Cefas can generate the necessary data to underpin national and international obligations such as sustainable fisheries, food security, biodiversity and conservation and environmental quality. It is important to note that RV Cefas Endeavour is also used for survey and monitoring work by multiple UK Government Departments, as well as UK academic institutions, and therefore supports wider UK sustainability objectives.

RV Cefas Endeavour is managed and maintained to achieve a planned operational life of 30 years, and having been delivered in 2003, this means the planned end of operational life is in 2033.

Following Cefas' inclusion within the UK Government's [National Shipbuilding Strategy: A refreshed strategy for a globally successful, innovative and sustainable shipbuilding enterprise¹](#), Cefas has commenced and will be continuing to develop a Project Business Case to assess how Cefas can best undertake marine scientific data collection beyond the planned operational life of RV Cefas Endeavour. The intention is to submit the Project Business Case (at Outline Business Case stage) for consideration as part of a future Comprehensive Spending Review (expected to be mid-late 2024).

Short-list of options

The Strategic Outline Case (SOC) process has created a short-list of options to be taken forward to the Outline Business Case (OBC) stage, as below:

- Option 1: RV Cefas Endeavour Continuation to 2048 (without targeted life extension investment).
- Option 2: RV Cefas Endeavour Continuation to 2048 (with targeted life extension investment).
- Option 8: New vessel to replace RV Cefas Endeavour with 'like-for-like' scientific capability.
- Option 9: New vessel to replace RV Cefas Endeavour with 'enhanced' scientific capability.

All options involve a vessel, whether this is the continued use of RV Cefas Endeavour beyond 2033, or the commissioning of a new research vessel which can make use of the latest scientific and technological advances.

There is therefore a requirement to draw upon a Specialist Marine Technical Consultant (SUPPLIER) to develop the Project Business Case and implement the 'Preferred Option' until it is in place, operational, and outside of warranty claims.

Requirement

Implementation Plan

Within 2 weeks of contract award, the Supplier will provide an Implementation Plan for the Authorities approval. This Implementation Plan will include (inter alia):

- all activity milestones / gateways.
- all deliverables.
- a critical path.
- the dependencies and risks which may affect the Implementation Plan.

1

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1061201/ CP_605 National Shipbuilding Strategy Refresh.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1061201/CP_605_National_Shipbuilding_Strategy_Refresh.pdf)

It should be noted that the dates in the Implementation Plan shall be firm dates (unless as otherwise agreed in writing with the Authority's Representative), and those related to the provision of the Services within the Supplier's control or responsibility shall be complied with by the Supplier.

PART A – Identification of the 'Preferred Option'

This part is required for all options to support the identification of the 'Preferred Option'. See [*PART A – Identification of the 'Preferred Option'*](#) for more details.

PART B – Development of the 'Preferred Option'

Following the identification of the 'Preferred Option' in *PART A – Identification of the 'Preferred Option'*, the Supplier is required to support the Authority in the development of the 'Preferred Option' (to such an extent that procurement of the 'Preferred Option' can take place upon approval of the OBC).

For the avoidance of doubt, only one option will be taken forward under *PART B – Development of the 'Preferred Option'*.

The Authority currently expect that all activities captured under *PART B – Development of the 'Preferred Option'* will be completed by the end of June 2024, however timings may be subject to change.

Where the 'Preferred Option' requires the development of a detailed design specification to support its procurement, the Supplier is responsible for producing all the necessary technical documentation to support an effective procurement exercise. Notwithstanding the above, any procurement exercise undertaken will be run and managed by the Authority.

PART C – Procurement of the 'Preferred Option'

Where the OBC (and thus the 'Preferred Option') is supported by the project's governance and approvals process, the 'Preferred Option' will need to be formally procured to support the development and submission of the Full Business Case (FBC). The Supplier is required to support the Authority in the procurement of the 'Preferred Option'.

For the avoidance of doubt, only one option will be taken forward under *PART C – Procurement of the 'Preferred Option'*.

PART D – Implementation of the 'Preferred Option'

Where the procured FBC is supported by the project's governance and approvals process, and the UK Government decides to implement the 'Preferred Option', this will need to be formally delivered. The Supplier is required to support the Authority in the implementation of the 'Preferred Option'.

For the avoidance of doubt, only one option will be taken forward under *PART D – Implementation of the 'Preferred Option'*.

[Subject to Contract]

Schedule 2 (Specification)

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Options Summary

The following table provides a summary of activities for each of the short-listed options.

	Option 1	Option 2	Option 8	Option 9
PART A – Identification of the ‘Preferred Option’ Activities for all options are required under this Part A.	<ul style="list-style-type: none"> • <i>Activity 0: Evaluation of Business Case Assumptions</i> • <i>Activity 1: ‘Do Nothing’ Risk Assessment</i> • <i>Activity 2: Vessel Management Mechanisms</i> 	<ul style="list-style-type: none"> • <i>Activity 1: Life Extension Risk Assessment</i> • <i>Activity 2: Life Extension Vessel Management Mechanisms</i> 	<ul style="list-style-type: none"> • <i>Activity 1: ‘Like-for-like’ Replacement Vessel Risk Assessment</i> • <i>Activity 2: ‘Like-for-like’ Replacement Vessel Management Mechanisms</i> 	<ul style="list-style-type: none"> • <i>Activity 1: ‘Enhanced’ Replacement Vessel Risk Assessment</i> • <i>Activity 2: ‘Enhanced’ Replacement Vessel Management Mechanisms</i>
PART B – Development of the ‘Preferred Option’ Only activities for the ‘Preferred Option’ selected in Part A will be developed under Part B.	No activities required.	<ul style="list-style-type: none"> • <i>Activity 3: Life Extension Statement of Requirements</i> • <i>Activity 4: Life Extension Specification</i> • <i>Activity 5: Life Extension Estimation Summary Report</i> 	<ul style="list-style-type: none"> • <i>Activity 3: Assess the Authority’s Statement of Requirements</i> • <i>Activity 4: Research Vessel Design Specification</i> • <i>Activity 5: Estimation</i> • <i>Activity 6: Procurement of Shipyard(s): Responsibilities</i> • <i>Activity 7: Procurement of Shipyard(s): Advertisement</i> • <i>Activity 8: Procurement of Shipyard(s): Market Engagement</i> • <i>Activity 9: Procurement of Shipyard(s): Documentation Preparation</i> 	<ul style="list-style-type: none"> • <i>Activity 3: Assess the Authority’s Statement of Requirements</i> • <i>Activity 4: Research Vessel Design Specification</i> • <i>Activity 5: Estimation</i> • <i>Activity 6: Procurement of Shipyard(s): Responsibilities</i> • <i>Activity 7: Procurement of Shipyard(s): Advertisement</i> • <i>Activity 8: Procurement of Shipyard(s): Market Engagement</i> • <i>Activity 9: Procurement of Shipyard(s): Documentation Preparation</i>

	Option 1	Option 2	Option 8	Option 9
PART C – Procurement of the ‘Preferred Option’ Only activities for the ‘Preferred Option’ selected in Part A will be developed under Part C	<ul style="list-style-type: none"> <u>Activity 3: Procurement of Vessel Managers</u> 	<ul style="list-style-type: none"> <u>Activity 6: Procurement of Vessel Managers</u> 	<ul style="list-style-type: none"> <u>Activity 10: Procurement of Shipyard(s): Selection Questionnaire (SQ)</u> <u>Activity 11: Procurement of Shipyard(s): Tender Assessment</u> <u>Activity 12: Shipyard Plan Approval</u> 	<ul style="list-style-type: none"> <u>Activity 10: Procurement of Shipyard(s): Selection Questionnaire (SQ)</u> <u>Activity 11: Procurement of Shipyard(s): Tender Assessment</u> <u>Activity 12: Shipyard Plan Approval</u>
PART D – Implementation of the ‘Preferred Option’ Only activities for the ‘Preferred Option’ selected in Part A will be developed under Part D.	<ul style="list-style-type: none"> <u>Activity 4: Ongoing Technical Support</u> 	<ul style="list-style-type: none"> <u>Activity 7: Ongoing Technical Support</u> 	<ul style="list-style-type: none"> <u>Activity 13: Procurement of Vessel Managers</u> <u>Activity 14: Supervision of Construction</u> <u>Activity 15: Supervision of Trials Programme and Remedial Work</u> <u>Activity 16: Supervision of Guarantee Period</u> <u>Activity 17: Supervision of Final Guarantee Docking (12 months after delivery)</u> <u>Activity 18: Ongoing Technical Support</u> 	<ul style="list-style-type: none"> <u>Activity 13: Procurement of Vessel Managers</u> <u>Activity 14: Supervision of Construction</u> <u>Activity 15: Supervision of Trials Programme and Remedial Work</u> <u>Activity 16: Supervision of Guarantee Period</u> <u>Activity 17: Supervision of Final Guarantee Docking (12 months after delivery)</u> <u>Activity 18: Ongoing Technical Support</u>

Contract Summary

The initial Contract Period shall be for the delivery of Parts A and B only. The initial Contract Period shall be a period of two years and the Authority reserves the right to extend the initial Contract Period by one year.

At its sole discretion, the Authority reserves the right to extend the Contract beyond the initial Contract Period to include Activities required for the ‘Preferred Option’ under Part C (upon conclusion of Part B), and Part D (upon conclusion of Part C), until a maximum end date of 31 March 2034.

Although the Contract Period shall be for the delivery of all Parts set out in the Specification (Parts A, B, C, and D), progression beyond Parts A and B to any and each subsequent stage will require express approval from the Authority. The Authority may, subject to the necessary approvals being in place and confirming the Services and Charges with the Supplier for Parts C and or D, progress to Parts C and or D of the Contract.

The Authority would also draw the Supplier's attention to the Authority's right to terminate the Contract pursuant to clause 14.3.

Annual Indexation

Commercial prices for all activities under Parts C and D are based on rates for financial year 2023/2024 and exclusive of annual indexation / inflationary uplift.

Indexation, determined by the following Indexation Factor calculation, is to be carried out on an annual basis on the 01 April (referred to as Contract Anniversary Date), with the first indexation taking place on 01 April 2024. Such indexation will uplift commercial prices for the subsequent 12-month period (e.g. 01 April 2024 to 31 March 2025).

- EARN03 Average Weekly Earnings - Not Seasonally Adjusted Average Weekly Earnings

Index K5EU (Professional, Scientific and Technical Activities), within EARN03 Average Weekly Earnings - Not Seasonally Adjusted Average Weekly Earnings (Index Figures Excluding Bonuses, Including Arrears), shall provide an element of indexation linked to the headline estimates of earnings growth for the relevant business area.

For the purposes of the formula below:

- $K5EU_{Anniversary}$ is the value of K5EU for the month of December in the calendar Year immediately prior to the Contract Anniversary Date; and
- $K5EU_{Baseline}$ is the value of K5EU for December 2022 (i.e. 213.3)

- CPI: Consumer Prices Inflation Index

Index D7BT of CPI shall provide an element of indexation linked to the Consumer Price Inflation Index and shall **not** include owner occupier's housing costs.

For the purposes of the formula below:

- $CPI_{Anniversary}$ is the value of CPI for the month of December in the calendar Year immediately prior to the Contract Anniversary Date; and
- $CPI_{Baseline}$ is the value of CPI for December 2022 (i.e. 127.2).

$$\text{Indexation Factor} = \left(A \times \frac{K5EU_{Anniversary}}{K5EU_{Baseline}} \right) + \left(B \times \frac{CPI_{Anniversary}}{CPI_{Baseline}} \right)$$

As commercial rates for the Supplier will be determined by their own balance of pay (e.g. salaries, employers contributions, etc.) and non-pay (e.g. overhead, consumables, etc.) related costs, Suppliers are required to detail (and evidence/justify through provision of their most recent set of audited accounts) what proportion (between 0 and 1) of their costs are made up of:

- pay (and thus subject to uplift related to K5EU), and
- non-pay (and thus subject to uplift related to D7BT).

Example: An organisations costs are 60% related to pay and 40% related to non-pay, meaning that $A = 0.6$ and $B = 0.4$ in the above Indexation Factor equation.

Data regarding Index K5EU and Index D7BT shall be obtained from the Office for National Statistics².

Where Contributing Elements are changed/discontinued during the period of the contract, suitable Contract Change Requests and Notes will be used to capture the proposed new indexation mechanism.

Specification of Requirements Guidance

The following sections outline the services required.

As the delivery of [*PART A – Identification of the ‘Preferred Option’*](#) is required for all options, all of the activities required are collated together.

As Parts B, C, and D only require completion for the ‘Preferred Option’, these have been compiled for each individual option as follows:

- [*Option 1: RV Cefas Endeavour Continuation to 2048 \(without targeted life extension investment\)*](#)
- [*Option 2: RV Cefas Endeavour Continuation to 2048 \(with targeted life extension investment\)*](#)
- [*Option 8 / 9: New vessel to replace RV Cefas Endeavour*](#)

As the activities for Options 8 and 9 are the same, the activities requirements have been collated under a single heading (*Option 8 / 9: New vessel to replace RV Cefas Endeavour*). For all other options, activities are different and are specific to the option under consideration.

² Office for National Statistics - <https://www.ons.gov.uk/>

[Subject to Contract]

Schedule 2 (Specification)

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The Supplier should note that where the following activities refer to 'Shipyard', this can either mean a single Shipyard acting in isolation, or a collection of Shipyards and associated Suppliers acting as a consortium with one lead representative.

PART A – Identification of the ‘Preferred Option’

Outside of this Contract, the preliminary identification of the ‘Preferred Option’ will be worked up by the Authority and the Authority’s Business Case consultant prior to the Contract commencing.

However, the Supplier will need to perform Activity 0 to ensure that assumptions made in the preliminary identification process are correct.

Activity 0: Evaluation of Business Case Assumptions

- (a) Upon commencement of the Contract, the Supplier will be required to evaluate the assumptions made during the preliminary identification of the ‘Preferred Option’ and propose any additions and/or amendments as may be required. For the avoidance of doubt, this will include an evaluation of the assumed costs associated with each of the short-listed options to ensure that the determination of the ‘Preferred Option’ is based on informed commercial/financial/economic estimates.

To support this the following activities are also envisaged for PART A:

Option 1: RV Cefas Endeavour Continuation to 2048 (without targeted life extension investment)

Activity 1: ‘Do Nothing’ Risk Assessment

- (a) The Supplier will:
 - (i) review the specification, design, and performance of the current research vessel (RV Cefas Endeavour), and in conjunction with the Authority and RV Cefas Endeavour’s appointed vessel management company, determine what delivery objectives are being (or could be) affected by system performance and/or design issues.
 - (ii) produce a ‘Do Nothing’ Risk Assessment which presents the likelihood and impact of such system performance issues and/or design failures occurring and assigning an anticipated timescale for such issues/failures to be realised, along with controls / mitigators to manage such risk.

Activity 2: Vessel Management Mechanisms

- (a) With due consideration of the ‘Do Nothing’ Risk Assessment, and with input from the Authority’s Specialist Marine Legal Services contractor, the Supplier will:
 - (i) review the existing contract mechanism in place between the Authority and RV Cefas Endeavour’s appointed vessel management company.
 - (ii) consider whether the existing contract mechanism (and associated technical risk management and liability) are suited to continued use of RV Cefas Endeavour without targeted investment.
 - (iii) in the form of a ‘Do Nothing’ Vessel Management Options Plan:

- A. propose modifications to the existing contract mechanism to better manage the risk and liability of an aging asset without targeted investment.
- B. forecast how much a vessel management services contract will cost operating with:
 - the existing contract mechanism without proposed modifications.
 - the existing contract mechanism with proposed modifications.

Option 2: RV Cefas Endeavour Continuation to 2048 (with targeted life extension investment)

Activity 1: Life Extension Risk Assessment

- (a) The Supplier will:
 - (i) review the specification, design, and performance of the current research vessel (RV Cefas Endeavour), and in conjunction with the Authority and RV Cefas Endeavour's appointed vessel management company, determine what delivery objectives are being (or could be) affected by system performance and/or design failures.
 - (ii) produce a Life Extension Risk Assessment which presents the likelihood and impact of such system performance issues and/or design failures occurring and assigning an anticipated timescale for such issues/failures to be realised.

Activity 2: Life Extension Vessel Management Mechanisms

- (a) With due consideration of the Life Extension Risk Assessment, and with input from the Authority's Specialist Marine Legal Services contractor, the Supplier will:
 - (i) review the existing contract mechanism in place between the Authority and RV Cefas Endeavour's appointed vessel management company.
 - (ii) consider whether the existing contract mechanism (and associated technical risk management and liability) are suited to continued use of RV Cefas Endeavour with the identified life extension investment.
 - (iii) In the form of a Life Extension Vessel Management Options Plan:
 - A. propose modifications to the existing contract mechanism to better manage the risk and liability of an aging asset with the identified life extension investment.
 - B. forecast how much a vessel management services contract will cost operating with:
 - the existing contract mechanism without proposed modifications.
 - the existing contract mechanism with proposed modifications.

Option 8: New vessel to replace RV Cefas Endeavour with 'like-for-like' scientific capability

Activity 1: 'Like-for-like' Replacement Vessel Risk Assessment

- (a) The Supplier will:
 - (i) review the specification, design, and performance of the current research vessel (RV Cefas Endeavour), and in conjunction with the Authority and RV Cefas Endeavour's appointed vessel management company, determine what delivery objectives could be affected by a new vessel with similar system performance and/or design limitations.
 - (ii) produce a 'Like-for-like' Replacement Vessel Risk Assessment which presents the likelihood and impact of such system performance and/or design limitations of a new vessel and assigning an anticipated timescale for such limitations to be realised.

Activity 2: 'Like-for-like' Replacement Vessel Management Mechanisms

- (a) With due consideration of the 'Like-for-like' Replacement Vessel Risk Assessment, and with input from the Authority's Specialist Marine Legal Services contractor, the Supplier will:
 - (i) review the existing contract mechanism in place between the Authority and RV Cefas Endeavour's appointed vessel management company.
 - (ii) consider whether the existing contract mechanism (and associated technical risk management and liability) are suited to a new vessel with 'RV Cefas Endeavour' scientific capability.
 - (iii) In the form of a 'Like-for-like' Replacement Vessel Management Options Plan:
 - A. propose modifications to the existing contract mechanism to better manage the risk and liability of a new vessel with the identified scientific capability.
 - B. forecast how much a vessel management services contract will cost operating with:
 - the existing contract mechanism without proposed modifications.
 - the existing contract mechanism with proposed modifications.

Option 9: New vessel to replace RV Cefas Endeavour with 'enhanced' scientific capability

Activity 1: 'Enhanced' Replacement Vessel Risk Assessment

- (a) The Supplier will:
 - (i) review the specification, design, and performance of the current research vessel (RV Cefas Endeavour), and in conjunction with the Authority and RV Cefas Endeavour's appointed vessel management company, determine what delivery objectives could be affected by a new vessel with enhanced scientific capability.

- (ii) produce a 'Enhanced' Replacement Vessel Risk Assessment which presents the likelihood and impact of such delivery objective affects (by a new vessel with enhanced scientific capability), proposing mitigations/controls to manage the risks, and assigning an anticipated timescale for such affects to be realised.

Activity 2: 'Enhanced' Replacement Vessel Management Mechanisms

- (a) With due consideration of the 'Enhanced' Replacement Vessel Risk Assessment, and with input from the Authority's Specialist Marine Legal Services contractor, the SUPPLIER will:
 - (i) review the existing contract mechanism in place between the Authority and RV Cefas Endeavour's appointed vessel management company.
 - (ii) consider whether the existing contract mechanism (and associated technical risk management and liability) are suited to a new vessel with 'RV Cefas Endeavour' scientific capability.
 - (iii) In the form of a 'Like-for-like' Replacement Vessel Management Options Plan:
 - A. propose modifications to the existing contract mechanism to better manage the risk and liability of a new vessel with the identified scientific capability.
 - B. forecast how much a vessel management services contract will cost operating with:
 - the existing contract mechanism without proposed modifications.
 - the existing contract mechanism with proposed modifications.

PART A of this Contract will be concluded upon determination of the 'Preferred Option', which is expected to be in November/December 2023.

Option 1: RV Cefas Endeavour Continuation to 2048 (without targeted life extension investment)

If selected as the 'Preferred Option', the following Parts and associated activities will be required.

PART B – Development of the 'Preferred Option'

No activities required.

PART C – Procurement of the 'Preferred Option'

Activity 3: Procurement of Vessel Managers

- (a) The Supplier will not be required to support the Authority in the SQ process related to the procurement of vessel managers.
- (b) The Supplier will nominate an "intended engineer" to support the Authority in the selection and evaluation of tender submissions relating to the procurement of Vessel Management Services for RV Cefas Endeavour.
- (c) As an assigned evaluator, the Supplier's intended engineer will receive access to all tender submissions via the Authority's procurement portal and follow the Authority's procurement processes in full.
- (d) Associated with this, the Supplier's intended engineer will need to:
 - (i) complete the evaluation documentation in line with all other evaluators, and in line with all guidance provided by the Authority.
 - (ii) participate in a Consensus Meeting in which the Supplier's intended engineer will discuss their scores and comments for each tender submission, and their reasoning for such scores and comments.
 - (iii) attend the premises / ships of short-listed Suppliers (determined through the initial evaluation) for the purposes of an on-site evaluation and scenario exercise.
 - (iv) attend Clarification Meetings with each tenderer in Lowestoft.
 - (v) review and evaluate (as per initial tender submissions) any subsequent tender submissions from the short-listed tenderers.
 - (vi) assist the Authority in de-briefing tenderers (as required).
 - (vii) advise the Authority as may be required.
- (e) The evaluation process will be concluded to determine the successful tenderer.

PART D – Implementation of the 'Preferred Option'

Activity 4: Ongoing Technical Support

- (a) The Authority requires ad-hoc technical support to advise the Authority of Vessel Manager performance (for a 5-year period following the procurement activity under Activity 3).
- (b) The requirements of this are unknown at the time of writing and a stand-alone scope of work will be drafted for each occasion, however it is expected to at least include a periodic Vessel Condition Survey (and production of an associated report) to assess whether the condition of the vessel is in line with contractual compliance.

Option 2: RV Cefas Endeavour Continuation to 2048 (with targeted life extension investment)

If selected as the 'Preferred Option', the following Parts and associated activities will be required.

PART B – Development of the 'Preferred Option'

Activity 3: Life Extension Statement of Requirements

- (a) Building on the Life Extension Risk Assessment, the Supplier will:
 - (i) review the specification, design, and performance of the current research vessel (RV Cefas Endeavour), and in consultation with the Authority and RV Cefas Endeavour's appointed vessel management company, determine what works well, and what could be improved by future vessel modifications.
 - (ii) assess efficiency of the Life Extension Statement Of Requirements (LXSOR) with respect to the purpose of the research vessel and the Authority's present and future operations / scientific delivery requirements.
 - (iii) challenge the proposed research vessel's key features and planned operational life for cost / build implications.
 - (iv) suggest amendments which might be made to the LXSOR with respect to current design practice, innovation, life cycle costing, or other considerations in order to improve the efficiency of the design (EEXI) and value for money. For the avoidance of doubt, the Supplier may be required to perform an EEXI assessment of RV Cefas Endeavour to enable comparison.
 - (v) create and submit a Formal LXSOR Appraisal Report to the Authority.
 - (vi) discuss and agree a Final LXSOR (the Final LXSOR) with the Authority. The Authority will produce the Final LXSOR draft documentation for review and agreement with the Supplier.

The Authority will provide the Supplier with the Final LXSOR document and the definitive Final LXSOR shall be that held by the Authority.

Activity 4: Life Extension Specification

- (a) The Supplier will prepare the proposed Life Extension Specification (Life Extension Specification) conforming strictly to the Final LXSOR (unless as otherwise agreed in writing with the Authority's authorised representative). The Life Extension Specification is to be produced in sufficiently comprehensive detail and in a suitable format for it to be used by:
 - (i) Vessel Management Services contractors to tender a fixed cost for the management of RV Cefas Endeavour, including the realisation of the proposed modifications.
 - (ii) the SUPPLIER and the Authority to assess the performance of the Vessel Management Services contractor's proposals and delivery.
 - (iii) the SUPPLIER, Vessel Management Services contractors, and the Authority during modifications to assess the compliance of the vessel, the associated plant, and outfit with the original intentions of the Authority and the Final LXSOR.

- (iv) the Supplier and the Authority to assess the operational performance of the research vessel at all the stages of this Specification.
- (v) The Supplier will include consideration of the aspects including (but not limited to):
 - A. endurance.
 - B. propulsion system.
 - C. fuel type (including transition/blending where appropriate), storage, and handling systems.
 - D. shafting torsional and vibration characteristics.
 - E. draught and stability.
 - F. efficiency, speed, power, and fuel consumption.
 - G. propeller design in relation to service speeds MCR, NCR and RPM (including trawling speeds, Dynamic Positioning (DP) and loitering).
 - H. electrical power including 'clean' supplies.
 - I. hull form.
 - J. classification status.
 - K. statutory requirements.
 - L. margins for weather.
 - M. ageing.
 - N. crewing levels and specialist roles.
 - O. compliance with regulations for which the vessel currently holds exemptions.
- (b) The Supplier will include at least the following in the proposed Life Extension Specification:
 - (i) the general particulars of the research vessel.
 - (ii) hull specification.
 - (iii) machinery specification.
 - (iv) piping specification.
 - (v) electrical specification.
 - (vi) how the Authority's scientific requirements will be achieved.
 - (vii) how both underwater radiated noise (URN) and internal noise will be managed, monitored, and minimised.
 - (viii) acceptable limitations relating to the specified research vessel's performance, plant, operation, and ability.
 - (ix) how availability, reliability and maintainability requirements will be achieved.
 - (x) During selection and specification of the most appropriate fuelling and propulsion system, an evaluation study of the merits of the alternatives considered shall be prepared by the SUPPLIER. The study should include information relating to: space; weight; capital cost; operating cost; full life cost; slow speed operation; DP operation; practical design options, shore power provision, and the ability to reduce carbon and other harmful emissions to desired levels over the Authority's planned operational life-time of the vessel.
- (c) The Supplier will produce outline general arrangement drawings (where different from the original) to support the Life Extension Specification including (but not limited to) the following:
 - (i) General Arrangement Plan and Profile.
 - (ii) Midship Section.
 - (iii) Preliminary Tank Plan.
 - (iv) Working deck arrangements.
 - (v) General arrangement of Accommodation.
 - (vi) General Arrangement of 'Tween decks and Holds.

- (vii) Wheelhouse Arrangement.
 - (viii) Arrangement of Storerooms.
 - (ix) Engine / hull isolation rafts or mounting.
 - (x) Propulsion and electrical schematic.
 - (xi) other plans considered necessary by the Supplier and/or the Authority to affect the Life Extension Specification.
- (d) Prepare preliminary design information (where different from the original) including (but not limited to) the following to support the Life Extension Specification:
 - (i) Lines plans.
 - (ii) Hydrostatic cross curves of stability.
 - (iii) Calculations of scantlings.
 - (iv) Weights and centres of gravity.
 - (v) Capacities.
 - (vi) Dead weight.
 - (vii) Displacement.
 - (viii) Trim.
 - (ix) Static and dynamic stability.
 - (x) DP capability and manoeuvrability.
 - (xi) Electrical load.
 - (xii) Powering.
 - (xiii) URN.
 - (xiv) Electro Magnetic Compatibility.
 - (xv) General performance information.
 - (xvi) Other calculations and drawings considered by the Supplier and/or the Authority to be necessary to prove the design.
- (e) In developing the Life Extension Specification, the Supplier will consult with acknowledged authorities and carry out tests and analyses to prove their designs sufficiently (where different from the original) for the purpose of satisfying the Final LXSOR and produce detailed reports for inclusion in the specification including (but not limited to) the following:
 - (i) Hull form – hydrodynamic analyses and model testing including:
 - A. Provide a model of the research vessel and carry out all necessary analyses and model tests to prove the design.
 - B. Assess the results of analyses and model tests based upon the Life Extension Specification draft and Final LXSOR including stability, speed, seakeeping, manoeuvrability, powering, and bollard pull.
 - C. specification of a suitable roll damping tank including detailed drawings suitable for inclusion in the Tender documentation, showing structure and diagrammatic piping arrangements.
 - (ii) URN:
 - A. Carry out a finite element analysis of the engine installation design taking account of the vibration and noise characteristics of all main reciprocating and rotating machines and shafting.
 - B. Assess the URN signature and compare against both the original URN profile (when RV Cefas Endeavour was delivered in 2003) and the Final LXSOR specification.
 - (iii) consulting with specialists needed to prove the design.
- (f) During specification, the Supplier will compile a list of particular equipment, plant, and/or service requirements considered essential by the Supplier and / or by the Authority to satisfy the Life Extension Specification. The list will show equipment type, the item's specification requirements, and reasoning for specific parameters. This list will form a Life Extension Equipment

Requirements List. Whenever practicable, and for guidance only, a reasonable number of example items shall be included for each item on the Life Extension Equipment Requirements List. Visits to or by manufacturers / Suppliers are to be recorded in an Engagement Record for future reference giving the date, the reason for the visit, a summary of events/activities, and the names of persons involved. Events leading to inclusions of items in the Life Extension Specification are to be clearly indicated. The vessel management services contractor will contract with any and all equipment manufacturers and will be responsible for supplier / manufacturer default at all stages. Where the vessel managers procure such suppliers, they are to conform to UK Government's Procurement Policy Note (PPN) 01/18 (Supply Chain Visibility).

The conclusion of this stage will result in a collection of documents which will be referred to hereinafter as the Life Extension Specification.

Activity 5: Life Extension Estimation Summary Report

- (a) The Supplier will prepare a Life Extension Estimation Summary Report which shall include an estimation of the following:
 - (i) time required for, and cost of, each modification (outlining confidence levels in estimates made, and highlighting where concurrent activities may be possible).
 - (ii) items or areas particularly vulnerable to problems which might cause delay / increased risk.
 - (iii) RV Cefas Endeavour's future annual operating costs (which is expected to change over time following modifications being implemented).

The Supplier will also list dependencies which may affect the life extension estimations, any assumptions made when estimating, and the expected accuracy of estimations (with upper and lower limits of variability).

PART C – Procurement of the 'Preferred Option'

Activity 6: Procurement of Vessel Managers

- (a) The Supplier will not be required to support the Authority in the SQ process related to the procurement of vessel managers.
- (b) The Supplier will nominate an "intended engineer" to support the Authority in the selection and evaluation of tender submissions relating to the procurement of Vessel Management Services for RV Cefas Endeavour.
- (c) As an assigned evaluator, the Supplier's intended engineer will receive access to all tender submissions via the Authority's procurement portal and follow the Authority's procurement processes in full.
- (d) Associated with this, the Supplier's intended engineer will need to:
 - (i) complete the evaluation documentation in line with all other evaluators, and in line with all guidance provided by the Authority.
 - (ii) participate in a Consensus Meeting in which the Supplier's intended engineer will discuss their scores and comments for each tender submission, and their reasoning for such scores and comments.

- (iii) attend the premises / ships of short-listed tenderers (determined through the initial evaluation) for the purposes of an on-site evaluation and scenario exercise.
 - (iv) attend Clarification Meetings with each tenderer in Lowestoft.
 - (v) review and evaluate (as per initial tender submissions) any subsequent tender submissions from the short-listed tenderers.
 - (vi) assist the Authority in de-briefing tenderers (as required).
 - (vii) advise the Authority as may be required.
- (e) The evaluation process will be concluded to determine the successful tenderer.
- (f) The Supplier will advise the Authority in codifying an Upgrade Programme (including the most appropriate stage payment arrangements if necessary).

PART D – Implementation of the ‘Preferred Option’

Activity 7: Ongoing Technical Support

- (c) The Authority requires ad-hoc technical support to advise the Authority of Vessel Manager performance (for a 5-year period following the procurement activity under Activity 6).
- (d) The requirements of this are unknown at the time of writing and a stand-alone scope of work will be drafted for each occasion, however it is expected to at least include a periodic Vessel Condition Survey (and production of an associated report) to assess whether the condition of the vessel is in line with contractual compliance.

Option 8 / 9: New vessel to replace RV Cefas Endeavour

If Option 8 or Option 9 is selected as the 'Preferred Option', the following Parts and associated activities will be required.

PART B – Development of the 'Preferred Option'

Activity 3: Assess the Authority's Statement of Requirements

- (a) The Supplier will:
 - (i) review the specification, design, and performance of the current research vessel (RV Cefas Endeavour), and in consultation with the Authority, determine what works well, and what could be improved for any future vessel modified/built for the Authority's delivery.
 - (ii) assess efficiency of the Authority's Statement Of Requirements (SOR) with respect to the purpose of the research vessel and the Authority's present and future operations / scientific delivery requirements.
 - (iii) challenge the proposed research vessel's key features and planned operational life for cost / build implications.
 - (iv) suggest amendments which might be made to the SOR with respect to current design practice, innovation, life cycle costing, or other considerations in order to improve the efficiency of the design (when comparing EEDI to the current vessel's EEXI) and value for money. For the avoidance of doubt, the Supplier may be required to perform an EEXI assessment of RV Cefas Endeavour to enable comparison.
 - (v) create and submit a Formal SOR Appraisal Report to the Authority.
 - (vi) discuss the Formal SOR Appraisal Report and agree a Final SOR (the Final SOR) with the Authority. The Authority will produce the Final SOR draft documentation for review and agreement with the SUPPLIER.

The Authority will provide the Supplier with the Final SOR document and the definitive Final SOR shall be that held by the Authority.

Activity 4: Research Vessel Design Specification

- (a) The Supplier will prepare the proposed Research Vessel Design Specification (RV Design Specification) conforming strictly to the Final SOR (unless as otherwise agreed in writing with the Authority's authorised representative). The RV Design Specification is to be produced in sufficiently comprehensive detail and in a suitable format for it to be used by:
 - (i) Shipyards to tender a fixed cost for the design and build of the research vessel.
 - (ii) the Supplier and the Authority to assess the performance of the Shipyard's design and build.
 - (iii) all parties during Shipyard design and build to assess the compliance of the emerging vessel, the associated plant, and outfit with the original intentions of the Authority and the Final SOR.
 - (iv) the Supplier and the Authority to assess the operational performance of the research vessel at all the stages of this Specification.

- (v) The Supplier will include consideration of the aspects including (but not limited to):
 - A. endurance.
 - B. propulsion system.
 - C. fuel type (including transition/blending where appropriate), storage, and handling systems.
 - D. shafting torsional and vibration characteristics.
 - E. draught and stability.
 - F. efficiency, speed, power and fuel consumption.
 - G. propeller design in relation to service speeds MCR, NCR and RPM (including trawling speeds, Dynamic Positioning (DP) and loitering).
 - H. electrical power including 'clean' supplies.
 - I. hull form.
 - J. classification status.
 - K. statutory requirements.
 - L. margins for weather.
 - M. ageing.
 - N. crewing levels and specialist roles.
- (b) The Supplier will include at least the following in the proposed RV Design Specification:
 - (i) the general particulars of the research vessel.
 - (ii) hull specification.
 - (iii) machinery specification.
 - (iv) piping specification.
 - (v) electrical specification.
 - (vi) how the Authority's scientific requirements will be achieved.
 - (vii) how both underwater radiated noise (URN) and internal noise will be minimised.
 - (viii) acceptable limitations relating to the specified research vessel's performance, plant, operation, and ability.
 - (ix) how availability, reliability and maintainability requirements will be achieved.
 - (x) During selection and specification of the most appropriate fuelling and propulsion system, an evaluation study of the merits of the alternatives considered shall be prepared by the Supplier. The study should include information relating to: space; weight; capital cost; operating cost; full life cost; slow speed operation; DP operation; practical design options, shore power provision, and the ability to reduce carbon and other harmful emissions to desired levels over the Authority's planned operational life-time of the vessel.
- (c) The Supplier will produce outline general arrangement drawings to support the RV Design Specification including (but not limited to) the following:
 - (i) General Arrangement Plan and Profile.
 - (ii) Midship Section.
 - (iii) Preliminary Tank Plan.
 - (iv) Working deck arrangements.
 - (v) General arrangement of Accommodation.
 - (vi) General Arrangement of 'Tween decks and Holds.
 - (vii) Wheelhouse Arrangement.
 - (viii) Arrangement of Storerooms.
 - (ix) Engine / hull isolation rafts or mounting.
 - (x) Propulsion and electrical schematic.

- (xi) other plans considered necessary by the Supplier and/or the Authority to affect the RV Design Specification.
- (d) Prepare preliminary design information including (but not limited to) the following to support the RV Design Specification:
 - (i) Lines plans.
 - (ii) Hydrostatic cross curves of stability.
 - (iii) Calculations of scantlings.
 - (iv) Weights and centres of gravity.
 - (v) Capacities.
 - (vi) Dead weight.
 - (vii) Displacement.
 - (viii) Trim.
 - (ix) Static and dynamic stability.
 - (x) DP capability and manoeuvrability.
 - (xi) Electrical load.
 - (xii) Powering.
 - (xiii) URN.
 - (xiv) Electro Magnetic Compatibility.
 - (xv) General performance information.
 - (xvi) Other calculations and drawings considered by the Supplier and/or the Authority to be necessary to prove the design.
- (e) In developing the RV Design Specification, the Supplier will consult with acknowledged authorities and carry out tests and analyses to prove their concept designs sufficiently for the purpose of satisfying the Final SOR and produce detailed reports for inclusion in the specification including (but not limited to) the following:
 - (i) Hull form – hydrodynamic analyses and model testing including:
 - A. Provide a model of the research vessel and carry out all necessary analyses and model tests to prove the design.
 - B. Assess the results of analyses and model tests based upon the RV Design Specification draft and Final SOR including stability, speed, seakeeping, manoeuvrability, powering, and bollard pull.
 - C. specification of a suitable roll damping tank including detailed drawings suitable for inclusion in the Tender documentation, showing structure and diagrammatic piping arrangements.
 - (ii) URN:
 - A. Carry out a finite element analysis of the engine installation design taking account of the vibration and noise characteristics of all main reciprocating and rotating machines and shafting.
 - B. Assess the URN signature and compare against the Final SOR specification.
 - (iii) consulting with specialists needed to prove the design.
- (f) During specification, the Supplier will compile a list of particular equipment, plant, and/or service requirements considered essential by the Supplier and / or by the Authority to satisfy the RV Design Specification. The list will show equipment type, the item's specification requirements, and reasoning for specific parameters. This list will form an Equipment Requirements List. Whenever practicable, and for guidance only, a reasonable number of example items shall be included for each item on the Equipment Requirements List. Visits to or by manufacturers / suppliers are to be recorded in an Engagement Record for future reference giving the date, the reason for the visit, a summary of events/activities, and the names of persons involved. Events leading to inclusions of items in the RV Design

Specification are to be clearly indicated. The Shipyard will contract with any and all equipment manufacturers and will be responsible for Supplier / manufacturer default at all stages. Where the Shipyard procures such Suppliers, they are to conform to UK Government's Procurement Policy Note (PPN) 01/18 (Supply Chain Visibility).

- (g) The Supplier shall also be required to produce a colour 3-dimensional (3D) CAD drawing of the concept design, along with images of the concept design to show how parts of the vessel (inter alia) may look:
 - (i) Bridge.
 - (ii) Mess facilities.
 - (iii) Scientific laboratories.
 - (iv) Cabin.
 - (v) Recreation rooms.

The conclusion of this stage will result in a collection of documents which will be referred to hereinafter as the RV Design Specification.

Activity 5: Estimation

- (a) The Supplier will prepare an estimation of the following:
 - (i) time required for, and cost of, each Shipyard design and build stage (outlining confidence levels in estimates made).
 - (ii) launch and delivery date.
 - (iii) items or areas particularly vulnerable to problems which might cause delay.
 - (iv) the research vessel's future annual operating costs.

The Supplier will also list dependencies which may affect the RV estimations, any assumptions made when estimating, and the expected accuracy of estimations (with upper and lower limits of variability).

Activity 6: Procurement of Shipyard(s): Responsibilities

- (a) The Authority and its Specialist Marine Legal Services contractor will draft the Shipbuilding Conditions of Contract, "Shipbuilding Contract" using BIMCO's NEWBUILDCON (or similar).
- (b) The "design and build" tendering process will be subject to applicable regulations. It will aim to generate competition and innovation in the market and be framed to encourage participation from the UK supply chain (where procurement law and international obligations allow), compliant international players, and new entrants, with appropriate use of pre-procurement activities.
- (c) The Authority will contract the "design and build" of the research vessel with a Shipyard which has adequate financial resources and technical ability to design, build, trial, deliver, and guarantee the research vessel in strict compliance with the RV Design Specification. This shall be determined through the Selection Questionnaire (SQ) process.
- (d) The Authority will chair the Shipyard selection process, with the Supplier forming part of the evaluation panel(s).
- (e) The Authority will act with advice from its Specialist Marine Legal Services contractor, expert financial, and other advisers (outside this Contract to which this specification refers) at the discretion of the Authority.

- (f) The Supplier will be responsible to the Authority for the provision of technical expertise, along with expertise in current good practice, in relating the RV Design Specification to the Shipbuilding Contract form.

Activity 7: Procurement of Shipyard(s): Advertisement

- (a) The Authority will advertise the procurement process. When it is released to tenderers, the Bidder Pack will in all cases be distributed by the Authority using the Authority's procurement portal.

Activity 8: Procurement of Shipyard(s): Market Engagement

- (a) The Supplier will advise Authority about the necessary market engagement events with potential Shipyards (and any other relevant technical organisations) to support the development of the commercial and management cases of the project business case.
- (b) The Supplier's intended senior build-supervision surveyor(s) may be required to accompany the Authority during any visits to Shipyards and/or any other relevant technical organisations (where these are deemed appropriate and necessary).

Activity 9: Procurement of Shipyard(s): Documentation Preparation

- (a) To shortlist Suppliers, the Supplier will support the Authority with the preparation of a Selection Questionnaire (SQ) which complies with the UK Government's Procurement Policy Note (PPN) 03/23 (Standard Selection Questionnaire) or as otherwise updated/replaced.
- (b) The Supplier will support the Authority's preparation of an Invitation to Tender (ITT) consisting of draft Contract documents (produced by the Authority), the RV Design Specification (produced by Supplier) and information to assist in tender evaluation including:
 - (i) schedule of prices and rates.
 - (ii) method statement.
 - (iii) staff and resources.
 - (iv) quality plan.
 - (v) comments and additional information considered necessary by the Authority and / or the Supplier.
 - (vi) arrangements for Shipyard presentations which will take place at the Shipyard facility and will be supported by a tour of the facility in order for the Shipyard to be able to more appropriately demonstrate how the Authority's project will be delivered at their site.
- (c) The tender documents will be drafted to encourage tenderers to quote for using:
 - (i) Equipment Requirements List, where specified, and
 - (ii) alternative equipment, clearly identifying the reasoning, complete with technical and cost advantages.
- (d) The Supplier will advise the Authority on whether the procurement should enable the Shipyard(s) to select and contract with their own sub-contractors, or whether certain construction tasks should be tendered for separately (with the Shipyard(s) needing to bid on the basis of co-operating with the

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Schedule 2 (Specification)

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Authority's nominated sub-contractors). Technical and cost advantages, as well as risk associated with either option, must be clearly identified.

- (e) Innovative bids in addition to compliant bids should be encouraged, and the Supplier should advise the Authority about how best to achieve this.
- (f) The S Supplier's intended senior build-supervision surveyor(s) may also be required accompany the Authority to research vessel visits across Europe in order to develop the tender documentation.

PART C – Procurement of the ‘Preferred Option’

Activity 10: Procurement of Shipyard(s): Selection Questionnaire (SQ)

- (a) To shortlist tenderers, the Supplier will support the Authority with the evaluation of a Selection Questionnaire (SQ) which complies with UK Government’s Public Contract Regulations (2015) and Procurement Policy Note (PPN) 03/23 (Standard Selection Questionnaire) or as otherwise updated/replaced.
- (b) The Supplier will form part of the evaluation panel alongside the Authority during the SQ evaluation and short-listing process at Lowestoft.
- (c) The Authority will reduce the number of candidates in accordance with UK Government’s Public Contract Regulations (2015) or as otherwise updated/replaced to produce a final shortlist to be invited to tender.

Activity 11: Procurement of Shipyard(s): Tender Assessment

- (a) The SUPPLIER will nominate an “intended engineer” to support the Authority in the selection and evaluation of tender submissions relating to the procurement of Shipyards for the “design and build” of a new research vessel.
- (b) As an assigned evaluator, the Supplier’s intended engineer will receive access to all tender submissions via the Authority’s procurement portal and follow the Authority’s procurement processes in full.
- (c) Associated with this, the Supplier’s intended engineer will need to:
 - (i) complete the evaluation documentation in line with all other evaluators, and in line with all guidance provided by the Authority.
 - (ii) participate in a Consensus Meeting in which the Supplier’s intended engineer will discuss their scores and comments for each tender submission, and their reasoning for such scores and comments.
 - (iii) attend the premises / ships of short-listed tenderers (determined through the initial evaluation) for the purposes of an on-site presentations and a tour of each facility in order for the Shipyard(s) to be able to more appropriately demonstrate how the Authority’s project will be delivered at their site.
 - (iv) attend Clarification Meetings with each tenderer in Lowestoft.
 - (v) review and evaluate (as per initial tender submissions) any subsequent tender submissions from the short-listed tenderers.
 - (vi) advise the Authority in codifying a Build Programme including the most appropriate stage payment arrangements with the Shipyard.
 - (vii) assist the Authority in de-briefing tenderers (as required).
 - (viii) advise the Authority as may be required.

Activity 12: Shipyard Plan Approval

- (a) The Supplier shall have the delegated authority to approve and certify plans consistent with the instructions described in Activity 12 (b) to (h) below. Where plans are not compliant with the RV Design Specification, the Supplier may still approve and certify the plans provided that the non-compliance does not impact adversely on the Final SOR, scientific operational efficiency, or general operational efficiency described in Activity 12 (f) below and the non-compliance is not at variance with the Equipment Requirements List and does not vary the cost.

- (b) Any variances to the Shipbuilding Contract or amendment to the Final SOR or RV Design Specification must be approved by the Authority. Such changes would be managed in accordance with the UK Government's Public Contract Regulations (2015) or as otherwise updated/replaced.
- (c) The successful Shipyard's tendering drawings will be re-submitted by the Shipyard to the Authority and the Supplier for approval in the case of amendments made during the tender process using the Plan Approval Procedure described below.
- (d) The Supplier will set up the following Plan Approval Procedure:
 - (i) The Authority and the Supplier will both receive each plan from the Shipyard.
 - (ii) The Supplier will send comments on each plan to the Authority.
 - (iii) The Authority will reply to the Supplier with their own advisory comments and opinions.
 - (iv) The Supplier will assess the effect of the consequent plan amendment and report back to the Authority.
 - (v) The Authority will revise their advice to the Supplier as appropriate.
 - (vi) The Supplier will approve and certify the plan with amendment as necessary.
- (e) The Supplier will liaise with the Shipyard and the Authority, and return copies of the amended, approved drawings to the Shipyard within appropriate deadlines. Several hundred drawings and a larger number of technical orders can be expected for approval by the Supplier: The Supplier is to allow sufficient resources to ensure that the Shipyard is not delayed by Plan Approval.

The Supplier shall give due consideration to availability, reliability, and maintainability.
- (f) Subject to the Plan Approval Procedure and within the delegated authority described above, the Supplier will be responsible for Plan Approval defined as examining all relevant documentation produced by the Shipyard during the Shipyard's research vessel design including:
 - (i) the Shipyard's drawings.
 - (ii) the Shipyard's technical orders and designation.
 - (iii) the Shipyard's calculations.

and advising the Shipyard of any errors (which must be corrected) or amendments (which must be made) in order that:

 - (iv) the research vessel will comply with the RV Design Specification.
 - (v) the research vessel will comply with all relevant statutory and classification regulations.
 - (vi) the Authority's requirements are met in relation to scientific operational efficiency (e.g. arrangement of laboratory benching) and general operational efficiency (e.g. engine room control layout).
- (g) The Supplier will record all error corrections and amendments in a suitable log and make regular and timely running reports to the Authority on errors in and amendments to the Shipyard's Design to include:
 - (i) date, description, and correction/amendment.
 - (ii) effect on costings (+/-).
 - (iii) effect on Build Programme (+/-).
 - (iv) precise decisions, negotiations, and discussions with the Shipyard.
 - (v) any effect on compliance with the Final SOR or RV Design Specification or scientific and general operational efficiency.

- (h) In the event of changes to the RV Design Specification initiated by the Authority or by the Shipyard, the Supplier will be responsible for advising the Authority and for negotiating the cost and effect (+/-) on the Build Programme with the Shipyard on behalf of the Authority. The authority for final agreement to such changes and their cost and programme effects will rest with the Authority. Such changes would be managed in accordance with the UK Government's Public Contract Regulations (2015) or as otherwise updated/replaced.
- (i) The conclusion of Plan Approval will result in the Shipyard's Design which has been certified by the Supplier to be compliant with:
 - (i) the RV Design Specification.
 - (ii) all relevant statutory and classification regulations.
 - (iii) the Authority's requirements in relation to scientific operational efficiency general operational efficiency.
 - (iv) Certified variances to the RV Design Specification and / or Final SOR.

PART D – Implementation of the 'Preferred Option'

Activity 13: Procurement of Vessel Managers

- (a) The Supplier will not be required to support the Authority in the SQ process related to the procurement of vessel managers.
- (b) The Supplier will nominate an "intended engineer" to support the Authority in the selection and evaluation of tender submissions relating to the procurement of Vessel Management Services for RV Cefas Endeavour.
- (c) As an assigned evaluator, the Supplier's intended engineer will receive access to all tender submissions via the Authority's procurement portal and follow the Authority's procurement processes in full.
- (d) Associated with this, the Supplier's intended engineer will need to:
 - (i) complete the evaluation documentation in line with all other evaluators, and in line with all guidance provided by the Authority.
 - (ii) participate in a Consensus Meeting in which the Supplier's intended engineer will discuss their scores and comments for each tender submission, and their reasoning for such scores and comments.
 - (iii) attend the premises / ships of short-listed tenderers (determined through the initial evaluation) for the purposes of an on-site evaluation and scenario exercise.
 - (iv) attend Clarification Meetings with each tenderer in Lowestoft.
 - (v) review and evaluate (as per initial tender submissions) any subsequent tender submissions from the short-listed Suppliers.
 - (vi) assist the Authority in de-briefing tenderers (as required).
 - (vii) advise the Authority as may be required.
- (e) The evaluation process will be concluded to determine the successful tenderer.

Activity 14: Supervision of Construction

- (a) The Supplier will employ suitably qualified Surveyor(s) to approve and certify, at all stages of construction, that the research vessel and all her plant and equipment conforms to the Shipyard's Design as well as all relevant statutory and classification requirements. The Surveyor(s) will oversee operations at the main Shipyard and at other places where Research Vessel parts and units, machinery and plant are built.

Surveyor(s) will in all cases be appointed subject to the Authority's approval. The Surveyor(s) tasks will include:

- (i) active and continuous communications with the Authority Project Manager on all aspects of build progress including the items listed at (ii) below.
- (ii) presentation of monthly written reports with photographs and other evidence to the Authority including:
 - A. construction progress.
 - B. delivery of materials and sub contractors' items.
 - C. effect on progress of weather.
 - D. Shipyard disputes.
 - E. Shipyard labour and plant allocation and labour disputes.
 - F. weight of steel erected.
 - G. surveys and tests completed.
 - H. target dates and their attainment.
 - I. foreseeable delays.
 - J. estimates of completion dates.
 - K. agreed design changes.
 - L. costs of variances to the Contract.
 - M. reports of alleged force majeure incidents.
- (iii) supervise construction of the research vessel from commencement of cutting steel and ensure that all work is carried out in compliance with the Shipbuilding Contract and with the approved Shipyard drawings so that the research vessel and research vessel's construction, plant and performance will comply with the Shipyard Design, statutory, and class regulations.
- (iv) supervise the testing of the research vessel and all associated machinery and equipment during construction, sea trials, and until commencement of the delivery voyage.
- (v) render advice and assistance generally in connection with the construction of the research vessel.
- (vi) maintain a Defects Log and a Log of Negotiations, Disputes, and Decisions between the Supplier, the Authority, and the Shipyard.
- (vii) monitor build progress against the Build Programme and make timely warnings to avoid delay.
- (viii) inform the Shipyard in writing of any material or standard of workmanship which does not conform to the Shipbuilding Contract or to the approved drawings and ensure that the Shipyard takes steps to correct any such fault, such written information to be logged and copied to the Authority.
- (ix) certify stage payments under the Shipbuilding Contract and subject to the approval of the Authority.
- (x) steel inspection; overseeing the research vessel construction including: plate preparation, welding test and x-ray and protective coating; section alignment, fitting out and installation; on a day-to-day basis throughout the Build Programme and at all places of construction.
- (xi) overseeing correct installation of all plant, wiring, pipework, and equipment.
- (xii) ensure that all relevant construction standards are complied with.
- (xiii) survey and witness testing of main items of machinery and equipment at the manufacturers ' works as appropriate.

- (xiv) ensure that the research vessel is constructed in compliance with all relevant statutory requirements and conforms to the requirements of the Maritime and Coastguard Agency (MCA); attend, with the MCA Surveyor, and witness all tests and trials required by the MCA.
- (xv) ensure that the requirements of the Classification Surveyor are complied with by the Shipyard and attend, with the Classification Surveyor, and witness all tests and trials required by the Classification rules.
- (xvi) ensure that the weight of hull, outfit, machinery, and fittings is progressively recorded and checked against design estimates and that any variance is assessed for its effect on the vessel such as its trim, stability, and speed.
- (xvii) ensure that availability, reliability, and maintainability requirements are met.
- (b) The Supplier will make sure that all defects noted in the Defects Log are corrected and that satisfactory remedial work is undertaken by the Shipyard and certified by the Supplier prior to delivery.
- (c) The Supplier shall have the delegated authority to approve and certify items consistent with the Shipbuilding Contract.
- (d) The Supplier will be given written delegated authority to approve and certify variances to the Shipbuilding Contract where the variations are not "significant".
- (e) Significant variations can only be approved by the Authority, with such changes managed in accordance with the UK Government's Public Contract Regulations (2015) or as otherwise updated/replaced.
- (f) "Significant variation" means a variation to the Shipbuilding Contract which could result in:
 - (i) cost increase³.
 - (ii) cost reduction³.
 - (iii) increase of build duration overall³.
 - (iv) decrease of build duration³.
 - (v) variance from the Equipment Requirements List.
 - (vi) variance from the RV Design Specification as amended during Plan Approval.
- (g) Any variances to the Shipbuilding Contract or amendment to the Final SOR or RV Design Specification must be approved by the Authority, with such changes managed in accordance with the UK Government's Public Contract Regulations (2015) or as otherwise updated/replaced.

Activity 15: Supervision of Trials Programme and Remedial Work

- (a) In order to test the performance of the RV for compliance with the Final SOR and RV Design Specification, the Supplier, with the Authority, will agree a Trials Programme prepared by the Shipyard and attend all trials.
- (b) The Supplier will supervise and certify any remedial work required as a result of trials through to the end of the guarantee period.

³ Cefas will determine the magnitude at which the cost or duration change is considered 'significant' in consultation with the Specialist Marine Technical Consultant and put this in writing during the supervision of construction stage.

- (c) For this activity, the Supplier is expected to work with both the Authority and the appointed vessel managers to ensure compliance with Flag and Class requirements.

Activity 16: Supervision of Guarantee Period

- (a) The Supplier will liaise with the Authority and visit the research vessel in service, as considered necessary by the Authority during the guarantee period, in order to continue logging defects for rectification before expiry of the guarantee period. Where practicable the Supplier will arrange, supervise, and approve and certify defect correction with the Shipyard during this period.
- (b) For this activity, the Supplier is expected to work with both the Authority and the appointed vessel managers to ensure compliance with Flag and Class requirements.

Activity 17: Supervision of Final Guarantee Docking (12 months after delivery)

- (a) The Supplier will arrange and supervise a final guarantee docking of the research vessel.
- (b) The Supplier will supervise all remedial work in the manner specified in Activity 15 above and approve and certify that all defects have been dealt with satisfactorily and that the research vessel and the research vessel's performance conforms in full with the Final SOR and RV Design Specification.
- (c) For this activity, the Supplier is expected to work with both the Authority and the appointed vessel managers to ensure compliance with Flag and Class requirements.

Activity 18: Ongoing Technical Support

- (e) The Authority requires ad-hoc technical support to advise the Authority of Vessel Manager performance (for a 5-year period following the delivery of the vessel to the Authority).
- (f) The requirements of this are unknown at the time of writing and a stand-alone scope of work will be drafted for each occasion, however it is expected to at least include a periodic Vessel Condition Survey (and production of an associated report) to assess whether the condition of the vessel is in line with contractual compliance.

Continuous Improvement

The Authority requires the Supplier to continuously improve the delivery of service in accordance with Schedule 11 of the Contract.

Social Value

For all options and activities, the Supplier will be required to minimise the environmental impacts from travel during the performance of the contract. Travel should only be undertaken when necessary, with digital/online solutions considered first, and domestic flights avoided.

All travel should take into account:

- Carbon emissions when considering method of travel.
- Care and safety of employees.
- Cost.
- Operational effectiveness.
- Convenience.

Where project related car travel is actively avoided as a result of using a green transport programme such as public transport or carpooling, the Supplier will report to the Authority car miles saved on the project. The Supplier will also report mileage where low or no emission vehicles have been utilised or innovative measures have been used to safeguard the environment and respond to the climate emergency minimising the carbon footprint of the contract.

For overseas Travel accommodation the Supplier will adopt HMRC's country by country rate⁴ as the basis for the ceiling for subsistence claims.

⁴ <https://www.gov.uk/guidance/expenses-rates-for-employees-travelling-outside-the-uk>

Schedule 3 (Charges)

1. How Charges are calculated

1.1 The Charges:

1.1.1 shall be calculated in accordance with the terms of this Schedule;

1.1.2 cannot be increased except as specifically permitted by this Schedule and in particular shall only be subject to Indexation where specifically stated in this Schedule; and

1.2 Any variation to the Charges payable under a Contract must be agreed between the Supplier and the Buyer and implemented using the procedure set out in this Schedule.

1.3 Once Parts A and B of the Contract have been concluded, if the Buyer determines to proceed to Part C and or D of the Contract (the Extension Period), the Buyer will provide the Supplier with a more detailed scope for the Services required of the Supplier for Part C and or D, as applicable, as set out in the Statement of Requirement and Design Specification of the Specification. The Supplier shall then provide the Buyer with a resource schedule for Part C and D using the rates set out in Table 1 in Annex 1 of Schedule 3 (Charges) and the Indexation set out at Annex 2 of Schedule 3 (Charges), for review and approval by the Buyer. If approved by the Buyer, the figures contained in the Supplier's resource schedule shall be converted into a baseline lump sum fee and become the Charges for Part C or D of the Contract, as applicable, which shall replace any and all other rates or proposed charges for Part C or D of the Contract and shall be agreed by the parties in writing, initialled by the Buyer's Representative and the Supplier's Representative and annexed to this Contract.

2. The pricing mechanisms

2.1 Subject to clause 1.3 of this Schedule, the pricing mechanisms and prices set out in Annex 1 shall be available for use in calculation of Charges in the Contract.

3. Are costs and expenses included in the Charges

3.1 Except as expressly set out in Paragraph 5 below, or otherwise stated in the Award Form, all costs and expenses of Supplier are included in the Charges.

4. When the Supplier can ask to change the Charges

4.1 The Charges will be fixed for the first two years for Parts A and B following the Start Date. After such time, if the Initial Period is extended, the Supplier can request that Charges for Parts A and B be adjusted as set out below.

4.2 If the Supplier is given notice that the Initial Period will be extended for Parts A and B, the Supplier shall notify the Buyer within one (1) Month of receiving such notice where it wants to request an increase in Charges for extension

of the Initial Period. If the Supplier does not give notice in time, then it will not be able to request an increase for such period.

- 4.3 Apart from the above, Charges can only be adjusted on each following yearly anniversary of the commencement of Part C and or D, as applicable, (the date of each such anniversary is also a "**Review Date**") in accordance with Clauses 5.1.1 to 5.1.4.
- 4.4 For Parts C and or D only, the Supplier shall give the Buyer at least three (3) Months' notice in writing prior to a Review Date where it wants to request an increase. If the Supplier does not give notice in time then it will only be able to request an increase prior to the next Review Date.
- 4.5 Any notice requesting an increase shall include:
 - 4.5.1 a list of the Charges to be reviewed;
 - 4.5.2 for each of the Charges under review, written evidence of the justification for the requested increase including:
 - a) a breakdown of the cost components that comprise the relevant part of the Charges;
 - b) details of the movement in the different identified cost components of the relevant Charge;
 - c) reasons for the movement in the different identified cost components of the relevant Charge;
 - d) evidence that the Supplier has attempted to mitigate against the increase in the relevant cost components;
- 4.6 The Buyer shall consider each request for a price increase. The Buyer may grant Approval to an increase at its sole discretion.
- 4.7 Where the Buyer approves an increase then it will be implemented from the first (1st) Working Day following the relevant date, Review Date or such later date as the Buyer may determine at its sole discretion and Annex 1 shall be updated accordingly.

5. Other events that allow the Supplier to change the Charges

- 5.1 The Charges can also be varied (and Annex 1 will be updated accordingly) due to:
 - 5.1.1 a Specific Change in Law in accordance with Clauses 28.6 to 28.8;
 - 5.1.2 a benchmarking review in accordance with Schedule 12 (Benchmarking);
 - 5.1.3 a request from the Supplier, which it can make at any time, to decrease the Charges;
 - 5.1.4 indexation, for Parts C and or D only, where Annex 1 states that a particular Charge or any component is "subject to Indexation" in which event Paragraph 6 below shall apply.

6. When the Charges are linked to inflation

- 6.1 Once the baseline Charges for Parts C and or D have been fixed pursuant to Clause 1.3 of this Schedule, thereafter, for purposes of yearly adjustments only, the Charges for Parts C and or D shall be adjusted in line with changes as set out in Annex 2 (Indexation). All other costs, expenses, fees and charges shall not be adjusted to take account of any inflation, change to exchange rate, change to interest rate or any other factor or element which might otherwise increase the cost to the Supplier.
- 6.2 Charges shall not be indexed during Parts A and B, including there should be no indexation during any extension of the Initial Period.
- 6.3 Where Annex 1 states a Charge is subject to Indexation then it will be indexed as set out in Annex 2 by reference to the financial year following the the date Part C or D commences, as applicable. As set out more fully in Annex 2, Charges for Part C or D shall be indexed on each following yearly anniversary to reflect the percentage change in the EARN03 and CPI since the previous change.
- 6.4 Where the CPI Index as used in Annex 2 (Indexation):
 - 6.4.1 is updated (for example due to it being provisional), then the indexation calculation shall also be updated unless the Buyer and the Supplier agree otherwise;
 - 6.4.2 is no longer published, the Buyer and the Supplier shall agree a fair and reasonable replacement that will have substantially the same effect.

7. When you will be reimbursed for travel and subsistence

- 7.1 Expenses shall only be recoverable where:
 - 7.1.1 the Time and Materials pricing mechanism is used; and
 - 7.1.2 the Award Form states that recovery is permitted; and
 - 7.1.3 they are Reimbursable Expenses and are supported by Supporting Documentation.
- 7.2 The Buyer shall provide a copy of their current expenses policy to the Supplier upon request.

Annex 1: Rates and Prices

Table 1: Time and Materials

The Supplier (and its Subcontractor) shall not be entitled to include any uplift for risks or contingencies within its day rates.

The rates and Charges below shall be subject to variation by way of Indexation.

PARTS C & D: Grade/Role	Daily Rate (£ ex VAT)
<i>Project Director</i>	
<i>Project Manager</i>	
<i>Principal Engineer</i>	
<i>Senior Engineer</i>	
<i>Engineer</i>	
<i>CAD Designer</i>	
<i>CAD Draughtsperson</i>	
<i>Site supervisor</i>	
<i>Project Support</i>	

Table 2: Fixed Prices

The rates and Charges below shall not be subject to variation by way of Indexation.

All Charges relating to Parts A and B of the Contract, including any extension of the Initial Period

PART A - All Options	Fixed Charge (£)
Activity 0	£
Total fixed price for 'PART A - All Options' activity but excluding VAT	£ 5,973.00

PART A - Option 1	Fixed Charge (£)
Activity 1	£
Activity 2	£
Total fixed price for all 'PART A - Option 1' activities but excluding VAT	£ 7,414.00

PART A - Option 2	Fixed Charge (£)
Activity 1	£

Activity 2	£	
Total fixed price for all 'PART A - Option 2' activities but excluding VAT	£	7,414.00

PART A - Option 8	Fixed Charge (£)	
Activity 1	£	
Activity 2	£	
Total fixed price for all 'PART A - Option 8' activities but excluding VAT	£	7,414.00

PART A - Option 9	Fixed Charge (£)	
Activity 1	£	
Activity 2	£	
Total fixed price for all 'PART A - Option 9' activities but excluding VAT	£	7,414.00

The following Part B fixed charges will be updated to reflect the preferred option following confirmation by the Authority.

PART B - Option 1	Fixed Charge (£)	
No activity	No cost	

PART B - Option 2	Fixed Charge (£)	
Activity 3	£	
Activity 4	£	
Activity 5	£	
PART B Option 2 - Continuous Improvement Commercial Efficiency Savings	£	
Total fixed price for all 'PART B - Option 2' activities but excluding VAT	£	292,097.00

PART B - Option 8	Fixed Charge (£)	
Activity 3	£	
Activity 4	£	

Activity 5	£	
Activity 6	£	
Activity 7	£	
Activity 8	£	
Activity 9	£	
PART B Option 8 - Continuous Improvement Commercial Efficiency Savings	£	
Total fixed price for all 'PART B - Option 8' activities but excluding VAT	£	376,485.00

PART B - Option 9	Fixed Charge (£)	
Activity 3	£	
Activity 4	£	
Activity 5	£	
Activity 6	£	
Activity 7	£	
Activity 8	£	
Activity 9	£	
PART B Option 9 - Continuous Improvement Commercial Efficiency Savings	£	
Total fixed price for all 'PART B - Option 9' activities but excluding VAT	£	370,261.00

Annex 2: Indexation

Where permitted under this Contract, Indexation on the baseline Charges at Annex 1, determined by the following Indexation Factor calculation, is to be carried out on an annual basis as calculated on the 01 April following the date on which Part C or D commences (referred to as Yearly Anniversary Date), with the first indexation taking place no earlier than on 01 April 2026. Such indexation will uplift commercial prices for the subsequent 12-month period(e.g. 01 April to 31 March).

- EARN03 Average Weekly Earnings - Not Seasonally Adjusted Average Weekly Earnings

Index K5EU (Professional, Scientific and Technical Activities), within EARN03 Average Weekly Earnings - Not Seasonally Adjusted Average Weekly Earnings (Index Figures Excluding Bonuses, Including Arrears), shall provide an element of indexation linked to the headline estimates of earnings growth for the relevant business area.

For the purposes of the formula below:

- $K5EU_{Anniversary}$ is the value of K5EU for the month of December in the calendar

- Year immediately prior to the Yearly Anniversary Date; and
 - $K5EU_{Baseline}$ is the value of K5EU for December 2022 (i.e. 213.3)
- CPI: Consumer Prices Inflation Index
 Index D7BT of CPI shall provide an element of indexation linked to the Consumer Price Inflation Index and shall **not** include owner occupier's housing costs.
 For the purposes of the formula below:
 - $CPI_{Anniversary}$ is the value of CPI for the month of December in the calendar Year immediately prior to the Yearly Anniversary Date; and
 - $CPI_{Baseline}$ is the value of CPI for December 2022 (i.e. 127.2).

$$Indexation\ Factor = \left(A \times \frac{K5EU_{Anniversary}}{K5EU_{Baseline}} \right) + \left(B \times \frac{CPI_{Anniversary}}{CPI_{Baseline}} \right)$$

As commercial rates for Tenderers will be determined by their own balance of pay (e.g. salaries, employers contributions, etc.) and non-pay (e.g. overhead, consumables, etc.) related costs, Tenderers are required to detail (and evidence/justify through provision of their most recent set of audited accounts) what proportion (between 0 and 1) of their costs are made up of:

- pay (and thus subject to uplift related to K5EU), and
- non-pay (and thus subject to uplift related to D7BT).

Example: An organisations costs are 60% related to pay and 40% related to non-pay, meaning that $A = 0.6$ and $B = 0.4$ in the above Indexation Factor equation.

Data regarding Index K5EU and Index D7BT shall be obtained from the Office for National Statistics¹.

Where Contributing Elements are changed/discontinued during the period of the contract, suitable Contract Change Requests and Notes will be used to capture the proposed new indexation mechanism.

¹ Office for National Statistics - <https://www.ons.gov.uk/>

Schedule 4 (Tender)

1. Professional and Technical Capability

Houlder is a specialist business with broad capability that has provided ship design and consulting services, engineering design and analysis, technical advice, and project management for over thirty years.

We have extensive experience of managing multi-disciplinary projects and the team for this work will be drawn from our staff of suitably qualified and experienced marine engineers, designers, and naval architects. Our approach has benefitted from our recent experience and lessons learned from previous contracts of a similar nature, in which we have provided advice and technical support.

Our engineering and design knowledge and expertise are backed by disciplined project management, works supervision and professional services. Houlder takes accountability for project delivery through alternative approaches as required by different clients whether on a wholly turnkey basis, as part of an integrated team, on the clients’ behalf or acting as advisors on a consultancy basis.

We will utilise the depth of our technical expertise and specialist support to deliver your project requirements in a timely and effective manner. The staff will be deployed in a project team structure to effectively manage the ‘discipline’ expertise to achieve Cefas’s objectives throughout the project.

In accordance with the Procurement Specific Requirements, Section 2 - Specification of Requirements, personal details of the project team have been anonymised in this document, including the project team organogram and CVs in Appendix I.

1.1. Project Team

The project will be managed from our Fareham offices and the work will be undertaken by a dedicated project team. The Project Director and Project Manager will be appointed for the duration of the project to provide continuity throughout. The Houlder team will evolve throughout the stages of the project to engage the right individuals to provide the best level of skill, knowledge, and experience appropriate for each stage whilst ensuring the best value for Cefas. The project organisation structure is shown below.

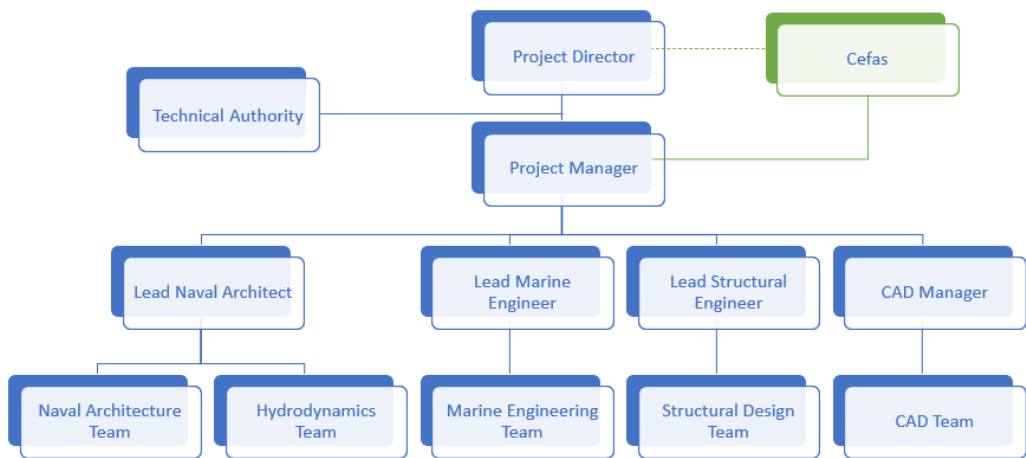


Figure 1 - Project team organogram

1.2. Key Staff

Key staff for this project and their roles and duties have been identified based on their specific expertise. The Project Manager has most recently successfully managed the Houlder delivery in the procurement, design, and construction of Polar Research Vessel *RRS Sir David Attenborough* for NERC. They have led our work on the evaluation and adoption of hybrid systems and battery selection. The Technical Authority led Houlder work on the *MV Victoria of Wight* with concept design, tender specification and build support for Wightlink, and is currently undertaking the same for *Manxman*.

The CVs of key staff, envisaged for this work, including details of previous relevant experience are provided in Appendix I Proposed Team CV's

1.2.1. Project Director

The Project Director is responsible for ensuring the project meets the client's requirements, especially regarding QHSE. Our Project Director will also be responsible for:

- Ensuring Cefas's requirements are being addressed by the Project Manager.
- Facilitating the availability of competent resources to achieve successful delivery of the project.
- Monitoring project and design reviews to ensure that these are conducted and recorded as required.
- Engaging with key stakeholders.
- Monitoring key project deliverables and complete project closure.
- Monitoring the Project Manager's project performance.
- Ensuring there are clear lines of communications implemented for the project team and client.
- Seeking external professional support when required.
- Supporting the Project Manager on the conduct of the project team.
- Resolving project issues that are outside the control of the Project Manager

The Project Director is a Chartered Naval Architect and has led multiple vessel design, build and procurement projects for numerous international clients. They have proven expertise in managing technical work scopes including design and builds in Europe, South America, and the Far East, as well as commercial, legal, and contractual matters related to procurement management, design, plan approval, construction, and delivery. As such they are ideally placed to advise on marine projects, be that at a strategic, implementation or technical level.

1.2.2. Project Manager

The Project Manager will be accountable to the Project Director and will be accountable for:

- The day-to-day leadership and management of the project and engagement of the Project Team across all necessary disciplines.
- Ensuring that the project work scopes are managed and co-ordinated, in order to meet both Cefas's and Houlder's requirements especially regarding QHSE and welfare.

They will also be responsible for:

- Motivating and leading the Project Team.
- Defining the accountabilities, work scope, and targets for each Project Team member within the project.
- Defining the terminology to be used on the project.
- Ensuring the security of the project's assets, including the control of documents, with regard to commercial sensitivity, data/national security, or professional confidentiality.
- Sanctioning the start of specific work items.
- Monitoring and managing the project progress.
- Managing the resolution of project issues.
- Managing the scope of the project and control changes.

They are a highly experienced engineer with a proven track record of team leadership, project management, engineering design and ship construction. Through their time working in shipyards, they have gained first-hand experience of ship design and the approval process with classification societies, including Lloyds Register and DNV GL. As a consultant they have undertaken plan approval on behalf of clients on several projects and vessel types, including passenger and cargo ships.

They have worked on projects supporting business cases and procurement for a range of clients including UK government agencies. This work involved stakeholder engagement presentations including public consultation events and assessment at pre-qualification and tender response stages.

They have also been heavily involved with dual fuel vessels which use Liquefied Natural Gas (LNG) fuel in environmentally sensitive areas and the use of energy storage systems (such as lithium-ion batteries) for power generation and propulsion augmentation.

1.2.3. Technical Authority

The Houlder Technical Authority (TA) will provide overall technical guidance as required and undertake technical assurance of project outputs. They will be accountable to the Project Director, and responsible for the day-to-day assurance of all project design outputs. TA will also be responsible for:

- Reviewing and approving essential project documentation to ensure;
 - Compliance with all the relevant legal and regulatory requirements, including all associated standards required by Cefas.
 - The design is fit for purpose, and its development meets the Cefas's requirements and expectations.
 - The verification and validation processes.
 - Guidance in the resolution of issues.

The TA is a naval architect and Chartered Engineer with extensive experience in the marine industry having worked on both defence and commercial marine vessels in consultancy and class society roles. Their experience extends from initial concept and feasibility evaluations to practical shipbuilding experience, newbuild and refit supervision and in-service support. Their range of technical experience covers vessel concept through to detail design and is balanced with experience of managing large projects for a range of ship types and clients. Recent projects have included evaluation of novel flow batteries to enable zero-emission propulsion and leading the design of a novel battery hybrid ferry for a UK operator. They have extensive experience on *Victoria of Wight* passenger ferry concept and tender design through to plan approval and feasibility studies into retrofitting on passenger ferries and car carriers. Their recent experience has involved various projects on decarbonisation and low emission shipping practice.

1.2.4. Subject Matter Experts

SMEs will provide discipline-wise technical guidance and assurance of outputs. They will be accountable to the Project Manager, and will be responsible for:

- Checking essential project documentation and.
- Guidance in the resolution of pertinent issues.

SME – Hydrodynamics and Model Testing

Our Hydrodynamics and Model Testing SME is an expert naval architect and hydrodynamicists and is a Fellow of both RINA and IMarEST. They have over 40 years' experience in ship design with specialist expertise in hydrodynamics covering hull form design, performance prediction (powering, dynamic stability, manoeuvring and seakeeping), sea trials and data analysis. They have a long association with the industry including involvement in and oversight of vessel design and construction across Europe, Australia, and the USA, including most recently acting as the client's technical oversight of the design and build of a 110 m fast ferry for Virtu Ferries. In addition to their specialist expertise, they are a proven business leader and manager having founded and run two specialist marine consultancy businesses.

SME - Structural

Our Structural SME is a structural engineer, naval architect, and Chartered Engineer with 25 years of experience in analysis, design, and engineering leadership. They're experience in leading innovative projects, engineering procurement, vessel construction, class societies, oil & gas, and marine consultancy. They have broad ranging and in-depth experience in structural analysis, technology evaluation and goal based marine structural code development; safety case based technical assurance; technology development and innovation. They have been evaluating clean technology options, for the marine sector in the recent months.

SME – Electrical

The Electrical SME has over 25 years' experience in design engineering through to on-site commissioning and testing for new builds, conversions, and retrofits in the offshore and commercial marine sectors. They have extensive experience in both high voltage, low voltage systems and automation systems. They have worked closely with various classification societies on these projects and is well versed in ensuring

compliance for all electrical design aspects. Recently they have overseen the retrofit of a hybrid solution for a shipping client.

1.2.5. Lead Naval Architect

The Lead Naval Architect will manage and execute development of the concept general arrangement, hull design and powering including overseeing numerical simulations and model testing, accommodation arrangements and stability. They are responsible for managing and executing design, analysis, trials and works supervision on all types of floating structures including passenger ferries, pontoons, barges, offshore vessels, and semi-submersibles. They are fully conversant with classification society, Flag State and IMO regulatory regimes and leads the vessel concept design group within Houlder. Their specific expertise is on stability calculations and hydrodynamic studies. Recent experience involves the concept design of a submarine rescue vessel.

1.2.6. Lead Marine Engineer

The Lead Marine Engineer will manage and execute development of the machinery arrangement and powering. They are experienced in the management, operation and repair of various types and size of vessels and have held senior management and project delivery roles with responsibility for the assessment and choice of marine machinery for refits, conversions, and new builds. They are a former seagoing engineer with a wealth of operational expertise including direct contact with class societies for new build vessels, statutory surveys and retrofit class approval process. They have significant experience in all areas of vessel builds from writing initial specifications and bidder compliance technical checks for Royal Navy's T31e frigates to on-site installation and commissioning of the Sir David Attenborough's main machinery. They have recently been undertaking FEED design work on the heat and load balances for an FPSO including a novel carbon capture system.

1.2.7. Lead Structural Engineer

The Lead Structural Engineer will manage and execute the development of the vessel structural arrangement and lightship weight estimates. They have over fifteen years' experience as a structural naval architect and will provide structural design, calculations, and assessment to support the tender design package. They developed the structural design packages for the concept design of the *RRS Sir David Attenborough* and for a range of ship types and has a proven practical knowledge including new-build scantlings of Ro-Ro ferries, jack-ups, and ice class vessels. They also have extensive experience of detailed design work such as the integration of crane foundations, mooring equipment, A-frames, main engines, shaft lines, vehicle ramps and bow doors. They have experience in vessel repair and survey work, and investigations into lightweight solutions and its adoption in ship design.

1.2.8. Computer Aided Design Manager

The CAD Manager will manage and execute the development of all drawings and plans required for the project. They have 15 years' experience as a CAD Designer producing general arrangements, structural plans, detailed design drawings, safety plans as well as 3D renderings for a wide variety of vessels.

1.2.9. Additional Resource

In addition to the personnel identified above, the project will be supported by Houlder's office staff in Aberdeen, Newcastle, London, and Fareham mobilising, as required, a wide reach back to technical staff and consultants who have experience in the tendering, design and build of vessels.

1.3. Technical Capacity

Our personnel are typically qualified as chartered engineers having studied and graduated at bachelor's or master's degree level. They will be members or fellows of a relevant professional body such as the Royal Institution of Naval Architects (RINA) or Institute of Marine Engineering, Science and Technology (IMarEST) and many have seagoing experience.

1.3.1. Naval Architecture

Houlder has an in-house team of qualified naval architects who are well-versed in addressing standards and regulations for both new and old vessels, using verified in-house tools and software NAPA, Maxsurf, ANSYS AQWA, and OrcaFlex, and producing design and analysis documents for owners, operators, Classification Society, fabrication, and equipment companies.

1.3.2. Hydrodynamics

Houlder have recently acquired Seasppeed Marine Consulting, a leading hydrodynamics consultancy and computational fluid dynamics business, bringing advanced analytical capabilities and extensive experience in-house. We have core expertise in hydrodynamics, hull form development, optimisation, trials, and testing combined with an innovative and motivated approach to all projects. The team of five hydrodynamicists, soon to be expanded, have been running CFD and other simulation packages alongside model test programmes for many years and are able to undertake full CFD hull assessment in combination with other simulation software for mooring analysis and dynamic positioning including time domain simulations. Software packages utilised include Maxsurf and Rhino Grasshopper for hull form development and fairing, NUMECA Fine Marine, DualSPysics and ANSYS AQWA to conduct RANS CFD, smoothed particle hydrodynamics and computational seakeeping respectively.

1.3.3. Structural Design

Houlder provides structural design to the latest industry codes and all classification society rules and regulations using verified in-house tools and proprietary software; FS-2000, ASAS, Staad-Pro and ANSYS. CAD design work and animations for vessel structural arrangement, fabrication drawings and system development are completed in AutoCAD, NUPAS CADMATIC, Autodesk Inventor and Rhino.

1.3.4. Engineering

Houlder's team includes structural, marine, systems, mechanical, piping, electrical, controls and safety engineers from a range of backgrounds including former seagoing engineers, naval and shipyard employees. Collectively, we have considerable project experience in new build, procurement, conversions, upgrades, condition surveys and equipment specification, installation, and commissioning. Houlder has extensive experience of marine operations, safety systems, mooring systems, dynamic positioning and specialist handling equipment and structures.

1.3.5. Project Management / Support

Project management is undertaken by suitably qualified and experienced staff with many years of experience in vessel design, procurement, and shipyard operations. Typically works supervisors are time served and capable engineers ideally placed to act on our client's behalf during shipyard construction works to ensure the contract requirements are met and quality, health, safety, and environmental (QHSE) standards achieved.

1.3.6. Non-Direct Engineering Support

Houlder has a team of in-house professionals managing resourcing, QHSE, business development, finance, document control, IT, and other support functions.

2. Client Relationship

2.1. Kick-off Meeting

The Project Manager will attend a kick-off meeting with all relevant parties to ensure that the requirements, roles, and actions are clearly understood from the outset. The purpose of the kick-off meeting shall be to;

- Agree lines of communication.
- Discuss the approach.
- Clarify the scope of work if necessary.
- Agree delivery timescales.

- Identify information required from Cefas.

2.2. Lines of Communication

Houlder's Project Manager shall be the main point of contact for Cefas and shall maintain regular contact for the duration of the contract. The regularity of this contact shall be determined by the intensity of the workload at various stages, and we anticipate this to vary between daily, weekly, and fortnightly contact as appropriate for the stage.

Houlder's Project Director shall be available to meet with Cefas as required through the duration of the contract, if required.

2.3. Monthly Progress Reporting

In addition to this ad-hoc reporting, Houlder's Project Manager shall be responsible for providing monthly progress report to Cefas. Monthly report shall comprise of issuing a written monthly progress reports to Cefas, and a monthly progress meeting.

The monthly progress reports shall be issued such that they can be reviewed in advance of each monthly progress meeting. The meeting schedule is to be agreed following contract award.

The monthly progress reports shall be issued in native office format and shall include:

- Summary of activities completed during the reporting period and activities planned for the next period.
- Details of each deliverable's revision status, completion progress and Client review/approval status.
- Details of arising issues, either contractual or technical, and actions being taken to resolve them.
- Review of new or potential improvements as part of continuous improvement.
- Updated Project Schedule Gantt chart showing progress against the agreed plan.
- Updated Risk Register.
- Safety Statistics (during site supervision stage)

Houlder's Project Manager shall attend all virtual monthly progress meetings. Other members of the project team, such as the Project Director and discipline leads, may also attend the meeting as necessary.

2.4. Contract Review Meetings

In addition to other reporting mechanisms, we shall provide a progress update to Cefas at high level quarterly contract review meetings focusing on Houlder's deliverable and performance and, during later stages the performance of the shipyard. This shall be attended by the Project Director and Project Manager. Minutes of the meeting shall be issued by Houlder and include a summary of actions, changes, risk status, programme status, areas of concern, Houlder resources and costs. This shall provide a mechanism for Cefas to provide feedback on our performance and discuss issues with senior management in a face-to-face meeting.

2.5. Close Out

At the end of the contract period, Houlder shall initiate its Project Close Out procedure which includes the following steps:

- Houlder's Project Manager shall confirm that all commercial commitments in the contract have been fulfilled and that all project related invoices have been issued and settled.
- The Contract Manager shall seek acceptance of the delivered work from the Client and request feedback on Houlder's performance.
- A wash-up meeting shall be held.
- A close-out report shall be produced detailing any particular technical, commercial or schedule related problems encountered; any Client complaints and corrective actions; and overall lessons learnt.
- The Contract Manager shall ensure all project records are up to date before closing the project internally.

All Cefas data and drawings received during the course of the contract shall be stored in a structured database on our system. All work undertaken shall be archived in a dedicated folder together with any structural, stability or other models. All such data shall be available to be handed back to Cefas on conclusion of the contract. In this situation, Houlder shall provide Cefas with a list of all the drawings, CAD, stability models and documents, prior to termination date for your approval and return them to you on the conclusion of the contract. Return of these files shall be either on a courier delivered hard-drive or via Houlder's online large file transfer capability. We shall return any physical information to Cefas by registered post or courier.

3. Project Planning

This implementation plan demonstrates Houlder's project management arrangements and capacity to undertake the work within the timescales specified. Houlder has prepared an implementation plan based on robust project management principles in accordance with our Business Quality Management System (BQMS) which governs all works undertaken by Houlder. The plan includes a project overview listing the scope including all activity milestones, deliverables and identifies the critical path. The plan also details dependencies and risks which may affect the implementation of the plan, including resource planning, utilisation of staff, subcontractors, costs, communication, change, risk, and quality management.

The quality control mechanisms and approach to quality assurance, procedures, and accreditation, drawn from the BQMS are detailed in the implementation plan.

A project risk assessment is presented in the form of a project risk register identifying potential risks, their impact, likelihood, and mitigation measures to manage the risk to acceptable levels. Further, the project approach to updating, monitoring and control of the project risk register is included.

The Houlder implementation plan is based around the following project management activities:

- Preparation and planning.
- Project monitoring and control to ensure Houlder delivers on its obligations.
- Managing contract change
- Monitoring Houlder's performance against the contract Key Performance Indicators (KPIs) enabling prompt action to be taken if agreed levels of performance are not met, including dispute resolution.
- Recording key decisions and general record keeping.

3.1. Preparation and Planning

Houlder shall commence detailed preparation and planning immediately following contract award. This shall be based on the overall plan forming part of this tender and shall include finalisation of the following documents for agreement with Cefas at the project Kick Off Meeting:

- Project Schedule, identifying:
 - All activity milestones/gateways
 - All deliverables
 - The critical path(s)
 - Dependencies
 - Invoicing Schedule
 - Invoice Format
 - Monthly Progress Report Format
 - Risk Register

Our Project Manager shall assign the project team their roles and ensure they are fully briefed on the requirements, including the scope of work, expected quality and schedule. It is recognised that meeting the standards of Project Quality requirements is the responsibility of all those assigned to the project.

3.2. Project Monitoring & Control

Our Project Manager shall closely monitor and control the project throughout the contract duration to ensure Houlder delivers on all its obligations. These obligations include:

- Submission of high-quality deliverables according to the agreed project schedule.
- Submission of accurate invoices according to the agreed payment schedule.
- Ensuring payment of subcontractors/suppliers within agreed payment terms.

The identification of risks with respect to quality, programme and costs shall be highlighted in a project risk register as described in section 5. The project risks shall be continually reviewed and updated as the project progresses.

3.3. Contract Change

Houlder aims to work collaboratively with Cefas to accommodate any requested changes to the project scope or schedule. Our Project Management team shall formally manage any variation request by Cefas. All changes, whether raised by Cefas or by Houlder, shall be recorded in a change log. The management of the log shall be the responsibility of the Houlder Project Manager and shall be made available to the Houlder Project Director for periodic review. If the variation order has a cost impact, the Houlder Project Manager shall prepare a detailed cost breakdown for review with the Project Director.

3.4. Monitoring Houlder's Performance

Our Project Manager shall monitor performance against the contract KPIs and take prompt action if agreed levels of performance are not met. Internal reviews shall periodically be carried out to verify this performance. Performance against these KPIs shall be reported in the monthly progress reports and contract meetings. The exact performance requirements and associated measurement criteria shall be agreed with Cefas following contract award.

In the event of any shortfall in Houlder's performance against the high standards expected by Cefas, our Project Manager shall be responsible for taking the necessary corrective action. As a minimum, this action shall be discussed with Houlder's Project Director and agreed with Cefas. Where Houlder's performance has fallen significantly short of expected standards, or Cefas wishes to raise a complaint, it shall be dealt with through Houlder's Corrective and Preventative Action (CaPa) Procedure.

If an issue or dispute cannot be resolved by Houlder's Project Manager to the full satisfaction of the Cefas representative, it shall be escalated in the first instance to the Project Director and to Houlder's Senior Management.

3.5. Record Keeping

Houlder's Project Manager shall be responsible for ensuring all major decisions and related information related to the contract is recorded, thereby ensuring an audit trail in the case of disputes or other issues arising. This comprehensive record of activities, discussions and agreements shall also allow for smooth handover if key personnel leave the project for any unforeseen reason.

Houlder's document control system shall be set up, managed, and maintained in line with our QA certified BQMS by the Houlder Project Manager and the project team. Project correspondence, files and relevant records shall be maintained and filed in the project filing system and referenced in any reporting. Traceability shall be maintained for all project deliverables. Project records shall be retained in the archives for a minimum of 7 years.

All Cefas data and drawings received during the contract shall be stored in a structured database on our electronic system. All work undertaken shall be archived in a dedicated folder together with any structural, stability or other models.

Houlder has put in place appropriate security measures to prevent data from being accidentally lost, used, or accessed in an unauthorised way, altered, or wrongly disclosed. Our operations have been certified to

“Cyber Essentials PLUS” against the Cyber Essentials Scheme Test Specification. Houlder shall ensure that data is always processed in accordance with the provisions of relevant data protection legislation including the General Data Protection Regulation (GDPR).

4. Quality Control and Assurance

Houlder is committed to providing services and products that consistently meet and exceed the quality requirements of its clients.

Our policies and procedures are supported by direct and recent experience of public sector and commercial ship procurement and shipbuilding best practice. Clients who have benefited from this approach include British Antarctic Survey (BAS), the Natural Environment Research Council (NERC), UK Ministry of Defence, Irish Department of Defence, QinetiQ, British Nuclear Fuels Limited (BNFL) and Serco Maritime Services.

A draft Quality Plan, L-00634-150401-11978 has been prepared and provided in the Qualification Envelope

08.1. This document shall be updated, in consultation with Cefas, following contract award and become a live document to be used throughout the course of the project.

4.1. Quality Policy Statement

Houlder’s Quality Statement developed by Houlder’s Senior Management Team and approved by the Chief Executive Officer is presented below.

Houlder has developed and implemented a BQMS as a key element in the overall efficiency and success of the business. The BQMS is certified to ISO 9001:2015 Standard by LRQA and is continually improved.

Houlder is committed to:

- Ensuring that all people who work for, or on behalf of, Houlder conduct their work to the highest technical and commercial standards and with utmost professional integrity.
- Learning from experience by reviewing and monitoring performance then feeding the results back into our BQMS and informing staff.
- Continually improving our BQMS by determining and addressing the risks and opportunities that could enhance customer satisfaction or affect the conformity of our products and services.
- Performing work in such a manner that ensures human life and the environment are protected.
- Developing an environment and culture whereby the competency of Houlder personnel is continuously reviewed and developed so that the business delivers solutions that deliver our high standards and those of our clients.
- Maintaining a clear framework in which to set and monitor the business objectives and report on the effectiveness and applicability of the processes contained within it.
- Adhering to all relevant International and National Standards and Codes of Practice in delivering this statement.
- Reviewing and revising this Quality Statement annually.

The Senior Management Team is fully committed to providing leadership and the essential resources, communication, employee engagement, training, and support as required to maintain Quality Assurance.

4.2. Project Approach

4.2.1. Internal Project Review Meetings

We shall arrange regular internal project meetings chaired by the Project Manager with input from the Project Director and discipline leads. The regularity of these meetings shall be determined by the project stage and pace of work through the course of the contract. These meetings are intended to ensure technical progress is being made in accordance with the project plan, identify priorities and resources for the week ahead, ensure compliance with QHSE Standards and maintain client satisfaction.

The project meeting shall feed into and from Houlder's wider utilisation and staff deployment meetings meaning that suitably qualified and experienced engineers and naval architects can be allocated to the project as required. In addition, we also hold quarterly internal review meetings at which Houlder's senior management review the project's QHSE, technical and financial performance. Through these meetings, Houlder senior management can promptly identify and rectify any performance or QHSE issues.

4.2.2. Document Control System

Houlder's document control system shall be set up, managed, and maintained in line with our QA certified BQMS by the Houlder Project Manager and the project team. Project correspondence, files and relevant records shall be maintained and filed in the project filing system and referenced in any reporting. Traceability shall be maintained for all project deliverables. Project records shall be retained in the archives for 7 years.

4.2.3. Deliverable Review & Delivery

Each deliverable is subject to a two-stage review process. This shall comprise a checking stage which seeks to review the validity of assumptions made and to verify the accuracy and correctness of the deliverables. Checking is performed by a suitably experienced senior or principal engineer with chartered status or equivalent. This is supported by an approval stage which ensures the deliverables are fit for purpose, include all required information and are consistent with other deliverables or activities underway in the project. Approvals are undertaken by staff at principal engineer or project director level.

Wherever it is possible to achieve without jeopardising quality, deliverable reviews shall be conducted electronically to improve efficiency and reduce paper waste. All deliverables are individually identified with a document or drawing number and each revision of the deliverable is identified with a revision letter or number. All drawings or documents shall be delivered to Cefas using an agreed document management procedure.

The correct and successful management of deliverables is key element of Houlder's ISO 9001:2018 certification. Houlder's BQMS procedures have been used successfully and have been shown to be compliant across a wide range of design, shipbuilding, and procurement projects for clients with robust requirements.

4.2.4. Supplier Management

Houlder's supply chain is an essential element of its business. Our responsibilities extend beyond our operations to those of our suppliers for goods and services. Houlder is also committed to working with its suppliers and their sub-suppliers in an ethical, fair, and transparent way.

It is Houlder's policy to trade only with suppliers that meet or exceed the minimum standards set out below in a demonstrable manner, or who can demonstrate progress towards achieving these standards within an agreed timescale. Suppliers must be committed to working with Houlder and achieving ongoing improvements.

Houlder promises its customers excellent quality, reliability, and innovation. We require our suppliers to support us in this commitment through implementing and complying with the following standards.

- Have an effective Quality, Health, Safety and Environmental (QHSE) culture utilising a systematic QHSE management system, designed to ensure compliance with all applicable legislation, regulations, and industry best practices.
- Provide a trained, qualified, and competent workforce to undertake the assigned tasks, who shall work to, or exceed, the quality standards necessary to meet our and our clients' requirements.
- Operate their business to the highest ethical standards and provide goods and services of excellent quality and reliability.
- Deliver goods and services on time, at the agreed cost, and to the required specification.
- Work with Houlder in a flexible, proactive, and collaborative manner.
- Actively engage in Houlder's supply chain and pass these same standards and processes on to their sub-suppliers.
- Have suitable arrangements in place to manage the risk of counterfeit material in their supply chain.

- Maintain sound and efficient business operations, with competitive prices, and deal fairly and promptly with legitimate concerns or complaints.
- Alert Houlder promptly to any problems or dangers that may or might arise over the expected lifetime of the goods and services supplied.

During execution of the project, subcontractors shall be closely monitored by the appropriate discipline lead to ensure the following.

- Subcontractors are clearly briefed on the requirements of the project and the work required of them.
- Costs are agreed in advance with a clear payment schedule and terms set out.
- All delivered work meets the expectations of quality as agreed with Cefas. This shall be ensured through review of interim and final deliverables as well as informal contact with the subcontractor during the work.

4.3. Accreditations

The certificates for the following accreditations can be found in the Qualification Envelope 08.2.

ISO 45001:2018, ISO 9001:2015 (LRQA)

Current issue date: 25 August 2021

Expiry Date: 24 August 2024

Certificate identity number: 10386308

Approval numbers: ISO 45001 – 00003822, ISO 9001 – 0079133

The scope of this approval is applicable to:

ISO 45001:2018 – Technical service provision to the commercial and public sectors of the marine and offshore energy industries. Areas include design, consultancy, advisory, procurement, supply, installation, commissioning, maintenance, and technical support services relating to ships and marine assets.

ISO 9001:2015 – Technical service provision to the commercial and public sectors of the marine and offshore energy industries. Areas include design, consultancy, advisory, procurement, supply, installation, commissioning, maintenance, and technical support services relating to ships and marine assets.

5. Project Risk

The BQMS and associated processes shall be used to support the project execution and manage associated risks during the project life cycle. Houlder ensures that risks are managed effectively on all projects by Houlder and its subcontractors to meet and exceed the Client's expectations. The aim is to identify and record areas of risk in order to implement effective mitigations to reduce them to a tolerable level and ensure the project is completed to time, budget and agreed quality.

Where required, the process of risk identification, assessment and the development of mitigation controls may involve consultation with the project team, Client or independent third parties.

5.1. Initial Risk Assessment

The initial project risk assessment has been prepared and the summary can be seen in Figure 2 below, the complete document, L-00634-150401-11986, is provided in the Qualification Envelope 08.1. The risk assessment process enables Houlder to identify potential risks and detail procedures which shall assist the project team by assessing the probability of occurrence, the impact on cost, time, and performance for each risk as well as suitable mitigation measures. These assessments support the decision-making process and help to justify appropriate control action, allowing the project team to manage the project successfully. This risk assessment has informed our tender response, project budget preparation and scheduling.

Project Risk Register & Mitigation Plan																		
Pre-mitigation overall risk score			<div><div></div></div>	10														
Post mitigation overall risk score			<div><div></div></div>	5														
RISK			PERCEIVED RISK					PROPOSED MITIGATION PLAN									RISIDUAL RISK	
Risk No.	Entry Date	Description & Impact	Date of Impact	Impact			Likelihood	Risk Level	Description of Mitigation Plan	Impact			Likelihood	Owner	Completion Date	Proceed Y/N	Risk Level	Status
				Time	Cost	Quality				Time	Cost	Quality						
1.00		Project Risks																
1.01	08/08/23	Scope definition missing tasks leading to delay to delivery.	01/06/24	3	2	1	2	<div><div></div></div> 6	Early definition of tasks, with ability to draw additional resource from wider team.	2	2	1	2	PM			<div><div></div></div> 4	
1.02	08/08/23	Scope changes impacting schedule and subsequent deliverables.	01/06/24	3	1	1	3	<div><div></div></div> 9	Deliverables defined with scheduled dates.	2	1	1	3	PM			<div><div></div></div> 6	
1.03	08/08/23	Limited access to operational information	27/11/23	3	2	1	2	<div><div></div></div> 6	Early definition of tasks and client information required.	2	2	1	2	PM			<div><div></div></div> 4	
1.04	08/08/23	Lack of timely review and approval of deliverables, leading to delay in delivery of subsequent tasks.	01/06/24	3	2	1	3	<div><div></div></div> 9	Early definition of tasks and client review requirements. Review time included in schedule.	2	2	1	2	PM			<div><div></div></div> 4	
1.05	08/08/23	Delay in agreeing model testing socpe results in delay to booking test facilities and price increase.	01/06/24	3	2	1	2	<div><div></div></div> 6	Model testing carried out in house and additional resource can be deployed if required.	2	2	1	2	PM			<div><div></div></div> 4	
1.06	08/08/23	Client requirements change, delaying schedule and/or causing work to be repeated.	01/06/24	3	1	1	3	<div><div></div></div> 9	Early definition of tasks and regular review with client.	2	1	1	3	PM			<div><div></div></div> 6	
1.07	08/08/23	Key personnel not available, loss of project knowledge resulting in delays.	01/06/24	4	3	4	4	<div><div></div></div> 16	Project records will be kept in accordance with BQMS, multiple personnel leading project with	2	1	2	4	PM			<div><div></div></div> 8	
1.08	08/08/23	Availability of shipyard to undertake the works	01/06/24	3	3	3	3	<div><div></div></div> 9	Early discussion with potential shipyards to enquire about available slots.	2	2	2	2	PM			<div><div></div></div> 4	
1.09								<div><div></div></div> 0									<div><div></div></div> 0	
2.00		Commerical Risks																
2.01	08/08/23	Cost of model test testing increases.	01/06/24	1	3	1	3	<div><div></div></div> 9	Manufacture of model and tests carried out by staff, hire of model test facility only part of total.	1	2	1	3	PM			<div><div></div></div> 6	
2.02								<div><div></div></div> 0									<div><div></div></div> 0	
2.00		Technical Risks																
2.01	08/08/23	Weight estimate errors result in a lack of deadweight.	01/06/24	1	1	3	3	<div><div></div></div> 9	Weight estimate carried out with validated reference vessels that is regularly updated.	1	1	2	2	PM			<div><div></div></div> 4	
2.02	08/08/23	Speed and power prediction erros result in inability to meet speed.	01/06/24	1	1	4	3	<div><div></div></div> 12	Initial CFD prediction and optimisation.	1	1	3	2	PM			<div><div></div></div> 6	
2.03	08/08/23	Speed and power prediction errors result in inability to meet range due to increased fuel consumption.	01/06/24	1	1	3	3	<div><div></div></div> 9	Initial CFD prediction and optimisation.	1	1	2	2	PM			<div><div></div></div> 4	
2.04	08/08/23	Hull form does not perform as expected during model testing, delay to issuing design package	01/06/24	1	1	3	3	<div><div></div></div> 9	Initial CFD prediction and optimisation.	1	1	2	2	PM			<div><div></div></div> 4	
2.05								<div><div></div></div> 0									<div><div></div></div> 0	

Figure 2 – Initial Project Risk Assessment

5.2. Project Risk Register

Following contract award, the initial risk assessment shall be reviewed in collaboration with Cefas and updated to become the Project Risk Register. Throughout the project, risks shall be identified and classified in terms of their impact on the performance, cost, and timescales of the project. When a risk is identified and validated it must be entered in the risk register. The risk register shall be completed to ensure that the information is readily accessible and that risks are adequately documented and mitigated.

The risk register shall hold all of the subjective, qualitative, and basic quantitative assessment details of risk associated with the project. They shall include the following:

- A unique identifier.
- Name/title of the risk.
- A description of the risk including risk causes and impact statements.
- Risk category based upon the lifecycle phase of the project.
- Risk source.
- Qualitative (probability/impact/priority rating) prior to the implementation of any risk mitigation actions.
- Details of mitigation strategies that are agreed shall be taken.
- Persons responsible for managing/progressing the identified mitigation actions.
- Residual qualitative assessment details, i.e., the reduced probability/impact/priority ratings post implementation of the agreed mitigation actions.
- Fall-back plans.
- Risk history log containing an audit trail of the historical information generated at each risk review.
- Current status of the risk.

The risk register shall be a live document that is monitored by the Project Manager with a formal review by the Houlder project team on at least a monthly basis to ensure new risks are identified and existing ones are being mitigated. Any significant changes shall be advised to Cefas, and corrective actions proposed. Corrective actions for risks that do materialise shall vary according to the nature of the risk, the potential impact on the project and the stage of the project at which the risk is realised. We shall prepare and present suitable corrective actions which could be undertaken and agree with Cefas the appropriate course of action.

5.3. Responsibility

The Project Manager is responsible for overall risk management on this project, including:

- Completing regular project risk reviews.
- Assessment of identified project risks and developing strategies to manage those risks as they are identified.
- Ensuring that risks given a high-risk scoring, or a high probability are reviewed and monitored more frequently.
- Providing the updated risk register to Cefas on a monthly basis and highlighting any significant changes or new risks within it.
- Notifying the Cefas Project Manager immediately of any significant risks that do materialise or appear highly likely to materialise.
- The Project Team members are responsible for assisting the Project Manager in the risk management process which includes the identification, analysis and evaluation of risks and continual monitoring of these throughout the project life cycle.

5.4. Potential Conflicts of Interest

Houlder is a wholly independent, employee-owned business without legal or contractual ties to any other businesses or organisations. This allows the business to operate to the benefit of its clients and employees with a low risk of conflicts of interest occurring. However, we recognise that conflicts are

always a possibility and therefore Houlder's management has conducted a review of the company's clients, projects and opportunities and found that none presents an actual, potential, or perceived conflict of interest in relation to this contract that would impact on our ability to deliver the required services.

Throughout the duration of this contract, Houlder shall periodically review the situation and act to avoid any conflict of interest. In the unlikely event that a perceived, potential, or actual conflict arises we shall inform Cefas and take appropriate action to mitigate it. This action may include segregation of staff and information; removing individual employees from certain project teams; entering into appropriate confidentiality agreements; or, where no other mitigation may be found, declining new projects.

Appendix 1 Proposed Team CV's

1. Implementation Plan

The implementation plan demonstrates Houlder's project management arrangements and capacity to undertake the work within the timescales specified.

Houlder has prepared a draft implementation plan (Appendix I) based on robust project management principles in accordance with the Houlder Business Quality Management System (BQMS) which govern all works undertaken by Houlder. The plan includes a project overview listing the scope including all activity milestones, deliverables and identifies the critical path. The plan also details dependencies and risks which may affect the implementation including; resource planning, utilisation of staff, cost, communication, change, risk and quality management.

The quality control mechanisms and approach to quality assurance, procedures, and accreditation, drawn from the BQMS are detailed in the project management plan.

The Houlder implementation plan is based around the following project management activities:

- Preparation and planning.
- Project monitoring and control to ensure Houlder delivers on its obligations.
- Managing contract change
- Monitoring Houlder's performance against the contract KPIs enabling prompt action to be taken if agreed levels of performance are not met, including dispute resolution.
- Recording key decisions and general record keeping.

1.1. Preparation and Planning

Houlder shall commence detailed preparation and planning immediately following contract award. This shall be based on the draft implementation plan forming part of this tender and shall include finalisation of the following for agreement with CEFAS at the project Kick Off Meeting:

- Project Schedule, identifying; activity milestones, deliverables, critical path, dependencies.
- Invoicing Format and Schedule
- Monthly Progress Report Format
- Risk Register

Our Project Manager shall assign the project team to their roles and ensure they are fully briefed on the contract requirements, including the scope of work, expected quality and project schedule. It is recognised that meeting the standards of Project Quality requirements is the responsibility of all those assigned to the project. The updated project plan shall be delivered within 2 weeks of contract award.

1.2. Project Related Travel

Throughout the project, travel will be kept to a minimum, with online meetings being the preferred option. When travel is absolutely necessary the minimum number of people will be sent, and sustainable travel options will be preferred (e.g. public transport instead of cars). Where project related car travel is actively avoided as a result of using a green transport programme such as public transport or carpooling, Houlder shall report to the Authority car miles saved on the project. Houlder will also report mileage where low or no emission vehicles have been utilised or innovative measures have been used to safeguard the environment and respond to the climate emergency minimising the carbon footprint of the contract. Short haul flights will be avoided unless absolutely necessary. Any travel outside the UK will be discussed, planned and agreed with the Authority prior to taking place.

2. Part A – Identification of the Preferred Option

Houlder understands that outside of the Specialist Marine Technical Consultant (SMTTC) contract, the preliminary identification of the 'Preferred Option' will be worked up by the Authority and the Authority's Business Case consultant prior to the SMTTC contract commencing. The following activities shall be carried out, and the results used, in conjunction with the preliminary identification, to support the identification of the 'Preferred Option' to be taken forward to Part B.

2.1. Activity 0: Evaluation of Business Case Assumptions

Houlder has a wealth of experience in developing business cases to support investment decisions for ship construction and conversion projects on behalf of our clients.

We shall undertake a review of the business case, liaising with the Business Case consultant and the Authority as necessary, to evaluate the assumptions made during the preliminary identification of the 'Preferred Option', including the following:

- A review of the high-level stakeholder and system level requirements collated by Cefas. Using our experience of similar vessel types and wider ship design knowledge we shall review the requirements to identify those that are likely to be significant cost drivers for the project and ensure that all such requirements have been identified and assessed. We shall also provide recommendations for Cefas to consider.
- Evaluating the assumed costs associated with each of the short-listed options in the Business Case. This shall be conducted using current market research and our knowledge and experience of the new build and conversions of vessels of similar size and complexity to ensure that the determination of the 'Preferred Option' is based on informed commercial/ financial/ economic estimates.
- Analysing outline timescales for each option. Based on the options, recent vessel projects delivered in a similar manner and our experience, we shall analyse the likely timescales for each option. This shall also include the impact on timescales of contracting with a UK, European or Asian shipyard.
- Review the Outline Business Case and analyse any assumptions and provide due diligence for Cefas.

The output of this review shall be a single set of comments for the Business Case consultant and the Authority to consider and incorporate into the Outline Business Case as deemed appropriate.

2.2. Activity 1: Risk Assessments

Houlder recognises the importance of undertaking risk assessments as an integral part of its risk identification and risk management methodology. In Part A of this project, we shall undertake the risk assessments to provide a systematic examination of the options for the purpose of identifying the significant project risks and recommending what further control measures should be taken to reduce the risk to an acceptable level. Risk assessments shall be carried out for each of the following options as part of this activity.

- Option 1 – 'Do Nothing' Risk Assessment
- Option 2 – Life Extension Risk Assessment
- Option 8 – 'Like-for-like' Replacement Vessel Risk Assessment
- Option 9 – 'Enhanced' Replacement Vessel Risk Assessment

For each of the above options the following process, based on our own Risk Assessment Procedures and Instructions, shall be followed to provide four individual assessments. The risk assessment steps are as follows:

1. Identify risk assessment is required;
2. Review task or activity;
3. Identify all associated risks;
4. Decide on what might be impacted and how;
5. Identify the relevant control measures;
6. Do the control measure introduce new risk – If yes, go back to 2. If no, proceed to 7;
7. Review the risk assessment and evaluate scored;
8. Are the risks adequately reduced to an acceptable level – If yes, proceed to 9. If no, go back to 2;
9. Proceed and monitor control measure for effectiveness.

2.2.1. Review

The specification, design, and performance of the current research vessel, RV Cefas Endeavour, shall be reviewed in conjunction with the Authority and the appointed vessel management company. The review will be focused on the four options under consideration to determine how the delivery objectives of the vessel and Cefas could be affected (positively or negatively) by the each of the options.

2.2.2. Identify Risks, Impacts and Controls

Risk identification in conjunction with the Authority and RV Cefas Endeavour's appointed vessel management company. These risk, impact and controls shall include but not be limited to; technical, commercial, economic and CEFAS delivery objectives.

2.2.3. Evaluate Risks

For the initial risk evaluation, the risks identified shall be considered in the worst-case scenario before any controls are applied. The likelihood shall be based on the worst-case scenario, ranging from a remote possibility to the inevitable, using the following scale.

Likelihood	Frequency	Score
Imminent	One event or more per month within the industry	5
Likely	One event between one month and a year	4
Possible	One event in 1-10 years	3
Unlikely	One event in between 10 and 100 years	2
Highly unlikely	Could exceptionally occur	1

Table 2-1- Likelihood Scoring Matrix

The severity shall be expressed in terms of the impact on the project, whether capability, cost or time, using the following scale. The numerical scores given to the likelihood and severity and then multiplied to obtain a risk rating. The risk rating is a measure of the likelihood of occurrence and the severity of the occurrence.

Severity	Project	Cost	Time	Score
Catastrophic	Unable to operate	>£100,000	over 6 months delay	5
Major	Functions of the vessels restricted.	£50,000 to £10,000	up to 6 months delay	4
Severe	Able to operate with concession(s)	£10,000 to £50,000	up to 2 months delay	3
Moderate	Can be rectified by change.	£1,000 to £10,000	up to 2 weeks delay	2
Minor	Negligible impact, can be rectified by modification	<£1,000	<1 day	1

Table 2-2- Severity Scoring Matrix

		Severity				
		1	2	3	4	5
Likelihood	1	(1) Low	(2) Low	(3) Low	(4) Low	(5) Low
	2	(2) Low	(4) Low	(6) Low	(8) Med.	(10) Med.
	3	(3) Low	(6) Low	(9) Med.	(12) Med.	(15) High
	4	(4) Low	(8) Med.	(12) Med.	(16) High	(20) High
	5	(5) Low	(10) Med.	(15) High	(20) High	(25) High

Table 2-3- Combined Scoring Matrix

High risks shall be considered prohibitive, and actions shall be identified to eliminate or substantially mitigate the risk to an acceptable level. Medium risks cannot be neglected, and further mitigations shall be identified. Where medium risks cannot be mitigated further, these shall be identified, and appropriate authorisation and continual monitoring of the risk is recommended. Low risks shall be considered as an acceptable level.

This process allows Cefas to understand the residual risk rating and be aware of how significant a risk is posed if not properly managed.

Overall project risk shall also be calculated by summing the risk scores for all of the tasks and dividing by the number of tasks (rounding up when necessary). This allows for meaningful comparison between the options. The risk assessment template can be found in the Qualification Envelope 08.1.

2.3. Activity 2: Vessel Management Mechanisms

Taking into consideration of the Risk Assessments produced in the previous activity for each of the four options, Houlder shall, with input from the Authority's Specialist Marine Legal Services contractor, review the existing contract mechanism in place between the Authority and RV Cefas Endeavour's appointed vessel management company and consider whether the existing contract mechanism (and associated technical risk management and liability) are suitable for the respective option.

Houlder shall produce either a Do Nothing, Like-for-like or Replacement Vessel Management Options Plan for each option that includes proposed modification to the existing contract mechanism to better manage the risk and liability for that option. This shall include a cost forecast comparison for the vessel management services contract operating with the existing contract mechanism with and without proposed modifications.

3. Part B – Development of the Preferred Option

Houlder understand that no activities required in Part B for this option.

4. Part C – Procurement of the Preferred Option

Houlder understands that, where the Outline Business Case is supported by the project's governance and approval process, the 'Preferred Option' developed in Part B will need to be formally procured to support the development and submission of the Full Business Case. The following activities shall be carried out by the SMTC, to support the Authority in the procurement of the 'Preferred Option'.

4.1. Activity 3: Procurement of Vessel Managers

We understand that support shall not be required during the selection questionnaire stage.

During the tender assessment stage, the Project Manager (a principal marine engineer) shall be working as an integrated part of the evaluation team, having access to all tender submissions via the Authority's procurement portal and following the Authority's procurement processes in full.

The Project Managers roles during the assessment of the submissions shall include.

- Evaluation of the documentation in line with all guidance provided by the Authority in line with other evaluators.
- Participation in a Consensus Meeting during which they shall discuss their scores and comments for each tender submission, and their reasoning for such scores and comments.
- Attending the premises/ships of short-listed tenderers for the purposes of an on-site evaluation and scenario exercise.
- Attend Clarification Meetings with each tenderer in Lowestoft.
- Review and evaluation of any subsequent tender submission from the short-listed tenderers.
- Assisting the Authority in de-briefing Tenderers as required.
- Ad hoc advise to the Authority as may be required.

The number of Vessel Manager assessments is not limited but for an indication of the price we have allowed for three (3) being short-listed, requiring three tenders to be evaluated and on-site evaluations attended.

The evaluation process shall conclude with a successful tendered selected.

5. Part D – Implementation of the Preferred Option

Houlder understands that, where the Full Business Case is supported by the project's governance and approval process, and the UK Government decides to implement the 'Preferred Option' developed in Part B, this will need to be formally delivered. The following activities shall be carried out by the SMTC, to support the Authority in the implementation of the 'Preferred Option'. Houlder understand this support period is anticipated to be for 5 years following the conclusion of Part C.

5.1. Activity 4: Ongoing Technical Support

Stand-alone Scopes of Work

The requirements for ongoing technical support are not known at this time and we understand that a stand-alone scope of work will be drafted for each occasion. For each scope of work, we would provide a proposal to Cefas for your consideration and comment that included;

- Detailed scope of work
- Defined list of deliverables and timescales
- Required customer supplied information
- Any assumptions and exclusions
- Identified resource (and corresponding agreed rate)
- Estimation of hours to complete

Typically, where the scope of work is sufficient defined, we would propose a fixed price for each of these stand-alone scopes, agreed prior to commencing work. However, we would be happy to provide quotations with agreed limits of liability if required.

The number of stand-alone scopes of work is not limited but for an indication of the price we have allowed for nine (9) scopes of work of 4 weeks duration each.

Vessel Condition Survey

The number of Vessel Condition Surveys is not limited but for an indication of the price we have allowed for one condition survey per year during the 5-year period. This frequency is to reflect the age and condition of the vessel that will require careful monitoring to maintain availability to Cefas.

We shall undertake an initial ship condition survey of the ship, at a location and time to be confirmed. A report shall be provided documenting the condition found and rating this condition, with any additional findings, against the contractual requirements, compliant to the required legislation and with a high degree of operational availability. Where required, remedial actions shall be proposed that would improve the condition of the ship to that required by Cefas.

After 5 years a final condition survey, will assess the ship condition against the contractual requirements and the success, or otherwise, of the implementation of any remedial actions in improving the condition of the ship to the contractually required standards. Further recommendations for remedial actions and additional work shall be made in the context of keeping within future legislation trends.

We shall liaise with yourselves to agree exact timing and location of each survey but for an indication of the price anticipate a dry dock in East Anglia. We shall further liaise with the vessel's master and chief and any other designated responsible person nominated by Cefas to arrange the survey commencement times, confirm our intentions during each survey and confirm requirements of vessel crew with respect to each survey. On commencement of each survey, we will liaise directly with the master and chief to present our survey plan, confirm local safety arrangements and practices and on the initial survey be provided with a guided familiarisation walk through the vessel.

The surveys shall be carried out by a marine engineer and naval architect, who shall attend the vessel to conduct a technical condition inspection. Our assumption is that each survey shall last two working days, excluding travel, and that the vessel shall be undergoing maintenance. The inspections shall comprise the following;

- Survey of the visible condition of the vessel fabric in general including:
 - External hull, superstructure, decks, appendages and fittings;
 - All internal compartments, both technical and non-technical;
 - General and specialist deck equipment;
- Machinery and systems, including securing arrangements;
- Inspection of a sample of fresh water or water ballast tanks (tank selection dependent on availability of safe access);
 - Visual inspection of and functional demonstration of, with crew assistance and where safe and practical:
- Watertight closures;
- Ship IT and communications systems;
- Isolated checks of general ship systems, including air conditioning, alarm monitoring within random compartments;
 - Evident areas of concern with respect to maintenance or other upcoming costs, in particular those that would have contractual implications and those that have a long-term impact on the ship's life;
 - The total running hours for main engines and generators;
 - Inspection of main Classification Society & Flag Authority survey records for outstanding condition of Class or memoranda – if available on board;
 - Discussion with crew and inspection of technical documentation, records and Planned Maintenance System with respect to relevance, equipment availability, hours and cost-effective maintenance practice;
 - Inventorying available spares, including condition, with a focus on identification of critical spares through use of crew statements;
 - Inspection of the condition of any appurtenances found.

Following each survey we shall prepare a photographic condition report based on the survey and information gathered, including;

- Photographs and descriptions of
 - Any evident areas of concern with respect to maintenance or other upcoming costs;
 - The overall condition of the vessel, machinery and equipment, systems and outfit as well as any visible damage or repairs;
 - The overall condition of the vessel structure;
 - Any areas or equipment which appear to be in poor condition relative the vessels target service life;
 - Record of latest total running hours for main engines and generators,

- Record of status of main current certification, including photographs or copies of, specifically;
- Main Class certificate
- Passenger Safety certificate (if applicable)
- Record of Equipment certificate (LSA)
- Dangerous Goods certificate
- Safe Manning certificate
 - Inventory of spares located on board;
 - Remedial actions required to meet first class operator standards and those to achieve contractual compliance.

6. Schedule of Deliverables

The following deliverable shall be submitted to Cefas in PDF format via email.

Activity	Deliverables	Q'ty
General	Implementation Plan	1 off
	Monthly progress reports (Parts A & B)	8 off (monthly)
	Monthly progress reports (Parts C & D)	TBC (monthly)
0	Business Case Evaluation Report	1 off
1	'Do Nothing' Risk Assessment	1 off
	Life Extension Risk Assessment	1 off
	'Like-for-like' Replacement Vessel Risk Assessment	1 off
	'Enhanced' Replacement Vessel Risk Assessment	1 off
2	'Do Nothing' Vessels Management Options Plan	1 off
	Life Extension Vessels Management Options Plan	1 off
	'Like-for-like' Replacement Vessel Vessels Management Options Plan	1 off
	'Enhanced' Replacement Vessel Vessels Management Options Plan	1 off
3	Assessment of Vessel Managers Tenders	3 off
4	Vessel Condition Survey Report	5 off
	Ad hoc support	9 off (TBC)

Deliverables shall be submitted in batches at the following times.

Batch No.	Title	Delivery ¹²
1	Project Implementation Plan	Contract start +2 weeks
2	Part A, Activity 0 to 2 – Identification of preferred option	Contract start +5 weeks
3	Part C, Activity 3 – Procurement of vessel managers	TBC
4	Part D – Implementation of the Preferred Option	TBC

¹ Part A shall be completed upon determination of the Preferred Option which we understand is expected to be in November 2023, subject to a contract start date of 23rd October 2023.

² It is expected that all activities captured under Part B shall be completed by the end of June 2024, subject to the determination of the Preferred Option in November 2023, however timings may be subject to change and shall be agreed as part of the Implementation Plan.

Mon 04/09/23

1. Implementation Plan

The implementation plan demonstrates Houlder's project management arrangements and capacity to undertake the work within the timescales specified.

Houlder has prepared a draft implementation plan (Appendix I) based on robust project management principles in accordance with the Houlder Business Quality Management System (BQMS) which govern all works undertaken by Houlder. The plan includes a project overview listing the scope including all activity milestones, deliverables and identifies the critical path. The plan also details dependencies and risks which may affect the implementation including; resource planning, utilisation of staff, cost, communication, change, risk and quality management.

The quality control mechanisms and approach to quality assurance, procedures, and accreditation, drawn from the BQMS are detailed in the project management plan.

The Houlder implementation plan is based around the following project management activities:

- Preparation and planning.
- Project monitoring and control to ensure Houlder delivers on its obligations.
- Managing contract change
- Monitoring Houlder's performance against the contract KPIs enabling prompt action to be taken if agreed levels of performance are not met, including dispute resolution.
- Recording key decisions and general record keeping.

1.1. Preparation and Planning

Houlder shall commence detailed preparation and planning immediately following contract award. This shall be based on the draft implementation plan forming part of this tender and shall include finalisation of the following for agreement with CEFAS at the project Kick Off Meeting:

- Project Schedule, identifying; activity milestones, deliverables, critical path, dependencies.
- Invoicing Format and Schedule
- Monthly Progress Report Format
- Risk Register

Our Project Manager shall assign the project team to their roles and ensure they are fully briefed on the contract requirements, including the scope of work, expected quality and project schedule. It is recognised that meeting the standards of Project Quality requirements is the responsibility of all those assigned to the project. The updated project plan shall be delivered within 2 weeks of contract award.

1.2. Project Related Travel

Throughout the project, travel will be kept to a minimum, with online meetings being the preferred option. When travel is absolutely necessary the minimum number of people will be sent, and sustainable travel options will be preferred (e.g. public transport instead of cars). Where project related car travel is actively avoided as a result of using a green transport programme such as public transport or carpooling, Houlder shall report to the Authority car miles saved on the project. Houlder will also report mileage where low or no emission vehicles have been utilised or innovative measures have been used to safeguard the environment and respond to the climate emergency minimising the carbon footprint of the contract. Short haul flights will be avoided unless absolutely necessary. Any travel outside the UK will be discussed, planned and agreed with the Authority prior to taking place.

2. Part A – Identification of the Preferred Option

Houlder understands that outside of the Specialist Marine Technical Consultant (SMTC) contract, the preliminary identification of the 'Preferred Option' will be worked up by the Authority and the Authority's Business Case consultant prior to the SMTC contract commencing. The following activities shall be carried out, and the results used, in conjunction with the preliminary identification, to support the identification of the 'Preferred Option' to be taken forward to Part B.

2.1. Activity 0: Evaluation of Business Case Assumptions

Houlder has a wealth of experience in developing business cases to support investment decisions for ship construction and conversion projects on behalf of our clients.

We shall undertake a review of the business case, liaising with the Business Case consultant and the Authority as necessary, to evaluate the assumptions made during the preliminary identification of the 'Preferred Option', including the following:

- A review of the high-level stakeholder and system level requirements collated by Cefas. Using our experience of similar vessel types and wider ship design knowledge we shall review the requirements to identify those that are likely to be significant cost drivers for the project and ensure that all such requirements have been identified and assessed. We shall also provide recommendations for Cefas to consider.
- Evaluating the assumed costs associated with each of the short-listed options in the Business Case. This shall be conducted using current market research and our knowledge and experience of the new build and conversions of vessels of similar size and complexity to ensure that the determination of the 'Preferred Option' is based on informed commercial/ financial/ economic estimates.
- Analysing outline timescales for each option. Based on the options, recent vessel projects delivered in a similar manner and our experience, we shall analyse the likely timescales for each option. This shall also include the impact on timescales of contracting with a UK, European or Asian shipyard.
- Review the Outline Business Case and analyse any assumptions and provide due diligence for Cefas.

The output of this review shall be a single set of comments for the Business Case consultant and the Authority to consider and incorporate into the Outline Business Case as deemed appropriate.

2.2. Activity 1: Risk Assessments

Houlder recognises the importance of undertaking risk assessments as an integral part of its risk identification and risk management methodology. In Part A of this project, we shall undertake the risk assessments to provide a systematic examination of the options for the purpose of identifying the significant project risks and recommending what further control measures should be taken to reduce the risk to an acceptable level. Risk assessments shall be carried out for each of the following options as part of this activity.

- Option 1 – 'Do Nothing' Risk Assessment
- Option 2 – Life Extension Risk Assessment
- Option 8 – 'Like-for-like' Replacement Vessel Risk Assessment
- Option 9 – 'Enhanced' Replacement Vessel Risk Assessment

For each of the above options the following process, based on our own Risk Assessment Procedures and Instructions, shall be followed to provide four individual assessments. The risk assessment steps are as follows:

1. Identify risk assessment is required;
2. Review task or activity;
3. Identify all associated risks;
4. Decide on what might be impacted and how;
5. Identify the relevant control measures;
6. Do the control measure introduce new risk – If yes, go back to 2. If no, proceed to 7;
7. Review the risk assessment and evaluate scored;
8. Are the risks adequately reduced to an acceptable level – If yes, proceed to 9. If no, go back to 2;
9. Proceed and monitor control measure for effectiveness.

2.2.1. Review

The specification, design, and performance of the current research vessel, RV Cefas Endeavour, shall be reviewed in conjunction with the Authority and the appointed vessel management company. The review will be focused on the four options under consideration to determine how the delivery objectives of the vessel and Cefas could be affected (positively or negatively) by each of the options.

2.2.2. Identify Risks, Impacts and Controls

Risk identification in conjunction with the Authority and RV Cefas Endeavour's appointed vessel management company. These risk, impact and controls shall include but not be limited to; technical, commercial, economic and CEFAS delivery objectives.

2.2.3. Evaluate Risks

For the initial risk evaluation, the risks identified shall be considered in the worst-case scenario before any controls are applied. The likelihood shall be based on the worst-case scenario, ranging from a remote possibility to the inevitable, using the following scale.

Likelihood	Frequency	Score
Imminent	One event or more per month within the industry	5
Likely	One event between one month and a year	4
Possible	One event in 1-10 years	3
Unlikely	One event in between 10 and 100 years	2
Highly unlikely	Could exceptionally occur	1

Table 2-1- Likelihood Scoring Matrix

The severity shall be expressed in terms of the impact on the project, whether capability, cost or time, using the following scale. The numerical scores given to the likelihood and severity and then multiplied to obtain a risk rating. The risk rating is a measure of the likelihood of occurrence and the severity of the occurrence.

Severity	Project	Cost	Time	Score
Catastrophic	Unable to operate	>£100,000	over 6 months delay	5
Major	Functions of the vessels restricted.	£50,000 to £10,000	up to 6 months delay	4
Severe	Able to operate with concession(s)	£10,000 to £50,000	up to 2 months delay	3
Moderate	Can be rectified by change.	£1,000 to £10,000	up to 2 weeks delay	2
Minor	Negligible impact, can be rectified by modification	<£1,000	<1 day	1

Table 2-2- Severity Scoring Matrix

		Severity				
		1	2	3	4	5
Likelihood	1	(1) Low	(2) Low	(3) Low	(4) Low	(5) Low
	2	(2) Low	(4) Low	(6) Low	(8) Med.	(10) Med.
	3	(3) Low	(6) Low	(9) Med.	(12) Med.	(15) High
	4	(4) Low	(8) Med.	(12) Med.	(16) High	(20) High
	5	(5) Low	(10) Med.	(15) High	(20) High	(25) High

Table 2-3- Combined Scoring Matrix

High risks shall be considered prohibitive, and actions shall be identified to eliminate or substantially mitigate the risk to an acceptable level. Medium risks cannot be neglected, and further mitigations shall be identified. Where medium risks cannot be mitigated further, these shall be identified, and appropriate authorisation and continual monitoring of the risk is recommended. Low risks shall be considered as an acceptable level.

This process allows Cefas to understand the residual risk rating and be aware of how significant a risk is posed if not properly managed.

Overall project risk shall also be calculated by summing the risk scores for all of the tasks and dividing by the number of tasks (rounding up when necessary). This allows for meaningful comparison between the options. The risk assessment template can be found in the Qualification Envelope 08.1.

2.3. Activity 2: Vessel Management Mechanisms

Taking into consideration of the Risk Assessments produced in the previous activity for each of the four options, Houlder shall, with input from the Authority's Specialist Marine Legal Services contractor, review the existing contract mechanism in place between the Authority and RV Cefas Endeavour's appointed vessel management company and consider whether the existing contract mechanism (and associated technical risk management and liability) are suitable for the respective option.

Houlder shall produce either a Do Nothing, Like-for-like or Replacement Vessel Management Options Plan for each option that includes proposed modification to the existing contract mechanism to better manage the risk and liability for that option. This shall include a cost forecast comparison for the vessel management services contract operating with the existing contract mechanism with and without proposed modifications.

3. Part B – Development of the Preferred Option

Houlder understands that following the identification of the 'Preferred Option' in Part A, the SMTC shall be required to support the Authority in the development of one option to take forward as the 'Preferred Option'. The following activities shall be carried out to support the Outline Business Case, and allow the procurement of the 'Preferred Option' in Part C.

3.1. Activity 3: Life Extension Statement of Requirements

Houlder has a wealth of experience in developing user requirements on behalf of our clients and of developing refit specifications for tendering purposes.

Houlder propose a methodology to develop the Life Extension Statement of Requirements (LXSOR) based on a visit to the vessel and a review meeting with Cefas. This ensures close collaboration and mutual understanding of the unique vessel requirements. Houlder's Project Manager (a marine engineer) and a naval architect shall attend.

Houlder shall review the specification, design and performance of the existing vessel, MRV Cefas Endeavour, and the LXSOR and in consultation with Cefas and utilising our experience identify good features of the existing vessel, areas for improvement, additional requirements or those already stated but requiring further clarification. This opportunity shall be used to identify queries and information Houlder shall require to progress with the life extension design.

We shall confirm underwater noise performance with regard to the required standards but also specifics in relation to equipment used and conditions of use by Cefas. At this time, we would consider if any modifications or improvements could be made and/or if existing Classification Society Notations such as DNV's Silent R or Lloyds Register ShipRight UWN or other standards such as ICES no.209, could be applied.

The ship visit shall provide further context and an opportunity to understand any specific operational procedures and challenges that the crew encounter in their daily duties. This will also give Houlder an opportunity to understand present and future operations / scientific delivery requirements from the crew and assess the efficiency of the LXSOR to accommodate these requirements.

As required EEDI reference lines are not provided for research vessels in MARPOL Annex VI, Regulation 21, Houlder shall undertake EEXI calculations of the existing vessel and compare it against similar vessels in Houlder's internal database. This shall allow Houlder to make suggestions to improve the efficiency of the MRV Cefas Endeavour when comparing EEDI with known benchmarks.

Where required, Houlder shall assist Cefas to derive Specific Measurable Achievable Realistic and Timely (SMART) requirements based on the basic LXSOR, which shall then be incorporated into an updated version. This may include amendments to current design practice, innovation, lifecycle costing or other options to improve efficiency. We shall then develop additional system level requirements for areas of key concern.

Following this, a review meeting shall be held to review the basic LXSOR and findings from the ship familiarisation visit. The objective of this meeting shall be to collaboratively agree changes and additions to the LXSOR required by the stakeholder community and receive stakeholder inputs arising from Houlder's LXSOR review.

In particular, this meeting shall be used to determine the stakeholder expectations with respect to the stated design aims of;

- Minimising emissions and discharges;
- Maximising safety;
- Maximising reliability and availability, and;
- Addressing any known issues.

Following the meeting, Houlder shall deliver a draft LXSOR for review and minutes of the meeting to the Cefas contract manager for approval. The Authority will provide Houlder with the final LXSOR document and the definitive LXSOR will be help by Cefas.

3.2. Activity 4: Life Extension Specification

During this activity the life extension design shall be developed to show a credible solution that meets the requirements, and which can be used by:

- Shipyards to tender a fixed cost for the life extension refit of the Cefas Endeavour
- Houlder and the Authority to assess the performance of the Shipyard's proposals.
- all parties during Shipyard refit to assess compliance with the Final LXSOR.
- Houlder and the Authority to assess the operational performance of the Cefas Endeavour following refit

Where new equipment or significant structural changes are suggested, they will be assessed in terms of cost, schedule impact and benefit to capability. These will be presented to Cefas and a joint decision will be made on whether to incorporate them into the final specification.

3.2.1. RV Life Extension Specification

Using our experience, the Houlder project team shall develop, in close collaboration with Cefas, a life extension specification that reflects the unique requirements agreed in the LXSOR and incorporates best shipbuilding practices. The life extension specification shall set out the requirements in a format familiar to shipyards at a level that defines the requirements whilst allowing and encouraging “proven innovation”.

Houlder is experienced with a range of different specification format types, tailored to individual clients and vessels as appropriate. We shall present the options to Cefas and agree on the format to be adopted. Regardless of format, all our specifications include sections covering:

- the general particulars of the research vessel.
- hull specification.
- machinery specification.
- piping specification.
- electrical specification.
- how the Authority's scientific requirements shall be achieved.
- how both underwater radiated noise (URN) and internal noise shall be minimised.
- acceptable limitations relating to the specified research vessel's performance, plant, operation, and ability.
- how availability, reliability and maintainability requirements shall be achieved.

Houlder shall compile a specification, working closely with Cefas to capture precise details where any exist beyond those captured in the vessel LXSOR. As a minimum the follow elements shall be considered during the development of the life extension design and reflected in the specification.

- endurance.
- propulsion system.
- fuel type (including transition/blending where appropriate), storage, and handling systems.
- shafting torsional and vibration characteristics.
- draught and stability.
- efficiency, speed, power and fuel consumption.
- propeller design in relation to service speeds MCR, NCR and RPM (including trawling speeds, Dynamic Positioning (DP) and loitering).
- electrical power including 'clean' supplies.
- hull form.
- classification status.
- statutory requirements.
- margins for weather.
- ageing.
- crewing levels and specialist roles.

3.2.2. Study on most appropriate fuelling and propulsion system

We shall carry out an evaluation study of the merits of the various alternative fuels and the feasibility of any conversion and/or replacement of the existing machinery. The study shall be based on the life extension specification using current operation and load profiles to assess the potential of a range of options including;

- Propulsion type - electric propulsion, AC distribution, DC distribution
- Fuel - diesel (including bio & e-diesels), methanol, hydrogen
- Prime movers - internal combustion engines, fuel cells, batteries

The study shall consider as a minimum the impact of the options on the following.

- Space
- Weight
- Capital cost
- Operating cost
- Full life cost
- Slow speed operation

- DP operation
- Practical design options, including: Fuel consumption and bunkering arrangement, Size and location of bunker tanks, Technical risks, Safety, Impact on current vessel structure and equipment.
- Shore power provision
- Emissions to air, including CO₂, NO_x and SO_x

3.2.3. Arrangement Drawings

In support of the Life Extension Specification, drawings and plans shall be prepared as required either as new plans or updates to the existing drawings. This may include modifications to some or all of the following.

- General Arrangement Plan and Profile
- Midship Section
- Preliminary Tank Plan.
- Working deck arrangements.
- General arrangement of Accommodation.
- General Arrangement of 'Tween decks and Holds.
- Wheelhouse Arrangement.
- Arrangement of Storerooms.
- Engine / hull isolation rafts or mounting.
- Propulsion and electrical schematic.

Other plans may be added to the list if considered if required to enhance the RV Life Extension Specification.

General Arrangement

We shall update the existing General Arrangement (GA) drawing showing plan and profile views, based on the agreed LXSOR and embodying all key features necessary as part of a life extension. Any changes to accommodation, deck equipment and machinery locations, together with Cefas, will be cost benefit assessed as to reach the most effective solution for the vessel.

As part of the life extension planning phase, we anticipate that this drawing shall be updated several times, including outputs from each activity within Phase B and Cefas comments in order to define the key design features and ensure Cefas input is embodied in the tender design package. We have allowed for six iterations of which the final revision shall be the agreed Tender General Arrangement.

On issuing each revision of the GA we have allowed for a video conference with the Cefas project team, to discuss the amendments and the reason for them (outputs of other stages or comments from Cefas).

Midship Section

We shall update midship section drawings where appropriate with sufficient detail to provide input to an updated weight estimate.

Preliminary Tank Plan

As part of the development of the life extension design and to input into the stability assessment we shall produce an update to the tank capacities plan.

Working Areas - General

In conjunction with the GA development, Houlder shall collaborate closely with Cefas to produce detailed updates of the working deck and equipment. In addition to the LXSOR and any subsequent system level requirements identified with Cefas, Houlder shall take the opportunity to discuss the operational challenges associated with use of all equipment with the Cefas operators during the visit to the reference vessel. Together with Cefas staff we generate updates to the scientific laboratory, hangar and working deck arrangements that satisfy the requirements of Cefas and provide flexibility for use, at all times being led by the operational experience and preferences of Cefas.

On completion of the updated preliminary arrangements, Houlder propose a stakeholder review via teleconference during which any final details shall be captured for incorporation into the final arrangements.

Working Areas - Scientific Laboratories

We shall seek feedback from Cefas crew on the current arrangement of the scientific laboratories and any required improvements, updating plans as required.

Working Areas - Deck Arrangements

We shall seek feedback from Cefas crew on the current arrangement of the working decks any required improvements, updating plans as required.

During the life extension specification each piece of deck equipment will be reviewed to see if it can be refurbished or requires replacement to extend its useable life. Any items that require replacement shall be updated on the drawings as required.

Working Areas - Mooring Decks

We shall seek feedback from Cefas crew on the current arrangement of the mooring decks and any required improvements, updating plans as required.

Accommodation Arrangement

We shall seek feedback from Cefas crew on the current arrangement of the accommodation and any required improvements, updating plans as required.

Arrangement of Tween Deck and Holds

We shall seek feedback from Cefas crew on the current arrangement of the tween deck and holds and any required improvements, updating plans as required.

Wheelhouse Arrangement

Where changes are made to the wheelhouse arrangement, Houlder shall update the wheelhouse arrangement drawing to reflect the changes, and in conjunction with the updated GA, we shall be used to confirm the field of vision meets the needs of Cefas and ensure the best possible visibility of the working areas of the deck and cranes from the manoeuvring workstations in addition to regulatory requirements.

Arrangement of Storerooms

We shall seek feedback from Cefas crew on the current arrangement of the storerooms and any required improvements, updating plans as required.

Machinery Arrangements (inc. engine/hull isolation)

Where replacement of main machinery is identified, either as part of obsolescence or conversion to low carbon fuels, Houlder shall update machinery arrangement drawings as required. Any updated arrangement of the main machinery spaces shall include proposed new machinery and associated modifications to walkways, main pipe routes etc. Consideration will be given to machinery access for maintenance purposes and the layout shall comply with all regulatory requirements. Hull isolation of large equipment shall be considered and Houlder shall consult with equipment supplier and use previous project experience to define best solution to minimise noise and vibration and maintain the structural integrity.

Propulsion and Electrical Schematic

We shall produce an update to the electrical single line diagram and machinery arrangement drawings where these are required by the life extension. These shall be based on the existing electrical loads and propulsion powering requirements.

3.2.4. Preliminary Design Information

Lines Plan (including optimisation for URN)

The existing lines shall be subjected to a computational fluid dynamics (CFD) optimisation process to identify any opportunities to minimise the wavemaking resistance of the hull, which shall improve the powering efficiency. This process shall include optimising the alignment of appendages, including bilge keels, and vessel wake to improve efficiency, particularly in the region of the propeller in order to facilitate an optimised propeller design and achieve the lowest practicable Underwater Radiated Noise (URN). This approach shall enable us to determine the propeller inflow conditions. Achieving a uniform inflow is key to avoiding cavitation. We therefore propose a 3-stage CFD optimisation of the hull form and appendages to minimise the resistance and power required, while also ensuring a high-quality propeller wake field conducive to low URN.

During this process hydrodynamic features that improve efficiency or noise performance shall be considered, with a number of feasible options to consider on account of the vessels modest speed. All options considered shall be assessed against both efficiency improvements but also likely impact on noise characteristics. Air lubrication systems shall be assessed for use when cruising, although our experience indicates that they will not show a noteworthy improvement for a vessel of this size.

In tandem with the hull line optimisation, CFD analysis of bubble sweepdown shall be undertaken at a single speed (typically 11 kts). This will be a prime driver for hull modification and will likely be conducted prior to resistance optimisation because research vessel bow design has evolved since the current vessel was designed and constructed. Understanding the flow of bubbles along the hull formed by waves, hard edges and chines is important for a research vessel in order to inform the optimal location for sensors and other scientific equipment to avoid disturbance to their correct operation. The hull areas of focus include the bow, in particular

investigation of the removal of the bulb and replacement with a straighter stem finer lined bow, and bow- thruster tunnel interface and the analysis shall be used to confirm that the bow shape and location of the sonar transducers are suitable to avoid bubbles causing issues with the multi beam echo sounder.

Weights and Centres (including lightship, deadweight and capacities)

We shall calculate changes to the lightship weight and assess the impact on deadweight and capacities as well as investigating what available options may allow the lightship weight to be reduced in order to optimise the initial powering.

Lightweight checks for machinery and outfitting shall be based on the existing vessel and identified changes which shall be refined as the design progresses and, by the tender stage, we shall issue a detailed item weight estimate which reflects the proposed changes as part of the life extension with typical (though non- identifiable) supplier data. The lightship weight and centre (VCG, LCG and TCG) shall be estimated, based on a weight calculation broken down into the following categories:

- Hull
- Accommodation
- Hull Outfit
- Machinery
- Pipes
- Electrical equipment and cables
- Margin

The calculation shall specify whether the information has been estimated, calculated or defined by a potential supplier. A reference for each line of the weight calculation shall define the location of the reference material.

The longitudinal weight distribution shall be undertaken for inclusion in loading conditions, to enable still water bending moments and shear forces to be calculated.

The vessel shall be designed so that as far as possible the transverse centre of gravity (TCG) is zero in departure and ballast conditions so that ballast required for heeling the vessel would be required only to account for asymmetric distribution of cargo.

Lightship and deadweight carrying capacity of the hull form shall be checked at this stage.

Static and Dynamic Stability (including trim)

A preliminary static and dynamic stability study shall be conducted to check that the vessel retains adequate buoyancy, trim and stability characteristics and is capable of safely and efficiently carrying the required cargo, crew, provisions, stores, fuel and consumables, with acceptable trim. The investigation shall include both intact and damaged stability cases.

The position of the stern in relation to the waterline shall be checked in various loading conditions and operating trims.

Dynamic Positioning Capability and Manoeuvring

If changes are proposed to the propulsion and/or thruster arrangement, a preliminary assessment of the vessel's ability to maintain station in the required wind and sea state shall be conducted to provide assurance that the proposed changes do not impact the vessels DP or manoeuvring capability.

Electrical Load

We shall produce an updated calculation of electrical load based on the existing load balance. The updated electrical load balance shall examine the power requirements under the same operating conditions. This shall be used to refine the technical requirements and any innovative power generation and/or storage options.

Powering

For the initial power assessment, we shall calculate power based on parametric series, calibrated against our in-house database of model test and ship trials results. The resistance results from the CFD study shall be utilised to refine the initial powering assessment and improve the accuracy of the assessment. The output of this assessment shall provide power requirements across the speed range, allowing propulsion plant equipment ratings to be confirmed.

The initial power calculation shall be used in the first phases of design refinement in order to verify the initial estimates of machinery weight, stability, capacity and emissions as part of the design spiral. Indicative fuel consumption for operation at endurance and maximum speeds shall be calculated.

Electro Magnetic Compatibility

Electro Magnetic Compatibility is an important consideration for research vessels and any addition, relocation or replacement of equipment shall be carefully planned to minimise the potential for interference between ship and scientific equipment.

Underwater Radiated Noise

If underwater radiated noise is identified as an area where improvement is required mitigation options for reducing URN shall be investigated including:

- Hull form design – streamlining any appendages. This has the benefit of reducing the hull resistance and powering requirements.
- Propeller design – detailed propeller design can reduce cavitation and URN.
- Isolation and Monitoring – installing noisy machinery on isolation mounts, resilient mounts of sound absorbing materials.
- Material Selection - choose materials that dampen noise and vibrations. Sound-absorbing materials, resilient coatings, and insulating panels can be applied to machinery spaces and bulkheads.

A simplified FEA analysis will be undertaken of the engine installation design including the effect of vibration and noise characteristics of rotating machines and shafting.

3.2.5. Tests and Analysis

Hull form

Houlder shall define and agree with Cefas a series of model tests for the optimised hull form. Houlder having recently acquired Seaspeed Marine Consulting Ltd, shall prepare the specification, complete the model construction and conduct model test programme in house. The tests shall be conducted at an International Towing Tank Conference (ITTC) affiliated model test basin. Our team has extensive experience and knowledge from oversight and conduct of model test programmes of a vast range of vessels.

Most model test facilities have a minimum of three-month orderbook, and therefore we shall seek to define and agree the model test programme and testing slot well in advance. The scope of the tests shall be agreed with Cefas before contracting, however our initial view is that the scope should comprise: Resistance model tests to validate and support CFD powering predictions, Seakeeping model tests and Manoeuvring model tests.

The model shall be built to a suitable scale to suit the testing tank facility size and required wave conditions for seakeeping testing. As the purpose of the testing at this stage is assurance of the design, to confirm the extent of hull optimisation is complete and indicate that seakeeping and manoeuvring performance is acceptable, we have assessed that a single model shall be suitable for all tests.

A compromise exists in model scale between testing the higher sea states within the vessel operational envelope, where smaller models are beneficial, and improved accuracy of the resistance and powering tests, where larger models are traditionally used. Utilising our expertise, we will agree the optimum scale with Cefas during the definition of the test scope. Our CFD capability for resistance and propulsion has been extensively benchmarked against model test results, providing us with high confidence in our CFD output and thus flexibility to use a slightly smaller model for resistance model testing if required. Whilst CFD is effective at seakeeping predictions, the cost of doing so is often comparable to model testing.

The model shall be constructed with bilge keels, bow and stern thruster features. Instrumentation fit-out shall allow for recording of motions and accelerations at numerous locations of interest, which can be agreed with Cefas.

The following resistance and propulsion assessments is proposed. All tests shall be undertaken at the design draught, with a 'naked' model. Contributions to resistance from appendage, aero and drag from features such as the bow thruster and drop keels shall be added based on standard estimating procedures.

- Calm water resistance tests at one displacement and trim condition, across the speed range up to 14 kts with sufficient definition to capture the various trawl speeds, cruise, survey and top speed (to be confirmed in conjunction with Cefas).
- An update to the CFD powering assessment in calm water if there is divergence between the model test and CFD resistance results

In order to verify the vessel's seakeeping performance, we propose the following programme of tests in the design loading condition. The objective of the tests is to determine ship motions, accelerations, propeller emergence and slamming tendency. The test scope suggested comprises five wave encounter directions, including head, beam and following seas across a range of sea states to provide output sufficient to provide evidence of seakeeping performance. The test scope, however, can be flexible to suit encounter directions

and sea states Cefas have a particular interest in based on operational experience. The tests shall be instrumented and recorded on video, providing a qualitative output to inform the vessel behaviour, for example the extent of green water over the deck forward and the working deck aft. The programme suggested includes:

- Calm water roll decay in the design condition;
- Tests at one speed and two wave heights for a single wave spectra, at five encounter angles (to be confirmed in consultation with Cefas)

General manoeuvring performance shall be assessed through physical model tests undertaken at a single speed and at the design draught. These tests shall typically comprise turning circles with pull outs and zig-zag manoeuvres sufficient to demonstrate compliance with the IMO criteria.

The model test results shall be assessed and a summary report provided to Cefas stating the impact of the results on the vessel design, including the seakeeping assessment and the effect on the proposed machinery arrangement and the hull form lines.

3.2.6. Equipment Requirements List

Using the requirements within the design specification, we shall provide an Equipment Requirements List in consultation with the Cefas for inclusion in the Tender. The list shall include all equipment plant and service requirements considered essential by Houlder and the Authority to satisfy the life extension Specification and shall include as a minimum the following details of each.

- Equipment type
- Specification requirements (e.g. capacity, power, size, etc.)
- Reasoning for specific parameters
- Example item and track record of item (multiple for each where practical)

Where engagement with manufacturers and/or suppliers has been undertaken as part of the design development, details of visits/discussions shall be recorded and provided to the Authority as an Engagement Record, which shall include. Supplier engagements that lead to equipment being included in the Design Specification will be clearly identified with; dates, names of persons involved, reasons for visit/discussion, summary of discussion/events/activities

3.2.7. 3D Model

On completion of the preliminary arrangements, we shall prepare a 3D model of the final vessel. The final design development review shall utilise the 3D model to examine the operation with Cefas staff to show how different parts of the vessel may look and their interaction.



Figure 3-1 Example bridge render

The 3D model shall include the following areas, from which renders can be taken.

- Bridge
- Mess facilities
- Science laboratory
- Cabin
- Recreation room

3.2.8. Independent Design Review

Houlder undertake design checks and verification as part of our Business Quality Management System (BQMS), certified to International Standards Organisation (ISO) 9001:2015 Quality Standard by Lloyds Register Quality Assurance (LRQA). In addition, we shall hold a dedicated independent design review, suitably timed close to completion of this activity (typically before model testing and issuing of final revision of the general

arrangement, but after other tasks), reviewing the deliverables for the design work undertaken up to this point. We shall focus on the correct definition of the SOR, the lightship and hence deadweight achieved at the critical design draught, the powering calculation and propulsion arrangement and ensuring the vessel as designed is compatible with Cefas's stated objectives regarding emissions.

This review shall be led by a senior consultant, who is not part of the delivery project team, to provide an impartial set of observations and recommendations on the deliverables for incorporation into the design. These observations and recommendation shall be shared with Cefas prior to a design review meeting, maintaining full transparency of the progress and quality of the design.

We shall consider the resulting recommendations and impact of any subsequent design changes and discuss these during the design review meeting with Cefas. This meeting shall agree the actions required to address the recommendations, with Cefas input ensuring that the action plan does not create any adverse impact on the operation of the vessel.

3.3. Activity 5: Life Extension Estimation Summary Report

Based on the life extension design work and technical specification combined with our experience of global shipbuilding and our team's commercial knowledge, we shall provide an estimated cost and life extension schedule for the vessel contained within the Life Extension Estimation Summary Report.

The cost estimate shall include a breakdown comprising costs for steelwork, outfitting, accommodation, and machinery and any specific additional or optional modification during the life extension programme. We shall include clear information on margins and tolerances applied, as well as the level of confidence in each to provide a baseline cost, with variations dependent on construction locations, which shall include yard time in the UK, Europe, and Asia. Operating costs (excluding crew costs) shall be provided, as these are dependent on the owner as well as the vessel, this shall be done as a comparison the existing operating costs for the RV Cefas Endeavour.

An estimated life extension schedule shall be provided based on a comparison with peer vessels with a breakdown comprising of shipyard design, structural work, outfitting, launch and delivery. We shall include clear information on tolerances applied, as well as the level of confidence in the schedule, with variations dependent on shipyard locations, which shall include the UK, Europe, and Asia. We shall also identify items of equipment or machinery that have long lead times and are likely to be on the critical path, and/or represent a risk in the supply chain that may cause delays.

Houlder's role in the procurement of life extension programmes, particularly those for government organisations such as the 'customer friend' role for the MoD for both the Fleet Solid Support and T31 projects, is proven and we believe is an asset that Cefas could draw upon in compiling the business case. If Cefas require, we would be able to provide input into the strategic dimension with regard to the projected technical challenges and costs of maintaining the replacement vessel in service.

4. Part C – Procurement of the Preferred Option

Houlder understands that, where the Outline Business Case is supported by the project's governance and approval process, the 'Preferred Option' developed in Part B will need to be formally procured to support the development and submission of the Full Business Case. The following activities shall be carried out by the SMTC, to support the Authority in the procurement of the 'Preferred Option'.

4.1. Activity 6: Procurement of Vessel Managers

We understand that support shall not be required during the selection questionnaire stage.

During the tender assessment stage, the Project Manager (a principal marine engineer) shall be working as an integrated part of the evaluation team, having access to all tender submissions via the Authority's procurement portal and following the Authority's procurement processes in full.

The Project Managers roles during the assessment of the submissions shall include.

- Evaluation of the documentation in line with all guidance provided by the Authority in line with other evaluators.
- Participation in a Consensus Meeting during which they shall discuss their scores and comments for each tender submission, and their reasoning for such scores and comments.
- Attending the premises/ships of short-listed tenderers for the purposes of an on-site evaluation and scenario exercise.
- Attend Clarification Meetings with each tenderer in Lowestoft.
- Review and evaluation of any subsequent tender submission from the short-listed tenderers.

- Assisting the Authority in de-briefing Tenderers as required.
- Ad hoc advise to the Authority as may be required.
- Advise the Authority in codifying an upgrade programme including the most appropriate stage payment arrangements if necessary.

The number of Vessel Manager assessments is not limited but for an indication of the price we have allowed for three (3) being short-listed, requiring three tenders to be evaluated and on-site evaluations attended.

5. Part D – Implementation of the Preferred Option

Houlder understands that, where the Full Business Case is supported by the project's governance and approval process, and the UK Government decides to implement the 'Preferred Option' developed in Part B, this will need to be formally delivered. The following activities shall be carried out by the SMTC, to support the Authority in the implementation of the 'Preferred Option'.

5.1. Activity 7: Ongoing Technical Support

Stand-alone Scopes of Work

The requirements for ongoing technical support are not known at this time and we understand that a stand-alone scope of work will be drafted for each occasion. For each scope of work, we would provide a proposal to Cefas for your consideration and comment that included;

- Detailed scope of work
- Defined list of deliverables and timescales
- Required customer supplied information
- Any assumptions and exclusions
- Identified resource (and corresponding agreed rate)
- Estimation of hours to complete

Typically, where the scope of work is sufficient defined, we would propose a fixed price for each of these stand-alone scopes, agreed prior to commencing work. However, we would be happy to provide quotations with agreed limits of liability if required.

Vessel Condition Survey

The number of Vessel Condition Surveys is not limited but for an indication of the price we have allowed for two (2) condition surveys during the 5-year period following delivery, a condition survey after approximately 2 years' service and a final condition survey at the end of the period. Both shall be undertaken in coordination with Cefas and the appointed vessel manger.

We shall undertake an initial ship condition survey with the ship in dry dock, at a location and time to be confirmed. A report shall be provided documenting the condition found and rating this condition, with any additional findings, against the contractual requirements of a first-class ship condition, compliant to the required legislation and with a high degree of operational availability. Where required, remedial actions shall be proposed that would improve the condition of the ship to that required by a first-class operator.

A final condition survey, of duration one day, in dry dock, will assess the ship condition against the contractual requirements and the success, or otherwise, of the implementation of any remedial actions in improving the condition of the ship to the contractually required first-class standards. Further recommendations for remedial actions and additional work shall be made in the context of keeping within future legislation trends.

We shall liaise with yourselves to agree exact timing and location of two inspections but for an indication of the price anticipate a dry dock in East Anglia. We shall further liaise with the vessel's master and chief and any other designated responsible person nominated by Cefas to arrange the survey commencement times, confirm our intentions during each survey and confirm requirements of vessel crew with respect to each survey. On commencement of each survey, we will liaise directly with the master and chief to present our survey plan, confirm local safety arrangements and practices and on the initial survey be provided with a guided familiarisation walk through the vessel.

The surveys shall be carried out by a marine engineer and naval architect, who shall attend the vessel to conduct a technical condition inspection. Our assumption is that each survey shall last two working days, excluding travel, and that the vessel shall be undergoing maintenance. The inspections shall comprise the following;

- Survey of the visible condition of the vessel fabric in general including:
 - External hull, superstructure, decks, appendages and fittings;
 - All internal compartments, both technical and non-technical;

- General and specialist deck equipment;
- Machinery and systems, including securing arrangements;
- Inspection of a sample of fresh water or water ballast tanks (tank selection dependent on availability of safe access);
- Visual inspection of and functional demonstration of, with crew assistance and where safe and practical:
 - Watertight closures;
 - Ship IT and communications systems;
 - Isolated checks of general ship systems, including air conditioning, alarm monitoring within random compartments;
- Evident areas of concern with respect to maintenance or other upcoming costs, in particular those that would have contractual implications and those that have a long-term impact on the ship's life;
- The total running hours for main engines and generators;
- Inspection of main Classification Society & Flag Authority survey records for outstanding condition of Class or memoranda – if available on board;
- Discussion with crew and inspection of technical documentation, records and Planned Maintenance System with respect to relevance, equipment availability, hours and cost-effective maintenance practice;
- Inventorying available spares, including condition, with a focus on identification of critical spares through use of crew statements;
- Inspection of the condition of any appurtenances found.

Following each survey we shall prepare a photographic condition report based on the survey and information gathered, including;

- Photographs and descriptions of
 - Any evident areas of concern with respect to maintenance or other upcoming costs;
 - The overall condition of the vessel, machinery and equipment, systems and outfit as well as any visible damage or repairs;
 - The overall condition of the vessel structure;
 - Any areas or equipment which appear to be in poor condition relative the vessels target service life;
- Record of latest total running hours for main engines and generators,
- Record of status of main current certification, including photographs or copies of, specifically;
 - Main Class certificate
 - Passenger Safety certificate (if applicable)
 - Record of Equipment certificate (LSA)
 - Dangerous Goods certificate
 - Safe Manning certificate
- Inventory of spares located on board;
- Remedial actions required to meet first class operator standards and those to achieve contractual compliance.

6. Schedule of Deliverables

The following deliverable shall be submitted to Cefas in PDF format via email.

Activity	Deliverables	Q'ty
General	Implementation Plan	1 off
	Monthly progress reports (Parts A & B)	8 off (monthly)
	Monthly progress reports (Parts C & D)	TBC (monthly)
0	Business Case Evaluation Report	1 off
1	'Do Nothing' Risk Assessments ('Do nothing', life extension, 'like-for-like' replacement and 'enhanced' replacement)	4 off
2	'Do Nothing' Vessels Management Options Plans ('Do nothing', life extension, 'like-for-like' replacement and 'enhanced' replacement)	4 off
3	Statement of Requirements appraisal report	1 off
4	Research Vessel Life Extension Specification	1 off
	Study on most appropriate fuelling and propulsion system	1 off
	Arrangement Drawings (updates to existing where required)	
	General Arrangement Drawing	1 off +5 revisions
	Midship Section	1 off
	Preliminary Tank Plan	1 off

Activity	Deliverables	Q'ty
	Arrangement of working areas	4 off
	Accommodation Arrangement	1 off
	Arrangement of Tween Deck and Holds	1 off
	Wheelhouse Arrangement	1 off
	Arrangement of Storerooms	1 off
	Machinery Arrangement (inc. engine/hull isolation)	1 off
	Propulsion Schematic	1 off
	Electrical Schematic	1 off
	Preliminary Design Information (updates to existing where required)	
	Lines Plan	1 off
	CFD report (inc. Dynamic Positioning)	1 off
	Deadweight with initial breakdown	1 off
	Lightship calculation	1 off
	Stability report (inc. recommendations, intact, damage, trim and heel)	1 off
	Tank capacity plan	1 off
	Electrical load balance	1 off
	Powering report	1 off
	Tests and Analysis	
	Model test specification	1 off
	Model test report	1 off
	Equipment Requirements Lists	1 off
	3D Model renders	5 off
	Independent Design Review Report	1 off
5	Cost Estimate Report	1 off
6	Assessment of Vessel Managers Tenders	3 off
7	Vessel Condition Survey Report	2 off
	Ad hoc support	9 off (TBC)

Deliverables shall be submitted in batches at the following times.

Batch No.	Title	Delivery ¹²
1	Project Implementation Plan	Contract start +2 weeks
2	Part A, Activity 0 to 2 – Identification of preferred option	Contract start +5 weeks
3	Part B, Activity 3 – Statement of Requirements	Select preferred option +7 weeks
6	Part B, Activity 4 – Life Extension Specification	Acceptance of activity 3 +24 weeks
4	Part B, Activity 4 – General Arrangement, Rev A Revisions B to F	Acceptance of activity 3 +4 weeks Four-week intervals
5	Part B, Activity 4 – Study on fuelling & powering options	Acceptance of activity 3 +4 weeks
6	Part B, Activity 4 – Remaining deliverables	Acceptance of activity 3 +24 weeks
7	Part B, Activity 5 – Estimation	Acceptance of activity 3 +24 weeks
8	Part C – Procurement of the Preferred Option	TBC
7	Part D – Implementation of the Preferred Option	TBC

¹ Part A shall be completed upon determination of the Preferred Option which we understand is expected to be in November 2023, subject to a contract start date of 23rd October 2023.

² It is expected that all activities captured under Part B shall be completed by the end of June 2024, subject to the determination of the Preferred Option in November 2023, however timings may be subject to change and shall be agreed as part of the Implementation Plan.

1. Implementation Plan

The implementation plan demonstrates Houlder's project management arrangements and capacity to undertake the work within the timescales specified.

Houlder has prepared a draft implementation plan (Appendix I) based on robust project management principles in accordance with the Houlder Business Quality Management System (BQMS) which govern all works undertaken by Houlder. The plan includes a project overview listing the scope including all activity milestones, deliverables and identifies the critical path. The plan also details dependencies and risks which may affect the implementation including; resource planning, utilisation of staff, cost, communication, change, risk and quality management.

The quality control mechanisms and approach to quality assurance, procedures, and accreditation, drawn from the BQMS are detailed in the project management plan.

The Houlder implementation plan is based around the following project management activities:

- Preparation and planning.
- Project monitoring and control to ensure Houlder delivers on its obligations.
- Managing contract change
- Monitoring Houlder's performance against the contract KPIs enabling prompt action to be taken if agreed levels of performance are not met, including dispute resolution.
- Recording key decisions and general record keeping.

1.1. Preparation and Planning

Houlder shall commence detailed preparation and planning immediately following contract award. This shall be based on the draft implementation plan forming part of this tender and shall include finalisation of the following for agreement with CEFAS at the project Kick Off Meeting:

- Project Schedule, identifying; activity milestones, deliverables, critical path, dependencies.
- Invoicing Format and Schedule
- Monthly Progress Report Format
- Risk Register

Our Project Manager shall assign the project team to their roles and ensure they are fully briefed on the contract requirements, including the scope of work, expected quality and project schedule. It is recognised that meeting the standards of Project Quality requirements is the responsibility of all those assigned to the project. The updated project plan shall be delivered within 2 weeks of contract award.

1.2. Project Related Travel

Throughout the project, travel will be kept to a minimum, with online meetings being the preferred option. When travel is absolutely necessary the minimum number of people will be sent, and sustainable travel options will be preferred (e.g. public transport instead of cars). Where project related car travel is actively avoided as a result of using a green transport programme such as public transport or carpooling, Houlder shall report to the Authority car miles saved on the project. Houlder will also report mileage where low or no emission vehicles have been utilised or innovative measures have been used to safeguard the environment and respond to the climate emergency minimising the carbon footprint of the contract. Short haul flights will be avoided unless absolutely necessary. Any travel outside the UK will be discussed, planned and agreed with the Authority prior to taking place.

2. Part A – Identification of the Preferred Option

Houlder understands that outside of the Specialist Marine Technical Consultant (SMTC) contract, the preliminary identification of the 'Preferred Option' will be worked up by the Authority and the Authority's Business Case consultant prior to the SMTC contract commencing. The following activities shall be carried out, and the results used, in conjunction with the preliminary identification, to support the identification of the 'Preferred Option' to be taken forward to Part B.

2.1. Activity 0: Evaluation of Business Case Assumptions

Houlder has a wealth of experience in developing business cases to support investment decisions for ship construction and conversion projects on behalf of our clients.

We shall undertake a review of the business case, liaising with the Business Case consultant and the Authority as necessary, to evaluate the assumptions made during the preliminary identification of the 'Preferred Option', including the following:

- A review of the high-level stakeholder and system level requirements collated by Cefas. Using our experience of similar vessel types and wider ship design knowledge we shall review the requirements to identify those that are likely to be significant cost drivers for the project and ensure that all such requirements have been identified and assessed. We shall also provide recommendations for Cefas to consider.
- Evaluating the assumed costs associated with each of the short-listed options in the Business Case. This shall be conducted using current market research and our knowledge and experience of the new build and conversions of vessels of similar size and complexity to ensure that the determination of the 'Preferred Option' is based on informed commercial/ financial/ economic estimates.
- Analysing outline timescales for each option. Based on the options, recent vessel projects delivered in a similar manner and our experience, we shall analyse the likely timescales for each option. This shall also include the impact on timescales of contracting with a UK, European or Asian shipyard.
- Review the Outline Business Case and analyse any assumptions and provide due diligence for Cefas.

The output of this review shall be a single set of comments for the Business Case consultant and the Authority to consider and incorporate into the Outline Business Case as deemed appropriate.

2.2. Activity 1: Risk Assessments

Houlder recognises the importance of undertaking risk assessments as an integral part of its risk identification and risk management methodology. In Part A of this project, we shall undertake the risk assessments to provide a systematic examination of the options for the purpose of identifying the significant project risks and recommending what further control measures should be taken to reduce the risk to an acceptable level. Risk assessments shall be carried out for each of the following options as part of this activity.

- Option 1 – 'Do Nothing' Risk Assessment
- Option 2 – Life Extension Risk Assessment
- Option 8 – 'Like-for-like' Replacement Vessel Risk Assessment
- Option 9 – 'Enhanced' Replacement Vessel Risk Assessment

For each of the above options the following process, based on our own Risk Assessment Procedures and Instructions, shall be followed to provide four individual assessments. The risk assessment steps are as follows:

1. Identify risk assessment is required;
2. Review task or activity;
3. Identify all associated risks;
4. Decide on what might be impacted and how;
5. Identify the relevant control measures;
6. Do the control measure introduce new risk – If yes, go back to 2. If no, proceed to 7;
7. Review the risk assessment and evaluate scored;
8. Are the risks adequately reduced to an acceptable level – If yes, proceed to 9. If no, go back to 2;
9. Proceed and monitor control measure for effectiveness.

2.2.1. Review

The specification, design, and performance of the current research vessel, RV Cefas Endeavour, shall be reviewed in conjunction with the Authority and the appointed vessel management company. The review will be focused on the four options under consideration to determine how the delivery objectives of the vessel and Cefas could be affected (positively or negatively) by the each of the options.

2.2.2. Identify Risks, Impacts and Controls

Risk identification in conjunction with the Authority and RV Cefas Endeavour's appointed vessel management company. These risk, impact and controls shall include but not be limited to; technical, commercial, economic and CEFAS delivery objectives.

2.2.3. Evaluate Risks

For the initial risk evaluation, the risks identified shall be considered in the worst-case scenario before any controls are applied. The likelihood shall be based on the worst-case scenario, ranging from a remote possibility to the inevitable, using the following scale.

Likelihood	Frequency	Score
Imminent	One event or more per month within the industry	5
Likely	One event between one month and a year	4
Possible	One event in 1-10 years	3
Unlikely	One event in between 10 and 100 years	2
Highly unlikely	Could exceptionally occur	1

Table 2-1- Likelihood Scoring Matrix

The severity shall be expressed in terms of the impact on the project, whether capability, cost or time, using the following scale. The numerical scores given to the likelihood and severity and then multiplied to obtain a risk rating. The risk rating is a measure of the likelihood of occurrence and the severity of the occurrence.

Severity	Project	Cost	Time	Score
Catastrophic	Unable to operate	>£100,000	over 6 months delay	5
Major	Functions of the vessels restricted.	£50,000 to £10,000	up to 6 months delay	4
Severe	Able to operate with concession.	£10,000 to £50,000	up to 2 months delay	3
Moderate	Can be rectified by change.	£1,000 to £10,000	up to 2 weeks delay	2
Minor	Negligible impact, can be rectified by modification	<£1,000	<1 day	1

Table 2-2- Severity Scoring Matrix

		Severity				
		1	2	3	4	5
Likelihood	1	(1) Low	(2) Low	(3) Low	(4) Low	(5) Low
	2	(2) Low	(4) Low	(6) Low	(8) Med.	(10) Med.
	3	(3) Low	(6) Low	(9) Med.	(12) Med.	(15) High
	4	(4) Low	(8) Med.	(12) Med.	(16) High	(20) High
	5	(5) Low	(10) Med.	(15) High	(20) High	(25) High

Table 2-3- Combined Scoring Matrix

High risks shall be considered prohibitive, and actions shall be identified to eliminate or substantially mitigate the risk to an acceptable level. Medium risks cannot be neglected, and further mitigations shall be identified. Where medium risks cannot be mitigated further, these shall be identified, and appropriate authorisation and continual monitoring of the risk is recommended. Low risks shall be considered as an acceptable level.

This process allows Cefas to understand the residual risk rating and be aware of how significant a risk is posed if not properly managed.

Overall project risk shall also be calculated by summing the risk scores for all of the tasks and dividing by the number of tasks (rounding up when necessary). This allows for meaningful comparison between the options. The risk assessment template can be found in the Qualification Envelope 08.1.

2.3. Activity 2: Vessel Management Mechanisms

Taking into consideration of the Risk Assessments produced in the previous activity for each of the four options, Houlder shall, with input from the Authority's Specialist Marine Legal Services contractor, review the existing contract mechanism in place between the Authority and RV Cefas Endeavour's appointed vessel management company and consider whether the existing contract mechanism (and associated technical risk management and liability) are suitable for the respective option.

Houlder shall produce either a Do Nothing, Like-for-like or Replacement Vessel Management Options Plan for each option that includes proposed modification to the existing contract mechanism to better manage the risk and liability for that option. This shall include a cost forecast comparison for the vessel management services contract operating with the existing contract mechanism with and without proposed modifications.

3. Part B – Development of the Preferred Option

Houlder understands that following the identification of the 'Preferred Option' in Part A, the SMTC shall be required to support the Authority in the development of one option to take forward as the 'Preferred Option'. The following activities shall be carried out to support the Outline Business Case, and allow the procurement of the 'Preferred Option' in Part C.

Our approach is to have early engagement with Cefas to ensure that we gain a comprehensive understanding of the requirements and establish the sense of collaboration with the ship operation staff that, we trust, shall be a feature throughout the project.

Prompt engagement with a model test facility is also key to this phase of the project to ensure that this can be completed in a well-timed manner to inform the design prior to the build tender being issued. We have an existing relationship a suitable facility that shall make this possible. To this end, we have contacted the facility, to identify when the model test basin is available for use.

We shall provide deliverables in draft form two weeks prior to submission of final versions to allow the Cefas to comment in good time. In this way we aim to mitigate any delays that may arise from amendments required. Deliverables shall be submitted at the earliest opportunity or in batches (as agreed with the Cefas). Milestone dates in the programme indicate provision dates for delivery of a document or batch which shall be agreed as part of the implementation plan.

3.1. Activity 3: Assess the Authority's Statement of Requirements

Houlder has a wealth of experience in developing user requirements on behalf of our clients and of developing illustrative designs and design specifications for tendering purposes.

Houlder propose a methodology to finalise the basis Statement of Requirements (SOR) based on a visit to the vessel and a review meeting with Cefas. This ensures close collaboration and unequivocal mutual understanding of the unique vessel requirements. Houlder's Project Manager (a marine engineer) and a naval architect shall attend.

Houlder shall review the specification, design and performance of the existing vessel, MRV Cefas Endeavour, and the SOR and in consultation with Cefas and utilising our experience identify good features of the existing vessel, areas for improvement, additional requirements or those already stated but requiring further clarification. This opportunity shall be used to identify queries and information Houlder shall require to progress with the preliminary design, for example those associated with trawling and deployment of scientific equipment, survey operations and any specifics of the geographical areas of operation and ports visited.

We shall confirm expectations of underwater noise performance with regard to accepted design standards but also specifics in relation to equipment used and conditions of use by Cefas. At this time, we would consider if existing Classification Society Notations such as DNV's Silent R or Lloyds Register ShipRight UWN, would be appropriate to meet the role foreseen for the ship or propose alternative and/or additional acceptance criteria (such as ICES No.209).

The ship visit shall provide further context and an opportunity to understand any specific operational procedures and challenges that the crew encounter in their daily duties. This will also give Houlder an opportunity to understand present and future operations / scientific delivery requirements from the crew and assess the efficiency of the SOR to accommodate these requirements.

As required EEDI reference lines are not provided for research vessels in MARPOL Annex VI, Regulation 21, Houlder shall undertake EEXI calculations of the existing vessel and compare it against similar vessels in Houlder's internal database. This shall allow Houlder to make suggestions to improve the efficiency of the new design when comparing EEDI with known benchmarks.

Where required, Houlder shall assist Cefas to derive Specific Measurable Achievable Realistic and Timely (SMART) requirements based on the basic SOR, which shall then be incorporated into an updated version. This may include amendments to current design practice, innovation, lifecycle costing or other options to improve efficiency. We shall then develop additional system level requirements for areas of key concern.

Following this, a review meeting shall be held to review the basic SOR and findings from the ship familiarisation visit. The objective of this meeting shall be to collaboratively agree changes and additions to the SOR required by the stakeholder community and receive stakeholder inputs arising from Houlder's SOR review. In particular, this meeting shall be used to determine the stakeholder expectations with respect to the stated design aims of;

- Minimising emissions and discharges;
- Maximising manoeuvrability, seakeeping and crew comfort;
- Maximising safety, and;
- Maximising reliability and availability.

Following the meeting, Houlder shall deliver a draft SOR for review and minutes of the meeting to the Cefas contract manager for approval. The Authority will provide Houlder with the final SOR document and the definitive SOR will be help by Cefas.

3.2. Activity 4: Research Vessel Design Specification

During this activity the concept design shall be developed to show a credible solution that meets the requirements, and which can be used by:

- Shipyards to tender a fixed cost for the design and build of the research vessel.
- Houlder and the Authority to assess the performance of the Shipyard's design and build.
- all parties during Shipyard design and build to assess the compliance of the emerging vessel, the associated plant, and outfit with the original intentions of the Authority and the Final SOR.
- Houlder and the Authority to assess the operational performance of the research vessel at all the stages of this Specification.

3.2.1. RV Design Specification

Using our experience, the Houlder project team shall develop, in close collaboration with Cefas, a design specification that reflects the unique requirements agreed in the SOR and incorporates best shipbuilding practices. The design specification shall set out the requirements in a format familiar to shipyards at a level that defines the requirements whilst allowing and encouraging “proven innovation”.

Houlder is experienced with a range of different specification format types, tailored to individual clients and vessels as appropriate. We shall present the options to Cefas and agree on the format to be adopted. Regardless of format, all our specifications include sections covering:

- the general particulars of the research vessel.
- hull specification.
- machinery specification.
- piping specification.
- electrical specification.
- how the Authority's scientific requirements shall be achieved.
- how both underwater radiated noise (URN) and internal noise shall be minimised.
- acceptable limitations relating to the specified research vessel's performance, plant, operation, and ability.
- how availability, reliability and maintainability requirements shall be achieved.

Houlder shall compile a specification, working closely with Cefas to capture precise details where any exist beyond those captured in the vessel SOR. As a minimum the follow elements shall be considered during the development of the design and reflected in the specification.

- endurance.
- propulsion system.
- fuel type (including transition/blending where appropriate), storage, and handling systems.
- shafting torsional and vibration characteristics.
- draught and stability.
- efficiency, speed, power and fuel consumption.
- propeller design in relation to service speeds MCR, NCR and RPM (including trawling speeds, Dynamic Positioning (DP) and loitering).
- electrical power including 'clean' supplies.
- hull form.
- classification status.
- statutory requirements.
- margins for weather.
- ageing.
- crewing levels and specialist roles.

3.2.2. Study on most appropriate fuelling and propulsion system

During selection and specification of the most appropriate fuelling and propulsion system, we shall carry out an evaluation study of the merits of the various alternatives. The study shall be based on the design specification using the reference vessel operation and load profiles to assess the potential of a range of options including;

- Propulsion type - electric propulsion, AC distribution, DC distribution
- Fuel - diesel (including bio & e-diesels), methanol, hydrogen
- Prime movers - internal combustion engines, fuel cells, batteries

The study shall consider as a minimum the impact of the options on the following.

- Space

- Weight
- Capital cost
- Operating cost
- Full life cost
- Slow speed operation
- DP operation
- Practical design options, including
 - Fuel consumption and bunkering
 - Size and location of bunker tanks
 - Technical risks
 - Safety
- Shore power provision
- Emissions to air (inc. CO₂, NO_x and SO_x)

3.2.3. Arrangement Drawings

In support of the Design Specification, the following drawing and plans shall be prepared as a minimum.

- General Arrangement Plan and Profile
- Midship Section
- Preliminary Tank Plan.
- Working deck arrangements.
- General arrangement of Accommodation.
- General Arrangement of 'Tween decks and Holds.
- Wheelhouse Arrangement.
- Arrangement of Storerooms.
- Engine / hull isolation rafts or mounting.
- Propulsion and electrical schematic.

Other plans may be added to the list if considered if required to enhance the RV Design Specification.

General Arrangement

We shall develop a concept General Arrangement (GA) drawing showing plan and profile views, based on the agreed SOR and embodying all key features necessary as part of a successful design. We shall consider different accommodation, deck equipment and machinery locations so that, together with Cefas, we agree the best overall configuration for the vessel.

As part of the concept arrangement phase, we anticipate that this drawing shall be updated throughout the design process including outputs from each activity within Phase B and Cefas comments in order to define the key design features and ensure Cefas input is embodied in the tender design package. We have allowed for six iterations of which the final revision shall be the agreed Tender General Arrangement. On issuing each revision of the GA we have allowed for a video conference with the Cefas project team, to discuss the amendments and the reason for them (outputs of other stages or comments from Cefas).

Midship Section

We shall prepare preliminary midship section drawings with sufficient detail to provide input to the weight estimate, but without developing design details for minor bulkheads, equipment foundations, etc. where it is considered more appropriate to apply the standard methods of the selected shipbuilder.

Preliminary Tank Plan

As part of the development of the concept design and to input into the stability assessment we shall produce a tank capacities plan.

Working Areas - General

In conjunction with the GA development, Houlder shall collaborate closely with Cefas to develop a detailed arrangement of the working deck and equipment. In addition to the SOR and any subsequent system level requirements identified with Cefas, Houlder shall take the opportunity to discuss the operational challenges associated with use of all equipment with the Cefas operators during the visit to the reference vessel. Together with Cefas staff we shall generate scientific laboratory, hangar and working deck arrangements that satisfy the requirements of Cefas and provide flexibility for use, at all times being led by the operational experience and preferences of Cefas.

Our approach to generating the various arrangements shall mirror that taken for RRS Sir David Attenborough and the MRV Scotia replacement, which is focused on client consultation and input as the scientific capability and functionality defines the purpose of the ship. The RRS Sir David Attenborough and MRV Scotia

replacement have similar scientific equipment to the RV Cefas Endeavour, and consequently the types of required deck equipment are familiar to the Houlder team.

On completion of the preliminary arrangements, Houlder propose a stakeholder review via teleconference during which any final details shall be captured for incorporation into the final arrangements.

Working Areas - Scientific Laboratories

Following initial discussions with the Cefas team and drawing on our experience of layouts from other scientific vessels, we shall together create an arrangement layout for the scientific laboratories. The final number and types of compartment shall be determined by the SOR, but we would typically expect the following to be included:

- CTD Laboratory
- Wet laboratory, with dry annex,
- General laboratory
- Instrumentation laboratory,
- Computer suite,

Other scientific spaces, for example freezers and store rooms shall be sited. The entire arrangement shall take account of access arrangements and routes between all spaces to suit best safe and ergonomic use by Cefas staff.

Working Areas - Deck Arrangements

In conjunction with Cefas operator input, we shall prepare a draft deck arrangement for review and comment. This shall illustrate the position and range of major moving equipment (including boats, davits, and cranes), bulwark openings, line handling equipment and control stations.

Following comments received, we shall develop the arrangement focusing on being both safe and ergonomic for the user whilst providing flexibility. We shall draw on our prior experience of RRS Sir David Attenborough, MRV Scotia replacement, other research vessels and offshore working vessels. In addition, where required, our experience with offshore equipment handling and launch and recovery system and davit design.

We envisage that the arrangement shall site the following equipment, which shall be confirmed with Cefas:

- Trawl winches, trawl ways, sheaves,
- Storage requirement for trawl weights and doors
- Multiple types of scientific and net winches
- Strong points and turn locks to provide flexibility in securing additional equipment
- A-frame & Cranes
- Fish hopper
- Store hatches
- Workboat(s)

Working Areas - Mooring Decks

We shall engage with the operator to understand the reference vessel mooring arrangements and how these can be applied or improved for use on the new design. Specific requirements relating to regular berths shall be gathered and shall influence the design, including location of the gangway access points, for example to ensure that gangway angles sit within recommended limits and for ease of access and handling.

Using the concept GA as a basis we shall calculate the equipment number from which the size of anchors, chain, and mooring equipment can be determined. Using these we shall prepare a mooring arrangement drawing.

Accommodation Arrangement

We shall seek feedback from Cefas crew on the arrangement of the reference vessel to inform our design.

Using the space envelope developed in the concept GA we shall prepare a crew accommodation arrangement drawing showing in plain view the size of main furniture (bed, desk, wardrobes, bathroom) in crew sleeping/day rooms and the mess/recreation rooms. All crew and officers' accommodation shall be based on cabin sizes that exist on the reference and shall comply with Maritime Labour Convention (MLC) standards required for international operation, in addition to any requirements identified in the SOR. As far as possible the crew and officers' cabins shall use standardised equipment and furniture with single cabins for crew and officers.

Layout of the accommodation spaces shall emphasise efficiency in movement, particularly with respect to access routes to muster stations and life-saving equipment. A logical arrangement in turn shall promote safety by easing crew tasks whilst on board. The access from the deck areas shall be carefully considered to provide direct access to 'wet' changing rooms, adjacent drying rooms.

Arrangement of Tween Deck and Holds

We shall seek feedback from Cefas crew on the arrangement of the reference vessel to inform our design.

Using our experience of designing research vessels and the input from the crew in terms of what equipment is stored where, we will develop an arrangement for the tween deck and holds. Access to the holds and loading areas will be as ergonomic as possible for the crew. Any hazardous or sensitive scientific equipment that needs to be stored will be in appropriately classified zones. The size and location of the holds will be clearly marked on the GA and reviews with the Authority and the crew throughout.

Wheelhouse Arrangement

We shall seek feedback from Cefas crew on the arrangement of the reference vessel to inform our design.

We shall utilise our experience in designing vessels that operate deploying boats and equipment at sea, such as the RRS Sir David Attenborough and MRV Scotia replacement, to generate a bridge arrangement that maximises ease of operation for your specific tasks.

The concept GA shall be used to confirm the field of vision meets the needs of Cefas and ensure the best possible visibility of the working areas of the deck and cranes from the manoeuvring workstations in addition to regulatory requirements.

The bridge windows, main steering position, navigation and manoeuvring workstations and bridge wings shall be designed to ensure sufficient visibility in line with IMO guidelines on ergonomic criteria for bridge equipment and layouts. Bridge equipment shall be included in the design based on similar reference equipment.

Arrangement of Storerooms

We shall seek feedback from Cefas crew on the arrangement of the reference vessel to inform our design.

Using our experience of designing research vessels and the input from the crew in terms of what equipment is stored where, we will develop an arrangement for the storerooms. Access to the storerooms and loading areas will be as ergonomic as possible for the crew. Any hazardous or sensitive scientific equipment that needs to be stored will be in appropriately classified zones. The size and location of the storerooms will be clearly marked on the GA and reviews with the Authority and the crew throughout.

Machinery Arrangements (inc. engine/hull isolation)

Houlder will use their experience of machinery space arrangement to create a space efficient and ergonomic machinery spaces. An arrangement of the main machinery spaces will be included using example engine specifications which Houlder have specified on previous projects. Consideration will be given to machinery access for maintenance purposes and the layout will comply with all regulatory requirements. Hull isolation of large equipment will be considered and Houlder will consult with equipment supplier and use previous project experience to define best solution to minimise noise and vibration and maintain the structural integrity. An initial FEA analysis of the engine raft design shall be undertaken using typical stiffness, vibrational and allowable deflections supplied by engine manufacturers for engines similar to that being specified. The detail of resilient mountings and vibration analysis will be done by the engine manufacturer in the detailed design phase.

Propulsion and Electrical Schematic

We shall produce a preliminary electrical single line diagram and the creation of the machinery arrangement drawing. These shall be based on the preliminary electrical loads and propulsion powering requirements calculated.

3.2.4. Preliminary Design Information

Lines Plan (including optimisation for URN)

Preliminary lines shall be developed based on the first iteration of the general arrangement and outline weight estimate, lightship weight, deadweight and buoyancy consistent with preliminary estimates. Our approach to developing and optimising lines starts with a definition of the hard-point constraints including principal dimensions, deck areas, propeller(s), secondary thrusters, structure and other geometrical factors as appropriate. These are modelled in 3D and used as the basis of a hull form to meet the required hydrostatic form coefficients (optimised block, waterplane, midship section, prismatic, etc.) as best suits the design.

These lines shall be fed back into the arrangement drawing to confirm that the fairing process has not compromised the vessel arrangement.

Throughout this process we shall make reference to proven hull forms from our extensive library, incorporating their best relevant features with respect to the Cefas vessel primary objectives. In this case, we have a selection of several proven and tested concept research vessel hull forms, and noting the emphasis on acoustic performance we can draw on our prior experience in the crucial areas of the hull, for example bow

design to minimise bubble sweepdown. We will also pay particular attention to seakeeping performance and maximising the operational envelope of the vessel by providing a safe and comfortable platform for science missions to be conducted from. We will draw on a history of vessels with sound seaworthy performance, stretching from CS Sovereign, to more the recent model tests of Marine Scotland designs indicated impressive seakeeping performance.

The preliminary lines shall be subjected to a computational fluid dynamics (CFD) optimisation process to minimise the wavemaking resistance of the hull, which shall improve the powering efficiency. This process shall include optimising the alignment of appendages, including bilge keels, and vessel wake to improve efficiency, particularly in the region of the propeller in order to facilitate an optimised propeller design and achieve the lowest practicable Underwater Radiated Noise (URN). This approach shall enable us to determine the propeller inflow conditions. Achieving a uniform inflow is key to avoiding cavitation. We therefore propose a 3-stage CFD optimisation of the hull form and appendages to minimise the resistance and power required, while also ensuring a high-quality propeller wake field conducive to low URN.

During this process hydrodynamic features that improve efficiency or noise performance shall be considered, with a number of feasible options to consider on account of the vessels modest speed. These may include a ducted propeller or rudder bulb. All options considered shall be assessed against both efficiency improvements but also likely impact on noise characteristics.

In tandem with the hull line optimisation, CFD analysis of bubble sweepdown shall be undertaken at a single speed (typically 11 kts). Understanding the flow of bubbles along the hull formed by waves, hard edges and chines is important for a research vessel in order to inform the optimal location for sensors and other scientific equipment to avoid disturbance to their correct operation. The hull areas of focus include the bow and bow- thruster tunnel interface and the analysis shall be used to confirm that the bow shape and location of the sonar transducers are suitable to avoid bubbles causing issues with the multi beam echo sounder.

The siting of the drop keel shall be fixed in conjunction with input from Cefas, the results from the bubble sweepdown assessment and considerations for watertight sub-division and overall general arrangement.

Hydrostatics

Initial estimates shall compare the required hull form parameters against our library of reference information to confirm the initial design is in a suitable range. As the design matures, we shall model the hull form in order to undertake detailed hydrostatic calculations using the Naval Architecture program NAPA. This shall output, amongst other items, hydrostatics and KN curves for the hull form for the range of operating draughts.

Calculations of Scantlings

We shall carry out a longitudinal strength calculation, based on the still water bending moment calculated as part of stability analysis (see below). Referencing this, we shall calculate the required section modulus using Classification Society rules and develop a midship section. This shall be designed to have adequate effective section modulus for global strength and scantlings for deck, side shell and bulkheads in accordance with rule requirements.

Weights and Centres (including lightship, deadweight and capacities)

At the concept stage we shall calculate the lightship weight based on our in-house database of reference vessels, suitably adapted to suit the vessel. We shall consider the target block coefficient and as part of this lightship weight assessment we shall investigate what available options may allow the lightship weight to be reduced in order to optimise the initial powering.

As steelwork comprises the dominant proportion of the lightship weight, we shall utilise scantling calculations to determine an accurate steel weight prediction.

Initial lightweight checks for machinery and outfitting shall be based on reference design values which shall be refined as the design progresses and, by the tender design stage, we shall issue a detailed item weight estimate which reflects the specification and GA with typical (though non-identifiable) supplier data. Within the lightship estimate we shall investigate the impact of, for example, the use of high-strength steels and light- weight outfitting. The lightship weight and centre (VCG, LCG and TCG) shall be estimated, based on a weight calculation broken down into the following categories:

- Hull
- Accommodation
- Hull Outfit
- Machinery
- Pipes
- Electrical equipment and cables

- Margin

The calculation shall specify whether the information has been estimated, calculated or defined by a potential supplier. A reference for each line of the weight calculation shall define the location of the reference material. The longitudinal weight distribution shall be undertaken for inclusion in loading conditions, to enable still water bending moments and shear forces to be calculated.

The vessel shall be designed so that as far as possible the transverse centre of gravity (TCG) is zero in departure and ballast conditions so that ballast required for heeling the vessel would be required only to account for asymmetric distribution of cargo. Lightship and deadweight carrying capacity of the hull form shall be checked at this stage.

Static and Dynamic Stability (including trim)

A preliminary static and dynamic stability study shall be conducted to demonstrate that the vessel has adequate buoyancy, trim and stability characteristics and is capable of safely and efficiently carrying the required cargo, crew, provisions, stores, fuel and consumables, with acceptable trim. The investigation shall include both intact and damaged stability cases. The position of the stern in relation to the waterline shall be checked in various loading conditions and operating trims.

Dynamic Positioning Capability and Manoeuvring

Whilst technical reference data shall provide an indication of thruster sizes and indicative performance, a preliminary assessment of the vessel's ability to maintain station in the required wind and sea state shall be conducted to provide assurance that the proposed design and propulsion equipment is suitable.

Electrical Load

We shall produce a calculation of preliminary electrical load. The electrical load balance shall examine the power requirements under typical operating conditions such as harbour, cruise, trawling and emergency power. This shall be used to refine the technical requirements and any innovative power generation and/or storage options.

Powering

For the initial power assessment, we shall calculate power based on parametric series, calibrated against our in-house database of over two thousand model test and ship trials results. The resistance results from the CFD study shall be utilised to refine the initial powering assessment and improve the accuracy of the assessment. The output of this assessment shall provide power requirements across the speed range, allowing propulsion equipment ratings to be confirmed. The initial power calculation shall be used in the first phases of design refinement in order to verify the initial estimates of machinery weight, stability, capacity and emissions as part of the design spiral. Indicative fuel consumption for operation at endurance and maximum speeds shall be calculated.

Electro Magnetic Compatibility

Electro Magnetic Compatibility is an important consideration for research vessels due to the sensitive scientific equipment on board. The placement of equipment shall be carefully planned to minimise the potential for interference between ship equipment (radars, transmitters, etc.) and scientific equipment (sonar, sensors, etc.). If additional shielding, grounding, isolation, or filtering is required this shall be included in the specification. The position of sensitive equipment and large sources of electromagnetic radiation will be marked on the general arrangement drawings.

Underwater Radiated Noise

A preliminary underwater radiated noise (URN) assessment will be undertaken, potential sources of noise will be identified and where possible manufactures data will be obtained. There are several mitigation options for reducing URN including:

- Hull form design – streamlining the hull form and any appendages. This has the benefit of reducing the hull resistance and powering requirements.
- Propeller design – detailed propeller design can reduce cavitation and URN.
- Isolation and Monitoring – installing noisy machinery on isolation mounts, resilient mounts of sound absorbing materials.
- Material Selection - choose materials that dampen noise and vibrations. Sound-absorbing materials, resilient coatings, and insulating panels can be applied to machinery spaces and bulkheads.

Houlder shall compare the URN design against similar vessels in our database and empirical data to ensure that the URN is acceptable in the specification.

3.2.5. Tests and Analysis

Hull form

Houlder shall define and agree with Cefas a series of model tests for the optimised hull form. Houlder having recently acquired Seaspeed Marine Consulting Ltd, shall prepare the specification, complete the model construction and conduct model test programme in house. The tests shall be conducted at an International Towing Tank Conference (ITTC) affiliated model test basin. Our team has extensive experience and knowledge from oversight and conduct of model test programmes of a vast range of vessels.

Most model test facilities have a minimum of three-month orderbook, and therefore we shall seek to define and agree the model test programme and testing slot well in advance. The scope of the tests shall be agreed with Cefas before contracting, however our initial view is that the scope should comprise: Resistance model tests to validate and support CFD powering predictions, Seakeeping model tests and Manoeuvring model tests.

The model shall be built to a suitable scale to suit the testing tank facility size and required wave conditions for seakeeping testing. As the purpose of the testing at this stage is assurance of the design, to confirm the extent of hull optimisation is complete and indicate that seakeeping and manoeuvring performance is acceptable, we have assessed that a single model shall be suitable for all tests.

A compromise exists in model scale between testing the higher sea states within the vessel operational envelope, where smaller models are beneficial, and improved accuracy of the resistance and powering tests, where larger models are traditionally used. Utilising our expertise, we will agree the optimum scale with Cefas during the definition of the test scope. Our CFD capability for resistance and propulsion has been extensively benchmarked against model test results, providing us with high confidence in our CFD output and thus flexibility to use a slightly smaller model for resistance model testing if required. Whilst CFD is effective at seakeeping predictions, the cost of doing so is often comparable to model testing.

The model shall be constructed with bilge keels, bow and stern thruster features. Instrumentation fit-out shall allow for recording of motions and accelerations at numerous locations of interest, which can be agreed with Cefas.

The following resistance and propulsion assessments is proposed. All tests shall be undertaken at the design draught, with a 'naked' model. Contributions to resistance from appendage, aero and drag from features such as the bow thruster and drop keels shall be added based on standard estimating procedures.

- Calm water resistance tests at one displacement and trim condition, across the speed range up to 14 kts with sufficient definition to capture the various trawl speeds, cruise, survey and top speed (to be confirmed in conjunction with Cefas).
- An update to the CFD powering assessment in calm water if there is divergence between the model test and CFD resistance results

In order to verify the vessel's seakeeping performance, we propose the following programme of tests in the design loading condition. The objective of the tests is to determine ship motions, accelerations, propeller emergence and slamming tendency. The test scope suggested comprises five wave encounter directions, including head, beam and following seas across a range of sea states to provide output sufficient to provide evidence of seakeeping performance. The test scope, however, can be flexible to suit encounter directions and sea states Cefas have a particular interest in based on operational experience. The tests shall be instrumented and recorded on video, providing a qualitative output to inform the vessel behaviour, for example the extent of green water over the deck forward and the working deck aft. The programme suggested includes:

- Calm water roll decay in the design condition;
- Tests at one speed and two wave heights for a single wave spectra, at five encounter angles (to be confirmed in consultation with Cefas)

General manoeuvring performance shall be assessed through physical model tests undertaken at a single speed and at the design draught. These tests shall typically comprise turning circles with pull outs and zig-zag manoeuvres sufficient to demonstrate compliance with the IMO criteria.

The model test results shall be assessed and a summary report provided to Cefas stating the impact of the results on the vessel design, including the seakeeping assessment and the effect on the proposed machinery arrangement and the hull form lines.

3.2.6. Equipment Requirements List

Using the requirements within the design specification, we shall provide an Equipment Requirements List in consultation with the Cefas for inclusion in the Tender. The list shall include all equipment plant and service

requirements considered essential by Houlder and the Authority to satisfy the Design Specification and shall include as a minimum the following details of each.

- Equipment type
- Specification requirements (e.g. capacity, power, size, etc.)
- Reasoning for specific parameters
- Example item and track record of item (multiple for each where practical)

Where engagement with manufacturers and/or suppliers has been undertaken as part of the design development, details of visits/discussions shall be recorded and provided to the Authority as an Engagement Record, which shall include. Supplier engagements that lead to equipment being included in the Design Specification will be clearly identified with; dates, names of persons involved, reasons for visit/discussion, summary of discussion/events/activities

3.2.7. 3D Model

On completion of the preliminary arrangements, we shall prepare a 3D model of the final vessel. The final design development review shall utilise the 3D model to examine the operation with Cefas staff to show how different parts of the vessel may look and their interaction.

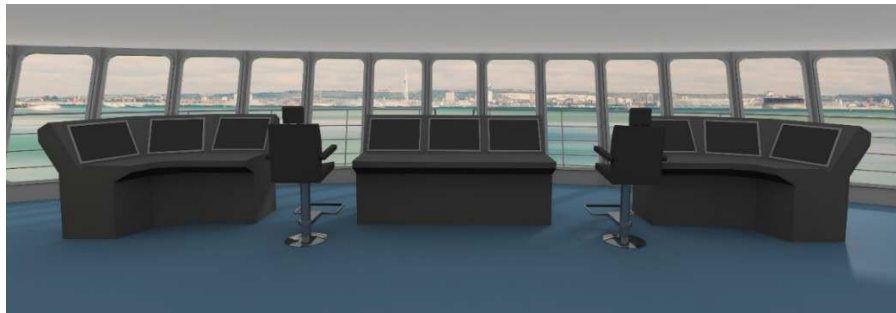


Figure 3-1 Example bridge render

The 3D model shall include the bridge, mess facilities, science laboratories, cabins and recreation rooms, from which renders can be taken.

3.2.8. Independent Design Review

Houlder undertake design checks and verification as part of our Business Quality Management System (BQMS), certified to International Standards Organisation (ISO) 9001:2015 Quality Standard by Lloyds Register Quality Assurance (LRQA). In addition, we shall hold a dedicated independent design review, suitably timed close to completion of this activity (typically before model testing and issuing of final revision of the general arrangement, but after other tasks), reviewing the deliverables for the design work undertaken up to this point. We shall focus on the correct definition of the SOR, the lightship and hence deadweight achieved at the critical design draught, the powering calculation and propulsion arrangement and ensuring the vessel as designed is compatible with Cefas's stated objectives regarding emissions.

This review shall be led by a senior consultant, who is not part of the delivery project team, to provide an impartial set of observations and recommendations on the deliverables for incorporation into the design. These observations and recommendation shall be shared with Cefas prior to a design review meeting, maintaining full transparency of the progress and quality of the design.

We shall consider the resulting recommendations and impact of any subsequent design changes and discuss these during the design review meeting with Cefas. This meeting shall agree the actions required to address the recommendations, with Cefas input ensuring that the action plan does not create any adverse impact on the operation of the vessel.

3.3. Activity 5: Estimation

Based on the concept design and technical specification combined with our experience of global shipbuilding and our team's commercial knowledge, we shall provide an estimated cost and build schedule for the vessel.

The cost estimate shall comprise an estimated cost for the basic vessel using two methods, a comparison with peer vessels and a preliminary bottom-up estimate with a breakdown comprising costs for steelwork, outfitting, accommodation, and machinery and any specific additional or optional features. We shall include clear information on margins and tolerances applied, as well as the level of confidence in each to provide a baseline cost, with variations dependent on construction locations, which shall include builds in the UK, Europe,

and Asia. Operating costs (excluding crew costs) shall be provided, as these are dependent on the owner as well as the vessel, this shall be done as a comparison the existing operating costs for the RV Cefas Endeavour.

An estimated build schedule shall be provided based on a comparison with peer vessels with a breakdown comprising of shipyard design, hull construction, outfitting, launch and delivery. We shall include clear information on tolerances applied, as well as the level of confidence in the schedule, with variations dependent on construction locations, which shall include builds in the UK, Europe, and Asia. We shall also identify items of equipment or machinery that have long lead times and are likely to be on the critical path, and/or represent a risk in the supply chain that may cause delays.

Houlder's role in the procurement of vessels, particularly those for government organisations such as the 'customer friend' role for the MoD for both the Fleet Solid Support and T3 I projects, is proven and we believe is an asset that Cefas could draw upon in compiling the business case. If Cefas require, we would be able to provide input into the strategic dimension with regard to the projected technical challenges and costs of maintaining the replacement vessel in service.

3.4. Activity 6: Procurement of Shipyard(s): Responsibilities

We understand that during this activity the Authority and its Specialist Marine Legal Services contractor will draft the Shipbuilding Conditions of Contract, and that Houlder shall be responsible to the Authority for the provision of technical expertise in support of this. We shall work with the Authority and Specialist Marine Legal Services contractor to support the writing of technical clauses required in the contract, including design characteristics of the vessel and levels of performance required under the contract. Houlder shall provide ad hoc technical support during this stage.

3.5. Activity 7: Procurement of Shipyard(s): Advertisement

We understand that during this activity the Authority will advertise the procurement process, but no support from the SMTC is required.

3.6. Activity 8: Procurement of Shipyard(s): Market Engagement

Market Engagement

The Project Manager shall be available to support a presentation of the requirements and/or general arrangement drawing, include preparation of technical content for the presentations, participation in the events and answer questions directly during the market engagement. Where we have provided this service for other clients, our experience shows that this level of engagement adds value to the quality of the bids received and improves the quality of the competition for the design and construction of the vessel.

We shall work with the Cefas team and provide assistance with any Request For Information (RFI) issued as part of pre-market engagements. This shall include assisting with the preparation of questions for suppliers and supporting analysis and assessment of responses. In addition to the above, we shall provide general technical advice during the market engagement including responding to shipyard questions that may be generated by market engagement.

Shipyard Visits

Houlder shall support the Authority by accompanying them during any visits to shipyards and/or other relevant technical organisations. The number of visits is not limited but for an indication of the price we have allowed for three (3) visits to shipyards or relevant technical organisations in Europe. These visits shall be supported by the intended senior build supervision surveyor, if they have been identified by this stage. If the geographical location of the build is unknown at this stage and the intended senior build supervision surveyor has not been identified, the Houlder Project Manager shall attend.

3.7. Activity 9: Procurement of Shipyard(s): Documentation Preparation

Houlder has a wealth of experience in tendering shipbuilding projects and preparation of tender documentation, including advising UKRI during the tender for the RRS Sir David Attenborough, Wightlink for the MV Victoria of Wight, Manxman for the Isle of Man Steam Packet Company and the UK MOD for the T3 I and FSS programmes.

Research Vessel Visits

Houlder shall support the Authority by accompanying them during any visits to other research vessels across Europe in order to develop the tender documentation. The number of visits is not limited but for an indication of the price we have allowed for three (3) visits to other research vessel in service around Europe. These visits shall be supported by the intended senior build supervision surveyor, if they have been identified by this stage. If the geographical location of the build is unknown at this stage and the intended senior build supervision surveyor has not been identified, the Houlder Project Manager shall attend.

Selection Questionnaire

Houlder shall work with Cefas, assisting in preparing the Selection Questionnaire (SQ), including questions relating to technical and professional ability of prospective Shipyards. This may include any Shipyard limitations due to size and/or capacity, their experience of builds of similar type and/or complexity and suitable processes and procedures to provide confidence to Cefas of their ability to successfully deliver the contract. In addition, we shall also provide general technical advice during the development by Cefas of the SQ.

Invitation To Tender

Houlder shall work with Cefas and assist in preparing the Invitation To Tender (ITT) and other technical aspects of the tender pack. This shall include assisting Cefas in formulating the technical award criteria to be used to evaluate the design concepts submitted by tendering Shipyards and shall include the following:

- schedule of prices and rates;
- method statement;
- staff and resources;
- quality plan;
- comments and additional information considered necessary by the Authority.
- recommendations by Houlder, such as comparison of the user requirements and the main features of the designs on a confidence basis;
- equipment list (with reasoning, and technical / cost advantages);
- arrangements for Shipyard presentations.

During the development of the ITT Houlder shall advise the Authority on whether the procurement should enable the Shipyard(s) to select and contract with their own sub-contractors, or whether certain construction tasks should be tendered for separately (with the Shipyard(s) needing to bid on the basis of co-operating with the Authority's nominated sub-contractors). Technical and cost advantages, as well as risk associated with either option, shall be clearly identified. Innovative bids in addition to compliant bids shall also be considered, and advice on the mechanisms for comparison with fully compliant bids and fair assessment shall be provided to the Authority by Houlder. We shall also support the development of a pricing proposal templates for tenderers to populate as part of their tender responses and any general technical advice during the development by Cefas of the ITT.

4. Part C – Procurement of the Preferred Option

Houlder understands that, where the Outline Business Case is supported by the project's governance and approval process, the 'Preferred Option' developed in Part B shall need to be formally procured to support the development and submission of the Full Business Case.

Houlder has a wealth of experience in tender evaluation and contract negotiation and award of shipbuilding projects, including advising NERC during the tender for the RRS Sir David Attenborough, Wightlink for the MV Victoria of Wight and the Isle of Man Steam Packet Company's newbuild contracted in July 2020.

We understand that the complete evaluation process shall be formulated in Part B and hence has yet to be defined by Cefas. Regardless of the process selected, Houlder's Project Manager shall integrate into the Cefas's evaluation team as our nominated engineer to support the procurement process throughout this stage.

The following details the service, support, and co-operation Houlder anticipate it would offer Cefas during the shipyard selection and tender evaluation process.

During this stage of the project, we shall provide advice and technical input to the pre-qualification process, tender competition and subsequent negotiation, to ensure competing shipyards have:

- timely, accurate and informed responses to technical queries during their response preparation;
- appropriate technical input during any market engagement; and,
- a full understanding of the technical requirements.

The technical input provided by Houlder shall ensure that Cefas can confidently shortlist responses, negotiate and award a contract, ultimately minimising risk of shipyard failure to perform technically and commercially.

4.1. Activity 10: Procurement of Shipyard(s): Selection Questionnaire (SQ)

During the selection stage, the Project Manager (Houlder's nominated engineer) shall be working as an integrated part of the evaluation team. They shall assist by preparing responses to relevant questions from potential bidders as they arise. Where bidders raise questions, issues or queries, we shall apply our understanding of the requirements in formulating appropriate responses.

We understand that the final evaluation of the SQ shall be carried out by the evaluation panel, and Houlder's "nominated engineer" shall attend Cefas's offices in Lowestoft, for one to two days of evaluation.

On completion of the short-listing process we understand that the Authority will reduce the number of candidates to produce a final shortlist to be invited to tender.

4.2. Activity 11: Procurement of Shipyard(s): Tender Assessment

During the tender assessment stage, the Project Manager (Houlder's nominated engineer) shall be working as an integrated part of the evaluation team, having access to all tender submissions via the Authority's procurement portal and following the Authority's procurement processes in full.

The Project Managers roles during the assessment of the submissions shall include.

- Evaluation of the documentation in line with all guidance provided by the Authority in line with other evaluators.
- Participation in a Consensus Meeting during which they shall discuss their scores and comments for each tender submission, and their reasoning for such scores and comments.
- Attending the premises/ships of short-listed tenderers for the purposes of an on-site presentation and tour of each facility to allow the Shipyard to appropriately demonstrate how the Authority's project will be delivered at their site.
- Attend Clarification Meetings with each tenderer in Lowestoft.
- Review and evaluation of any subsequent tender submission from the short-listed tenderers.
- Advising the Authority in codifying a Build Programme including the most appropriate stage payment arrangements with the Shipyard.
- Assisting the Authority in de-briefing Tenderers as required.
- Ad hoc advise to the Authority as may be required.

The number of Shipyard tender assessments is not limited but for an indication of the price we have allowed for three (3) Shipyard's to be short-listed, requiring three tenders to be evaluated and on-site presentations attended.

4.3. Activity 12: Shipyard Plan Approval

Houlder believes that there is great value and benefit in carrying out thorough drawing, document and calculation reviews (plan approval) to provide assurance prior to build. The following plan approval and change control activities shall be carried out such that at the conclusion on this activity the Shipyard's design shall be certified by Houlder to be compliant with:

- All relevant Statutory Regulations and Classification Society Rules.
- The SOR and Authorities requirements in relation to scientific and general operating efficiency.
- The Design Specification.
- Certified variances in accordance with the change control procedure.

Plan Approval

In conjunction with the Shipyard and Cefas we shall agree a Plan Approval Procedure, including format, response times, lines of communication and the scope. The response mechanism can be tailored to your preference and the shipyard's standard practice.

We understand that Houlder shall be delegated authority to approve and certify plans that are compliant with; Statutory Regulations, Classification Society Rules and the SOR. Where plans are non-compliant with the Design Specification, but do not adversely impact compliance with the SOR, scientific or general operational efficiency, Houlder may still approve these plans. The detailed level of authority delegated by Cefas to Houlder, shall be clearly defined and agreed at the start of this activity.

The Plan Approval Procedure shall be based on the following process steps.

1. The Authority and Houlder shall receive each plan from the Shipyard.
2. Houlder shall review the plan and send our comments to the Authority.
3. The Authority shall reply to Houlder with their own advisory comments and opinions.
4. Houlder shall assess the effect of the consequent plan amendment and report back to the Authority.
5. The Authority shall revise their advice to Houlder as appropriate.
6. Houlder shall approve and certify the plan with amendment as necessary.

On completion of the above process Houlder shall return a single unified set of comments to the Shipyard within the timescales set out in the shipbuilding contract, which we would anticipate being potentially as little as 10 working days from receipt of such plans. To manage this process the Project Manager shall maintain a

document control system for plan approval to record dates received, dates returned and persons undertaking the review.

In addition to formal plan approval, we would also propose to monitor communications between the Shipyard, Classification Society and Flag State. We recognise that design changes made to achieve compliance, particularly at the detail design stage can have wider implications for Cefas and the long-term operation of the vessel. By monitoring correspondence between the shipyard and regulatory authorities any such impacts can be effectively mitigated.

The number of drawings, technical specification, and document for approval is not limited but for an indication of the price we have allowed for six hundred (600) submissions, comprising approximately 250 drawings and 350 technical orders. In our experience this is appropriate for a vessel of this type, size and complexity. Following submission of any plans, drawings, main system specifications or documents, the Project Manager shall draw on the experience of a principal naval architect and principal marine engineer, who shall in turn draw on the wider expertise as required. This structure means the project gains technical expertise at an appropriate level, allows review tasks to be undertaken in parallel and ensures sufficient resources are available such that the Shipyard is not delayed by Plan Approval.

The scope for plan approval shall be subject to the final design and shipyard, but we understand this to include;

- Shipyard drawings, including
 - Primary structure (for example Profile and Decks and main construction units)
 - Main machinery and ship systems
 - Statutory drawings (for example Freeboard, Load Line, Lifesaving Arrangement and Fire-fighting Arrangement plans) submitted to the Flag Authority for approval.
 - Other drawings submitted to the Classification Society for approval.
- Shipyard technical orders and designations for main machinery and equipment.
- Shipyard calculations, including
 - Structural calculations
 - Statutory calculations submitted to the Flag Authority for approval
 - Other calculations submitted to the Classification Society for approval

The review shall examine and comment on the Shipyard's calculations, designs, drawings and equipment specifications to ensure:

- Proposals conform to the requirements of the Shipbuilding Contract including the Design Specification and other specified requirements not being reviewed by Class or Statutory Authority;
- Proposals comply with all relevant Statutory regulations and Classification Society rules.
- All relevant requirements of the Authority are incorporated in the plans/drawings relating to scientific and general operating efficiency;
- Proposals are in accordance with good engineering and shipbuilding practices;
- Ease of construction, which shall reflect on the end quality and maintainability;
- Operability and maintainability of the vessel and its systems;
- Incorporation of comments from previous submissions; and,
- Relation, compatibility and consistency to other plans submitted.

As part of the plan approval process, Houlder shall maintain a log of all comments and corrections/amendments, with the status of each plan submitted, provided as part of our monthly reporting. We shall also report on any significant deficiencies in the plans, including the following information.

- Date deficiency identified.
- Description of the deficiency and correction/amendment required.
- Effect on cost.
- Effect on delivery programme.
- Details of any discussion, negotiations, or decisions with the Shipyard.
- Effect on compliance with the SOR, Design Specification or scientific and general operational efficiency.

Change Control

The management of change during projects is critical to their success in terms of performance, quality and schedule. As such, Houlder shall work with Cefas and the Shipyard agree a change control process for the project, to manage any change introduced by either the Shipyard or Cefas. Houlder shall provide advice to Cefas and assist in negotiating the cost and impact on the build programme, with final agreement of any change by the Authority. The process shall ensure that changes proposed are recorded and responded to in a timely manner, and the impacts are identified and assessed prior to acceptance by all parties. Typically, we would expect any change control process to include the following as a minimum;

- Unique identifier
- Impact on cost
- Impact on delivery (delivery date and/or milestones in the contract build programme)
- Impact on performance (design characteristics of the vessel defined in the contract)
- Details of change, including proposed amendments to the SOR, Design Specification and/or any approved drawings, plans or documents.

5. Part D – Implementation of the Preferred Option

Houlder understands that, where the Full Business Case is supported by the project's governance and approval process, and the UK Government decides to implement the 'Preferred Option' developed in Part B, this will need to be formally delivered. The following activities shall be carried out by the SMTC, to support the Authority in the implementation of the 'Preferred Option'.

5.1. Activity 13: Procurement of Vessel Managers

We understand that support shall not be required during the selection questionnaire stage.

During the tender assessment stage, the Project Manager (a principal marine engineer) shall be working as an integrated part of the evaluation team, having access to all tender submissions via the Authority's procurement portal and following the Authority's procurement processes in full.

The Project Managers roles during the assessment of the submissions shall include.

- Evaluation of the documentation in line with all guidance provided by the Authority in line with other evaluators.
- Participation in a Consensus Meeting during which they shall discuss their scores and comments for each tender submission, and their reasoning for such scores and comments.
- Attending the premises/ships of short-listed tenderers for the purposes of an on-site evaluation and scenario exercise.
- Attend Clarification Meetings with each tenderer in Lowestoft.
- Review and evaluation of any subsequent tender submission from the short-listed tenderers.
- Assisting the Authority in de-briefing Tenderers as required.
- Ad hoc advise to the Authority as may be required.

The number of Vessel Manager assessments is not limited but for an indication of the price we have allowed for three (3) being short-listed, requiring three tenders to be evaluated and on-site evaluations attended.

5.2. Activity 14: Supervision of Construction

The duration, intensity and scope of this stage shall be finalised in agreement with Cefas as it is likely to vary with Shipyard, location and proposed build methodology. The number of supervisors and duration of attendance is not limited but for an indication of the price we have allowed for an 18 month build duration from steel cutting to delivery. We are able to offer a complete range of supervision activities and levels of shipyard attendance, which can be tailored to suit the Cefas's requirements. This approach has been applied successfully with previous clients, including NERC on the RRS *Sir David Attenborough* and Wightlink on the MV *Victoria of Wight*.

Key to the success of the supervision role is an understanding of shipyard operations and experience of interfacing with them on behalf of owners. This is part of Houlder's core business, and we have ensured members of our proposed team have suitable experience to deliver this. We shall be available to attend a kick-off meeting with all relevant parties to ensure that the requirements, roles and actions are clearly understood from the outset. The following methodology demonstrates our commitment and approach to this stage on behalf of Cefas during the delivery phase to ensure the timely delivery of the vessel, on budget and to the right quality. Within Houlder we have the appropriate staff and availability to provide levels of supervision from full time to a defined part time basis if required and would be pleased to discuss a scope for any of these options.

In addition to other reporting mechanisms, we shall report formally on progress to Cefas at the high-level quarterly project review meetings focusing on the performance of the Shipyard and Houlder. This shall be attended by the Project Director and Project Manager. Minutes of the meetings shall be issued by Houlder and shall include a summary of actions, changes, risk status, programme status, areas of concern, Houlder resources and costs. This shall provide a mechanism for Cefas to provide feedback on our performance and discuss issues with senior management.

Project Management

On commencement of the implementation stage, the Project Manager shall contact Cefas to discuss the approach and make any clarifications necessary to the; scope of work, delivery timescales, limits of authority and required information from Cefas. We propose preparing a detailed interface matrix and a RACI chart (Responsible, Accountable, Consulted, and Informed) to ensure that all parties have a clear understanding.

We envisage the devolved authority to include approval on behalf of Cefas to include the following;

- Shipyard's inspection and testing protocols excluding HATs and SATs;
- Vessel structure following inspection, when compliant with the contract;
- Compartment outfit following inspection, when compliant with the contract;
- Equipment following testing, when compliant with the contract; and,
- Changes that are not considered "significant" (no impact on cost, time, quality and/or contract performance).

We shall support Cefas by providing technical responses for your review, with recommended actions on:

- The programme of trials prepared by the Shipyard;
- Shipyard's testing protocols for HATs and SATs, and;
- Changes that are "significant" (impact on cost, time, quality and/or contract performance).

Dependent on the shipyard selected and Cefas requirements, on commencement of the vessel construction stage, the Project Manager shall prepare a project risk assessment to identify threats and opportunities and populate a register of risks whilst noting that certain risks (including safety and environmental risks) shall remain the Shipyard's responsibility. The risk assessment criteria would be agreed with Cefas prior to the assessment and shall be used for all new risks identified during the vessel delivery process.

We envisage that throughout the vessel delivery stage the Shipyard shall provide regular progress reports and host regular progress meetings. We anticipate that the progress meetings shall be attended by the Houlder Site Supervisor, however, should Cefas request, the Project Manager would be available to attend any of the monthly progress meetings at the Shipyard's premises and to provide additional support to the site team in the meetings and drive progress.

The Project Manager shall review progress reports and prepare reports to Cefas, keeping Cefas apprised of any concerns. The Project Manager shall, on receipt of progress reports from the Shipyard, review the information provided and consider any actions required by the Shipyard. The content and scope of the review of the shipyard reports is to be agreed, however we would recommend that the review includes elements of the following, subject to Cefas requirements and the shipyard selected.

- Health, Safety & the Environment
- Design progress, including:
 - Status of drawings against a master drawing schedule
 - Status of documents against a master document schedule
 - Classification Society approval status
- Weight (estimates & actual) including centres
- Production progress
 - Weight of steel fabricated and at berth
 - Pipe spools fabricated and fitted
 - Major equipment status (ordered/ delivered/ fitted)
 - Cables pulled & terminations completed
 - Compartment completions
 - Shortfalls and concerns
- Testing & trials progress (planned/completed)
 - FATs status
 - Shipyard inspections & tests

The Project Manager shall work closely with Cefas to ensure a full understanding of the situation and agree any actions or changes over and above the agreed devolved authority.

Supervision of Construction

Houlder propose supplying site supervision by Houlder staff at the shipyard to provide a full-time presence throughout the build. They will be in continuous communication with the Houlder and Authority Project Managers regarding the build.

We shall appoint an experienced hull inspector as the lead site supervisor to work from the start and throughout the construction to drive timely delivery of the vessel and report progress, via the Houlder Project Manager, during all stages of construction. Their duties shall include design discussions at the early stages

and snagging at the later stages, to ensure that all machinery and equipment conforms to the approved design and required quality. They shall work on behalf of Cefas, dealing with the shipyard on site to ensure the project schedule and build quality are maintained. The site supervisor(s) will be appointed subject to the Authority's approval.

We shall ensure, that:

- Work is carried out in accordance with the contract specification, the approved construction drawings and list of equipment;
- All recommendations by the Classification Surveyor or Flag State Authority are implemented, including attendance of tests and trials if required; and,
- All key and interim milestones are met, including certifying stage payments.

The lead site supervisor shall advise the shipyard of any material or workmanship that does not conform to the terms of the contract or to the reviewed drawings. This shall enable the shipyard to take necessary steps to correct any such fault in an effective and timely fashion.

Supervision of construction shall include full time on-site presence of a supervisor from start of construction supervision period (steel cutting) to delivery, for supervision oversight, technical discussions, inspection of steelwork, painting and outfitting, snagging and to support Cefas's representative on site.

The lead site supervisor shall fulfil the role of a steelwork inspector, overseeing the construction including plate preparations, welding testing, protective coatings, section alignment and fit out. Additionally, we shall periodically deploy the following specialists within the shipyard, during the appropriate stages of construction, under their direction:

- Marine engineering site supervisors during engineering installation and outfitting, with a bias towards increased attendance during testing and trials; and,
- Electrical engineering site supervisors during electrical installation and testing.

We have allowed for a total of 120 days each and the exact timing and duration of supervision shall be determined based on the successful Shipyard's programme. Houlder are happy to tailor the attendance breakdown in later discussions with Cefas and the shipyard if required.

We understand that the site supervisors shall be delegated authority to approve and certify plans that are compliant with; Statutory Regulations, Classification Society Rules and consisted with the Shipbuilding Contract. Where there are variances to the Shipbuilding Contract that are "not significant", and this has been clearly defined with the Authority, the site supervisors shall also have delegated authority to approve variances. Significant variations shall be recorded and highlighted to the Authority for their consideration, and shall include variations with an impact on:

- Cost (increase or reduction over a given magnitude, determined by Cefas);
- Build duration (increase or reduction over a given magnitude, determined by Cefas);
- The equipment requirements list;
- Shipbuilding Contract, SOR or Design Specification (as amended during plan approval).

Any variances to the Shipbuilding Contract or amendment to the SOR or RV Design Specification will be approved by the Authority and prior to being actioned on site.

The site supervisor shall maintain the following during the construction/ conversion of the vessel:

- Monitor the build progress against the Build Programme and make timely warnings to avoid delay.
- Representation of Cefas, providing active and continuous communication with the Authority
- A log of defects, disputes, negotiations and decisions between the Shipyard, Cefas and Houlder and a record of all rectification works.
- A change log for the project detailing; impact to cost, timescale and quality for the agreement of the Shipyard, Cefas and Houlder.
- Progressively monitor the weight of hull, outfit, machinery, and fittings and checked against design estimates so that variance is assessed for its effect on the vessel such as its trim, stability, and speed.
- Monthly written progress reports with photographs and other evidence to the Authority including:
 - construction progress.
 - delivery of materials and sub contractors' items.
 - effect on progress of weather.
 - Shipyard disputes.
 - Shipyard labour and plant allocation and labour disputes.
 - weight of steel erected.
 - surveys and tests completed.
 - target dates and their attainment.

- foreseeable delays.
- estimates of completion dates.
- agreed design changes.
- costs of variances to the Contract.
- reports of alleged force majeure incidents.

Factory Acceptance Tests

The Project Manager shall co-ordinate with the site supervisor to witness and report on production and factory testing of major items of equipment, at the supplier premises, as agreed with Cefas. Houlder recognises that the final equipment list shall be defined on completion of the vessel design in conjunction with Cefas, but we envisage witnessing factory tests of propulsion and auxiliary engines and generators, main and emergency switchboards, and deck cranes and winches.

Prior to each Factory Acceptance Test (FAT) we shall review and report on the testing protocol's suitability and reliability. Following the FAT, the attending engineer shall formally report on all outcomes including; commentary, log of defects, recommendations for remedial work and a photographic record, with the aim of advising the status of main equipment procurement and compliance with the specification.

Commissioning and Testing

The Project Manager shall co-ordinate appropriate site supervisor to witness and report on shipyard inspection and testing of equipment installation. Houlder recognises that the final list of inspections and equipment shall be defined on completion of the vessel design, but we envisage witnessing the following:

- Steelwork unit inspections;
- Compartment pre-outfit inspections;
- Compartment sign-off;
- Installation inspection of propulsion & auxiliary engines, switchboards, manoeuvring machinery (steering gear & thrusters), shafting & propulsors, deck cranes, and a representative sample of all other inspections and tests.

These inspections and tests shall include inspection of all materials and certification as appropriate and as required by Classification Society, Flag Authority, and the contract. The Project Manager and Lead Site Supervisor will facilitate any inspections required by third parties.

5.3. Activity 15: Supervision of Trials Programme and Remedial Work

Attendance at Harbour and Sea Trials

The Project manager, or an alternative appropriate naval architect/marine engineer, shall provide technical advice prior to, during and after harbour acceptance trials (HAT) and sea acceptance trials (SAT) of the vessel. The duration and level of attendance at HAT's and SAT's is not limited but for an indication of the price we have allowed for one (1) engineer to attend trial for a two (2) week duration.

The team, in collaboration with Cefas and the appointed vessel managers, shall review and comment on the proposed programme of trials and procedures to test the performance of the delivered vessel for compliance with the contractual and statutory requirements, providing reports to include recommendations and mitigations. Houlder shall assign the appropriate engineer to attend trials. They shall witness, review and comment on results of the sea trials, making recommendations as required. We recognise that the trials programme shall be proposed by the Shipyard and agreed by Cefas.

Following completion of the trials, Houlder shall provide Cefas with a report summarising the outcome of the trials and advising on any deficiencies against the contractual performance. The outcome of our technical advice during the trials stage of activity shall ensure confidence in the technical aspects of any decisions regarding acceptance. The focus of activity shall be the mitigation of risk for future operations and a commitment to quality.

Remedial Work

Following completion of HAT's and SAT's, any remedial work carried out by the Shipyard at their facilities prior to delivery shall be subject to the same supervision of construction as described above through to the end of the guarantee period.

5.4. Activity 16: Supervision of Guarantee Period

We shall provide a guarantee engineer (taken from the project team) who shall provide technical advice during the guarantee period or manage the guarantee process with the shipyard, to ensure that the vessel conforms to the contract and that all guarantee items have been satisfactorily completed. The guarantee engineer shall liaise with Cefas and the appointed vessel manager during the guarantee period in order to:

- Record new defects for rectification prior to the end of the guarantee period.

- Assist with prioritising action (timing of action, rectification required - replacement part, repair, service attendance or a combination).
- Identify action required and assist with its implementation.
- Supervise and approve defect correct.
- Maintain a status log of warranty claims.
- Record confirmation of claims closed.
- Provide regular updates on the status of claims.

Subject to the number and nature of the claims we shall make visits to the vessel to support assessment of the claims and their resolution. The number of visits is not limited but for an indication of the price we have allowed for four (4) visits to the delivered vessel in service around the coast of the United Kingdom, undertaken in coordination with Cefas and the appointed vessel manager.

We shall report on the guarantee status on a regular basis. Following each of the guarantee visits, the attending engineer shall issue a report to Cefas showing progress on defect rectification, any new defects identified including photographic evidence, commentary and recommendations. The guarantee engineer shall maintain the guarantee/defect log throughout the warranty period in conjunction with Cefas. If a guarantee item or defect is identified, Houlder shall raise a guarantee form for agreement by the Shipyard, Cefas and Houlder including; unique identifier, details of the defect, action required, defect raised by, and close out date.

Individual claims would be submitted as and when they are processed, and the complete document circulated to the vessel, Cefas, Vessel Manager, and the Shipyard on a regular basis, usually monthly (subject to the number of claims).

A copy of the completed guarantee/defect log shall be provided by Houlder to Cefas on completion of the warranty period. The Houlder Project Manager shall work with Cefas to follow up on each defect reported and ensure it is addressed appropriately and in accordance with the requirements of the contract.

5.5. Activity 17: Supervision of Final Guarantee Docking (12 months after delivery)

At the end of the guarantee period the guarantee engineer shall arrange and supervise a final guarantee docking for a final inspection. The guarantee engineer shall liaise with Cefas and the appointed vessel manager during the guarantee docking in order to:

- Record new defects for rectification during the guarantee docking.
- Assist with prioritising action (timing of action, rectification required - replacement part, repair, service attendance or a combination).
- Identify action required and assist with its implementation.
- Supervise and approve defect correct.
- Update the status log of warranty claims.
- Record confirmation of all claims closed.

Following the inspection, a narrative report shall be provided to confirm the vessel's performance conforms in full with the SOR and Design Specification, including advice and recommendations on any issues uncovered during the guarantee period and on any items which might be outstanding.

5.6. Activity 18: Ongoing Technical Support

Stand-alone Scopes of Work

The requirements for ongoing technical support are not known at this time and we understand that a stand-alone scope of work will be drafted for each occasion. For each scope of work, we would provide a proposal to Cefas for your consideration and comment that included;

- Detailed scope of work
- Defined list of deliverables and timescales
- Required customer supplied information
- Any assumptions and exclusions
- Identified resource (and corresponding agreed rate)
- Estimation of hours to complete

Typically, where the scope of work is sufficiently defined, we would propose a fixed price for each of these stand-alone scopes, agreed prior to commencing work. However, we would be happy to provide quotations with agreed limits of liability if required.

Vessel Condition Survey

The number of Vessel Condition Surveys is not limited but for an indication of the price we have allowed for two (2) condition surveys during the 5-year period following delivery, a condition survey after approximately 2

years' service and a final condition survey at the end of the period. Both shall be undertaken in coordination with Cefas and the appointed vessel manager.

We shall undertake an initial ship condition survey with the ship in dry dock, at a location and time to be confirmed. A report shall be provided documenting the condition found and rating this condition, with any additional findings, against the contractual requirements of a first-class ship condition, compliant to the required legislation and with a high degree of operational availability. Where required, remedial actions shall be proposed that would improve the condition of the ship to that required by a first-class operator.

A final condition survey, of duration one day, in dry dock, will assess the ship condition against the contractual requirements and the success, or otherwise, of the implementation of any remedial actions in improving the condition of the ship to the contractually required first-class standards. Further recommendations for remedial actions and additional work shall be made in the context of keeping within future legislation trends.

We shall liaise with yourselves to agree exact timing and location of two inspections but for an indication of the price anticipate a dry dock in East Anglia. We shall further liaise with the vessel's master and chief and any other designated responsible person nominated by Cefas to arrange the survey commencement times, confirm our intentions during each survey and confirm requirements of vessel crew with respect to each survey. On commencement of each survey, we will liaise directly with the master and chief to present our survey plan, confirm local safety arrangements and practices and on the initial survey be provided with a guided familiarisation walk through the vessel.

The surveys shall be carried out by a marine engineer and naval architect, who shall attend the vessel to conduct a technical condition inspection. Our assumption is that each survey shall last two working days, excluding travel, and that the vessel shall be undergoing maintenance. The inspections shall comprise::

- Survey of the visible condition of the vessel fabric in general including:
 - External hull, superstructure, decks, appendages and fittings;
 - All internal compartments, both technical and non-technical;
 - General and specialist deck equipment;
 - Machinery and systems, including securing arrangements;
 - Inspection of a sample of fresh water or water ballast tanks (tank selection dependent on availability of safe access);
- Visual inspection of and functional demonstration of, with crew assistance and where safe and practical:
 - Watertight closures;
 - Ship IT and communications systems;
 - Isolated checks of general ship systems, including air conditioning, alarm monitoring within random compartments;
- Evident areas of concern with respect to maintenance or other upcoming costs, in particular those that would have contractual implications and those that have a long-term impact on the ship's life;
- The total running hours for main engines and generators;
- Inspection of main Classification Society & Flag Authority survey records for outstanding condition of Class or memoranda – if available on board;
- Discussion with crew and inspection of technical documentation, records and Planned Maintenance System with respect to relevance, equipment availability, hours and cost-effective maintenance practice;
- Inventorying available spares, including condition, with a focus on identification of critical spares through use of crew statements;
- Inspection of the condition of any appurtenances found.

Following each survey we shall prepare a photographic condition report based on the survey and information gathered, including;

- Photographs and descriptions of
 - Any evident areas of concern with respect to maintenance or other upcoming costs;
 - The overall condition of the vessel, machinery and equipment, systems and outfit as well as any visible damage or repairs;
 - The overall condition of the vessel structure;
 - Any areas or equipment which appear to be in poor condition relative the vessels target service life;
- Record of latest total running hours for main engines and generators,
- Record of status of main current certification, including photographs or copies of, specifically;
 - Main Class certificate
 - Passenger Safety certificate (if applicable)

- Record of Equipment certificate (LSA)
- Dangerous Goods certificate
- Safe Manning certificate
- Inventory of spares located on board;
- Remedial actions required to achieve contractual compliance.

6. Schedule of Deliverables

The following deliverable shall be submitted to Cefas in PDF format via email.

Activity	Deliverables	Q'ty
General	Implementation Plan	1 off
	Monthly progress reports (Parts A & B)	8 off (monthly)
	Monthly progress reports (Parts C & D)	TBC (monthly)
0	Business Case Evaluation Report	1 off
1	'Do Nothing' Risk Assessment	1 off
	Life Extension Risk Assessment	1 off
	'Like-for-like' Replacement Vessel Risk Assessment	1 off
	'Enhanced' Replacement Vessel Risk Assessment	1 off
2	'Do Nothing' Vessels Management Options Plan	1 off
	Life Extension Vessels Management Options Plan	1 off
	'Like-for-like' Replacement Vessel Vessels Management Options Plan	1 off
	'Enhanced' Replacement Vessel Vessels Management Options Plan	1 off
3	Statement of Requirements appraisal report	1 off
4	Research Vessel Design Specification	1 off
	Study on most appropriate fuelling and propulsion system	1 off
	Arrangement Drawings	
	General Arrangement Drawing	1 off +5 revisions
	Midship Section	1 off
	Preliminary Tank Plan	1 off
	Arrangement of working areas – General	1 off
	Arrangement of working areas – Scientific Laboratories	1 off
	Arrangement of working areas – Deck Arrangements	1 off
	Arrangement of working areas – Mooring Decks	1 off
	Accommodation Arrangement	1 off
	Arrangement of Tween Deck and Holds	1 off
	Wheelhouse Arrangement	1 off
	Arrangement of Storerooms	1 off
	Machinery Arrangement (inc. engine/hull isolation)	1 off
	Propulsion Schematic	1 off
	Electrical Schematic	1 off
	Preliminary Design Information	
	Lines Plan	1 off
	CFD report (inc. Dynamic Positioning)	1 off
	Deadweight with initial breakdown	1 off
	Lightship calculation	1 off
	Stability report (inc. recommendations, intact, damage, trim and heel)	1 off
	Tank capacity plan	1 off
	Electrical load balance	1 off
	Powering report	1 off
	Tests and Analysis	
	Model test specification	1 off
	Model test report	1 off
	Equipment Requirements Lists	1 off
	3D Model renders	5 off
	Independent Design Review Report	1 off
5	Cost Estimate Report	1 off
6	Shipbuilding Contract (input to technical clauses)	1 off
7	None	-

Activity	Deliverables	Q'ty
8	Market Engagement Presentation (technical content)	1 off
	Shipyard visit report	3 off
9	Research vessel visit report	3 off
	Selection Questionnaire (technical and professional ability)	1 off
	Invitation To Tender (technical award criteria)	1 off
10	Assessment of Shipyard Selection Questionnaires	TBC
11	Assessment of Shipyard Tenders	3 off
12	Change control procedure	1 off
	Plan Approvals	350 off
13	Assessment of Vessel Managers Tenders	3 off
14	Defect Log	1 off
	Change Log	1 off
	Progress reports	Monthly
	Factory Acceptance Test reports	TBC
15	Trials Programme report	1 off
16	Guarantee visit report	4 off
17	Final Guarantee report	1 off
18	Vessel Condition Survey Report	2 off
	Ad hoc support	TBC

Deliverables shall be submitted in batches at the following times.

Batch No.	Title	Delivery ¹²
1	Project Implementation Plan	Contract start +2 weeks
2	Part A, Activity 0 to 2 – Identification of preferred option	Contract start +5 weeks
3	Part B, Activity 3 – Statement of Requirements	Select preferred option +7 weeks
6	Part B, Activity 4 – Design Specification	Acceptance of activity 3 +24 weeks
4	Part B, Activity 4 – General Arrangement, Rev A Revisions B to F	Acceptance of activity 3 +4 weeks Four-week intervals
5	Part B, Activity 4 – Study on fuelling & powering options	Acceptance of activity 3 +4 weeks
6	Part B, Activity 4 – Remaining deliverables	Acceptance of activity 3 +24 weeks
7	Part B, Activity 5 – Estimation	Acceptance of activity 3 +24 weeks
8	Part B, Activity 6 to 9 – Procurement of shipyard	TBC
7	C – Procurement of the Preferred Option	TBC
8	D – Implementation of the Preferred Option	TBC

¹ Part A shall be completed upon determination of the Preferred Option which we understand is expected to be in November 2023, subject to a contract start date of 23rd October 2023.

² It is expected that all activities captured under Part B shall be completed by the end of June 2024, subject to the determination of the Preferred Option in November 2023, however timings may be subject to change and shall be agreed as part of the Implementation Plan.

Appendix 1 Draft Implementation Plan

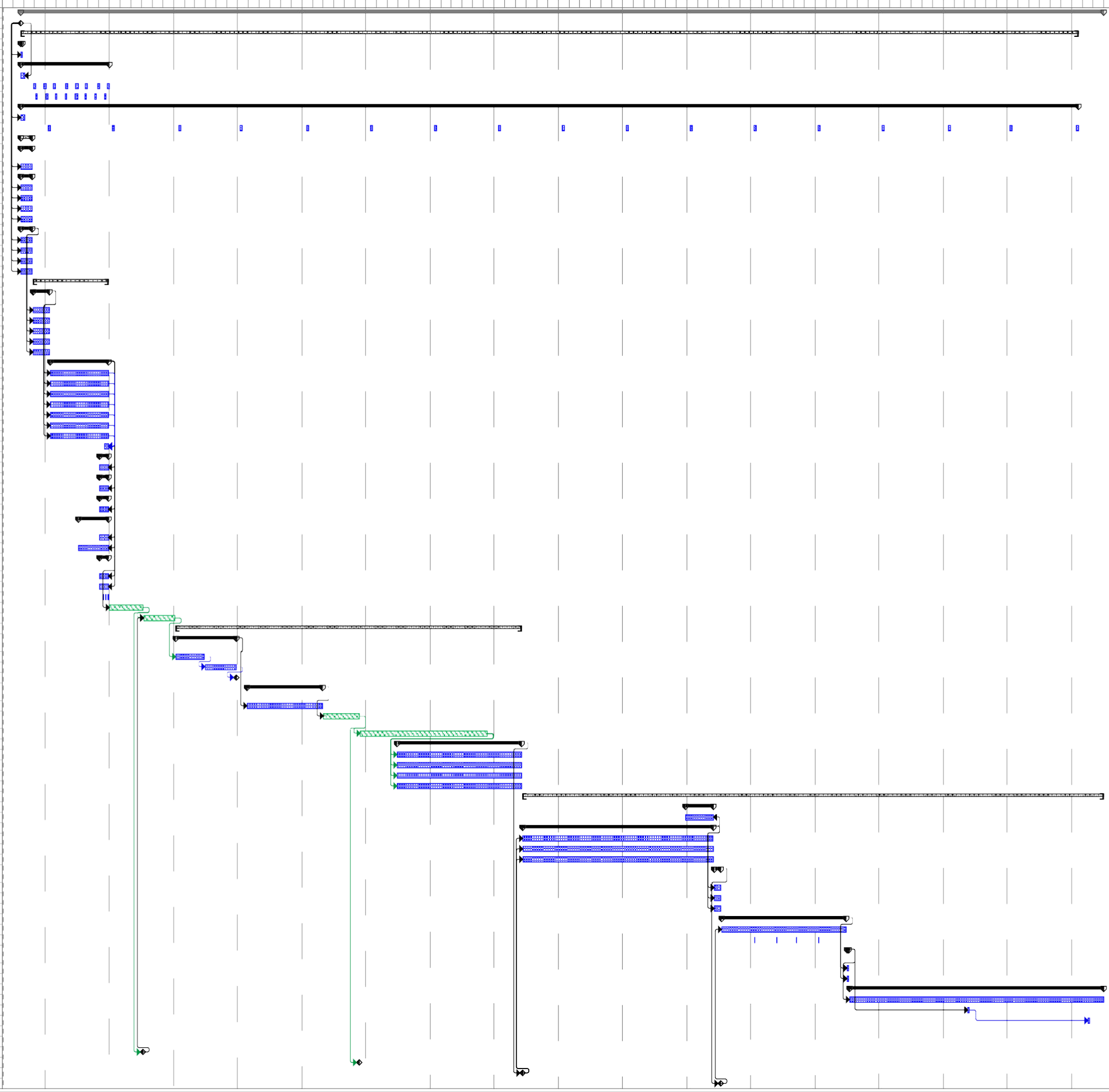
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1. Continuous Improvement

Houlder recognise that over a long duration contract that there will often be developments that could offer client an improvement in the service provided since the contract award. Houlder regularly review their internal process for improvements in; technical knowledge, delivery, quality, and efficiency and believe that any potential savings should be passed onto its clients where possible. Houlder and Cefas shall work together to identify and implement all continuous improvement measures by providing relevant information in a timely manner.

2. Improvement Plans

Within six months of the start date and at the start of each subsequent Contract Year, Houlder shall produce a continuous plan for improving the provision of Deliverables and/or reducing the charges without adversely affecting the performance of the contract, for the following year. The continuous improvement plan shall include details of the following processes and procedures.

- identifying the emergence of relevant new and evolving technologies;
- changes in business processes of Houlder or Cefas, and ways of working that would provide cost savings and/or enhanced benefits to Cefas (such as methods of interaction, supply chain efficiencies, reduction in energy consumption and methods of sale);
- new or potential improvements to the provision of the Deliverables including the quality, responsiveness, procedures, benchmarking methods, likely performance mechanisms and customer support services in relation to the Deliverables; and
- measuring and reducing the sustainability impacts of the Houlder's operations and supply-chains relating to the deliverables and identifying opportunities to assist Cefas in meeting their sustainability objectives.

If a potential improvement is identified mid-way through a year, it shall be raised at the earliest opportunity to Cefas so that the project shall see the benefit as soon as possible. If this is the case the continuous improvement plan shall be updated and re-issued mid-year.

The Project Manager shall advise the project team to their roles and ensure they are fully briefed on the requirements for continuous improvement. It is recognised that meeting the obligations of continuous improvement is the responsibility of all those assigned to the project.

It is acknowledged that Cefas shall notify Houlder of its approval or rejection of the proposed Continuous Improvement Plan or any updates to it within twenty working days of receipt. If it is rejected then the Houlder shall, within ten working days of receipt of notice of rejection, submit a revised Continuous Improvement Plan reflecting the changes required. Once Approved, it becomes the Continuous Improvement Plan for the purposes of this Contract.

Houlder understand that all costs relating to the compilation or updating of the Continuous Improvement Plan and the costs arising from any improvement made pursuant to it and the costs of implementing any improvement, shall have no effect on and are included in the submitted price.

3. Identifying Potential Improvements

Houlder shall actively seek to identify areas for continuous improvement. Where a new item is suggested, this shall be recorded along with sufficient information to enable a decision of whether to implement it, including the following.

- Description of the suggested improvement
- Overall cost impact, including:
 - Cost of implementation
 - Potential cost savings
- Statement on the impact on delivery schedule
- Statement on the impact on the quality of the deliverable.
- Statement on the impact on the cost to the SMTC contract

- Further information shall be provided as required by Cefas to fully assess the suggested improvement.

Each item shall be subject to a two-stage review process prior to issuing to Cefas. This shall comprise a checking stage which seeks to review the validity of assumptions made and to verify the accuracy and correctness of the entry. Checking is performed by a suitably experienced senior or principal engineer with chartered status or equivalent. This is supported by an approval stage which ensures the entry is fit for purpose, includes all required information and is consistent with other deliverables or activities underway in the project. Approvals are undertaken by staff at principal engineer or project director level.

4. Potential Improvement Measures

Houlder have identified the following as potential improvement measures that could provide a benefit to Cefas over the course of the project.

- **Look to identify other research vessel designs** – if an existing design meeting most or all of the requirements can be identified, the design time and cost could be significantly reduced subject to Intellectual Property rights.
- **Look to identify other research vessel builds** – if another research vessel meeting most or all of the requirements can be identified, and the other party are willing, a single contract for both vessels could be placed with associated cost savings in cost, time and supervision.
- **Reduction in site supervision** – depending on the shipyard selected, their experience, location and the level of technical risk identified, a reduction in site supervision from a full-time on-site presence to periodic visits either in the early stages of construction or throughout could be considered.

Other areas that could be investigated and developed further in the first iteration of the continuous improvement plan include.

- **Streamline project management / deliverables** – integration of project management software with improved project tracking and time management capabilities will reduce the number of hours spent by the Project Manager
- **Design process improvements / streamlining** – improvements in design software or calculation methodologies that make the design process more efficient.
- **Material / Equipment improvements** – material and equipment development over the duration of the contract leading to lighter, stronger, cheaper, and more efficient materials or equipment.
- **Shipyard efficiency improvements** – shipyard processes are not directly in Houlder control, but we can suggest looking at the technology in shipyards used to increase efficiency including; time management, digital briefings, material tracking, automated weld inspection, carbon tracking, site access controls and data analytics to analyse performance.

5. Implementation of Continuous Improvement

If Cefas wishes to implement an identified option for continuous improvement this will be formalised through a Variation Order following the Variation Procedure. The variation will have no additional cost the Cefas and savings from the improvement measure will be tracked against the unmodified cost.

Once a continuous improvement measure has been approved by Cefas, Houlder shall use all reasonable endeavours to implement the changes as soon as possible. Progress on continuous improvement measures will be reported on project update reports.

Should Houlder's costs in providing the Deliverables to Cefas be reduced as a result of continuous improvement measures implemented, all of the cost savings shall be passed on to Cefas. The Project Manager will manage this through the variation procedure and a log of all changes will be maintained.

6. Record Keeping

Houlder's Project Manager shall be responsible for ensuring all continuous improvement items related to the contract are recorded, thereby ensuring an audit. This comprehensive record of activities,

discussions and agreements shall also allow for smooth handover if key personnel leave the project for any unforeseen reason.

Continuous improvement records shall be set up, managed, and maintained in line with our QA certified Business Quality Management System by the Houlder Project Manager and the project team. Relevant records shall be maintained and filed in the project filing system and referenced in any reporting. Traceability shall be maintained for all project deliverables. Project records shall be retained in the archives for a minimum of 7 years.

All CEFAS data and drawings received during the contract shall be stored in a structured database on our electronic system. All work undertaken shall be archived in a dedicated folder together with any structural, stability or other models.

Houlder has put in place appropriate security measures to prevent data from being accidentally lost, used or accessed in an unauthorised way, altered or wrongly disclosed. Our operations have been certified to “Cyber Essentials PLUS” against the Cyber Essentials Scheme Test Specification. Houlder shall ensure that data is always processed in accordance with the provisions of relevant data protection legislation including the General Data Protection Regulation (GDPR).

7. Reviews with Cefas

Quarterly reviews shall be held with Cefas to review Houlder’s progress against the continuous improvement plan. The quarterly review shall comprise issuing a written quarterly report to Cefas and a quarterly review meeting.

The quarterly report shall be issued such that the contents can be reviewed in advance of each quarterly review. The meeting schedule shall be agreed following contract award.

The quarterly reports shall be issued in native Microsoft office format and shall include:

- Summary of continuous improvement activities
- Details of each continuous improvement item, including status, progress and issues arising.
- Review of new or potential improvements

Houlder’s Project Manager shall attend all virtual quarterly continuous improvement meetings. Other members of the project team, such as the Project Director and discipline leads, may also attend the meetings as necessary. The quarterly meetings shall include a review of Houlder’s deliverables and how they are provided to Cefas.

8. Gainshare

Throughout the Contract, Houlder may make a proposal for gainshare. If Cefas deems gainshare to be applicable, then the Houlder shall update the Continuous Improvement Plan to include details of the way in which the proposal shall be implemented in accordance with an agreed gainshare ratio. This process will be managed through the Project Manager.

1. Sustainability at Houlder

Houlder has a sustainability strategy (provided in the Qualification Envelope 08.1) in which we identified eight priority areas aligned with our company's commitment and values (see Figure 1). Each priority area is linked to at least one of the United Nations Sustainable Development Goals. Houlder is working towards addressing these goals both through our internal functioning and our work. Our business strategy is increasingly focussed on sustainability in the maritime and energy industries – this forms part of our offering to clients.



Figure 1 – Houlder's Sustainability Framework

2. Environmental Awareness – Within Houlder

2.1. Operations

Our publicly available Environmental Statement emphasises our motivation to reduce negative environmental impact from our work and the work of our clients, suppliers, and partners. As part of this, we currently have the following initiatives in place:

- A Sustainability Working Group focused on ensuring continual improvement in delivering our sustainability goals.
- An Alternative Fuels Group which collates and communicates, across Houlder, information on new fuels and technologies aimed at reducing greenhouse gas emissions from shipping.
- Waste recycling and segregation throughout our offices.
- Waste tracking using an internal central data collection system.
- Sustainable office furniture procurement and asset recirculation between our offices.
- Provision of a Cycle to Work Scheme for all employees.

Our ongoing environmental objectives are outlined as follows in our draft Environmental Compliance Manual:

1. To reduce wastage of energy and natural resources.
2. To reduce emissions and releases to the environment. Emissions include scope 1, scope 2, and scope 3 emissions, and will be calculated in tonnes-CO₂/year.
3. To minimize the number of environmental accidents and incidents.
4. To reduce organisation's carbon footprint per kVA.
5. To enhance environmental awareness among employees, suppliers, and customers.

6. To implement Houlder's sustainability strategy, aligned with the United Nation's Sustainable Development Goals, developed by Houlder's sustainability working group.

We will be working to these objectives throughout the duration of the Agreement and will encourage any suppliers and point of contacts during the delivery of the Agreement to do the same. Further relevant metrics will be confirmed with the adoption of the EMS.

2.2. Business

Over the past few years Houlder has also dedicated a large amount of its business effort to improving the environmental performance of the maritime industry. We appointed a new Sustainability director in June 2022 and shortly after created a sustainability advisory team to offer client decarbonisation advice.

The Sustainability Advisory Team developed an internal tool to conduct fleet decarbonisation studies for multiple vessel owners, using a three-phased approach to baseline their emissions and quantify the positive impact of implementing technology and/or operational measures on these emissions. Houlder uses this approach where relevant to quantify the reduction in emissions of greenhouse gases arising from the performance of the contract. Sustainable design will be incorporated into the vessel specifications as much as possible using Houlder extensive knowledge of marine decarbonisation technologies.

2.3. Travel

Houlder will do the following to ensure environmental impacts from travel are minimised during the performance of the contract:

- Throughout the duration of the Agreement, travel will be kept to a minimum, with online meetings being the preferred option.
- When travel to a meeting or site is absolutely necessary the minimum number of people will be sent, and sustainable travel options will be preferred (e.g. public transport instead of cars.)
- Where project related car travel is actively avoided as a result of using a green transport programme such as public transport or carpooling, Houlder shall report to the Authority car miles saved on the project. Houlder will also report mileage where low or no emission vehicles have been utilised or innovative measures have been used to safeguard the environment and respond to the climate emergency minimising the carbon footprint of the contract.
- Short haul flights will be avoided unless absolutely necessary. Any travel outside the UK will be discussed, planned and agreed with the Authority prior to taking place.

The above behaviours are standard practice at Houlder and our business travel policy is currently being updated to reflect this.

3. Environmental Awareness – Within the Wider Industry

Houlder is committed to influencing our clients and suppliers, as well as the wider maritime community to take the right steps in the right directions and our Environmental Statement, RQHSE-037-CS-001 (provided in the Qualification Envelope 08.1), sets out our aims and objectives for promoting a sustainable approach to business across the industry. To this end, we recently led and published a whitepaper entitled "Clean technology and the decarbonisation challenge – a Houlder navigator whitepaper". We interviewed multiple ship owners to understand their views on the industry's decarbonisation goals, clean technologies development, and the challenges they are facing towards implementation.

We also dedicate time and resource to supporting Industry-wide initiatives and working groups focused on decarbonisation:

- The Chief Commercial Officer of Houlder, is the chair of the maritime UK Hydrogen Fuels Group. The group brings together a wide range of Government bodies, academia and companies working to develop and implement alternative fuel technologies based on hydrogen, ammonia, and methanol.

- One of Houlder's Principal Marine Engineers recently led training workshops for the IMO in alternative fuels.
- Houlder's Director of Sustainability Advisory is a member of LR's Offshore Technical Committee with a focus on clean energy.

4. Social Value Add

The aim of the Sustainability Working Group is to engage all Houlder employees with the implementation of our sustainability strategy and to encourage sustainable practices in the work they do and the way they do it, as well as in their everyday lives outside of work. Houlder currently implements the following behaviours:

- A periodic survey to understand Houlder employees' views on sustainability at Houlder.
- Regular company-wide progress meetings on our sustainability strategy.
- Regular employee-led presentations and knowledge sharing sessions including environmental tips/tricks or sustainability work methods for work and outside work activities.
- Company-wide awareness events such as our November sustainability awareness month.
- Infographics and guidance hung on walls across our offices.

Houlder also recognise that we are in a fortunate position to have a platform to positively impact the local communities it operates in and spread the message of sustainability. We regularly undertake the following activities:

- **STEM outreach session in schools** – Houlder ran a primary school event at the Cutty Sark during Maritime UK Week to raise awareness of opportunities in the sustainable marine industry.
- **Club sponsorship** – Houlder sponsored the East the Boldon Scout Group, who took part in Tall Ships Races Hartlepool 2023, which ran from 6th to 9th July.
- **Event sponsorship** – Houlder sponsored the launch event of SMIFutures, an initiative dedicated to developing and empowering young professionals within the maritime industry. We support one of our Naval Architects who is currently Vice Chair of the SMIFutures board.
- **Local University collaboration** – Houlder have developed close links with universities close to their offices, offering student opportunities for joint projects and internships. The London office has close ties to UCL and the Fareham office close ties to Southampton University.

Specifically for this Agreement, part of the assessment criteria of the shipyard selection process will be how the shipyard engages with the local community and how sustainably the shipyard operates. This will include but not be limited to; waste management, recycling, apprenticeships and early careers, community engagement and environmental accountability. The project will also create jobs and opportunities for the local supply chain near the selected shipyard.

5. Policies and Accreditations

Houlder has a plan in place to achieve ISO 14001:2015 accreditation by the end of 2023, having passed the stage 1 audit in June of 2023 and with the Stage 2 audit due in the first week of November 2023. This will see us operating a formal Environmental Management System (EMS) accredited by a third-party body. Houlder currently has a draft Environmental Compliance Manual, RQHSE-037-CR-001 (provided in the Qualification Envelope 08.1) which will become an official company statement once ISO 14001:2015 is obtained. Houlder's QHSE team will administer the EMS, itself reviewed and approved by the Senior Management Team, and endorsed by the Board of Directors.

The ISO 14001:2015 accreditation will encompass auditing and reporting on the measures implemented. Houlder commits to reporting on progress in accordance with requirements of the future EMS. Houlder will share the results of the accreditation audit and subsequent annual reporting with CEFAS where relevant to this specific Contract. To improve transparency, we will consider signing up to official reduction targets schemes, such as the science-based targets developed by the non-profit CDP, the UN Global Compact, the World Resources Institute (WRI) and the World-Wide Fund for Nature (WWF). Additionally, Houlder is currently reviewing existing schemes to offset our carbon emissions and has had conversations with Carbon Neutral Britain as a starting point.

Draft Project Quality Plan

Provision of Specialist Marine Technical Consultant

Procurement Reference Number: CEFAS23-18

Publish date: 20 July 2021

Draft Project Quality Plan

Provision of Specialist Marine Technical Consultant

Procurement Reference Number: CEFAS23-18

Publish date: 20 July 2021

Our Reference: L-00634-150401-11978 Rev 0

Revision	Date	Reason for revision	Prepared by	Checked by	Approved by
0	14/08/23	Draft for Tender	DGP	JOC	JWM

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1. Introduction

This Project Quality Plan is provided to establish, implement, and maintain an effective quality framework for all activities being undertaken by Houlder's team on behalf of Cefas during the provision of specialist marine technical consultant.

In undertaking the role of a service provider, Houlder shall consult with the Cefas Project Management to define the objectives, deliverables and completion timeline of the project. Thus, ensuring that the plan is aligned with the requirements contained within any overall Cefas Plan. This document has been drafted on the basis that a Project Quality Plan would be provided if Option 8 were awarded to Houlder.

Following contract award, this plan shall be reviewed and re-issued. It should be read in conjunction with Cefas Statement of Requirements as defined in your ITT document and our response.

Quality Health Safety and Environmental (QHSE) measures shall be implemented in accordance with industry best practices and applicable industry standards, as required for quality assurance and control.

All personnel involved in the delivery of scopes of work (SOW), including any specialist contractors as required, shall follow the requirements of this Project Quality Plan and adhere to the standards contained within it. Houlder's project team is committed to maintaining the standards and methodology throughout the execution of the project activities.

All queries, clarifications or amendments to this Project Quality Plan are to be addressed to the Project Director, as below.



2. Scope and Purpose

The selected service provider shall provide a like-for-like replacement vessel design for a new Research Vessel to replace RV Cefas Endeavour. It covers the overall coordination, verification and management of the activities and the Cefas Project deliverables during the delivery of each stage and throughout the project life cycle.

This Project Quality Plan (PQP) has been developed to outline the Quality Programme that the Houlder team shall be responsible for and define the quality management levels required to deliver the project. The different responsibilities and interfaces that shall be applicable are also included.

This plan shall interface directly with any Cefas Project Quality Plan or Project Initiation Document that defines in general terms how the project shall meet corporate expectations. Houlder's Project Director, Project Manager and, if required, QHSE team members shall liaise with Cefas's Project Manager and QHSE management during project initiation.

The Project Quality Plan has been developed to ensure the quality of service expected under the contract for Design & Support Services by the Cefas is achieved throughout and encompasses the minimum project management activities that are to be implemented in its delivery.

2.1. Applicability

This Project Quality Plan (PQP) shall apply to the scope of work to be undertaken by the Houlder team for the duration of the Project.

2.2. Definitions

Definitions	Heading
Company	Cefas
Contractor	Houlder Limited
Project Director	Houlder Project Lead
Project	Provision of specialist marine technical consultant

3. Related Documents

Company Policies	Document No.
Quality Statement	RQHSE-018-CS-001
Health and Safety Statement	RQHSE-019-CS-001
Anti-bribery Statement	RQHSE-038-CS-002
Environmental Statement	RQHSE-037-CS-001
Corporate Social Responsibility Statement	CM-025-CS-001
IT Security Statement	IM-030-CS-001

Company Compliance Requirements / Manuals	Document No.
Company QHSE Compliance Requirement	RQHSE-018-CR-003
HSE Manual	RQHSE-019-MA-001
Project Common Manual	PM-015-MA-001

Company Policies	Document No.
Communication and Consultation Procedure	RQHSE-018-PR-008
Document & Record Control Procedure	RQHSE-018-PR-006
Document Retention Procedure	RQHSE-018-PR-007
Management of Change Procedure	RQHSE-018-PR-012
Internal- External Audit Procedure	RQHSE-018-PR-010
Control of Non-Conforming Product Procedure	RQHSE-018-PR-011
Corrective and Preventative action (CaPa) Procedure	RQHSE-018-PR-013
Managing Major Subcontracts	SM-010-UM-003
Root Cause Analysis Instruction	RQHSE-018-IN-001
Supplier Approval Procedure	SM-010-PR-001

3.1. Third Party Quality Documentation

Document Title	Document No.

3.2. Reference Standards

Document Title	Document No.
Quality management systems fundamentals and vocabulary	BS EN ISO 9000: 2015
Quality management - Quality of an organization - Guidance to achieve sustained success	BS EN ISO 9004: 2018
Quality management systems Requirements	BS EN ISO 9001: 2015
Environmental Management Requirements	BS EN ISO 14001: 2015
Occupational Health and Safety Management Systems	BS EN ISO 45001: 2018
Risk Management Guidelines	BS EN ISO 31000: 2018

3.3. Application of Specific Regulatory and Associated Standards

It is the Houlder's responsibility to ensure compliance with the Cefas's specific regulatory and associated standards, including the related standards.

Please note, this Quality Plan must be issued to all Suppliers and Contractors.

Houlder recognises all Quality, Safety and Environmental regulations listed in 3.2, as well as the client- specific referenced statutory and regulatory requirements, listed in 3.4.

3.4. Cefas Specific Project Specification Reference

Document Title	Document No.
Provision of Specialist Marine Technical Consultant –Core Requirements	CEFAS23-18, Part 1
Provision of Specialist Marine Technical Consultant –Procurement Specific Requirements	CEFAS23-18, Part 2

4. Project Management

The Project Manager (PM) is accountable to the Project Director for the successful planning of this Project.

The project manager shall continuously assess the progress of the project, to meet the scope of work (SOW) as defined and agreed. The PM is acting in the best interest of all parties to minimise any concerns or issues that could patently affect the overall product or service.

5. Responsibilities

The Project Manager is responsible for issuing, distributing and updating the Project Quality Plan in accordance with the requirements of the Cefas.

Each member of the Houlder project team shall be committed to the successful outcome of the project, including the implementation of industry best practice and Cefas Project requirements. These are well understood and shall be adhered to during each project stage awarded.

The Project Manager shall assist the Project Quality Manager and the Project Team to ensure that all Quality requirements and guidelines as defined in this Project Quality Plan and the Cefas requirements are implemented correctly at all stages of the Project.

All project requirements shall be to industry best practice both in terms of information and relevant supporting information and records.

The Project Manager shall have the necessary authority to enforce the implementation of this project quality plan when deemed appropriate, and ensure that at any stage the system outlined in this project quality plan is updated with Cefas requirements.

5.1. Project Director

Has overall accountability for the performance of the Project and the Project Team, therefore when deemed necessary shall review the overall Project performance against the Project Schedule and this PQP.

They are responsible for:

- Ensuring risks associated with the project is adequately evaluated.
- Ensuring project performance.
- Ensuring adequate resources (material and workforce) are made available.
- Ensuring the project adheres to all the latest legal and regulatory requirements and associated standards.
- Ensuring the adherence to the BQMS requirements, and the processes contained in this PQP are followed.
- Support the Project Manager on the conduct of the project.
- Ensuring the correct Project Team (PT) are assigned.
- Ensuring the project meets all budgetary expectations.
- Organising the appointment of Project Manager and the provision of necessary resources.
- Monitoring the Project Manager's control of project quality performance.
- Ensuring there are clear lines of communications implemented for the PT and Cefas.

5.2. Project Manager

Responsible for the correct implementation of the Quality Plan and responsible for:

- Delivering the intended scope of work as well as all project activities, deliverables including quality acceptance criteria and exclusions throughout the project lifecycle.
- Delivering the requirements of the contract and within budget.
- Overseeing the Design verification and validation throughout the project life cycle.
- Ensuring that the project complies with all the latest legal and regulatory requirement and relevant standards.
- Managing and recording all verification order requests (VOR) on the project.
- Ensuring adherence to the BQMS.
- Maintaining and controlling all project costs.
- Ensuring all project invoices are accurate and issued to Cefas on time, at the agreed milestone payments.

- Managing and addressing all Quality, Safety compliance.
- Reporting, briefing, and communicating progress reports with the project team, Cefas, when required.

5.3. Project Personnel

Responsible for:

- Supporting the Project to meet and deliver all Quality and Safety requirements
- Following this PQP and Cefas specific procedures.
- Ensuring all project information is checked validated and stored correctly in the appropriate folder location.
- Raising awareness of any concerns to the PM and the project team.

5.4. QHSE Team

Responsible for:

- Supporting the Project Manager in ensuring all Quality and Safety processes and guidelines are implemented.
- Recommend corrective actions to the Project Manager and verify their implementation and effectiveness.
- Completing audits, as required

6. Houlder Quality Organisational Structure

The Quality Plan operates under the governance of the Houlder Project Director, supported by the Houlder Board.

Therefore, the Project Manager shall be responsible for delivering and adhering to this Project Quality Plan. The Project Director shall provide oversight and client liaison Cefas, as required.

Figure 1 highlights the structure of the quality organisation within Houlder this shall be mapped to the Cefas Plan to ensure there is a commonality in approach and quality standards throughout the implementation of the required project. Procedures and processes required to implement and maintain a successful project.

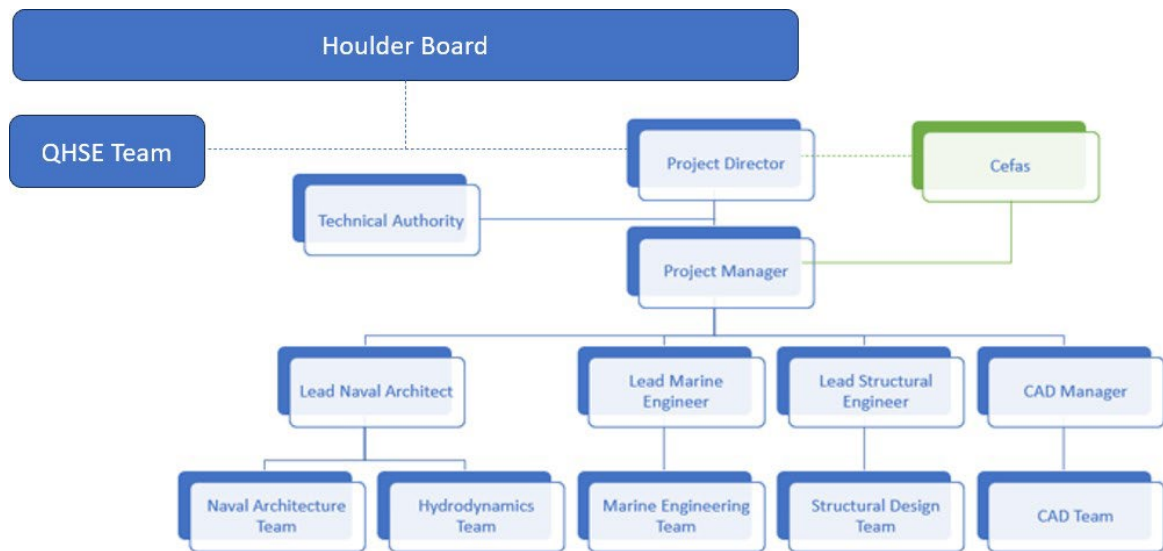


Figure 1 Project Quality Organisation

The Houlder team could vary throughout your phases of activity, providing the right level of skill, knowledge and experience as and when required.

The Project Manager shall direct the day-to-day delivery of the project and the focal point of contact for the Cefas team. The Project Director shall provide central strategic leadership and continuity throughout. They shall also obtain the required resource to select subject matter experts to support the project, as required.

QA Governance is aided directly by Houlder's QHSE team reporting to the Houlder Board who provide high-level oversight and client liaison as required.

Liaison and meetings with other key stakeholders and organisations involved in the project (e.g. regulatory authorities to include, MCA, Class,) shall be identified with communication and reporting lines established in consultation with the Cefas management team.

6.1. Houlder Quality Assurance Team

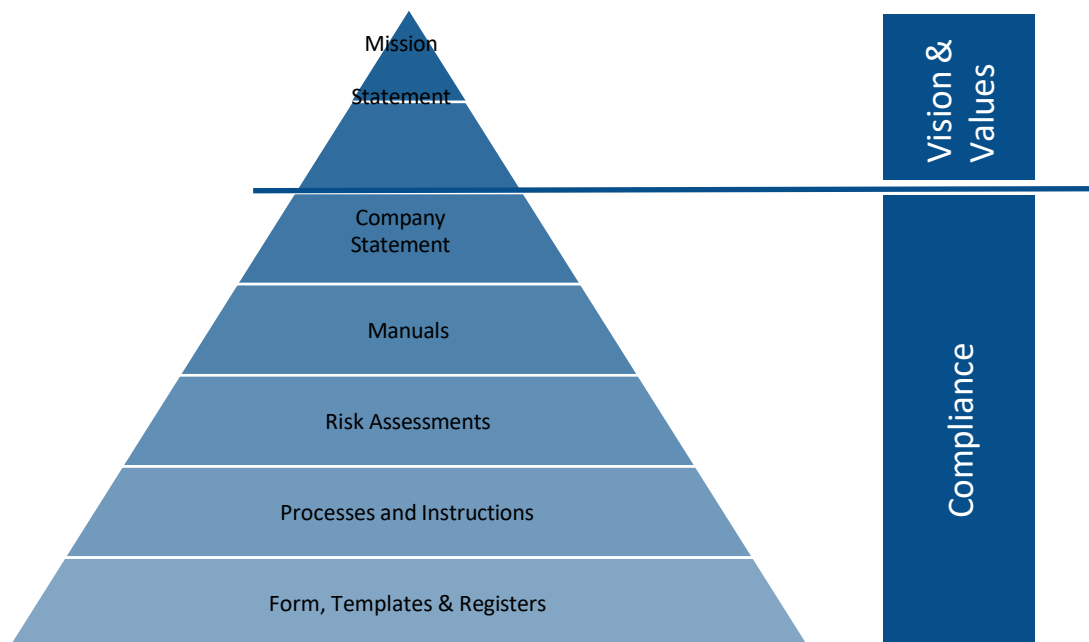
The central QHSE department within Houlder is responsible for creating and maintaining the Business Quality Management System (BQMS). The QHSE department shall support the monitoring of quality systems and application of the required standards to ensure the quality system is effective in achieving the services that meet the required contract deliverables of the Cefas Project team.

6.2. Houlder's BQMS Structure

The structure and supporting processes, within the BQMS, comply with:

- ISO 9001: 2015
- ISO 14001: 2015
- ISO 45001: 2018

The BQMS consists of the following levels of documented information:



7. Quality Planning

The Cefas quality expectations must be clearly understood and documented before project commencement.

Once Cefas quality expectations are clearly understood, the PM must plan the required Quality aspects of the project, this is to ensure the overall objectives and activities required for the successful application of the Houlder quality management system.

The Project Manager shall engage with the Cefas Project Team during the project 'Start-Up or initiation stage' to ensure each stage is expertly planned and the required resources are available, this is to ensure the quality criteria the services are to meet.

Service Descriptions shall define the quality criteria and control methods to be used for checking the existence of the level of quality. The Service description may require updating as the project moves through the various stages.

7.1. Stage Quality Plans

Where it applies, Houlder shall develop a Stage-specific Quality Plan aligned to the individual stages of the project. In effect this shall be the standard Quality Plan with variation to reflect the change in work scope and output, of the particular importance of activities being delivered during the construction/shipbuilding phases of the contract, where the focus changes from shipyard selection and contract negotiations to working closely on:

- The design, build
- FAT, HAT testing
- Commissioning of the vessel
- Trials

8. Project Quality Plan Approval

The PM and PD and The Cefas are overall responsible for the final approval of the PQP as well as approving any revision and updates to the PQP. Each holder of a controlled copy of the Quality Plan shall familiarise the reporting requirements and liaise with their personnel with the contents/requirements of this Project Quality Plan.

The controlled copies of the Project Quality Plan shall be distributed to the involved Project functions/organisation as indicated in the following “Project Quality Plan” Distribution/Involvement Matrix”.

8.1. Distribution of Quality Control Plan

The approved PQP shall be distributed to the required Project functions/ organisation as indicated in the following “Project Quality Plan Distribution/ Involvement Matrix”.

8.2. Revision of Project Quality Plans

The Head of QHSE shall revise this Project Quality Plan when changes occur in its contents, the PM and Cefas approve all modifications to the Houlder’s Quality Plan.

The original Project Quality Plan and any revisions must be maintained within the Project Filing System.

Houlder Project Quality Plan Distribution/Involvement Matrix.

Design and Support Services	Function / Organisation	Prepare	Revise	Approve	Implementation	Review	Information
	QHSE Manager	✓	✓				✓
	Project Director			✓	✓	✓	✓
	Project Manager	✓	✓	✓	✓	✓	✓
	Project Team				✓		✓
	Specialised Contractors				✓		✓
	Cefas			✓		✓	✓
	Houlder Board			✓		✓	✓

The above matrix defines the minimum requirements for distribution of the project quality plan, together with the involvement of all relevant parties.

9. Quality Control

Quality control is all about examining the services that the Project Team, under the leadership of the Project Manager, shall deliver to the Cefas, during and after the project is completed.

Houlder and Cefas shall need to develop a shared understanding of the link between quality, cost and time to ensure the service to be delivered is fit for purpose and is built around all three constraints.

9.1. Performance Monitoring

It is proposed that project quality and performance shall be monitored in the following ways:

- Relationship management through clear communications and reporting to Cefas at the scheduled contract meetings;
- Activity management to include development and reporting on the delivery of scope of services for the various stages of the project;
- Formal feedback on service delivery and quality standards shall be captured periodically throughout the contract.

The Project Manager shall continuously monitor and review the progress of the services against the contract. Cefas shall be kept informed as to the development of the project and deliverables at technical meetings and with progress and technical reports throughout all stages of the project.

9.2. Quality Objectives

Houlder shall liaise with the Cefas project leadership to confirm the quality expectations and the acceptance criteria against a range of outputs in addition to those included in the scope of work. As an example, these may include:

- Meeting milestone dates
- Experience and expertise of the resources applied to the project
- Performance and reliability levels
- Accuracy of data and reports
- Hours expended
- Preparation for meetings
- Timeliness of reporting
- Meeting ISO/Class and Flag standards

Each of the acceptance criteria has to be measurable against a set of metrics which are to be agreed

9.3. Project Quality Assurance

The Houlder Project Manager shall engage with the Cefas Project Manager and project assurance team throughout the contracting period(s) allowing suitable time for the review of any plans or schedules being delivered. These may require verification to confirm they are appropriate and that quality checks have been carried out such that the services to be provided are satisfactory.

This shall typically cover the type of service, method of its delivery, resources being applied and any subsequent reporting requirements.

10. Communication and Consultation

All correspondence and consultation shall be managed according to the Cefas and project requirements.

The following media could be used to ensure that all parties that are involved, with the project shall be fully informed with any requirements or changes that could affect the overall quality or the Project.

- E-mail
- Reports
- Letters
- Memorandums
- Corrective or Preventative Actions (CAPAs)
- Non-Conforming Reports (NCRs)

10.1. Project Review Meetings

Houlder shall hold formal project review meetings to align with Cefas project governance theses shall be set at:

- Commencement of the project.
- Periodic reviews throughout the delivery of the tender design
- Monthly and or quarterly during the shipyard selection and build through to delivery including shipyard guarantee period as required.

The frequency of the project review meetings shall also be monitored and amended as required.

Cefas shall be kept informed as to the progress of the project through regular communication. We shall also provide progress reports throughout all stages of the project.

10.2. Attendance at Progress Meetings

The Project Manager, with appropriate support from the wider team, shall attend progress meetings as scheduled by the Cefas Project Manager. In preparation for the meetings, Houlder shall ensure all the relevant advance reports are issued in preparation for the meeting, providing evidence of progress and quality of activities, together with providing comments, observations and recommendations.

11. Design

The Project Team for the design elements of the project shall comprise suitably qualified, experienced personnel, drawn from Houlder's in-house marine engineers, designers and naval architects.

The Houlder Team shall evolve throughout the stages of the project to engage the right individuals to provide the best level of skill, knowledge and experience appropriate for each stage. The Project Manager shall be responsible for identifying required staff to the Project Director and assigning staff as appropriate to design tasks.

The Project Team personnel are typically qualified as chartered engineers having studied and graduated at bachelor's or Master's degree level. They shall be members or fellows of a relevant professional body such as the Royal Institution of Naval Architects (RINA) membership or Institute of Marine Engineering, Science and Technology (IMarEST) and many have seagoing experience.

The senior members of the Project Team shall have direct design and new-build construction experience. The Principle Naval Architect and Principal Marine Engineer shall oversee the work of junior members of the Project Team. Where deemed necessary by the Principles or Project Manager, Subject Matter Experts within Houlder shall be engaged to provide additional expertise.

12. Reviewing and Reporting

The Project Manager, in consultation with Cefas Project Manager, shall continuously monitor and review progress against a Master Project Schedule and scope of services as defined in the contract.

Formal project reviews shall be undertaken in order to review project progress and ensure that the Cefas's requirements are being met and identify any corrective action or preventative measures required to resolve any issues as quickly as possible.

12.1. Design Reviews

In undertaking a design review of any shipyard deliverables, we shall advise on the progress of the review, to include:

- number of plans/drawings received and reviewed
- revision number, comments and recommendations

The above shall be issued to the Cefas Project Manager, taking into account compliance of the shipyard's interpretation of the contract specification, Flag and Class requirements, as well as good shipbuilding, practise.

We shall maintain a record of drawings received, date of receipt and scheduled date of return to the shipyard.

12.2. Factory Acceptance and Model Tests

In the case of tests and trials, Houlder shall advise Cefas on the schedule of our attendance at and results of any works. This includes model and tank trials and factory acceptance testing of main machinery and equipment. A report on the results, base-lined against the contract specification of each test including observations and recommendations, shall be issued to the Cefas as required.

Reporting shall include results of these tests together with our observations and recommendations, taking into account build specification, operational requirements and functional design and build practise.

12.3. Inspections and Monitoring

Following agreed inspection and monitoring visits, we shall report on progress and quality of construction in accordance with build programme and, as required, advise on the stage of construction and any outstanding items in order to effectively stage payments. Any non - conformities shall be raised and reported together with our observation and recommendations.

Houlder shall maintain a defect register to record defects raised, adding comment from the shipyard on how these are being addressed. The defect register shall be a live document showing the status of each item, i.e. those that have been closed or remain open.

13. Change Management

Houlder's Project Management team shall formally manage any variation request by Cefas.

If the verification order has a cost impact leading to exceeding the approved project budget, the Project Manager and the Project Director are responsible for the budget review/approval process. All changes, no matter if raised by Cefas, shall be recorded in a dedicated log.

The management of the log is the responsibility of the Project Manager for the project and periodically verified and controlled by the Project Director.

Any changes requested by Cefas that has a cost impact is chargeable and depending on the overall cost could be recovered by Houlder.

14. Monitoring and Measurement

The Project Manager is responsible for reporting the project performance monthly:

- Reviewing the performances of the project team;
- Collecting and reporting the project teams performance feedback.

14.1. Quality Reviews

Houlder shall nominate members of the team to support in the Project Assurance quality review process. The reviews shall form part of the Project Management Office configuration management function which release documents for review (such as the project gantt chart or resource plan) baseline the progress against the original and update the status report.

Houlder shall provide inputs to any Quality Log as directed by the Cefas Management. They shall also provide a Quality Log to the Houlder Board periodically if required.

14.2. Audits

Houlder shall provide unrestricted access to Cefas, or any Third-Party Auditors appointed by Cefas to audit or monitor the overall performance of Houlder, during the project, if requested.

All audits shall be carried out in accordance with the requirements of the Contract and Cefas requirements.

14.3. Internal Reviews

Audit requirements shall be determined by the Project team together with the Houlder's QHSE management and, where appropriate, shall be included on the Cefas audit schedule. Such audit would be undertaken with the project team's recommendations and Cefas's contractual requirements and cover all areas of the Project.

The main areas of project quality monitoring are:

- Technical Deliverables
- Project Management
- FAT, HAT and SAT testing
- Competition and Commissioning Work
- Trials

14.4. Follow Up

Following an audit or inspection, a detailed report is to be completed to ensure historic traceability on all audit subjects and findings all details are entered on to the relevant system and the subsequent report attached. All Corrective and Preventative actions (CaPa) shall be reported and assigned for action and closeout.

14.5. Analysis of Data

Houlder shall collect various information and statistics to identify any issues or trends regarding the overall performance of this Project. To determine the suitability and effectiveness of the BQMS and overall Project performance to identify improvements and continual improvements.

The analysis provides information on:

- Ensuring that sufficient resources are available for all functions;
- Customer satisfaction and dissatisfaction;
- Conformance of our products to customer requirements;

- The characteristics of processes, and products and their trends.

14.6. Reporting

The auditor shall monitor the progress of CaPa's provide support and guidance to the assignee if required. If the findings are not closed out by the agreed due date, the auditor informs interested parties - including Cefas's and Houlder Board as appropriate, on the overall progress made.

15. Document Control and Project Records

Houlder's document control system shall be set up managed and maintained by the Project Manager and the project team.

Project correspondence and project records shall be maintained to cover the scope of services in accordance with our Quality Assurance (QA) and Quality Control (QC). To demonstrate to the Cefas's that the overall that scope of service, is in line with our QA and QC has been achieved for the overall Project.

Houlder shall provide an index of project files/relevant records which shall be filed in the project filing system and referenced in the final report.

Traceability shall be maintained to relevant drawings specifications, purchase orders inspection and test records.

The list of records to cover quality-related project-specific activities are detailed in the Matrix of Procedure/Activity/Responsibilities (refer to section I8 of this plan). All relevant as-built records shall be filed in the project filing system and included in the final close-out report by the requirements of the Company.

Project records shall be retained in the archives for seven years.

16. Closeout


It is the responsibility of the auditor to update the records with objective evidence of the CaPa's implemented to address any finding. Once a satisfactory corrective or preventative action.

The action required to prevent recurrence of the original finding and the verification of the action has been implemented, objective evidence of the CaPa is attached and the completion date entered to close out the record. If there is no verification evidence provided during closeout, then the record must remain open until such information is provided.

If the auditor project team or Cefas is not satisfied that the details added to the record are a satisfactory action with sufficient objective evidence, the completion date is removed, and the appropriate persons informed that the record has been re-opened and requires further action.

17. Quality Statement

The Houlder Quality Statement is shown below and should be read in conjunction with the Cefas equivalent to ensure the Houlder team deliver to the highest standard possible for this project.



Quality Statement

Houlder is committed to providing services and products that consistently meet and exceed the quality requirements of its clients.

Houlder has developed and implemented a Business Quality Management System (BQMS) as a key element in the overall efficiency and success of the business. The BQMS is certified to ISO 9001:2015 Standard by LRQA and is continually improved.

Houlder is committed to:

- Ensuring that all people that work for, or on behalf of, Houlder conduct their work to the highest technical and commercial standards and with utmost professional integrity.
- Learning from experience by reviewing and monitoring performance then feeding the results back into our BQMS and staff.
- Continually improving our BQMS by determining and addressing the risks and opportunities that could enhance customer satisfaction or affect the conformity of our products and services.
- Performing work in such a manner that ensures human life and the environment are protected.
- Developing an environment and culture whereby the competency of Houlder personnel is continuously reviewed and developed so that the business delivers solutions that exceed our high standards and those of our clients.
- Maintaining a clear framework in which to set and monitor the business objectives and report on the effectiveness and applicability of the processes contained within it.
- Adhering to all relevant International and National Standards and Codes of Practice in delivering this statement.
- Reviewing and revising this Quality Statement annually.

The Senior Management Team is fully committed to providing leadership and the essential resources, communication, employee engagement, training and support as required to maintain Quality Assurance.

R

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Date7th February 2023

Document Reference RQHSE-018-CS-001 Rev 9
Owner: RQHSE Department
Published 14/03/2016

18. Matrix of Procedure/Activity/Responsibilities

Matrix of Procedure/Activities/Responsibilities							
QA System Requirement ISO 9001	Clause	Title	Requirement	Method to Assure Compliance	Responsibility		Document of Reference/Comments
					Review	Approve	
4- Context of the organisation (Section title)	4.1	Understanding the organisation and its context	To determine internal and external issues	Biannual reviews	Senior Management Team (SMT) & Head of QHSE	CEO	Houlder Website
	4.2	Understanding the needs and expectations of interested parties					RQHSE-018-RE-004 Risk and Opportunity Register
	4.3	Determining the scope of the quality management system	The boundaries of the Company's QA system	Yearly Review			RQHSE-018-CR-001 BQMS Structure and Compliance Requirements RQHSE-018-CR-003 Company QHSE Compliance Requirement RQHSE-018-PR-004 Management Review Procedure
	4.4	Quality management system and its processes	Continually Improve the Company's BQMS				RQHSE-018-CR-001 BQMS Structure and Compliance Requirements
5 Leadership (Section title)	5.1	Leadership and commitment	To demonstrate leadership	Yearly Reviews	SMT & Head of QHSE	CEO	RQHSE-018-CS-001 Company QA Statement RQHSE-019-CS-001- Company HSE Statement RQHSE-037-CS-001- Company EMS Statement
	5.2	Company Statements					
	5.3	Organisational roles, responsibilities and authorities	To ensure appropriate accountability and responsibility is implemented	Regular Review	HR Manager	CEO	RM-024-OR-001 Company Organisation Chart
6 Planning (Section title)	6.1	Actions to address risks and opportunities	To measure the effectiveness of the processes, within the Company	Biannual Review by The Executive Team	Head of QHSE	CEO	RQHSE-018-PR-002 Measurement, Analysis, and Improvement Procedure
	6.2	Quality objectives and planning to achieve them		Management Review Regular Meetings with the Streams	SMT	CEO	Company - RQHSE Performance Tracker
	6.3	Planning of changes		Management Review Regular Meetings with the Streams	Head of QHSE	CEO	RQHSE-018-PR-012 Management of Change Procedure RQHSE-018-PR-004 Management Review Procedure
7 Support (Section title)	7.1	Resource planning			PM	HR	RM-024-PR-010 Resource Management Procedures
	7.1.1	General					

Matrix of Procedure/Activities/Responsibilities

QA System Requirement ISO 9001	Clause	Title	Requirement	Method to Assure Compliance	Responsibility		Document of Reference/Comments
					Review	Approve	
	7.1.2	People	Provision of trained and qualified personnel	CV review by PM and Project Leaders			RM-024-FO-008 Supplier Approval Form (Category E - Technical Advisers & Consultants) emPerform twice-yearly employee performance measurement PM-MA-015-001 Project Common Manual Project QA & HSE Plan's
	7.1.3	Infrastructure	Ensure all work areas are operational	Internal audits and inspections	QHSE/HR Team, Office Managers & PM	Line Manager	RM-024-PR-010 Resource Management Procedures RQHSE-019-MA-001 Safety Management Manual RQHSE-018-FO-003 Internal Audit Report RQHSE-018-PR-004 Management Review Procedure QA & HSE Plans PM-015-MA-001 Project Common Manual Project Execution Plan
	7.1.4	The environment for the operation of processes					
	7.1.5	Monitoring and measuring resources	Ensure provision and retention of knowledge is maintained in the Company	Internal audits and inspections	QHSE/HR Team, Office Managers & PM	Line Manager	RM-024-PR-010 Resource Management Procedures RM-024-FO-008 Supplier Approval Form (Category E - Technical Advisers & Consultants) emPerform twice-yearly employee performance measurement PM-MA-015-001 Project Common Manual Project QA & HSE Plan's
	7.1.6	Organisational knowledge					
	7.2	Competence					
	7.3	Awareness	To communicate internally and third parties	Regular Internal and External Communications	Head of QHSE and Marketing Manager	CEO	RQHSE-018-PR-008 Consultation and Communication Procedure Holder highlights Houlder Happenings Houlder Website
	7.4	Communication					
	7.5	Documented Information	To maintain and control BQMS and Project documentation	Internal audits and inspections, Client & third- party reviews	QHSE/HR Team, Office Managers & PM	Line Manager	RQHSE-018-CR-001 BQMS Structure and Compliance Requirements RQHSE-018-CR-001 Company Quality Compliance Requirement Project Quality Plan RQHSE-018-PR-006 Document & Record Control Procedures RQHSE-018-PR-007 Document Retention Procedure PM-MA-015-001 Project Common Manual
	7.5.1	General					
	7.5.2	Creating and Updating					
	7.5.3	Control of Documented Information					

Matrix of Procedure/Activities/Responsibilities

QA System Requirement ISO 9001	Clause	Title	Requirement	Method to Assure Compliance	Responsibility		Document of Reference/Comments
					Review	Approve	
8 Operation (Section Only)	8.1	Operational Planning and Control	To plan and control processes required to deliver the product or service	Internal/ project audits and inspections, client & third-party reviews	QHSE Team, Office Managers & PM	Line Managers	RQHSE-018-CR-001 BQMS Structure and Compliance Requirements RQHSE-018-MA-001 Quality Manual RQHSE-018-CR-003 Company QHSE Compliance Requirement QA & HSE Plans Project Execution Plan RM-024-PR-010 Resource Management Procedures PM-015-FO-039 Minutes of Meeting PM-015-FO-011 Progress Report Project Plan
	8.2	Requirements for Products and Services	To communicate with all parties	Internal/project audits and inspections, client & third-party reviews	QHSE Team, Office Managers & PM	Line Managers	RQHSE-018-CR-003 Company QHSE Compliance Requirement PM-MA-015-001 Project Common Manual QA & HSE Plans Project Execution Plan PM-015-FO-039 Minutes of Meeting PM-015-FO-011 Progress Report RQHSE-018-PR-008 Consultation and Communication Procedure
	8.2.1	Customer Communication					
	8.2.2	Determination of requirements related to products and services	To determine the requirements of the product	Internal/project audits and inspections, client & third-party reviews	QHSE Team, Office Managers & PM	Line Managers	PM-MA-015-001 Project Common Manual QA & HSE Plans Project Execution Plan PM-015-FO-039 - Minutes of Meeting PM-015-FO-011 - Progress Report Scope of Work Client Requirements Design Reviews Review all applicable laws and regulations Contract Review
	8.2.3	Review of requirements related to products and services					
	8.2.4	Changes to requirements for products and services	To ensure any changes are recorded	Internal/project audits and inspections, client & third-party reviews	Lead engineers and PM	Line Manager	PM-MA-015-001 Project Common Manual QA & HSE Plans Project Execution Plan PM-015-FO-039 - Minutes of Meeting PM-015-FO-011 - Progress Report Client Requirements Design Reviews
	8.3	Design and development of products and services	To design the product to meet the requirements of the client	Internal/project audits and inspections, client & third-party reviews	Lead engineers and PM	Line Manager	PM-MA-015-001 Project Common Manual PM-015-FO-039 - Minutes of Meeting Client Requirements Design Reviews Review all applicable laws and regulations
	8.3.1	General					
	8.3.2	Design and Development Planning					
	8.3.3	Design and Development Inputs					
8 Operation (Section Only) (Cont)	8.3.4	Design and Development Controls					

Matrix of Procedure/Activities/Responsibilities

QA System Requirement ISO 9001	Clause	Title	Requirement	Method to Assure Compliance	Responsibility		Document of Reference/Comments
					Review	Approve	
8 Operation (Section Only) (Cont)	8.3.5	Design and Development Outputs					ET-030-IN-002 Design Development Review, Verification, & Validation Instruction ET-030-In-001 2D Draughting Instruction ET-030-IN-003 3D Drawing System Guidance ET-030-IN-004 Concept Design Process ET-040-TE-003 Technical Query ET-040-RE-004 Compliance Matrix Template
	8.3.6	Design and Development Changes					
	8.4	Control of externally provided processes, products and services	To control/ manage all outsourced or purchased products and services	Internal, external reviews, audits and inspections	QHSE Team and Project Buyer	Line Manager	RQHSE-018-MA-001 Quality Manual SM-010-PR-001 Supplier Approval Procedure PM-MA-015-001 Project Common Manual RQHSE-018-PR-002 Measurement, Analysis and Improvement Procedure SM-010-MA-001 Managing Major Subcontracts RQHSE-018-FO-002 External Audit Report QA & HSE Plans Project Plan Project Execution Plan RM-024-PR-010 Resource Management Procedures RM-024-FO-008 Supplier Approval Form (Category E - Technical Advisers & Consultants)
	8.4.1	General					
	8.4.2	Type and extent of control					
	8.4.3	Information for external providers					
	8.5	Control of Production and Service Provision	The control of production services	Supplier reviews, audits and inspections	PM & Project Buyer	Line Manager	PM-MA-015-001 Project Common Manual QA & HSE Plans Project Execution Plan PM-015-FO-039 Minutes of Meeting PM-015-FO-011 Progress Report SM-010-MA-001 Managing Major Subcontracts RQHSE-018-FO-002 External Audit Report
	8.5.1	Control of production and service provision					
	8.5.2	Identification and traceability					
	8.5.3	Property belonging to customers or external providers	The control of the goods	Supplier reviews, audits and inspections	PM & QHSE Team	Line Manager	MM-010-FO-006 Goods Received Notification Instruction QA & HSE Plans Project Plan PM-015-FO-039 Minutes of Meeting PM-015-FO-011 Progress Report Suppliers Packing Procedures Clients requirements SM-010-MA-001 Managing Major Subcontracts PM-MA-015-001 Project Common Manual RQHSE-018-CR-003 Company QHSE Compliance Requirement
	8.5.4	Preservation	To review and Control any Changes	Internal, external reviews, audits and inspections	Head of QHSE, Lead engineers, PM and Office Managers	Line Manager	RQHSE-019-MA-001 Safety Management Manual RQHSE-018-FO-003 Internal Audit Report QA & HSE Plans PM-015-FO-039 Minutes of Meeting PM-015-FO-011 Progress Report QHSE Dashboard

Matrix of Procedure/Activities/Responsibilities

QA System Requirement ISO 9001	Clause	Title	Requirement	Method to Assure Compliance	Responsibility		Document of Reference/Comments
					Review	Approve	
	8.5.5	Post-delivery activities					
	8.7	Control of nonconforming outputs					
9 Performance evaluation (Section title)	9.1	Monitoring, measurement, analysis and evaluation	To determine the overall performance of the Company	Internal, external reviews, audits and inspections across the Company and Projects	Head of QHSE, PM and Office & Line Managers	Company Directors	PM-MA-015-001 Project Common Manual QA & HSE Plans RQHSE-018-PR-004 Management Review RQHSE-018-PR-009 Customer Feedback Procedure QHSE Database QHSE dashboard PM-015-FO-039 Minutes of Meeting PM-015-FO-011 Progress Report PM-015-FO-039 - Minutes of Meeting PM-015-FO-011 - Progress Report CRM
	9.1.1	General					
	9.1.2	Customer Satisfaction					
	9.1.3	Analysis and Evaluation					
	9.2	Internal Audit	To determine the performance of the Company	Internal audits and inspections, inc. Third-Party	Head of QHSE, PM and Office Managers	Line Manager	PM-MA-015-001 Project Common Manual QA & HSE Plans RQHSE-018-PR-004 Management Review RQHSE-018-PR-009 Customer Feedback Procedure QHSE Database QHSE Dashboard RQHSE-018-CR-003 Company QHSE Compliance Requirement
9 Performance evaluation (Section title) (Cont)	9.3	Management Review	To determine the overall performance of the Company	Internal, external reviews, audits and inspections across the Company and Projects	Head of QHSE, PM and Office & Line Managers	Company Directors	RQHSE-018-PR-004 Management Review RQHSE-018-PR-009 Customer Feedback Procedure QHSE Database QHSE Dashboard CRM RQHSE-018-CR-003 Company QHSE Compliance Requirement RQHSE-018-CS-001 Company QA Statement Company-RQHSE Performance Tracker
10 Improvement (Section title)	10.1	General	To determine and select opportunities for improvement	Internal, external reviews, audits, inspections and Management Review	Head of QHSE, PM and Office & Line Managers	Company Directors	RQHSE-018-PR-004 Management Review RQHSE-018-PR-009 Customer Feedback Procedure Company-RQHSE Performance Tracker RQHSE-018-CS-001 Company QA Statement RQHSE-018-RE-004 Risk & Opportunities Register
	10.2	Nonconformity and Corrective Action	To control and evaluate the need for actions to maintain the quality of the product	Internal, external reviews, audits, inspections and Management Review	Head of QHSE, PM. Project Buyer	Line Managers	RQHSE-018-PR-002 Measurement, Analysis, and Improvement Procedure RQHSE-018-PR-009 Customer Feedback Procedure QHSE Database RQHSE-018-CR-001 Company Quality Compliance Requirement

Matrix of Procedure/Activities/Responsibilities

QA System Requirement ISO 9001	Clause	Title	Requirement	Method to Assure Compliance	Responsibility		Document of Reference/Comments
					Review	Approve	
	10.3	Continual Improvement	To continually improve	Internal, external reviews, audits, inspections and Management Review	Head of QHSE, PM and Office & Line Managers	Company Directors	RQHSE-018-PR-009 Customer Feedback Procedure QHSE Database RQHSE-018-CR-001 Company Quality Compliance Requirement RQHSE-018-PR-004 Management Review RQHSE-018-RE-006 Departmental Effectiveness Register RQHSE-018-RE-004 Risk & Opportunities Register



Provision of Specialist Marine

Project Risk Register & Mitigation Plan

Publish Date: 01 September 2023

Our Reference: L-00634-150401-11986 Rev 0



INTRODUCTION SHEET

Document Number: L-00634-150401-11986
Document Revision: Rev 0
Client: Cefas
Project: Title: Provision of Specialist Marine Technical Consultant Project
Date of Issue: Risk Register & Mitigation Plan
01 September 2023

REVISION HISTORY

Revision	Issue Date	Reason for Revision	Prepared by	Checked by	Approved by
0	01/09/2023	Draft issue for tendering	DGP	JOC	JWM

INTENT AND METHOD

The purpose of this document is to identify, access and manage risks to the project.

The risk register:

Identifies potential risks to the project

Assesses the likelihood and impact of each risk. Develops

mitigation strategies for each risk Tracks the status of the risk

SUMMARY

Pre-mitigation overall risk score 10 MEDIUM LOW
Post mitigation overall risk score 5

- A Register
- B Definitions
- C Considerations
- D Risk Severity Table




REFERENCE MATERIAL

- [1]
- [2]
- [3]

Reference: L-00634-150401-11986 Rev 0

Project: Provision of Specialist Marine Technical Consultant
Title: Project Risk Register & Mitigation Plan
Section A: Register

Risk level

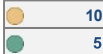
 Low
 Medium
 High

Likelihood
Impact

1 Highly unlikel
Minor
2 Unlikely
Moderate
3 Possible
Severe
4 Likely
Major
5 Imminent
Catastrophic

Project Risk Register & Mitigation Plan

Pre-mitigation overall risk score Post
mitigation overall risk score



RISK			PERCEIVED RISK						PROPOSED MITIGATION PLAN									RISIDUAL RISK	
Risk No.	Entry Date	Description & Impact	Date of Impact	Impact			Likelihood	Risk Level	Description of Mitigation Plan	Impact			Likelihood	Owner	Completion Date	Proceed Y/N	Risk Level	Status	
				Time	Cost	Quality				Time	Cost	Quality							
1.00 Project Risks																			
1.01	08/08/23	Scope definition missing tasks leading to delay to delivery.	01/06/24	3	2	1	2	<div><div></div></div> 6	Early definition of tasks, with ability to draw additional reasource from wider team.	2	2	1	2	PM			<div><div></div></div> 4		
1.02	08/08/23	Scope changes impacting schedule and subsequent deliverables.	01/06/24	3	1	1	3	<div><div></div></div> 9	Deliverables defined with scheduled dates.	2	1	1	3	PM			<div><div></div></div> 6		
1.03	08/08/23	Limited access to operational information	27/11/23	3	2	1	2	<div><div></div></div> 6	Early definition of tasks and client information required.	2	2	1	2	PM			<div><div></div></div> 4		
1.04	08/08/23	Lack of timely review and approval of deliverables, leading to delay in delivery of subsequent tasks.	01/06/24	3	2	1	3	<div><div></div></div> 9	Early definition of tasks and client review requirements. Review time included in schedule.	2	2	1	2	PM			<div><div></div></div> 4		
1.05	08/08/23	Delay in agreeing model testing socpe results in delay to booking test facilities and price increase.	01/06/24	3	2	1	2	<div><div></div></div> 6	Model testing carried out in house and additional resource can be deployed if required.	2	2	1	2	PM			<div><div></div></div> 4		
1.06	08/08/23	Client requirements change, delaying schedule and/or causing work to be repeated.	01/06/24	3	1	1	3	<div><div></div></div> 9	Early definition of tasks and regular review with client.	2	1	1	3	PM			<div><div></div></div> 6		
1.07	08/08/23	Key personnel not available, loss of project knowledge resulting in delays.	01/06/24	4	3	4	4	<div><div></div></div> 16	Project records will be kept in accordance with BQMS, multiple personnel leading project witb ability to deputise.	2	1	2	4	PM			<div><div></div></div> 8		
1.08	08/08/23	Availability of shipyard to undertake the works	01/06/24	3	3	3	3	<div><div></div></div> 9	Early discussion with potential shipyards to enquire about available slots. Engage with wide range of shipyards	2	2	2	2	PM			<div><div></div></div> 4		
1.09								<div><div></div></div> 0									<div><div></div></div> 0		
1.10								<div><div></div></div> 0									<div><div></div></div> 0		
2.00 Commerical Risks																			
2.01	08/08/23	Cost of model test testing increases.	01/06/24	1	3	1	3	<div><div></div></div> 9	Manufacture of model and tests carried out by staff, hire of model test facility only part of total.	1	2	1	3	PM			<div><div></div></div> 6		
2.02								<div><div></div></div> 0									<div><div></div></div> 0		
2.03								<div><div></div></div> 0									<div><div></div></div> 0		
2.04								<div><div></div></div> 0									<div><div></div></div> 0		
2.05								<div><div></div></div> 0									<div><div></div></div> 0		
2.06								<div><div></div></div> 0									<div><div></div></div> 0		
2.07								<div><div></div></div> 0									<div><div></div></div> 0		
2.08								<div><div></div></div> 0									<div><div></div></div> 0		
2.09								<div><div></div></div> 0									<div><div></div></div> 0		
2.10								<div><div></div></div> 0									<div><div></div></div> 0		
2.00 Technical Risks																			
2.01	08/08/23	Weight estimate errors result in a lack of deadweight.	01/06/24	1	1	3	3	<div><div></div></div> 9	Weight estimate carried out with validated reference vessels that is regularly updated.	1	1	2	2	PM			<div><div></div></div> 4		
2.02	08/08/23	Speed and power prediction erros result in inability to meet speed.	01/06/24	1	1	4	3	<div><div></div></div> 12	Iniital CFD prediction and optimisation.	1	1	3	2	PM			<div><div></div></div> 6		
2.03	08/08/23	Speed and power prediction errors result in inability to meet range due to increased fuel consumption.	01/06/24	1	1	3	3	<div><div></div></div> 9	Iniital CFD prediction and optimisation.	1	1	2	2	PM			<div><div></div></div> 4		
2.04	08/08/23	Hull form does not perform as expected during model testing, delay to issuing design package	01/06/24	1	1	3	3	<div><div></div></div> 9	Iniital CFD prediction and optimisation.	1	1	2	2	PM			<div><div></div></div> 4		
2.05								<div><div></div></div> 0									<div><div></div></div> 0		
2.06								<div><div></div></div> 0									<div><div></div></div> 0		
2.07								<div><div></div></div> 0									<div><div></div></div> 0		
2.08								<div><div></div></div> 0									<div><div></div></div> 0		
2.09								<div><div></div></div> 0									<div><div></div></div> 0		

2.04								<div><div></div>0</div>								<div><div></div>0</div>	
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Reference: L-00634-150401-11986 Rev 0

Project: Provision of Specialist Marine Technical Consultant

Title: Project Risk Register & Mitigation Plan

Section B: Definitions

Risk No.	Allocate each risk a unique reference number
Entry Date	Enter date when risk was first identified and recorded
Description & Impact	Provide a clear & concise description of the risk and its impact on the Contract / Tender. ALSO, specify at the Tender stage which clause in either the Technical spec or other documents the risk was identified
Date Of Impact	Date of impact to the business of this specific risk
Impact	State the severity of impact on a scale of 1-5 (1 = low, 5 = high) 1 - Negligible, 2 - Minor, 3 - Moderate, 4 - Major, 5 - Catastrophic (as defined in th severity table)
Likelihood	State the likelihood of occurrence on a scale of 1-5 (1 = low, 5 = high) 1 - Highly unlikely, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Imminent (as defined in the severity table)
Risk Level	Automated Level of Risk = Probability of risk occurring x Impact of the risk to the project
Cost Of Risk	The Cost of the risk if NO further action is taken.
Description Of Mitigation Plan	Please provide a clear and detailed description of the mitigation plan for this risk
Cost Of Mitigation Action	Tenders: Specify the Total Cost of mitigating this action.
	Contracts: Specify the Total Cost of mitigating this action. This must only be shown in the Contract P&L after agreement to change the P&L has been ratified by the Regional Finance Director.
Owner	Please specify the owner of the mitigation plan, and ensure that they are fully briefed as to their responsibilities
Completion Date	This is the absolute final day when mitigations must be in place and cannot be passed. The "Drop Dead" date which if passed will cause the whole tender/contract/project/activity to fail.
Proceed With Action - Y/N	After the cost of mitigation has been agreed, the decision to proceed will lie with the individual with the DA to approve this additional cost to the contract.
Contingency Cost	Cost Contingency = original Cost of Risk x Probability (Likelihood expressed as a percentage)
Status	Enter 'Closed' in the cell to indicate risk has been addressed and is closed.

Reference: L-00634-150401-11986 Rev 0

Project: Provision of Specialist Marine Technical Consultant

Calculation: Project Risk Register & Mitigation Plan

Section C: Considerations

Contractual Risks may include:

Operator group and contractor group property and personnel
Project works (including both operator and contractor supplied items)
Pollution
Third parties
Consequential losses
Warranty obligations
Unlimited liability/damages at large
Insurance cover
Force majeure and suspension
Delay
Variation orders
Free access to worksite
Intellectual property rights
Termination by operator for convenience
Operator's obligation to pay contractor.

Financial risks may include:

Profitability
Value of contract (size)
Balance sheet debt
Off-balance sheet debt
Level of exposure
Foreign currency exposure
Terms of payment
Operator creditworthiness
Insurance.

Technical risks may include:

FEED quality
New technology
Weather
Soil and foundations.

Operator risks may include:

Operator areas of influence
Insurance
Problems which impact the operator and can impact the contractor.

Performance risks may include:


























Scope, nature and duration of work
Schedule interactions
Size
Safety and environmental performance
Weather
Soil and foundations
Interference
Disturbance
Confidentiality
Permits and licences.




Geographical risks may include:

Location of the work

Reference: L-00634-150401-11986 Rev 0

Project: Provision of Specialist Marine Technical Consultant
 Calculation: Project Risk Register & Mitigation Plan
 Section D: Risk Severity Table

RISK MATRIX Time/Cost/Quality			Severity				
			Minor	Moderate	Severe	Major	Catastrophic
			1	2	3	4	5
Likelihood	Highly unlikely	1	 1	 2	 3	 4	 5
	Unlikely	2	 2	 4	 6	 8	 10
	Possible	3	 3	 6	 9	 12	 15
	Likely	4	 4	 8	 12	 16	 20
	Imminent	5	 5	 10	 15	 20	 25

Risk Level	Low	Medium	High
	 <8	 >14	

		Score				
		1	2	3	4	5
Impact	Severity	Minor	Moderate	Severe	Major	Catastrophic
	Time	Negligable, <1day	2 weeks	2 months	6 months	>6 months
	Cost	Negligable, <£1000	£10,000	£50,000	£100,000	> £100,000
	Quality	Negligable, rectified with modification	Rectified by change	Operable with concession	Some functions restricted	System fails to operate
Likelihood						
	Likelihood	Highly unlikely	Unlikely	Possible	Likely	Imminent
	Frequency	Could exceptionally occur	One event in 100 years	One event in 10 years	One event in a year	More than one event per year within industry
	Probability	0.10%	1.0%	5%	10%	90%



Provision of Specialist Marine

Project Risk Register & Mitigation Plan

Publish Date: Our 09 August 2023
Reference: L-00634-150401-xxxxx Rev 0



INTRODUCTION SHEET

Document Number: L-00634-150401-xxxxx
Document Revision: Client: Rev 0
Project: Cefas
Title: Provision of Specialist Marine Technical Consultant Project
Date of Issue: Risk Register & Mitigation Plan
09 August 2023

REVISION HISTORY

Revision	Issue Date	Reason for Revision	Prepared by	Checked by	Approved by
0	09/08/2023	Blank template issued for tendering	DGP	JOC	JWM

INTENT AND METHOD

The purpose of this document is to identify, access and manage risks to the project. The risk register:
Identifies potential risks to the project
Assesses the likelihood and impact of each risk. Develops mitigation strategies for each risk
Tracks the status of the risk

Assumption (to be confirmed with Client)

The following elements of rating and quantifying risks are to be confirmed with the Client at the start of the project.

Impacts	Time	Cost	Confirm 1-5 scale magnitudes of delay in section D are acceptable to the Client.
	Quality		Confirm 1-5 scale magnitudes of cost in section D are acceptable to the Client.
			Confirm 1-5 scale impact on quality in section D are acceptable to the Client.
Likelihood	Frequency		Confirm 1-5 scale definitions of frequency in section D are acceptable to the Client.
	Probability		Update probability to reflect any changes to frequency.

SUMMARY

Pre-mitigation overall risk score Post
mitigation overall risk score

0	LOW
0	

CALCULATION CONTENTS

Section	
A	Register
B	Definitions
C	Considerations
D	Risk Severity Table

REFERENCE MATERIAL

[1]
[2]
[3]

Reference: L-00634-150401-xxxxx Rev 0

Project: Provision of Specialist Marine Technical Consultant
Title: Project Risk Register & Mitigation Plan
Section A: Register

Project Risk Register & Mitigation Plan

Pre-mitigation overall risk score	0
Post mitigation overall risk score	0
Recommendend project risk contingency	£0

1	2	3	4	5	Risk level		Low
Likelihood	Highly unlikely	Unlikely	Possible	Likely	Imminent		Medium
Impact	Minor	Moderate	Severe	Major	Catastrophic		High

RISK			PERCEIVED RISK							PROPOSED MITIGATION PLAN										RISIDUAL RISK		
Risk No.	Entry Date	Description & Impact	Date of Impact	Impact			Likelihood	Cost of Risk	Risk Level	Description of Mitigation Plan	Impact			Likelihood	Cost of Mitigation	Owner	Completion Date	Proceed Y/N	Risk Level	Contingency Cost	Status	
				Time	Cost	Quality					Time	Cost	Quality									
1.00 Project Risks																						
1.01									<div><div></div></div> 0										<div><div></div></div> 0	£0		
1.02									<div><div></div></div> 0										<div><div></div></div> 0	£0		
1.03									<div><div></div></div> 0										<div><div></div></div> 0	£0		
1.04									<div><div></div></div> 0										<div><div></div></div> 0	£0		
1.05									<div><div></div></div> 0										<div><div></div></div> 0	£0		
2.00 Commerical Risks																						
2.01									<div><div></div></div> 0										<div><div></div></div> 0	£0		
2.02									<div><div></div></div> 0										<div><div></div></div> 0	£0		
2.03									<div><div></div></div> 0										<div><div></div></div> 0	£0		
2.04									<div><div></div></div> 0										<div><div></div></div> 0	£0		
2.05									<div><div></div></div> 0										<div><div></div></div> 0	£0		
2.00 Technical Risks																						
2.01									<div><div></div></div> 0										<div><div></div></div> 0	£0		
2.02									<div><div></div></div> 0										<div><div></div></div> 0	£0		
2.03									<div><div></div></div> 0										<div><div></div></div> 0	£0		
2.04									<div><div></div></div> 0										<div><div></div></div> 0	£0		
2.05									<div><div></div></div> 0										<div><div></div></div> 0	£0		

Reference: L-00634-150401-xxxxx Rev 0

Project: Provision of Specialist Marine Technical Consultant

Title: Project Risk Register & Mitigation Plan

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Likelihood	State the likelihood of occurrence on a scale of 1-5 (1 = low, 5 = high) 1 - Highly unlikely, 2 - Unlikely, 3 - Possible, 4 - Likely, 5 - Imminent (as defined in the severity table)
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Contingency Cost	Cost Contingency = original Cost of Risk x Probability (Likelihood expressed as a percentage)
Status	Enter 'Closed' in the cell to indicate risk has been addressed and is closed.

Reference: L-00634-150401-xxxxx Rev 0

Project: Provision of Specialist Marine Technical Consultant

Calculation: Project Risk Register & Mitigation Plan

Section C: Considerations

Contractual Risks may include:

Operator group and contractor group property and personnel
Project works (including both operator and contractor supplied items)
Pollution
Third parties
Consequential losses
Warranty obligations
Unlimited liability/damages at large
Insurance cover
Force majeure and suspension
Delay
Variation orders
Free access to worksite
Intellectual property rights
Termination by operator for convenience
Operator's obligation to pay contractor.

Financial risks may include:

Profitability
Value of contract (size)
Balance sheet debt
Off-balance sheet debt
Level of exposure
Foreign currency exposure
Terms of payment
Operator creditworthiness
Insurance.

Technical risks may include:

FEED quality
New technology
Weather
Soil and foundations.

Operator risks may include:

Operator areas of influence
Insurance
Problems which impact the operator and can impact the contractor.

Performance risks may include:

Scope, nature and duration of work
Schedule interactions
Size
Safety and environmental performance
Weather
Soil and foundations
External influences
Operator and influences at time of bid.

Political risks may include:

Interference
Disturbance
Confidentiality
Permits and licences.



















Geographical risks may include:




Location of the work

[Subject to Contract]
Schedule 4 (Tender)
 Crown Copyright 2022

Reference: L-00634-I50401-xxxxx Rev 0

Project: Provision of Specialist Marine
 Technical Consultant Calculation: Project Risk Register
 & Mitigation Plan
 Section D: Risk Severity Table

RISK MATRIX Time/Cost/Quality			Severity				
			Minor	Moderate	Severe	Major	Catastrophic
			1	2	3	4	5
Likelihood	Highly unlikely	1	 1	 2	 3	 4	 5
	Unlikely	2	 2	 4	 6	 8	 10
	Possible	3	 3	 6	 9	 12	 15
	Likely	4	 4	 8	 12	 16	 20
	Imminent	5	 5	 10	 15	 20	 25

Risk Level	Low	Medium	High
	 <8	 >14	

		Score				
		1	2	3	4	5
Impact	Severity	Minor	Moderate	Severe	Major	Catastrophic
	Time	Negligible, <1 day	2 weeks	2 months	6 months	>6 months
	Cost	Negligible, <£1000	£10,000	£50,000	£100,000	> £100,000
	Quality	Negligible, rectified with	Rectified by change	Operable with concession	Some functions	System fails to operate
Likelihood	Likelihood	Highly unlikely	Unlikely	Possible	Likely	Imminent
	Frequency	Could exceptionally	One event in 100 years	One event in 10 years	One event in a year	More than one event per year
	Probability	0.10%	1.0%	5%	10%	90%

Schedule 5 (Commercially Sensitive Information)

1. What is the Commercially Sensitive Information?

- 1.1 In this Schedule the Parties have sought to identify the Supplier's Confidential Information that is genuinely commercially sensitive and the disclosure of which would be the subject of an exemption under the FOIA and the EIRs.
- 1.2 Where possible, the Parties have sought to identify when any relevant Information will cease to fall into the category of Information to which this Schedule applies in the table below and in the Award Form (which shall be deemed incorporated into the table below).
- 1.3 Without prejudice to the Buyer's obligation to disclose Information in accordance with FOIA or Clause 20 (When you can share information), the Buyer will, in its sole discretion, acting reasonably, seek to apply the relevant exemption set out in the FOIA to the following Information:

No.	Date	Item(s)	Duration of Confidentiality
1	01/09/2023	Bid Appendix 6 Pricing Schedule. Daily rates for Part C and Part D.	For the contract period plus 5 years

Schedule 6 (Transparency Reports)

- 1.1 The Supplier recognises that the Buyer is subject to PPN 01/17 (Updates to transparency principles v1.1 (<https://www.gov.uk/government/publications/procurement-policy-note-0117-update-to-transparency-principles>)). The Supplier shall comply with the provisions of this Schedule in order to assist the Buyer with its compliance with its obligations under that PPN.
- 1.2 Without prejudice to the Supplier's reporting requirements set out in the Contract, within three (3) Months of the Start Date the Supplier shall submit to the Buyer for Approval (such Approval not to be unreasonably withheld or delayed) draft Transparency Reports consistent with the content requirements and format set out in the Annex of this Schedule.
- 1.3 If the Buyer rejects any proposed Transparency Report submitted by the Supplier, the Supplier shall submit a revised version of the relevant report for further Approval within five (5) days of receipt of any notice of rejection, taking account of any recommendations for revision and improvement to the report provided by the Buyer. If the Parties fail to agree on a draft Transparency Report the Buyer shall determine what should be included. Any other disagreement in connection with Transparency Reports shall be treated as a Dispute.
- 1.4 The Supplier shall provide accurate and up-to-date versions of each Transparency Report to the Buyer at the frequency referred to in the Annex of this Schedule.

Annex A: List of Transparency Reports

Title	Content	Format	Frequency
Performance	Progress against milestones	Consolidation of monthly report	Annual
Charges	Pricing for each of the Parts (A-D) as they are activated within the contract	Via publishing of the contract and variations	At contract award and at the point of contract variation
Key Subcontractors	N/A	N/A	N/A

Schedule 8 (Implementation Plan and Testing)

Part A - Implementation

1. Definitions

- 1.1 In this Schedule, the following words shall have the following meanings and they shall supplement Schedule 1 (Definitions):

"Delay"	(a) a delay in the Achievement of a Milestone by its Milestone Date; or (b) a delay in the design, development, testing or implementation of a Deliverable by the relevant date set out in the Implementation Plan;
"Deliverable Item"	an item or feature in the supply of the Deliverables delivered or to be delivered by the Supplier at or before a Milestone Date listed in the Implementation Plan;
"Implementation Period"	has the meaning given to it in Paragraph 7.1;
"Milestone Payment"	a payment identified in the Implementation Plan to be made following the issue of a Satisfaction Certificate in respect of Achievement of the relevant Milestone;

2. Agreeing and following the Implementation Plan

- 2.1 The Supplier shall provide a draft Implementation Plan 14 days after the Start Date.
- 2.2 The draft Implementation Plan:
- 2.2.1 must contain information at the level of detail necessary to manage the implementation stage effectively and as the Buyer may otherwise require; and
 - 2.2.2 it shall take account of all dependencies known to, or which should reasonably be known to, the Supplier.
- 2.3 Following receipt of the draft Implementation Plan from the Supplier, the Parties shall use reasonable endeavours to agree the contents of the Implementation Plan. If the Parties are unable to agree the contents of the Implementation Plan within twenty (20) Working Days of its submission, then such Dispute shall be resolved in accordance with the Dispute Resolution Procedure.

- 2.4 The Supplier shall provide each of the Deliverable Items identified in the Implementation Plan by the date assigned to that Deliverable Item in the Implementation Plan so as to ensure that each Milestone identified in the Implementation Plan is Achieved on or before its Milestone Date.
- 2.5 The Supplier shall monitor its performance against the Implementation Plan and Milestones (if any) and report to the Buyer on such performance.

3. Reviewing and changing the Implementation Plan

- 3.1 Subject to Paragraph 4.3, the Supplier shall keep the Implementation Plan under review in accordance with the Buyer's instructions and ensure that it is updated on a regular basis.
- 3.2 The Buyer shall have the right to require the Supplier to include any reasonable changes or provisions in each version of the Implementation Plan.
- 3.3 Changes to any Milestones, Milestone Payments and Delay Payments shall only be made in accordance with the Variation Procedure.
- 3.4 Time in relation to compliance with the Implementation Plan shall be of the essence and failure of the Supplier to comply with the Implementation Plan shall be a material Default.

4. Security requirements before the Start Date

- 4.1 The Supplier shall note that it is incumbent upon them to understand the lead-in period for security clearances and ensure that all Supplier Staff have the necessary security clearance in place before the Start Date. The Supplier shall ensure that this is reflected in their Implementation Plan.
- 4.2 The Supplier shall ensure that all Supplier Staff and Subcontractors do not access the Buyer's IT systems, or any IT systems linked to the Buyer, unless they have satisfied the Buyer's security requirements.
- 4.3 The Supplier shall be responsible for providing all necessary information to the Buyer to facilitate security clearances for Supplier Staff and Subcontractors in accordance with the Buyer's requirements.
- 4.4 The Supplier shall provide the names of all Supplier Staff and Subcontractors and inform the Buyer of any alterations and additions as they take place throughout the Contract Period.
- 4.5 The Supplier shall ensure that all Supplier Staff and Subcontractors requiring access to the Buyer Premises have the appropriate security clearance. It is the Supplier's responsibility to establish whether or not the level of clearance will be sufficient for access. Unless prior approval has been received from the Buyer, the Supplier shall be responsible for meeting the costs associated with the provision of security cleared escort services.
- 4.6 If a property requires Supplier Staff or Subcontractors to be accompanied by the Buyer's Authorised Representative, the Buyer must be given reasonable notice of such a requirement, except in the case of emergency access.

5. What to do if there is a Delay

- 5.1 If the Supplier becomes aware that there is, or there is reasonably likely to be, a Delay under this Contract it shall:
 - 5.1.1 notify the Buyer as soon as practically possible and no later than within two (2) Working Days from becoming aware of the Delay or anticipated Delay;
 - 5.1.2 include in its notification an explanation of the actual or anticipated impact of the Delay;
 - 5.1.3 comply with the Buyer's instructions in order to address the impact of the Delay or anticipated Delay; and
 - 5.1.4 use all reasonable endeavours to eliminate or mitigate the consequences of any Delay or anticipated Delay.

6. Compensation for a Delay

- 6.1 If Delay Payments have been included in the Implementation Plan and a Milestone has not been achieved by the relevant Milestone Date, the Supplier shall pay to the Buyer such Delay Payments (calculated as set out by the Buyer in the Implementation Plan) and the following provisions shall apply:
 - 6.1.1 the Supplier acknowledges and agrees that any Delay Payment is a price adjustment and not an estimate of the Loss that may be suffered by the Buyer as a result of the Supplier's failure to Achieve the corresponding Milestone;
 - 6.1.2 Delay Payments shall be the Buyer's exclusive financial remedy for the Supplier's failure to Achieve a Milestone by its Milestone Date except where:
 - a) the Buyer is also entitled to or does terminate this Contract pursuant to Clause 14.4 (When the Buyer can end the contract); or
 - b) the delay exceeds the number of days (the "**Delay Period Limit**") specified in the Implementation Plan commencing on the relevant Milestone Date;
 - 6.1.3 the Delay Payments will accrue on a daily basis from the relevant Milestone Date until the date when the Milestone is Achieved;
 - 6.1.4 no payment or other act or omission of the Buyer shall in any way affect the rights of the Buyer to recover the Delay Payments or be deemed to be a waiver of the right of the Buyer to recover any such damages; and
 - 6.1.5 Delay Payments shall not be subject to or count towards any limitation on liability set out in Clause 15 (How much you can be held responsible for).

7. Implementation Plan

- 7.1 The Implementation Period will be a 2 week period.
- 7.2 During the Implementation Period, the incumbent supplier shall retain full responsibility for all existing services until the Start Date or as otherwise formally agreed with the Buyer. The Supplier's full service obligations shall formally be assumed on the Start Date as set out in Award Form.
- 7.3 In accordance with the Implementation Plan, the Supplier shall:
 - 7.3.1 work cooperatively and in partnership with the Buyer and incumbent supplier, where applicable, to understand the scope of Services to ensure a mutually beneficial handover of the Services;
 - 7.3.2 work with the incumbent supplier and Buyer to assess the scope of the Services and prepare a plan which demonstrates how they will mobilise the Services;
 - 7.3.3 liaise with the incumbent supplier to enable the full completion of the Implementation Period activities; and
 - 7.3.4 produce an Implementation Plan, to be agreed by the Buyer, for carrying out the requirements within the Implementation Period including, key Milestones and dependencies.
- 7.4 The Implementation Plan will include detail stating:
 - 7.4.1 how the Supplier will work with the incumbent supplier and the Buyer Authorised Representative to capture and load up information such as asset data; and
 - 7.4.2 a communications plan, to be produced and implemented by the Supplier, but to be agreed with the Buyer, including the frequency, responsibility for and nature of communication with the Buyer and end users of the Services.
- 7.5 In addition, the Supplier shall:
 - 7.5.1 appoint a Supplier Authorised Representative who shall be responsible for the management of the Implementation Period, to ensure that the Implementation Period is planned and resourced adequately, and who will act as a point of contact for the Buyer;
 - 7.5.2 mobilise all the Services specified in the Specification within the Contract;
 - 7.5.3 produce an Implementation Plan report for each Buyer Premises to encompass programmes that will fulfil all the Buyer's obligations to landlords and other tenants:
 - a) the format of reports and programmes shall be in accordance with the Buyer's requirements and particular attention shall be paid to establishing the operating requirements of the occupiers when preparing these programmes which are subject to the Buyer's approval; and

- b) the Parties shall use reasonable endeavours to agree the contents of the report but if the Parties are unable to agree the contents within twenty (20) Working Days of its submission by the Supplier to the Buyer, then such Dispute shall be resolved in accordance with the Dispute Resolution Procedure.
- 7.5.4 manage and report progress against the Implementation Plan;
- 7.5.5 construct and maintain an Implementation risk and issue register in conjunction with the Buyer detailing how risks and issues will be effectively communicated to the Buyer in order to mitigate them;
- 7.5.6 attend progress meetings (frequency of such meetings shall be as set out in the Award Form) in accordance with the Buyer's requirements during the Implementation Period. Implementation meetings shall be chaired by the Buyer and all meeting minutes shall be kept and published by the Supplier; and
- 7.5.7 ensure that all risks associated with the Implementation Period are minimised to ensure a seamless change of control between incumbent supplier and the Supplier.

Annex 1: Implementation Plan

The Implementation Plan is set out below and the Milestones to be Achieved are identified below:

Milestone	Deliverable Items	Duration	Milestone Date	Buyer Responsibilities	Milestone Payments	Delay Payments
1	PART A: Project Implementation Plan	2 weeks	Start Date +2 weeks		£0.00	N/A
2	PARTS A & B: Monthly progress reports		Monthly – date to be agreed		£0.00	N/A
3	PART A: Activity 0: Business Case Evaluation Report	This Duration and all subsequent milestone durations will be confirmed as part of the Implementation Plan	This Milestone Date and all subsequent Milestone Dates will be confirmed as part of the Implementation Plan			N/A
4	PART A: Activity 1: 'Do Nothing' risk assessment					N/A
5	PART A: Activity 1: Life Extension risk assessment					N/A
6	PART A: Activity 1: 'Like for like' Replacement vessel risk assessment					N/A
7	PART A: Activity 1: 'Enhanced' Replacement					N/A

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	vessel risk assessment					
8	PART A: Activity 2: 'Do Nothing' management options plan					N/A
9	PART A: Activity 2: Life Extension management options plan					N/A
10	PART A: Activity 2: 'Like for like' Replacement vessel management options plan					N/A
11	PART A: Activity 2: 'Enhanced' Replacement vessel management options plan					N/A
12	PART B: Assignment of Part B milestones will be defined by the preferred option which is expected to be confirmed by the end of November 2023, unless otherwise notified by the Authority.					N/A
<p>The Milestones will be Achieved in accordance with this Part A of this Schedule</p> <p>For the purposes of Paragraph 6.1.2b) the Delay Period Limit shall be 10 working days.</p>						

Part B - Testing

1. Definitions

- 1.1 In this Schedule, the following words shall have the following meanings and they shall supplement Schedule 1 (Definitions):

"Component"	any constituent parts of the Deliverables;
"Material Test Issue"	a Test Issue of Severity Level 1 or Severity Level 2;
"Satisfaction Certificate"	a certificate materially in the form of the document contained in Annex 2 issued by the Buyer when a Deliverable and/or Milestone has satisfied its relevant Test Success Criteria;
"Severity Level"	the level of severity of a Test Issue, the criteria for which are described in Annex 1;
"Test Issue Management Log"	a log for the recording of Test Issues as described further in Paragraph 8.1 of this Schedule;
"Test Issue Threshold"	in relation to the Tests applicable to a Milestone, a maximum number of Severity Level 3, Severity Level 4 and Severity Level 5 Test Issues as set out in the relevant Test Plan;
"Test Reports"	the reports to be produced by the Supplier setting out the results of Tests;
"Test Specification"	the specification that sets out how Tests will demonstrate that the Test Success Criteria have been satisfied, as described in more detail in Paragraph 6.2 of this Schedule;
"Test Strategy"	a strategy for the conduct of Testing as described further in Paragraph 3.2 of this Schedule;
"Test Success Criteria"	in relation to a Test, the test success criteria for that Test as referred to in Paragraph 5 of this Schedule;

"Test Witness"

any person appointed by the Buyer pursuant to Paragraph 9 of this Schedule; and

"Testing Procedures"

the applicable testing procedures and Test Success Criteria set out in this Schedule.

2. How testing should work

- 2.1 All Tests conducted by the Supplier shall be conducted in accordance with the Test Strategy, Test Specification and the Test Plan.
- 2.2 The Supplier shall not submit any Deliverable for Testing:
 - 2.2.1 unless the Supplier is reasonably confident that it will satisfy the relevant Test Success Criteria;
 - 2.2.2 until the Buyer has issued a Satisfaction Certificate in respect of any prior, dependant Deliverable(s); and
 - 2.2.3 until the Parties have agreed the Test Plan and the Test Specification relating to the relevant Deliverable(s).
- 2.3 The Supplier shall use reasonable endeavours to submit each Deliverable for Testing or re-Testing by or before the date set out in the Implementation Plan for the commencement of Testing in respect of the relevant Deliverable.
- 2.4 Prior to the issue of a Satisfaction Certificate, the Buyer shall be entitled to review the relevant Test Reports and the Test Issue Management Log.

3. Planning for testing

- 3.1 The Supplier shall develop the final Test Strategy as soon as practicable after the Start Date but in any case no later than twenty (20) Working Days after the Start Date.
- 3.2 The final Test Strategy shall include:
 - 3.2.1 an overview of how Testing will be conducted in relation to the Implementation Plan;
 - 3.2.2 the process to be used to capture and record Test results and the categorisation of Test Issues;
 - 3.2.3 the procedure to be followed should a Deliverable fail a Test, fail to satisfy the Test Success Criteria or where the Testing of a Deliverable produces unexpected results, including a procedure for the resolution of Test Issues;
 - 3.2.4 the procedure to be followed to sign off each Test;
 - 3.2.5 the process for the production and maintenance of Test Reports and a sample plan for the resolution of Test Issues;
 - 3.2.6 the names and contact details of the Buyer and the Supplier's Test representatives;

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- 3.2.7 a high level identification of the resources required for Testing including Buyer and/or third party involvement in the conduct of the Tests;
- 3.2.8 the technical environments required to support the Tests; and
- 3.2.9 the procedure for managing the configuration of the Test environments.

4. Preparing for Testing

- 4.1 The Supplier shall develop Test Plans and submit these for Approval as soon as practicable but in any case no later than twenty (20) Working Days prior to the start date for the relevant Testing as specified in the Implementation Plan.
- 4.2 Each Test Plan shall include as a minimum:
 - 4.2.1 the relevant Test definition and the purpose of the Test, the Milestone to which it relates, the requirements being Tested and, for each Test, the specific Test Success Criteria to be satisfied; and
 - 4.2.2 a detailed procedure for the Tests to be carried out.
- 4.3 The Buyer shall not unreasonably withhold or delay its approval of the Test Plan provided that the Supplier shall implement any reasonable requirements of the Buyer in the Test Plan.

5. Passing Testing

- 5.1 The Test Success Criteria for all Tests shall be agreed between the Parties as part of the relevant Test Plan pursuant to Paragraph 4.

6. How Deliverables will be tested

- 6.1 Following approval of a Test Plan, the Supplier shall develop the Test Specification for the relevant Deliverables as soon as reasonably practicable and in any event at least 10 Working Days prior to the start of the relevant Testing (as specified in the Implementation Plan).
- 6.2 Each Test Specification shall include as a minimum:
 - 6.2.1 the specification of the Test data, including its source, scope, volume and management, a request (if applicable) for relevant Test data to be provided by the Buyer and the extent to which it is equivalent to live operational data;
 - 6.2.2 a plan to make the resources available for Testing;
 - 6.2.3 Test scripts;
 - 6.2.4 Test pre-requisites and the mechanism for measuring them; and
 - 6.2.5 expected Test results, including:
 - a) a mechanism to be used to capture and record Test results; and
 - b) a method to process the Test results to establish their content.

7. Performing the tests

- 7.1 Before submitting any Deliverables for Testing the Supplier shall subject the relevant Deliverables to its own internal quality control measures.
- 7.2 The Supplier shall manage the progress of Testing in accordance with the relevant Test Plan and shall carry out the Tests in accordance with the relevant Test Specification. Tests may be witnessed by the Test Witnesses in accordance with Paragraph 9.3.
- 7.3 The Supplier shall notify the Buyer at least 10 Working Days in advance of the date, time and location of the relevant Tests and the Buyer shall ensure that the Test Witnesses attend the Tests.
- 7.4 The Buyer may raise and close Test Issues during the Test witnessing process.
- 7.5 The Supplier shall provide to the Buyer in relation to each Test:
 - 7.5.1 a draft Test Report not less than 2 Working Days prior to the date on which the Test is planned to end; and
 - 7.5.2 the final Test Report within 5 Working Days of completion of Testing.
- 7.6 Each Test Report shall provide a full report on the Testing conducted in respect of the relevant Deliverables, including:
 - 7.6.1 an overview of the Testing conducted;
 - 7.6.2 identification of the relevant Test Success Criteria that have/have not been satisfied together with the Supplier's explanation of why any criteria have not been met;
 - 7.6.3 the Tests that were not completed together with the Supplier's explanation of why those Tests were not completed;
 - 7.6.4 the Test Success Criteria that were satisfied, not satisfied or which were not tested, and any other relevant categories, in each case grouped by Severity Level in accordance with Paragraph 8.1; and
 - 7.6.5 the specification for any hardware and software used throughout Testing and any changes that were applied to that hardware and/or software during Testing.
- 7.7 When the Supplier has completed a Milestone it shall submit any Deliverables relating to that Milestone for Testing.
- 7.8 Each party shall bear its own costs in respect of the Testing. However, if a Milestone is not Achieved the Buyer shall be entitled to recover from the Supplier, any reasonable additional costs it may incur as a direct result of further review or re-Testing of a Milestone.
- 7.9 If the Supplier successfully completes the requisite Tests, the Buyer shall issue a Satisfaction Certificate as soon as reasonably practical following such successful completion. Notwithstanding the issuing of any Satisfaction Certificate, the Supplier shall remain solely responsible for ensuring that the Deliverables are implemented in accordance with this Contract.

8. Discovering Problems

- 8.1 Where a Test Report identifies a Test Issue, the Parties shall agree the classification of the Test Issue using the criteria specified in Annex 1 and the Test Issue Management Log maintained by the Supplier shall log Test Issues reflecting the Severity Level allocated to each Test Issue.
- 8.2 The Supplier shall be responsible for maintaining the Test Issue Management Log and for ensuring that its contents accurately represent the current status of each Test Issue at all relevant times. The Supplier shall make the Test Issue Management Log available to the Buyer upon request.
- 8.3 The Buyer shall confirm the classification of any Test Issue unresolved at the end of a Test in consultation with the Supplier. If the Parties are unable to agree the classification of any unresolved Test Issue, the Dispute shall be dealt with in accordance with the Dispute Resolution Procedure using the Expedited Dispute Timetable.

9. Test witnessing

- 9.1 The Buyer may, in its sole discretion, require the attendance at any Test of one or more Test Witnesses selected by the Buyer, each of whom shall have appropriate skills to fulfil the role of a Test Witness.
- 9.2 The Supplier shall give the Test Witnesses access to any documentation and Testing environments reasonably necessary and requested by the Test Witnesses to perform their role as a Test Witness in respect of the relevant Tests.
- 9.3 The Test Witnesses:
 - 9.3.1 shall actively review the Test documentation;
 - 9.3.2 will attend and engage in the performance of the Tests on behalf of the Buyer so as to enable the Buyer to gain an informed view of whether a Test Issue may be closed or whether the relevant element of the Test should be re-Tested;
 - 9.3.3 shall not be involved in the execution of any Test;
 - 9.3.4 shall be required to verify that the Supplier conducted the Tests in accordance with the Test Success Criteria and the relevant Test Plan and Test Specification;
 - 9.3.5 may produce and deliver their own, independent reports on Testing, which may be used by the Buyer to assess whether the Tests have been Achieved;
 - 9.3.6 may raise Test Issues on the Test Issue Management Log in respect of any Testing; and
- 9.4 may require the Supplier to demonstrate the modifications made to any defective Deliverable before a Test Issue is closed.

10. Auditing the quality of the test

- 10.1 The Buyer or an agent or contractor appointed by the Buyer may perform on-going quality audits in respect of any part of the Testing (each a "**Testing Quality Audit**") subject to the provisions set out in the agreed Quality Plan.
- 10.2 The Supplier shall allow sufficient time in the Test Plan to ensure that adequate responses to a Testing Quality Audit can be provided.
- 10.3 The Buyer will give the Supplier at least 5 Working Days' written notice of the Buyer's intention to undertake a Testing Quality Audit.
- 10.4 The Supplier shall provide all reasonable necessary assistance and access to all relevant documentation required by the Buyer to enable it to carry out the Testing Quality Audit.
- 10.5 If the Testing Quality Audit gives the Buyer concern in respect of the Testing Procedures or any Test, the Buyer shall prepare a written report for the Supplier detailing its concerns and the Supplier shall, within a reasonable timeframe, respond in writing to the Buyer's report.
- 10.6 In the event of an inadequate response to the written report from the Supplier, the Buyer (acting reasonably) may withhold a Satisfaction Certificate until the issues in the report have been addressed to the reasonable satisfaction of the Buyer.

11. Outcome of the testing

- 11.1 The Buyer will issue a Satisfaction Certificate when the Deliverables satisfy the Test Success Criteria in respect of that Test without any Test Issues.
- 11.2 If the Deliverables (or any relevant part) do not satisfy the Test Success Criteria then the Buyer shall notify the Supplier and:
 - 11.2.1 the Buyer may issue a Satisfaction Certificate conditional upon the remediation of the Test Issues;
 - 11.2.2 the Buyer may extend the Test Plan by such reasonable period or periods as the Parties may reasonably agree and require the Supplier to rectify the cause of the Test Issue and re-submit the Deliverables (or the relevant part) to Testing; or
 - 11.2.3 where the failure to satisfy the Test Success Criteria results, or is likely to result, in the failure (in whole or in part) by the Supplier to meet a Milestone, then without prejudice to the Buyer's other rights and remedies, such failure shall constitute a material Default.
- 11.3 The Buyer shall be entitled, without prejudice to any other rights and remedies that it has under this Contract, to recover from the Supplier any reasonable additional costs it may incur as a direct result of further review or re-Testing which is required for the Test Success Criteria for that Deliverable to be satisfied.

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- 11.4 The Buyer shall issue a Satisfaction Certificate in respect of a given Milestone as soon as is reasonably practicable following:
- 11.4.1 the issuing by the Buyer of Satisfaction Certificates and/or conditional Satisfaction Certificates in respect of all Deliverables related to that Milestone which are due to be Tested; and
 - 11.4.2 performance by the Supplier to the reasonable satisfaction of the Buyer of any other tasks identified in the Implementation Plan as associated with that Milestone.
- 11.5 The grant of a Satisfaction Certificate shall entitle the Supplier to the receipt of a payment in respect of that Milestone in accordance with the provisions of any Implementation Plan and Clause 4 (Pricing and payments).
- 11.6 If a Milestone is not Achieved, the Buyer shall promptly issue a report to the Supplier setting out the applicable Test Issues and any other reasons for the relevant Milestone not being Achieved.
- 11.7 If there are Test Issues but these do not exceed the Test Issues Threshold, then provided there are no Material Test Issues, the Buyer shall issue a Satisfaction Certificate.
- 11.8 If there is one or more Material Test Issue(s), the Buyer shall refuse to issue a Satisfaction Certificate and, without prejudice to the Buyer's other rights and remedies, such failure shall constitute a material Default.
- 11.9 If there are Test Issues which exceed the Test Issues Threshold but there are no Material Test Issues, the Buyer may at its discretion (without waiving any rights in relation to the other options) choose to issue a Satisfaction Certificate conditional on the remediation of the Test Issues in accordance with an agreed Rectification Plan provided that:
- 11.9.1 any Rectification Plan shall be agreed before the issue of a conditional Satisfaction Certificate unless the Buyer agrees otherwise (in which case the Supplier shall submit a Rectification Plan for approval by the Buyer within 10 Working Days of receipt of the Buyer's report pursuant to Paragraph 10.5); and
 - 11.9.2 where the Buyer issues a conditional Satisfaction Certificate, it may (but shall not be obliged to) revise the failed Milestone Date and any subsequent Milestone Date.

12. Risk

- 12.1 The issue of a Satisfaction Certificate and/or a conditional Satisfaction Certificate shall not:
- 12.1.1 operate to transfer any risk that the relevant Deliverable or Milestone is complete or will meet and/or satisfy the Buyer's requirements for that Deliverable or Milestone; or
 - 12.1.2 affect the Buyer's right subsequently to reject all or any element of the Deliverables and/or any Milestone to which a Satisfaction Certificate relates.

Annex 1: Test Issues – Severity Levels

1. Severity 1 Error

- 1.1 This is an error that causes non-recoverable conditions, e.g. it is not possible to continue using a Component.

2. Severity 2 Error

- 2.1 This is an error for which, as reasonably determined by the Buyer, there is no practicable workaround available, and which:
 - 2.1.1 causes a Component to become unusable;
 - 2.1.2 causes a lack of functionality, or unexpected functionality, that has an impact on the current Test; or
 - 2.1.3 has an adverse impact on any other Component(s) or any other area of the Deliverables.

3. Severity 3 Error

- 3.1 This is an error which:
 - 3.1.1 causes a Component to become unusable;
 - 3.1.2 causes a lack of functionality, or unexpected functionality, but which does not impact on the current Test; or
 - 3.1.3 has an impact on any other Component(s) or any other area of the Deliverables;but for which, as reasonably determined by the Buyer, there is a practicable workaround available;

4. Severity 4 Error

- 4.1 This is an error which causes incorrect functionality of a Component or process, but for which there is a simple, Component based, workaround, and which has no impact on the current Test, or other areas of the Deliverables.

5. Severity 5 Error

- 5.1 This is an error that causes a minor problem, for which no workaround is required, and which has no impact on the current Test, or other areas of the Deliverables.

Annex 2: Satisfaction Certificate

To: [insert name of Supplier]

From: [insert name of Buyer]

[insert Date dd/mm/yyyy]

Dear Sirs,

Satisfaction Certificate

Deliverable/Milestone(s): [Insert relevant description of the agreed Deliverables/Milestones].

We refer to the agreement ("**Contract**") [insert Contract reference number] relating to the provision of the [insert description of the Deliverables] between the [*insert Buyer name*] ("**Buyer**") and [*insert Supplier name*] ("**Supplier**") dated [*insert Start Date dd/mm/yyyy*].

The definitions for any capitalised terms in this certificate are as set out in the Contract.

[We confirm that all the Deliverables relating to [insert relevant description of Deliverables/agreed Milestones and/or reference number(s) from the Implementation Plan] have been tested successfully in accordance with the Test Plan [or that a conditional Satisfaction Certificate has been issued in respect of those Deliverables that have not satisfied the relevant Test Success Criteria].

[OR]

[This Satisfaction Certificate is granted on the condition that any Test Issues are remedied in accordance with the Rectification Plan attached to this certificate.]

[You may now issue an invoice in respect of the Milestone Payment associated with this Milestone in accordance with Clause 4 (Pricing and payments)].

Yours faithfully

[insert Name]

[insert Position]

acting on behalf of [insert name of Buyer]

Schedule 11 (Continuous Improvement)

1. Supplier's Obligations

- 1.1 The Supplier must, throughout the Contract Period, identify new or potential improvements to the provision of the Deliverables with a view to reducing the Buyer's costs (including the Charges) and/or improving the quality and efficiency of the Deliverables and their supply to the Buyer.
- 1.2 The Supplier must adopt a policy of continuous improvement in relation to the Deliverables, which must include regular reviews with the Buyer of the Deliverables and the way it provides them, with a view to reducing the Buyer's costs (including the Charges) and/or improving the quality and efficiency of the Deliverables. The Supplier and the Buyer must provide each other with any information relevant to meeting this objective.
- 1.3 In addition to Paragraph 1.1, the Supplier shall produce at the start of each Contract Year a plan for improving the provision of Deliverables and/or reducing the Charges (without adversely affecting the performance of this Contract) during that Contract Year ("**Continuous Improvement Plan**") for the Buyer's Approval. The Continuous Improvement Plan must include, as a minimum, proposals:
 - 1.3.1 identifying the emergence of relevant new and evolving technologies;
 - 1.3.2 changes in business processes of the Supplier or the Buyer and ways of working that would provide cost savings and/or enhanced benefits to the Buyer (such as methods of interaction, supply chain efficiencies, reduction in energy consumption and methods of sale);
 - 1.3.3 new or potential improvements to the provision of the Deliverables including the quality, responsiveness, procedures, benchmarking methods, likely performance mechanisms and customer support services in relation to the Deliverables; and
 - 1.3.4 measuring and reducing the sustainability impacts of the Supplier's operations and supply-chains relating to the Deliverables, and identifying opportunities to assist the Buyer in meeting their sustainability objectives.
- 1.4 The initial Continuous Improvement Plan for the first (1st) Contract Year shall be submitted by the Supplier to the Buyer for Approval within six (6) Months following the Start Date.
- 1.5 The Buyer shall notify the Supplier of its Approval or rejection of the proposed Continuous Improvement Plan or any updates to it within twenty (20) Working Days of receipt. If it is rejected then the Supplier shall, within ten (10) Working Days of receipt of notice of rejection, submit a revised Continuous Improvement Plan reflecting the changes required. Once Approved, it becomes the Continuous Improvement Plan for the purposes of this Contract.

- 1.6 The Supplier must provide sufficient information with each suggested improvement to enable a decision on whether to implement it. The Supplier shall provide any further information as requested.
- 1.7 If the Buyer wishes to incorporate any improvement into this Contract, it must request a Variation in accordance with the Variation Procedure and the Supplier must implement such Variation at no additional cost to the Buyer.
- 1.8 Once the first Continuous Improvement Plan has been Approved in accordance with Paragraph 1.5:
 - 1.8.1 the Supplier shall use all reasonable endeavours to implement any agreed deliverables in accordance with the Continuous Improvement Plan; and
 - 1.8.2 the Parties agree to meet as soon as reasonably possible following the start of each quarter (or as otherwise agreed between the Parties) to review the Supplier's progress against the Continuous Improvement Plan.
- 1.9 The Supplier shall update the Continuous Improvement Plan as and when required but at least once every Contract Year (after the first (1st) Contract Year) in accordance with the procedure and timescales set out in Paragraph 1.3.
- 1.10 All costs relating to the compilation or updating of the Continuous Improvement Plan and the costs arising from any improvement made pursuant to it and the costs of implementing any improvement, shall have no effect on and are included in the Charges.
- 1.11 Should the Supplier's costs in providing the Deliverables to the Buyer be reduced as a result of any changes implemented, all of the cost savings shall be passed on to the Buyer by way of a consequential and immediate reduction in the Charges for the Deliverables.
- 1.12 At any time during the Contract Period of the Contract, the Supplier may make a proposal for gainshare. If the Buyer deems gainshare to be applicable then the Supplier shall update the Continuous Improvement Plan so as to include details of the way in which the proposal shall be implemented in accordance with an agreed gainshare ratio.

Schedule 12 (Benchmarking)

1. Definitions

1.1 In this Schedule, the following expressions shall have the following meanings:

"Benchmark Review"	a review of the Deliverables carried out in accordance with this Schedule to determine whether those Deliverables represent Good Value;
"Benchmarked Deliverables"	any Deliverables included within the scope of a Benchmark Review pursuant to this Schedule;
"Comparable Rates"	the Charges for Comparable Deliverables;
"Comparable Deliverables"	deliverables that are identical or materially similar to the Benchmarked Deliverables (including in terms of scope, specification, volume and quality of performance) provided that if no identical or materially similar Deliverables exist in the market, the Supplier shall propose an approach for developing a comparable Deliverables benchmark;
"Comparison Group"	a sample group of organisations providing Comparable Deliverables which consists of organisations which are either of similar size to the Supplier or which are similarly structured in terms of their business and their service offering so as to be fair comparators with the Supplier or which, are best practice organisations;
"Equivalent Data"	data derived from an analysis of the Comparable Rates and/or the Comparable Deliverables (as applicable) provided by the Comparison Group;
"Good Value"	that the Benchmarked Rates are within the Upper Quartile; and
"Upper Quartile"	in respect of Benchmarking Rates, that based on an analysis of Equivalent Data, the Benchmarking Rates, as compared to the range of prices for Comparable Deliverables, are within the top 25% in terms of best value for money for the recipients of Comparable Deliverables.

2. When you should use this Schedule

- 2.1 The Supplier acknowledges that the Buyer wishes to ensure that the Deliverables, represent value for money to the taxpayer throughout the Contract Period.
- 2.2 This Schedule sets out to ensure the Contract represents value for money throughout and that the Buyer may terminate the Contract by issuing a Termination Notice to the Supplier if the Supplier refuses or fails to comply with its obligations as set out in Paragraph 3 of this Schedule.
- 2.3 Amounts payable under this Schedule shall not fall with the definition of a Cost.

3. Benchmarking

3.1 How benchmarking works

- 3.1.1 The Buyer may, by written notice to the Supplier, require a Benchmark Review of any or all of the Deliverables.
- 3.1.2 The Buyer shall not be entitled to request a Benchmark Review during the first six (6) Month period from the Start Date or at intervals of less than twelve (12) Months after any previous Benchmark Review.
- 3.1.3 The purpose of a Benchmark Review will be to establish whether the Benchmarked Deliverables are, individually and/or as a whole, Good Value.
- 3.1.4 The Deliverables that are to be the Benchmarked Deliverables will be identified by the Buyer in writing.
- 3.1.5 Upon its request for a Benchmark Review the Buyer shall nominate a benchmarker. The Supplier must approve the nomination within ten (10) Working Days unless the Supplier provides a reasonable explanation for rejecting the appointment. If the appointment is rejected then the Buyer may propose an alternative benchmarker. If the Parties cannot agree the appointment within twenty (20) days of the initial request for Benchmark review then a benchmarker shall be selected by the Chartered Institute of Financial Accountants.
- 3.1.6 The cost of a benchmarker shall be borne by the Buyer (provided that each Party shall bear its own internal costs of the Benchmark Review) except where the Benchmark Review demonstrates that the Benchmarked Service and/or the Benchmarked Deliverables are not Good Value, in which case the Parties shall share the cost of the benchmarker in such proportions as the Parties agree (acting reasonably). Invoices by the benchmarker shall be raised against the Supplier and the relevant portion shall be reimbursed by the Buyer.

3.2 Benchmarking Process

- 3.2.1 The benchmarker shall produce and send to the Buyer, for Approval, a draft plan for the Benchmark Review which must include:
 - a) a proposed cost and timetable for the Benchmark Review;

- b) a description of the benchmarking methodology to be used which must demonstrate that the methodology to be used is capable of fulfilling the benchmarking purpose; and
 - c) a description of how the benchmarker will scope and identify the Comparison Group.
- 3.2.2 The benchmarker, acting reasonably, shall be entitled to use any model to determine the achievement of value for money and to carry out the benchmarking.
- 3.2.3 The Buyer must give notice in writing to the Supplier within ten (10) Working Days after receiving the draft plan, advising the benchmarker and the Supplier whether it Approves the draft plan, or, if it does not approve the draft plan, suggesting amendments to that plan (which must be reasonable). If amendments are suggested then the benchmarker must produce an amended draft plan and this Paragraph 3.2.3 shall apply to any amended draft plan.
- 3.2.4 Once both Parties have approved the draft plan then they will notify the benchmarker. No Party may unreasonably withhold or delay its Approval of the draft plan.
- 3.2.5 Once it has received the Approval of the draft plan, the benchmarker shall:
 - a) finalise the Comparison Group and collect data relating to Comparable Rates. The selection of the Comparable Rates (both in terms of number and identity) shall be a matter for the benchmarker's professional judgment using:
 - (A) information from other service providers to the Buyer;
 - (B) survey information;
 - (C) information from "in-house" providers to the Buyer to the extent that the benchmarker considers that they are valid comparators;
 - (D) market intelligence;
 - (E) the benchmarker's own data and experience;
 - (F) relevant published information; and
 - (G) pursuant to Paragraph 3.2.6 below, information from other suppliers or purchasers on Comparable Rates;
 - b) by applying the adjustment factors listed in Paragraph 3.2.7 and from an analysis of the Comparable Rates, derive the Equivalent Data;
 - c) using the Equivalent Data, calculate the Upper Quartile;
 - d) determine whether or not each Benchmarked Rate is, and/or the Benchmarked Rates as a whole are, Good Value.
- 3.2.6 The Supplier shall use all reasonable endeavours and act in good faith to supply information required by the benchmarker in order to

undertake the benchmarking. The Supplier agrees to use its reasonable endeavours to obtain information from other suppliers or purchasers on Comparable Rates.

3.2.7 In carrying out the benchmarking analysis the benchmarker may have regard to the following matters when performing a comparative assessment of the Benchmarked Rates and the Comparable Rates in order to derive Equivalent Data:

- a) the contractual terms and business environment under which the Comparable Rates are being provided (including the scale and geographical spread of the customers);
- b) exchange rates;
- c) any other factors reasonably identified by the Supplier, which, if not taken into consideration, could unfairly cause the Supplier's pricing to appear non-competitive.

3.3 Benchmarking Report

3.3.1 For the purposes of this Schedule **"Benchmarking Report"** shall mean the report produced by the benchmarker following the Benchmark Review and as further described in this Schedule;

3.3.2 The benchmarker shall prepare a Benchmarking Report and deliver it to the Buyer, at the time specified in the plan Approved pursuant to Paragraph 3.2.3, setting out its findings. Those findings shall be required to:

- a) include a finding as to whether or not a Benchmarked Service and/or whether the Benchmarked Deliverables as a whole are, Good Value;
- b) if any of the Benchmarked Deliverables are, individually or as a whole, not Good Value, specify the changes that would be required to make that Benchmarked Service or the Benchmarked Deliverables as a whole Good Value; and
- c) include sufficient detail and transparency so that the Party requesting the Benchmarking can interpret and understand how the Supplier has calculated whether or not the Benchmarked Deliverables are, individually or as a whole, Good Value.

3.3.3 The Parties agree that any changes required to this Contract identified in the Benchmarking Report shall be implemented at the direction of the Buyer in accordance with Clause 28 (Changing the contract).

Schedule 13 (Contract Management)

1. Definitions

In this Schedule, the following words shall have the following meanings and they shall supplement Schedule 1 (Definitions):

"Operational Board"	the board established in accordance with Paragraph 4.1 of this Schedule;
"Project Manager"	the manager appointed in accordance with Paragraph 2.1 of this Schedule;

2. Project Management

- 2.1 The Supplier and the Buyer shall each appoint a Project Manager for the purposes of this Contract through whom the provision of the Services and the Deliverables shall be managed day-to-day.
- 2.2 The Parties shall ensure that appropriate resource is made available on a regular basis such that the aims, objectives and specific provisions of this Contract can be fully realised.
- 2.3 Without prejudice to Paragraph 4 below, the Parties agree to operate the boards specified as set out in the Annex to this Schedule.

3. Role of the Supplier Project Manager

- 3.1 The Supplier Project Manager shall be:
 - 3.1.1 the primary point of contact to receive communication from the Buyer and will also be the person primarily responsible for providing information to the Buyer;
 - 3.1.2 able to delegate his position to another person at the Supplier but must inform the Buyer before proceeding with the delegation and it will be delegated person's responsibility to fulfil the Project Manager's responsibilities and obligations;
 - 3.1.3 able to cancel any delegation and recommence the position himself; and
 - 3.1.4 replaced only after the Buyer has received notification of the proposed change.
- 3.2 The Buyer may provide revised instructions to the Supplier's Project Manager in regards to the Contract and it will be the Supplier Project Manager's responsibility to ensure the information is provided to the Supplier and the actions implemented.
- 3.3 Receipt of communication from the Supplier Project Manager by the Buyer does not absolve the Supplier from its responsibilities, obligations or liabilities under the Contract.

4. Role of The Operational Board

- 4.1 The Operational Board shall be established by the Buyer for the purposes of this Contract on which the Supplier and the Buyer shall be represented.
- 4.2 The Operational Board members, frequency and location of board meetings and planned start date by which the board shall be established are set out in Annex A to the Schedule.
- 4.3 In the event that either Party wishes to replace any of its appointed board members, that Party shall notify the other in writing for approval by the other Party (such approval not to be unreasonably withheld or delayed). Each Buyer board member shall have at all times a counterpart Supplier board member of equivalent seniority and expertise.
- 4.4 Each Party shall ensure that its board members shall make all reasonable efforts to attend board meetings at which that board member's attendance is required. If any board member is not able to attend a board meeting, that person shall use all reasonable endeavours to ensure that a delegate attends the Operational Board meeting in his/her place (wherever possible) and that the delegate is properly briefed and prepared and that he/she is debriefed by such delegate after the board meeting.
- 4.5 The purpose of the Operational Board meetings will be to review the Supplier's performance under this Contract. The agenda for each meeting shall be set by the Buyer and communicated to the Supplier in advance of that meeting.

5. Contract Risk Management

- 5.1 Both Parties shall pro-actively manage risks attributed to them under the terms of this Contract.
- 5.2 The Supplier shall develop, operate, maintain and amend, as agreed with the Buyer, processes for:
 - 5.2.1 the identification and management of risks;
 - 5.2.2 the identification and management of issues; and
 - 5.2.3 monitoring and controlling project plans.
- 5.3 The Supplier allows the Buyer to inspect at any time within working hours the accounts and records which the Supplier is required to keep.
- 5.4 The Supplier will maintain a risk register of the risks relating to the Contract which the Buyer and the Supplier have identified.

Annex: Operational Boards


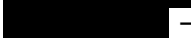
The Parties agree to operate the following boards at the locations and at the frequencies set out below:

Operational Board Meetings will take place at key milestones and exact timing and locations will be agreed as part of the Implementation Plan.

Authority attendees will include:

 – Senior Responsible Owner
 – Project Manager
 – Technical Lead

Supplier attendees will include:

 – Director - Ship Design & Engineering, Authorised Representative
 – Principal Marine Engineer, Project Manager

Schedule 14 (Business Continuity and Disaster Recovery)

1. Definitions

- 1.1 In this Schedule, the following words shall have the following meanings and they shall supplement Schedule 1 (Definitions):

"BCDR Plan"	has the meaning given to it in Paragraph 2.1 of this Schedule;
"Business Continuity Plan"	has the meaning given to it in Paragraph 2.2.2 of this Schedule;
"Disaster Recovery Plan"	has the meaning given to it in Paragraph 2.2.3 of this Schedule;
"Related Supplier"	any person who provides Deliverables to the Buyer which are related to the Deliverables from time to time;
"Review Report"	has the meaning given to it in Paragraph 6.3 of this Schedule; and
"Supplier's Proposals"	has the meaning given to it in Paragraph 6.3 of this Schedule;

2. BCDR Plan

- 2.1 At least ninety (90) Working Days from the Start Date the Supplier shall prepare and deliver to the Buyer for the Buyer's written approval a plan (a **"BCDR Plan"**), which shall detail the processes and arrangements that the Supplier shall follow to:
- 2.1.1 ensure continuity of the business processes and operations supported by the Services following any failure or disruption of any element of the Deliverables; and
 - 2.1.2 the recovery of the Deliverables in the event of a Disaster
- 2.2 The BCDR Plan shall be divided into three sections:
- 2.2.1 Section 1 which shall set out general principles applicable to the BCDR Plan;
 - 2.2.2 Section 2 which shall relate to business continuity (the **"Business Continuity Plan"**); and
 - 2.2.3 Section 3 which shall relate to disaster recovery (the **"Disaster Recovery Plan"**).
- 2.3 Following receipt of the draft BCDR Plan from the Supplier, the Parties shall use reasonable endeavours to agree the contents of the BCDR Plan. If the Parties are unable to agree the contents of the BCDR Plan within twenty (20) Working Days of its submission, then such Dispute shall be resolved in accordance with the Dispute Resolution Procedure.

3. General Principles of the BCDR Plan (Section 1)

3.1 Section 1 of the BCDR Plan shall:

- 3.1.1 set out how the business continuity and disaster recovery elements of the BCDR Plan link to each other;
- 3.1.2 provide details of how the invocation of any element of the BCDR Plan may impact upon the provision of the Deliverables and any goods and/or services provided to the Buyer by a Related Supplier;
- 3.1.3 contain an obligation upon the Supplier to liaise with the Buyer and any Related Suppliers with respect to business continuity and disaster recovery;
- 3.1.4 detail how the BCDR Plan interoperates with any overarching disaster recovery or business continuity plan of the Buyer and any of its other Related Supplier in each case as notified to the Supplier by the Buyer from time to time;
- 3.1.5 contain a communication strategy including details of an incident and problem management service and advice and help desk facility which can be accessed via multiple channels;
- 3.1.6 contain a risk analysis, including:
 - a) failure or disruption scenarios and assessments of likely frequency of occurrence;
 - b) identification of any single points of failure within the provision of Deliverables and processes for managing those risks;
 - c) identification of risks arising from an Insolvency Event of the Supplier, any Key Subcontractors and/or Supplier Group member;
 - d) identification of risks arising from the interaction of the provision of Deliverables with the goods and/or services provided by a Related Supplier; and
 - e) a business impact analysis of different anticipated failures or disruptions;
- 3.1.7 provide for documentation of processes, including business processes, and procedures;
- 3.1.8 set out key contact details for the Supplier (and any Subcontractors) and for the Buyer;
- 3.1.9 identify the procedures for reverting to "normal service";
- 3.1.10 set out method(s) of recovering or updating data collected (or which ought to have been collected) during a failure or disruption to minimise data loss;
- 3.1.11 identify the responsibilities (if any) that the Buyer has agreed it will assume in the event of the invocation of the BCDR Plan; and

- 3.1.12 provide for the provision of technical assistance to key contacts at the Buyer as required by the Buyer to inform decisions in support of the Buyer's business continuity plans.
- 3.2 The BCDR Plan shall be designed so as to ensure that:
 - 3.2.1 the Deliverables are provided in accordance with this Contract at all times during and after the invocation of the BCDR Plan;
 - 3.2.2 the adverse impact of any Disaster is minimised as far as reasonably possible;
 - 3.2.3 it complies with the relevant provisions of ISO/IEC 27002; ISO22301/ISO22313 and all other industry standards from time to time in force; and
 - 3.2.4 it details a process for the management of disaster recovery testing.
- 3.3 The BCDR Plan shall be upgradeable and sufficiently flexible to support any changes to the Deliverables and the business operations supported by the provision of Deliverables.
- 3.4 The Supplier shall not be entitled to any relief from its obligations under the Service Levels, or to any increase in the Charges to the extent that a Disaster occurs as a consequence of any breach by the Supplier of this Contract.

4. Business Continuity (Section 2)

- 4.1 The Business Continuity Plan shall set out the arrangements that are to be invoked to ensure that the business processes facilitated by the provision of Deliverables remain supported and to ensure continuity of the business operations supported by the Services including:
 - 4.1.1 the alternative processes, options and responsibilities that may be adopted in the event of a failure in or disruption to the provision of Deliverables; and
 - 4.1.2 the steps to be taken by the Supplier upon resumption of the provision of Deliverables in order to address the effect of the failure or disruption.
- 4.2 The Business Continuity Plan shall:
 - 4.2.1 address the various possible levels of failures of or disruptions to the provision of Deliverables;
 - 4.2.2 set out the goods and/or services to be provided and the steps to be taken to remedy the different levels of failures of and disruption to the Deliverables;
 - 4.2.3 specify any applicable Service Levels with respect to the provision of the Business Continuity Services and details of any agreed relaxation to the Service Levels in respect of the provision of other Deliverables during any period of invocation of the Business Continuity Plan; and

- 4.2.4 set out the circumstances in which the Business Continuity Plan is invoked.

5. Disaster Recovery (Section 3)

- 5.1 The Disaster Recovery Plan (which shall be invoked only upon the occurrence of a Disaster) shall be designed to ensure that upon the occurrence of a Disaster the Supplier ensures continuity of the business operations of the Buyer supported by the Services following any Disaster or during any period of service failure or disruption with, as far as reasonably possible, minimal adverse impact.
- 5.2 The Supplier's BCDR Plan shall include an approach to business continuity and disaster recovery that addresses the following:
 - 5.2.1 loss of access to the Buyer Premises;
 - 5.2.2 loss of utilities to the Buyer Premises;
 - 5.2.3 loss of the Supplier's helpdesk or CAFM system;
 - 5.2.4 loss of a Subcontractor;
 - 5.2.5 emergency notification and escalation process;
 - 5.2.6 contact lists;
 - 5.2.7 staff training and awareness;
 - 5.2.8 BCDR Plan testing;
 - 5.2.9 post implementation review process;
 - 5.2.10 any applicable Service Levels with respect to the provision of the disaster recovery services and details of any agreed relaxation to the Service Levels in respect of the provision of other Deliverables during any period of invocation of the Disaster Recovery Plan;
 - 5.2.11 details of how the Supplier shall ensure compliance with security standards ensuring that compliance is maintained for any period during which the Disaster Recovery Plan is invoked;
 - 5.2.12 access controls to any disaster recovery sites used by the Supplier in relation to its obligations pursuant to this Schedule; and
 - 5.2.13 testing and management arrangements.

6. Review and changing the BCDR Plan

- 6.1 The Supplier shall review the BCDR Plan:
 - 6.1.1 on a regular basis and as a minimum once every six (6) Months;
 - 6.1.2 within three (3) calendar Months of the BCDR Plan (or any part) having been invoked pursuant to Paragraph 7; and
 - 6.1.3 where the Buyer requests in writing any additional reviews (over and above those provided for in Paragraphs 6.1.1 and 6.1.2 of this Schedule) whereupon the Supplier shall conduct such reviews in accordance with the Buyer's written requirements. Prior to starting

its review, the Supplier shall provide an accurate written estimate of the total costs payable by the Buyer for the Buyer's approval. The costs of both Parties of any such additional reviews shall be met by the Buyer except that the Supplier shall not be entitled to charge the Buyer for any costs that it may incur above any estimate without the Buyer's prior written approval.

- 6.2 Each review of the BCDR Plan pursuant to Paragraph 6.1 shall assess its suitability having regard to any change to the Deliverables or any underlying business processes and operations facilitated by or supported by the Services which have taken place since the later of the original approval of the BCDR Plan or the last review of the BCDR Plan, and shall also have regard to any occurrence of any event since that date (or the likelihood of any such event taking place in the foreseeable future) which may increase the likelihood of the need to invoke the BCDR Plan. The review shall be completed by the Supplier within such period as the Buyer shall reasonably require.
- 6.3 The Supplier shall, within twenty (20) Working Days of the conclusion of each such review of the BCDR Plan, provide to the Buyer a report (a **"Review Report"**) setting out the Supplier's proposals (the **"Supplier's Proposals"**) for addressing any changes in the risk profile and its proposals for amendments to the BCDR Plan.
- 6.4 Following receipt of the Review Report and the Supplier's Proposals, the Parties shall use reasonable endeavours to agree the Review Report and the Supplier's Proposals. If the Parties are unable to agree Review Report and the Supplier's Proposals within twenty (20) Working Days of its submission, then such Dispute shall be resolved in accordance with the Dispute Resolution Procedure.
- 6.5 The Supplier shall as soon as is reasonably practicable after receiving the approval of the Supplier's Proposals effect any change in its practices or procedures necessary so as to give effect to the Supplier's Proposals. Any such change shall be at the Supplier's expense unless it can be reasonably shown that the changes are required because of a material change to the risk profile of the Deliverables.

7. Testing the BCDR Plan

- 7.1 The Supplier shall test the BCDR Plan:
 - 7.1.1 regularly and in any event not less than once in every Contract Year;
 - 7.1.2 in the event of any major reconfiguration of the Deliverables
 - 7.1.3 at any time where the Buyer considers it necessary (acting in its sole discretion).
- 7.2 If the Buyer requires an additional test of the BCDR Plan, it shall give the Supplier written notice and the Supplier shall conduct the test in accordance with the Buyer's requirements and the relevant provisions of the BCDR Plan. The Supplier's costs of the additional test shall be borne by the Buyer

unless the BCDR Plan fails the additional test in which case the Supplier's costs of that failed test shall be borne by the Supplier.

- 7.3 The Supplier shall undertake and manage testing of the BCDR Plan in full consultation with and under the supervision of the Buyer and shall liaise with the Buyer in respect of the planning, performance, and review, of each test, and shall comply with the reasonable requirements of the Buyer.
- 7.4 The Supplier shall ensure that any use by it or any Subcontractor of "live" data in such testing is first approved with the Buyer. Copies of live test data used in any such testing shall be (if so required by the Buyer) destroyed or returned to the Buyer on completion of the test.
- 7.5 The Supplier shall, within twenty (20) Working Days of the conclusion of each test, provide to the Buyer a report setting out:
 - 7.5.1 the outcome of the test;
 - 7.5.2 any failures in the BCDR Plan (including the BCDR Plan's procedures) revealed by the test; and
 - 7.5.3 the Supplier's proposals for remedying any such failures.
- 7.6 Following each test, the Supplier shall take all measures requested by the Buyer to remedy any failures in the BCDR Plan and such remedial activity and re-testing shall be completed by the Supplier, at its own cost, by the date reasonably required by the Buyer.

8. Invoking the BCDR Plan

- 8.1 In the event of a complete loss of service or in the event of a Disaster, the Supplier shall immediately invoke the BCDR Plan (and shall inform the Buyer promptly of such invocation). In all other instances the Supplier shall invoke or test the BCDR Plan only with the prior consent of the Buyer.

9. Circumstances beyond your control

- 9.1 The Supplier shall not be entitled to relief under Clause 24 (Circumstances beyond your control) if it would not have been impacted by the Force Majeure Event had it not failed to comply with its obligations under this Schedule.

Schedule 16 (Security)

Part B: Long Form Security Requirements

1. Definitions

- 1.1 In this Schedule the following words shall have the following meanings and they shall supplement Schedule 1 (Definitions):

"Breach of Security"	means the occurrence of: any unauthorised access to or use of the Goods and/or Deliverables, the Sites and/or any Information and Communication Technology ("ICT"), information or data (including the Confidential Information and the Government Data) used by the Buyer and/or the Supplier in connection with this Contract; and/or the loss and/or unauthorised disclosure of any information or data (including the Confidential Information and the Government Data), including any copies of such information or data, used by the Buyer and/or the Supplier in connection with this Contract, in either case as more particularly set out in the security requirements in the Security Policy where the Buyer has required compliance therewith in accordance with Paragraph 3.4.3(d);
"ISMS"	the information security management system and process developed by the Supplier in accordance with Paragraph 3 (ISMS) as updated from time to time in accordance with this Schedule; and
"Security Tests"	tests to validate the ISMS and security of all relevant processes, systems, incident response plans, patches to vulnerabilities and mitigations to Breaches of Security.

2. Security Requirements

- 2.1 The Parties acknowledge that the purpose of the ISMS and Security Management Plan are to ensure a good organisational approach to security under which the specific requirements of this Contract will be met.
- 2.2 The Parties shall each appoint a security representative to be responsible for Security. The initial security representatives of the Parties are:
- 2.2.1 Richard Page: Richard.Page@Cefas.gov.uk

[Subject to Contract]

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2.2.2 Jakki Hill: Jakki.Hill@HoulderLtd.com

- 2.3 The Buyer shall clearly articulate its high level security requirements so that the Supplier can ensure that the ISMS, security related activities and any mitigations are driven by these fundamental needs.
- 2.4 Both Parties shall provide a reasonable level of access to any members of their staff for the purposes of designing, implementing and managing security.
- 2.5 The Supplier shall use as a minimum Good Industry Practice in the day to day operation of any system holding, transferring or processing Government Data and any system that could directly or indirectly have an impact on that information, and shall ensure that Government Data remains under the effective control of the Supplier at all times.
- 2.6 The Supplier shall ensure the up-to-date maintenance of a security policy relating to the operation of its own organisation and systems and on request shall supply this document as soon as practicable to the Buyer.
- 2.7 The Buyer and the Supplier acknowledge that information security risks are shared between the Parties and that a compromise of either the Supplier or the Buyer's security provisions represents an unacceptable risk to the Buyer requiring immediate communication and co-operation between the Parties.

3. Information Security Management System (ISMS)

- 3.1 The Supplier shall develop and submit to the Buyer, within twenty (20) Working Days after the Start Date, an information security management system for the purposes of this Contract and shall comply with the requirements of Paragraphs 3.4 to 3.6.
- 3.2 The Supplier acknowledges that the Buyer places great emphasis on the reliability of the performance of the Deliverables, confidentiality, integrity and availability of information and consequently on the security provided by the ISMS and that the Supplier shall be responsible for the effective performance of the ISMS.
- 3.3 The Buyer acknowledges that:
 - 3.3.1 If the Buyer has not stipulated that it requires a bespoke ISMS, the ISMS provided by the Supplier may be an extant ISMS covering the Services and their implementation across the Supplier's estate; and
 - 3.3.2 Where the Buyer has stipulated that it requires a bespoke ISMS then the Supplier shall be required to present the ISMS for the Buyer's Approval.
- 3.4 The ISMS shall:
 - 3.4.1 if the Buyer has stipulated that it requires a bespoke ISMS, be developed to protect all aspects of the Deliverables and all processes associated with the provision of the Deliverables, including the Buyer Premises, the Sites, the Supplier System, the Buyer System (to the extent that it is under the control of the Supplier) and any ICT, information and data (including the Buyer's Confidential Information and the Government Data) to the extent used by the Buyer or the Supplier in connection with this Contract;
 - 3.4.2 meet the relevant standards in ISO/IEC 27001 (at least ISO/IEC 27001:2013) and ISO/IEC27002, in accordance with Paragraph 7;

[Subject to Contract]

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- 3.4.3 at all times provide a level of security which:
- a) is in accordance with the Law and this Contract;
 - b) complies with the Baseline Security Requirements;
 - c) as a minimum demonstrates Good Industry Practice;
 - d) where specified by a Buyer, complies with the Security Policy and the ICT Policy;
 - e) complies with at least the minimum set of security measures and standards as determined by the Security Policy Framework (Tiers 1-4)
(<https://www.gov.uk/government/publications/security-policy-framework/hmg-security-policy-framework>)
 - f) takes account of guidance issued by the Centre for Protection of National Infrastructure (<https://www.cpni.gov.uk>)
 - g) complies with HMG Information Assurance Maturity Model and Assurance Framework (<https://www.ncsc.gov.uk/articles/hmg-ia-maturity-model-iamm>)
 - h) meets any specific security threats of immediate relevance to the ISMS, the Deliverables and/or Government Data;
 - i) addresses issues of incompatibility with the Supplier's own organisational security policies; and
 - j) complies with ISO/IEC 27001 (at least ISO/IEC 27001:2013) and ISO/IEC27002 in accordance with Paragraph 7;
- 3.4.4 document the security incident management processes and incident response plans;
- 3.4.5 document the vulnerability management policy including processes for identification of system vulnerabilities and assessment of the potential impact on the Deliverables of any new threat, vulnerability or exploitation technique of which the Supplier becomes aware, prioritisation of security patches, testing of security patches, application of security patches, a process for Buyer approvals of exceptions, and the reporting and audit mechanism detailing the efficacy of the patching policy; and
- 3.4.6 be certified by (or by a person with the direct delegated authority of) a Supplier's main board representative, being the "Chief Security Officer", "Chief Information Officer", "Chief Technical Officer" or "Chief Financial Officer" (or equivalent as agreed in writing by the Buyer in advance of issue of the relevant Security Management Plan).
- 3.5 Subject to Paragraph 2 the references to Standards, guidance and policies contained or set out in Paragraph 3.4 shall be deemed to be references to such items as developed and updated and to any successor to or replacement for such standards, guidance and policies, as notified to the Supplier from time to time.
- 3.6 In the event that the Supplier becomes aware of any inconsistency in the provisions of the standards, guidance and policies set out in Paragraph 3.4, the Supplier shall immediately notify the Buyer Representative of such inconsistency and the Buyer Representative shall, as soon as practicable, notify the Supplier as to which provision the Supplier shall comply with.
- 3.7 If the bespoke ISMS submitted to the Buyer pursuant to Paragraph 3.3.1 is Approved by the Buyer, it shall be adopted by the Supplier immediately and thereafter operated

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and maintained in accordance with this Schedule. If the ISMS is not Approved by the Buyer, the Supplier shall amend it within ten (10) Working Days of a notice of non-approval from the Buyer and re-submit it to the Buyer for Approval. The Parties shall use all reasonable endeavours to ensure that the Approval process takes as little time as possible and in any event no longer than fifteen (15) Working Days from the date of the first submission of the ISMS to the Buyer. If the Buyer does not Approve the ISMS following its resubmission, the matter shall be resolved in accordance with the Dispute Resolution Procedure. No Approval to be given by the Buyer pursuant to this Paragraph 3 may be unreasonably withheld or delayed. However any failure to approve the ISMS on the grounds that it does not comply with any of the requirements set out in Paragraphs 3.4 to 3.6 shall be deemed to be reasonable.

- 3.8 Approval by the Buyer of the ISMS pursuant to Paragraph 3.7 or of any change to the ISMS shall not relieve the Supplier of its obligations under this Schedule.

4. Security Management Plan

- 4.1 Within twenty (20) Working Days after the Start Date, the Supplier shall prepare and submit to the Buyer for Approval in accordance with Paragraph 4 fully developed, complete and up-to-date Security Management Plan which shall comply with the requirements of Paragraph 4.2.
- 4.2 The Security Management Plan shall:
- 4.2.1 be based on the initial Security Management Plan set out in Annex 2 (Security Management Plan);
- 4.2.2 comply with the Baseline Security Requirements and, where specified by the Buyer in accordance with Paragraph 3.4.3(d), the Security Policy;
- 4.2.3 identify the necessary delegated organisational roles defined for those responsible for ensuring this Schedule is complied with by the Supplier;
- 4.2.4 detail the process for managing any security risks from Subcontractors and third parties authorised by the Buyer with access to the Goods and/or Services, processes associated with the delivery of the Goods and/or Services, the Buyer Premises, the Sites, the Supplier System, the Buyer System (to the extent that it is under the control of the Supplier) and any ICT, Information and data (including the Buyer's Confidential Information and the Government Data) and any system that could directly or indirectly have an impact on that information, data and/or the Deliverables;
- 4.2.5 unless otherwise specified by the Buyer in writing, be developed to protect all aspects of the Deliverables and all processes associated with the delivery of the Deliverables, including the Buyer Premises, the Sites, the Supplier System, the Buyer System (to the extent that it is under the control of the Supplier) and any ICT, Information and data (including the Buyer's Confidential Information and the Government Data) to the extent used by the Buyer or the Supplier in connection with this Contract or in connection with any system that could directly or indirectly have an impact on that Information, data and/or the Deliverables;
- 4.2.6 set out the security measures to be implemented and maintained by the Supplier in relation to all aspects of the Deliverables and all processes associated with the delivery of the Deliverables and at all times comply with and specify security measures and procedures which are sufficient to ensure that the Deliverables

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comply with the provisions of this Schedule (including the requirements set out in Paragraph 3.4);

- 4.2.7 demonstrate that the Supplier's approach to delivery of the Deliverables has minimised the Buyer and Supplier effort required to comply with this Schedule through consideration of available, appropriate and practicable pan-government accredited services (for example, 'platform as a service' offering from the G-Cloud catalogue);
 - 4.2.8 set out the plans for transitioning all security arrangements and responsibilities from those in place at the Start Date to those incorporated in the ISMS within the timeframe agreed between the Parties;
 - 4.2.9 set out the scope of the Buyer System that is under the control of the Supplier;
 - 4.2.10 be structured in accordance with ISO/IEC 27001 (at least ISO/IEC 27001:2013) and ISO/IEC 27002, cross-referencing if necessary to other Schedules which cover specific areas included within those standards; and
 - 4.2.11 be written in plain English in language which is readily comprehensible to the staff of the Supplier and the Buyer engaged in the Deliverables and shall reference only documents which are in the possession of the Parties or whose location is otherwise specified in this Schedule.
- 4.3 If the Security Management Plan submitted to the Buyer pursuant to Paragraph 4.1 is Approved by the Buyer, it shall be adopted by the Supplier immediately and thereafter operated and maintained in accordance with this Schedule. If the Security Management Plan is not approved by the Buyer, the Supplier shall amend it within ten (10) Working Days of a notice of non-approval from the Buyer and re-submit it to the Buyer for Approval. The Parties shall use all reasonable endeavours to ensure that the Approval process takes as little time as possible and in any event no longer than fifteen (15) Working Days from the date of the first submission to the Buyer of the Security Management Plan. If the Buyer does not Approve the Security Management Plan following its resubmission, the matter shall be resolved in accordance with the Dispute Resolution Procedure. No Approval to be given by the Buyer pursuant to this Paragraph may be unreasonably withheld or delayed. However any failure to approve the Security Management Plan on the grounds that it does not comply with the requirements set out in Paragraph 4.2 shall be deemed to be reasonable.
- 4.4 Approval by the Buyer of the Security Management Plan pursuant to Paragraph 4.3 or of any change or amendment to the Security Management Plan shall not relieve the Supplier of its obligations under this Schedule.

5. Amendment of the ISMS and Security Management Plan

- 5.1 The ISMS and Security Management Plan shall be fully reviewed and updated by the Supplier and at least annually to reflect:
 - 5.1.1 emerging changes in Good Industry Practice;
 - 5.1.2 any change or proposed change to the Supplier System, the Deliverables and/or associated processes;
 - 5.1.3 any new perceived or changed security threats;

- 5.1.4 where required in accordance with Paragraph 3.4.3(d), any changes to the Security Policy;
- 5.1.5 any new perceived or changed security threats; and
- 5.1.6 any reasonable change in requirement requested by the Buyer.
- 5.2 The Supplier shall provide the Buyer with the results of such reviews as soon as reasonably practicable after their completion and amend the ISMS and Security Management Plan at no additional cost to the Buyer. The results of the review shall include:
 - 5.2.1 suggested improvements to the effectiveness of the ISMS;
 - 5.2.2 updates to the risk assessments;
 - 5.2.3 proposed modifications to the procedures and controls that affect information security to respond to events that may impact on the ISMS; and
 - 5.2.4 suggested improvements in measuring the effectiveness of controls.
- 5.3 Subject to Paragraph 5.4, any change which the Supplier proposes to make to the ISMS or Security Management Plan (as a result of a review carried out pursuant to Paragraph 5.1, a Buyer request, a change to Annex 1 (Security) or otherwise) shall be subject to the Variation Procedure and shall not be implemented until Approved in writing by the Buyer.
- 5.4 The Buyer may, acting reasonably, Approve and require changes or amendments to the ISMS or Security Management Plan to be implemented on timescales faster than set out in the Variation Procedure but, without prejudice to their effectiveness, all such changes and amendments shall thereafter be subject to the Variation Procedure for the purposes of formalising and documenting the relevant change or amendment.

6. Security Testing

- 6.1 The Supplier shall conduct Security Tests from time to time (and at least annually across the scope of the ISMS) and additionally after any change or amendment to the ISMS (including security incident management processes and incident response plans) or the Security Management Plan. Security Tests shall be designed and implemented by the Supplier so as to minimise the impact on the delivery of the Deliverables and the date, timing, content and conduct of such Security Tests shall be agreed in advance with the Buyer. Subject to compliance by the Supplier with the foregoing requirements, if any Security Tests adversely affect the Supplier's ability to deliver the Deliverables so as to meet the KPIs, the Supplier shall be granted relief against any resultant under-performance for the period of the Security Tests.
- 6.2 The Buyer shall be entitled to send a representative to witness the conduct of the Security Tests. The Supplier shall provide the Buyer with the results of such Security Tests (in a form approved by the Buyer in advance) as soon as practicable after completion of each Security Test.
- 6.3 Without prejudice to any other right of audit or access granted to the Buyer pursuant to this Contract, the Buyer and/or its authorised representatives shall be entitled, at any time upon giving reasonable notice to the Supplier, to carry out such tests (including penetration tests) as it may deem necessary in relation to the ISMS and

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the Supplier's compliance with the ISMS and the Security Management Plan. The Buyer may notify the Supplier of the results of such tests after completion of each such test. If any such Buyer's test adversely affects the Supplier's ability to deliver the Deliverables so as to meet the KPIs, the Supplier shall be granted relief against any resultant under-performance for the period of the Buyer's test.

- 6.4 Where any Security Test carried out pursuant to Paragraphs 6.2 or 6.3 reveals any actual or potential Breach of Security or weaknesses (including un-patched vulnerabilities, poor configuration and/or incorrect system management), the Supplier shall promptly notify the Buyer of any changes to the ISMS and to the Security Management Plan (and the implementation thereof) which the Supplier proposes to make in order to correct such failure or weakness. Subject to the Buyer's prior written Approval, the Supplier shall implement such changes to the ISMS and the Security Management Plan and repeat the relevant Security Tests in accordance with the timetable agreed with the Buyer or, otherwise, as soon as reasonably possible. For the avoidance of doubt, where the change to the ISMS or Security Management Plan is to address a non-compliance with the Security Policy or security requirements (as set out in Annex 1 (Baseline Security Requirements) to this Schedule) or the requirements of this Schedule, the change to the ISMS or Security Management Plan shall be at no cost to the Buyer.
- 6.5 If any repeat Security Test carried out pursuant to Paragraph 6.4 reveals an actual or potential Breach of Security exploiting the same root cause failure, such circumstance shall constitute a material Default of this Contract.

7. Complying with the ISMS

- 7.1 The Buyer shall be entitled to carry out such security audits as it may reasonably deem necessary in order to ensure that the ISMS maintains compliance with the principles and practices of ISO/IEC 27001 (at least ISO/IEC 27001:2013) and/or the Security Policy where such compliance is required in accordance with Paragraph 3.4.3(d).
- 7.2 If, on the basis of evidence provided by such security audits, it is the Buyer's reasonable opinion that compliance with the principles and practices of ISO/IEC 27001 (at least ISO/IEC 27001:2013) and/or, where relevant, the Security Policy are not being achieved by the Supplier, then the Buyer shall notify the Supplier of the same and give the Supplier a reasonable time (having regard to the extent and criticality of any non-compliance and any other relevant circumstances) to implement and remedy. If the Supplier does not become compliant within the required time then the Buyer shall have the right to obtain an independent audit against these standards in whole or in part.
- 7.3 If, as a result of any such independent audit as described in Paragraph the Supplier is found to be non-compliant with the principles and practices of ISO/IEC 27001 (at least ISO/IEC 27001:2013) and/or, where relevant, the Security Policy then the Supplier shall, at its own expense, undertake those actions required in order to achieve the necessary compliance and shall reimburse in full the costs incurred by the Buyer in obtaining such audit.

8. Security Breach

- 8.1 Either Party shall notify the other in accordance with the agreed security incident management process as defined by the ISMS upon becoming aware of any breach of security or any potential or attempted Breach of Security.
- 8.2 Without prejudice to the security incident management process, upon becoming aware of any of the circumstances referred to in Paragraph 8.1, the Supplier shall:
- 8.2.1 immediately use all reasonable endeavours (which shall include any action or changes reasonably required by the Buyer) necessary to:
- a) minimise the extent of actual or potential harm caused by any Breach of Security;
 - b) remedy such Breach of Security or any potential or attempted Breach of Security in order to protect the integrity of the Buyer Property and/or Buyer Assets and/or ISMS to the extent that this is within the Supplier's control;
 - c) apply a tested mitigation against any such Breach of Security or attempted Breach of Security and provided that reasonable testing has been undertaken by the Supplier, if the mitigation adversely affects the Supplier's ability to provide the Deliverables so as to meet the relevant Service Levels the Supplier shall be granted relief against any resultant under-performance for such period as the Buyer, acting reasonably, may specify by written notice to the Supplier;
 - d) prevent a further Breach of Security or any potential or attempted Breach of Security in the future exploiting the same root cause failure; and
 - e) supply any requested data to the Buyer (or the Computer Emergency Response Team for UK Government ("GovCertUK")) on the Buyer's request within two (2) Working Days and without charge (where such requests are reasonably related to a possible incident or compromise); and
 - f) as soon as reasonably practicable provide to the Buyer full details (using the reporting mechanism defined by the ISMS) of the Breach of Security or attempted Breach of Security, including a root cause analysis where required by the Buyer.
- 8.3 In the event that any action is taken in response to a Breach of Security or potential or attempted Breach of Security that demonstrates non-compliance of the ISMS with the Security Policy (where relevant) or the requirements of this Schedule, then any required change to the ISMS shall be at no cost to the Buyer.

9. Vulnerabilities and fixing them

- 9.1 The Buyer and the Supplier acknowledge that from time to time vulnerabilities in the ICT Environment will be discovered which unless mitigated will present an unacceptable risk to the Buyer's information.
- 9.2 The severity of threat vulnerabilities for COTS Software shall be categorised by the Supplier as 'Critical', 'Important' and 'Other' by aligning these categories to the vulnerability scoring according to the agreed method in the ISMS and using the appropriate vulnerability scoring systems including:
- 9.2.1 the 'National Vulnerability Database' 'Vulnerability Severity Ratings': 'High', 'Medium' and 'Low' respectively (these in turn are aligned to CVSS scores as set out by NIST <http://nvd.nist.gov/cvss.cfm>); and

- 9.2.2 Microsoft's 'Security Bulletin Severity Rating System' ratings 'Critical', 'Important', and the two remaining levels ('Moderate' and 'Low') respectively.
- 9.3 The Supplier shall procure the application of security patches to vulnerabilities within a maximum period from the public release of such patches with those vulnerabilities categorised as 'Critical' within 14 days of release, 'Important' within 30 days of release and all 'Other' within 60 Working Days of release, except where:
- 9.3.1 the Supplier can demonstrate that a vulnerability is not exploitable within the context of any Service (e.g. because it resides in a software component which is not running in the service) provided vulnerabilities which the Supplier asserts cannot be exploited within the context of a Service must be remedied by the Supplier within the above timescales if the vulnerability becomes exploitable within the context of the Service;
- 9.3.2 the application of a 'Critical' or 'Important' security patch adversely affects the Supplier's ability to deliver the Services in which case the Supplier shall be granted an extension to such timescales of 5 days, provided the Supplier had followed and continues to follow the security patch test plan agreed with the Buyer; or
- 9.3.3 the Buyer agrees a different maximum period after a case-by-case consultation with the Supplier under the processes defined in the ISMS.
- 9.4 The Specification and Implementation Plan (if applicable) shall include provisions for major version upgrades of all COTS Software to be upgraded within 6 Months of the release of the latest version, such that it is no more than one major version level below the latest release (normally codified as running software no older than the 'n-1 version') throughout the Term unless:
- 9.4.1 where upgrading such COTS Software reduces the level of mitigations for known threats, vulnerabilities or exploitation techniques, provided always that such upgrade is made within 12 Months of release of the latest version; or
- 9.4.2 is agreed with the Buyer in writing.
- 9.5 The Supplier shall:
- 9.5.1 implement a mechanism for receiving, analysing and acting upon threat information supplied by GovCertUK, or any other competent Central Government Body;
- 9.5.2 ensure that the ICT Environment (to the extent that the ICT Environment is within the control of the Supplier) is monitored to facilitate the detection of anomalous behaviour that would be indicative of system compromise;
- 9.5.3 ensure it is knowledgeable about the latest trends in threat, vulnerability and exploitation that are relevant to the ICT Environment by actively monitoring the threat landscape during the Contract Period;
- 9.5.4 pro-actively scan the ICT Environment (to the extent that the ICT Environment is within the control of the Supplier) for vulnerable components and address discovered vulnerabilities through the processes described in the ISMS as developed under Paragraph 3.4.5;
- 9.5.5 from the date specified in the Security Management Plan provide a report to the Buyer within five (5) Working Days of the end of each Month detailing both patched and outstanding vulnerabilities in the ICT Environment (to the extent that the ICT Environment is within the control of the Supplier) and any elapsed time between the

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public release date of patches and either time of application or for outstanding vulnerabilities the time of issue of such report;

- 9.5.6 propose interim mitigation measures to vulnerabilities in the ICT Environment known to be exploitable where a security patch is not immediately available;
 - 9.5.7 remove or disable any extraneous interfaces, services or capabilities that are not needed for the provision of the Services (in order to reduce the attack surface of the ICT Environment); and
 - 9.5.8 inform the Buyer when it becomes aware of any new threat, vulnerability or exploitation technique that has the potential to affect the security of the ICT Environment and provide initial indications of possible mitigations.
- 9.6 If the Supplier is unlikely to be able to mitigate the vulnerability within the timescales under this Paragraph 9, the Supplier shall immediately notify the Buyer.
- 9.7 A failure to comply with Paragraph 9.3 shall constitute a Default, and the Supplier shall comply with the Rectification Plan Process.

Part B – Annex 1:

Baseline security requirements

1. Handling Classified information

- 1.1 The Supplier shall not handle Buyer information classified SECRET or TOP SECRET except if there is a specific requirement and in this case prior to receipt of such information the Supplier shall seek additional specific guidance from the Buyer.

2. End user devices

- 2.1 When Government Data resides on a mobile, removable or physically uncontrolled device it must be stored encrypted using a product or system component which has been formally assured through a recognised certification process of the National Cyber Security Centre ("NCSC") to at least Foundation Grade, for example, under the NCSC Commercial Product Assurance scheme ("CPA").
- 2.2 Devices used to access or manage Government Data and services must be under the management authority of Buyer or Supplier and have a minimum set of security policy configuration enforced. These devices must be placed into a 'known good' state prior to being provisioned into the management authority of the Buyer. Unless otherwise agreed with the Buyer in writing, all Supplier devices are expected to meet the set of security requirements set out in the End User Devices Security Guidance (<https://www.ncsc.gov.uk/guidance/end-user-device-security>). Where the guidance highlights shortcomings in a particular platform the Supplier may wish to use, then these should be discussed with the Buyer and a joint decision shall be taken on whether the residual risks are acceptable. Where the Supplier wishes to deviate from the NCSC guidance, then this should be agreed in writing on a case by case basis with the Buyer.

3. Data Processing, Storage, Management and Destruction

- 3.1 The Supplier and Buyer recognise the need for the Buyer's information to be safeguarded under the UK Data Protection regime or a similar regime. To that end, the Supplier must be able to state to the Buyer the physical locations in which data may be stored, processed and managed from, and what legal and regulatory frameworks Government Data will be subject to at all times.
- 3.2 The Supplier shall agree any change in location of data storage, processing and administration with the Buyer in accordance with Clause 18 (Data protection).
- 3.3 The Supplier shall:
 - 3.3.1 provide the Buyer with all Government Data on demand in an agreed open format;
 - 3.3.2 have documented processes to guarantee availability of Government Data in the event of the Supplier ceasing to trade;
 - 3.3.3 securely destroy all media that has held Government Data at the end of life of that media in line with Good Industry Practice; and
 - 3.3.4 securely erase any or all Government Data held by the Supplier when requested to do so by the Buyer.

4. Ensuring secure communications

- 4.1 The Buyer requires that any Government Data transmitted over any public network (including the Internet, mobile networks or un-protected enterprise network) or to a mobile device must be encrypted using a product or system component which has been formally assured through a certification process recognised by NCSC, to at least Foundation Grade, for example, under CPA.
- 4.2 The Buyer requires that the configuration and use of all networking equipment to provide the Services, including those that are located in secure physical locations, are at least compliant with Good Industry Practice.

5. Security by design

- 5.1 The Supplier shall apply the 'principle of least privilege' (the practice of limiting systems, processes and user access to the minimum possible level) to the design and configuration of IT systems which will process or store Government Data.
- 5.2 When designing and configuring the ICT Environment (to the extent that the ICT Environment is within the control of the Supplier) the Supplier shall follow Good Industry Practice and seek guidance from recognised security professionals with the appropriate skills and/or a NCSC certification (<https://www.ncsc.gov.uk/section/products-services/ncsc-certification>) for all bespoke or complex components of the ICT Environment (to the extent that the ICT Environment is within the control of the Supplier).

6. Security of Supplier Staff

- 6.1 Supplier Staff shall be subject to pre-employment checks that include, as a minimum: identity, unspent criminal convictions and right to work.
- 6.2 The Supplier shall agree on a case by case basis Supplier Staff roles which require specific government clearances (such as 'SC') including system administrators with privileged access to IT systems which store or process Government Data.
- 6.3 The Supplier shall prevent Supplier Staff who are unable to obtain the required security clearances from accessing systems which store, process, or are used to manage Government Data except where agreed with the Buyer in writing.
- 6.4 All Supplier Staff that have the ability to access Government Data or systems holding Government Data shall undergo regular training on secure information management principles. Unless otherwise agreed with the Buyer in writing, this training must be undertaken annually.
- 6.5 Where the Supplier or Subcontractors grants increased ICT privileges or access rights to Supplier Staff, those Supplier Staff shall be granted only those permissions necessary for them to carry out their duties. When staff no longer need elevated privileges or leave the organisation, their access rights shall be revoked within one (1) Working Day.

7. Restricting and monitoring access

- 7.1 The Supplier shall operate an access control regime to ensure all users and administrators of the ICT Environment (to the extent that the ICT Environment is within the control of the Supplier) are uniquely identified and authenticated when

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accessing or administering the Services. Applying the 'principle of least privilege', users and administrators shall be allowed access only to those parts of the ICT Environment that they require. The Supplier shall retain an audit record of accesses.

8. Audit

- 8.1 The Supplier shall collect audit records which relate to security events in the systems or that would support the analysis of potential and actual compromises. In order to facilitate effective monitoring and forensic readiness such Supplier audit records should (as a minimum) include:
 - 8.1.1 Logs to facilitate the identification of the specific asset which makes every outbound request external to the ICT Environment (to the extent that the ICT Environment is within the control of the Supplier). To the extent the design of the Deliverables allows such logs shall include those from DHCP servers, HTTP/HTTPS proxy servers, firewalls and routers.
 - 8.1.2 Security events generated in the ICT Environment (to the extent that the ICT Environment is within the control of the Supplier) and shall include: privileged account log-on and log-off events, the start and termination of remote access sessions, security alerts from desktops and server operating systems and security alerts from third party security software.
- 8.2 The Supplier and the Buyer shall work together to establish any additional audit and monitoring requirements for the ICT Environment.
- 8.3 The Supplier shall retain audit records collected in compliance with this Paragraph 8 for a period of at least 6 Months.

Part B – Annex 2 - Security Management Plan

System Security Plans are OFFICIAL-SENSITIVE. Handle accordingly and limit distribution per the protective marking system.

Information System Security Plan	
System Name:	
Application Name	
Brief Description Brief description of business function, purpose	
Application Data Owner(s) Use position titles, departments, business area names – don't use people's names	
Business Area/ Department Use departments, business area names and location names	
Summary of Hardware / Software Microsoft Windows O/S, SQL, C++, Compaq, Dell, HP, etc.; how many, locations	HP Servers, Cisco, Microsoft Windows O/S, Microsoft SQL. Microsoft IIS, Checkpoint, Symantec security software and hardware and Microsoft 365 and Azure cloud services.
For each of the following, please provide description and sufficient details of the processes, procedures and requirements for providing and maintaining security over the application system and its related data. Please review the various Information Security policies for further guidance on requirements. This Plan is not a procedures document; as needed, refer to specific procedures documents.	
Overview of Security Requirements and Processes One or two paragraphs describing overview of security requirements, processes	<p>Physical security</p> <p>Systems will be housed in a secure proximity protected computer suite with full fire and power protection and dedicated air-conditioning.</p> <p>Cefas will provide the service from a secure hosted environment located in Lowestoft. The equipment is accessible only via proximity / keycard access to a restricted subset of personnel.</p> <p>The building is configured with raised floors and fire detection systems and redundant power and network architectures. No unauthorised access to the building is allowed. Only strictly authorised technical staff are permitted to enter the hosting facility.</p> <p>Cefas will be responsible for:</p> <p>The physical security of the computer system.</p>

Information System Security Plan	
System Name:	
	<p>The set-up and maintenance of infrastructure and service including firewall security</p> <p>User end point security including Anti malware and encryption of laptops and removable devices.</p> <p>Assistance with the set-up and maintenance of user IDs and passwords.</p> <p>Monitoring of user access to and availability of the system.</p> <p>Cefas's IT infrastructure has an impact level 2 accredited RMADS (until Sept 2017). After Sept 2017 Cefas's ICT infrastructure will be compliant with and risk managed to ISO27001.</p> <p>Security for servers and systems hosted in the Microsoft cloud environment is managed by Microsoft and Cefas, Cefas conducts an annual review of and risk assessment on the Microsoft accreditation documentation to ensure risks are managed to an acceptable level.</p> <p>Resilience</p> <p>Systems can be housed in either the commuter room on the Cefas Lowestoft site or in the Microsoft cloud environment.</p> <p>Back up</p> <p>Systems will be backed up on tape on a nightly basis with copies stored in separate secure location to the main system.</p>
<p>Legal / Regulatory Requirements for Security / Privacy SOX, GLBA, HIPPA, FDIC, SEC, privacy laws, etc. – indicate what laws or regulations affect this system and data, how they affect it</p>	<p>Security Policy Framework (SPF) –Cefas must comply with the mandatory requirements of the SPF, The International Standard for Information Security Management Systems (ISO/IEC 27001) is acknowledged as good practice and the SPF is aligned to that standard.</p> <p>Computer Misuse Act – Any misuse of the system may be deemed an offence under the computer misuse act and as such may be punishable under law.</p> <p>Data Protection Act (DPA) – all personal information stored on Cefas and customer systems is protected under the DPA, Cefas is registered under Defra's DPA listing.</p>

Information System Security Plan	
System Name:	
	<p>Freedom of Information Act (Fol) – The Fol applies to all public authorities, who are obliged to provide information either through a publication scheme or in response to requests made under the general right of access except where a qualified or absolute exemption exists. The information held in the system is subject to request and will need to be assessed against the exemptions and released if required.</p>
<p>Confidentiality Requirements / Data Classification Describe confidentiality issues and requirements; Classify the data as confidential, internal, public – refer to Company Data Classification and Information Security policies.</p>	
<p>Administration, Roles & Responsibilities for Security Functions What position administers the userids - is it centralized? Business area or IT Security Administration? Who (position title) approves access requests? What positions are responsible for the various security functions; indicate positions by job title, and indicate responsibilities by role and or position?</p>	<p>User ID's and user access is managed by the information asset owner(s).</p> <p>IT Security is managed by the Cefas ITSO, administration of the system infrastructure is managed by Cefas IT Services.</p> <p>Administration of the application is managed by Cefas Applied Technology.</p> <p>Information assurance is managed by the Information Security Officer (ISO) and overseen by the Senior Information Risk Owner (SIRO)</p>
<p>Security Logging and Monitoring Describe the security and access logging processes, transaction logging, review of security exceptions, monitoring of security events, log review processes. Logging can be at O/S, database and application levels.</p>	<p>User logins/logoffs to the Citrix system are logged using windows server event monitoring and are kept for 30 days.</p>
<p>Security Training Security awareness and security administrative process training, initial training, new user and ongoing security training plans.</p>	<p>Security awareness training and testing is undertaken annually by all staff via the Civil Service Learning Responsible for Information course. This has been integrated into the Cefas induction program for new staff.</p> <p>The Information Security Officer is a CISSP (Certified Information Systems Security Professional) member of (ISC2) and CISA (Certified Information Systems Auditor) member of ISACA</p>

Information System Security Plan	
System Name:	
Security Initial implementation and periodic testing to ensure ongoing compliance to security requirements – should link to QA testing and Change Management processes, also periodic security assessment reviews.	Testing A monthly penetration test is carried out on server hosts on the Cefas network. Cefas IT Services operates under a business management system (BMS) certified to ISO9001, accreditation operated by LRQA. All installations, upgrades and patches are subject to a rigorous testing regime and change management process (operated under the BMS) before being allowed as a live release. Security patches are tested and released in a timely manner that balances business availability with continued security.
Backup and Disaster Recovery Requirements Availability requirements for system, backup requirements/frequency, DR requirements – brief description here, refer to the specific DR Plan for details. Data retention requirements. Restart requirements	Systems are backed up to tape on a nightly basis with one copy kept in a fireproof safe in a different building on the Cefas Lowestoft site and another copy kept in a fireproof safe on a different site three miles away. Organisation and execution of system backup/archive procedures for software and database and its secure storage. A disk-to-tape facility gives the ability to recover to a daily granularity within 1 week, to weekly granularity for 5 weeks and to monthly granularity for 6 months.
Remote Access Requirements What restrictions/allowances for remote access by users; any modem requirements for vendor or technical support; how should any remote access be controlled, logged, monitored?	
Physical Security Where are the physical components for the system, what physical security requirements are needed; What secure room/computer facility to be used; controls, logging and monitoring of physical access to computer hardware, data backups, etc	Cefas uses a proximity card detection system for access to the buildings with a reception area for visitors, during the day this area is managed by the reception staff and security guards at night. All access to the buildings is logged. The computer room where the physical hardware is located is protected by a separate proximity card detection system managed directly by Cefas IT Services. Over night the computer room is locked. All access to the computer room is logged.

Information System Security Plan

System Name:

	<p>The computer room is protected by a fire detection system with smoke and heat detectors and two stage alerting, with the second stage releasing an inert gas to extinguish a fire.</p> <p>The computer room environment has a redundant climate control system to ensure the correct operating heat and humidity is maintained. Power to the computer room is supplied by two 30kva uninterruptible power supplies, server hosts, where possible are configured with redundant power supplies and power feeds.</p>
Personnel Security	<p>All Cefas staff are cleared to BPSS.</p> <p>IT System managers and Administrators are cleared by Defra to SC level.</p>

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Prepared By	Richard Page

Schedule 19 (Cyber Essentials Scheme)

1. Definitions

- 1.1 In this Schedule, the following words shall have the following meanings and they shall supplement Schedule 1 (Definitions):

"Cyber Essentials Scheme"	the Cyber Essentials Scheme developed by the Government which provides a clear statement of the basic controls all organisations should implement to mitigate the risk from common internet based threats (as may be amended from time to time). Details of the Cyber Essentials Scheme can be found at: https://www.gov.uk/government/publications/cyber-essentials-scheme-overview
"Cyber Essentials Basic Certificate"	the certificate awarded on the basis of self-assessment, verified by an independent certification body, under the Cyber Essentials Scheme and is the basic level of assurance;
"Cyber Essentials Certificate"	Cyber Essentials Basic Certificate or the Cyber Essentials Plus Certificate to be provided by the Supplier as set out in the Award Form
"Cyber Essential Scheme Data"	sensitive and personal information and other relevant information as referred to in the Cyber Essentials Scheme
"Cyber Essentials Plus Certificate"	the certification awarded on the basis of external testing by an independent certification body of the Supplier's cyber security approach under the Cyber Essentials Scheme and is a more advanced level of assurance.

2. What Certification do you need

- 2.1 Where the Award Form requires that the Supplier provide a Cyber Essentials Certificate prior to the Start Date the Supplier shall provide a valid Cyber Essentials Certificate to the Buyer. Where the Supplier fails to comply with this Paragraph 2.1 it shall be prohibited from commencing the provision of Deliverables under the Contract until such time as the Supplier has evidenced to the Buyer its compliance with this Paragraph 2.1.
- 2.2 Where the Supplier continues to Process Cyber Essentials Scheme Data during the Contract Period of the Contract the Supplier shall deliver to the Buyer evidence of renewal of the Cyber Essentials Certificate on each

- anniversary of the first applicable certificate obtained by the Supplier under Paragraph 2.1.
- 2.3 Where the Supplier is due to Process Cyber Essentials Scheme Data after the Start date of the Contract but before the end of the Contact Period, the Supplier shall deliver to the Buyer evidence of:
- 2.3.1 a valid and current Cyber Essentials Certificate before the Supplier Processes any such Cyber Essentials Scheme Data; and
 - 2.3.2 renewal of the valid Cyber Essentials Certificate on each anniversary of the first Cyber Essentials Scheme certificate obtained by the Supplier under Paragraph 2.1.
- 2.4 In the event that the Supplier fails to comply with Paragraphs 2.2 or 2.3 (as applicable), the Buyer reserves the right to terminate this Contract for material Default.
- 2.5 The Supplier shall ensure that all Sub-Contracts with Subcontractors who Process Cyber Essentials Data contain provisions no less onerous on the Subcontractors than those imposed on the Supplier under this Contract in respect of the Cyber Essentials Scheme under Paragraph 2.1 of this Schedule.
- 2.6 This Schedule shall survive termination or expiry of this Contract.

Schedule 20 (Processing Data)

1. Status of the Controller

1.1 The Parties acknowledge that for the purposes of the Data Protection Legislation, the nature of the activity carried out by each of them in relation to their respective obligations under a Contract dictates the status of each party under the DPA 2018. A Party may act as:

1.1.1 “Controller” in respect of the other Party who is “Processor”;

1.1.2 “Processor” in respect of the other Party who is “Controller”;

1.1.3 “Joint Controller” with the other Party;

1.1.4 “Independent Controller” of the Personal Data where the other Party is also “Controller”,

in respect of certain Personal Data under a Contract and shall specify in Annex 1 (*Processing Personal Data*) which scenario they think shall apply in each situation.

2. Where one Party is Controller and the other Party its Processor

2.1 Where a Party is a Processor, the only Processing that it is authorised to do is listed in Annex 1 (*Processing Personal Data*) by the Controller.

2.2 The Processor shall notify the Controller immediately if it considers that any of the Controller’s instructions infringe the Data Protection Legislation.

2.3 The Processor shall provide all reasonable assistance to the Controller in the preparation of any Data Protection Impact Assessment prior to commencing any Processing. Such assistance may, at the discretion of the Controller, include:

2.3.1 a systematic description of the envisaged Processing and the purpose of the Processing;

2.3.2 an assessment of the necessity and proportionality of the Processing in relation to the Services;

2.3.3 an assessment of the risks to the rights and freedoms of Data Subjects; and

2.3.4 the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of Personal Data.

2.4 The Processor shall, in relation to any Personal Data Processed in connection with its obligations under the Contract:

2.4.1 Process that Personal Data only in accordance with Annex 1 (*Processing Personal Data*), unless the Processor is required to do otherwise by Law. If it is so required the Processor shall notify the Controller before Processing the Personal Data unless prohibited by Law;

2.4.2 ensure that it has in place Protective Measures, including in the case of the Supplier the measures set out in Clause 18.4 of the Core Terms, which the Controller may reasonably reject (but failure to reject shall not

amount to approval by the Controller of the adequacy of the Protective Measures) having taken account of the:

- a) nature of the data to be protected;
- b) harm that might result from a Personal Data Breach;
- c) state of technological development; and
- d) cost of implementing any measures;

2.4.3 ensure that:

- a) the Processor Personnel do not Process Personal Data except in accordance with the Contract (and in particular Annex 1 (*Processing Personal Data*));
- b) it uses all reasonable endeavours to ensure the reliability and integrity of any Processor Personnel who have access to the Personal Data and ensure that they:
 - (i) are aware of and comply with the Processor's duties under this Schedule 20, Clauses 18 (Data protection), 19 (What you must keep confidential) and 20 (When you can share information);
 - (ii) are subject to appropriate confidentiality undertakings with the Processor or any Subprocessor;
 - (iii) are informed of the confidential nature of the Personal Data and do not publish, disclose or divulge any of the Personal Data to any third party unless directed in writing to do so by the Controller or as otherwise permitted by the Contract; and
 - (iv) have undergone adequate training in the use, care, protection and handling of Personal Data;

2.4.4 not transfer Personal Data outside of the UK unless the prior written consent of the Controller has been obtained and the following conditions are fulfilled:

- a) the transfer is in accordance with Article 45 of the UK GDPR (or section 73 of DPA 2018); or
- b) the Controller or the Processor has provided appropriate safeguards in relation to the transfer (whether in accordance with UK GDPR Article 46 or section 75 of the DPA 2018) as determined by the Controller which could include relevant parties entering into the International Data Transfer Agreement (the "**IDTA**"), or International Data Transfer Agreement Addendum to the European Commission's SCCs (the "**Addendum**"), as published by the Information Commissioner's Office from time to time, as well as any additional measures determined by the Controller;
- c) the Data Subject has enforceable rights and effective legal remedies;

- d) the Processor complies with its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavours to assist the Controller in meeting its obligations); and
 - e) the Processor complies with any reasonable instructions notified to it in advance by the Controller with respect to the Processing of the Personal Data;
- 2.4.5 where the Personal Data is subject to EU GDPR, not transfer Personal Data outside of the EU unless the prior written consent of the Controller has been obtained and the following conditions are fulfilled:
 - a) the transfer is in accordance with Article 45 of the EU GDPR; or
 - b) the transferring Party has provided appropriate safeguards in relation to the transfer in accordance with Article 46 of the EU GDPR as determined by the non-transferring Party which could include relevant parties entering into Standard Contractual Clauses in the European Commission's decision 2021/914/EU or such updated version of such Standard Contractual Clauses as are published by the European Commission from time to time as well as any additional measures determined by the non-transferring Party;
 - c) the Data Subject has enforceable rights and effective legal remedies;
 - d) the transferring Party complies with its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavours to assist the non-transferring Party in meeting its obligations); and
 - e) the transferring Party complies with any reasonable instructions notified to it in advance by the non-transferring Party with respect to the processing of the Personal Data; and
- 2.4.6 at the written direction of the Controller, delete or return Personal Data (and any copies of it) to the Controller on termination of the Contract unless the Processor is required by Law to retain the Personal Data.
- 2.5 Subject to Paragraph 2.6 of this Schedule 20, the Processor shall notify the Controller immediately if in relation to it Processing Personal Data under or in connection with the Contract it:
 - 2.5.1 receives a Data Subject Access Request (or purported Data Subject Access Request);
 - 2.5.2 receives a request to rectify, block or erase any Personal Data;
 - 2.5.3 receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation;
 - 2.5.4 receives any communication from the Information Commissioner or any other regulatory authority in connection with Personal Data Processed under the Contract;

- 2.5.5 receives a request from any third Party for disclosure of Personal Data where compliance with such request is required or purported to be required by Law; or
- 2.5.6 becomes aware of a Personal Data Breach.
- 2.6 The Processor's obligation to notify under Paragraph 2.5 of this Schedule 20 shall include the provision of further information to the Controller, as details become available.
- 2.7 Taking into account the nature of the Processing, the Processor shall provide the Controller with assistance in relation to either Party's obligations under Data Protection Legislation and any complaint, communication or request made under Paragraph 2.5 of this Schedule 20 (and insofar as possible within the timescales reasonably required by the Controller) including by immediately providing:
 - 2.7.1 the Controller with full details and copies of the complaint, communication or request;
 - 2.7.2 such assistance as is reasonably requested by the Controller to enable it to comply with a Data Subject Access Request within the relevant timescales set out in the Data Protection Legislation;
 - 2.7.3 the Controller, at its request, with any Personal Data it holds in relation to a Data Subject;
 - 2.7.4 assistance as requested by the Controller following any Personal Data Breach; and/or
 - 2.7.5 assistance as requested by the Controller with respect to any request from the Information Commissioner's Office or any other regulatory authority, or any consultation by the Controller with the Information Commissioner's Office or any other regulatory authority.
- 2.8 The Processor shall maintain complete and accurate records and information to demonstrate its compliance with this Schedule 20. This requirement does not apply where the Processor employs fewer than 250 staff, unless:
 - 2.8.1 the Controller determines that the Processing is not occasional;
 - 2.8.2 the Controller determines the Processing includes special categories of data as referred to in Article 9(1) of the UK GDPR or Personal Data relating to criminal convictions and offences referred to in Article 10 of the UK GDPR; or
 - 2.8.3 the Controller determines that the Processing is likely to result in a risk to the rights and freedoms of Data Subjects.
- 2.9 The Processor shall allow for audits of its Data Processing activity by the Controller or the Controller's designated auditor.
- 2.10 The Parties shall designate a Data Protection Officer if required by the Data Protection Legislation.
- 2.11 Before allowing any Subprocessor to Process any Personal Data related to the Contract, the Processor must:
 - 2.11.1 notify the Controller in writing of the intended Subprocessor and Processing;
 - 2.11.2 obtain the written consent of the Controller;

- 2.11.3 enter into a written agreement with the Subprocessor which give effect to the terms set out in this Schedule 20 such that they apply to the Subprocessor; and
- 2.11.4 provide the Controller with such information regarding the Subprocessor as the Controller may reasonably require.
- 2.12 The Processor shall remain fully liable for all acts or omissions of any of its Subprocessors.
- 2.13 The Buyer may, at any time on not less than 30 Working Days' notice, revise this Schedule 20 by replacing it with any applicable controller to processor standard clauses or similar terms forming part of an applicable certification scheme (which shall apply when incorporated by attachment to the Contract).
- 2.14 The Parties agree to take account of any guidance issued by the Information Commissioner's Office. The Buyer may on not less than 30 Working Days' notice to the Supplier amend the Contract to ensure that it complies with any guidance issued by the Information Commissioner's Office.

3. Where the Parties are Joint Controllers of Personal Data

- 3.1 In the event that the Parties are Joint Controllers in respect of Personal Data under the Contract, the Parties shall implement Paragraphs that are necessary to comply with UK GDPR Article 26 based on the terms set out in Annex 2 to this Schedule 20 (*Processing Data*).

Independent Controllers of Personal Data

- 3.2 With respect to Personal Data provided by one Party to another Party for which each Party acts as Controller but which is not under the Joint Control of the Parties, each Party undertakes to comply with the applicable Data Protection Legislation in respect of their Processing of such Personal Data as Controller.
- 3.3 Each Party shall Process the Personal Data in compliance with its obligations under the Data Protection Legislation and not do anything to cause the other Party to be in breach of it.
- 3.4 Where a Party has provided Personal Data to the other Party in accordance with Paragraph 3.2 of this Schedule 20 above, the recipient of the Personal Data will provide all such relevant documents and information relating to its data protection policies and procedures as the other Party may reasonably require.
- 3.5 The Parties shall be responsible for their own compliance with Articles 13 and 14 UK GDPR in respect of the Processing of Personal Data for the purposes of the Contract.
- 3.6 The Parties shall only provide Personal Data to each other:
 - 3.6.1 to the extent necessary to perform their respective obligations under the Contract;
 - 3.6.2 in compliance with the Data Protection Legislation (including by ensuring all required data privacy information has been given to affected Data Subjects to meet the requirements of Articles 13 and 14 of the UK GDPR); and
 - 3.6.3 where it has recorded it in Annex 1 (*Processing Personal Data*).

- 3.7 Taking into account the state of the art, the costs of implementation and the nature, scope, context and purposes of Processing as well as the risk of varying likelihood and severity for the rights and freedoms of natural persons, each Party shall, with respect to its Processing of Personal Data as Independent Controller, implement and maintain appropriate technical and organisational measures to ensure a level of security appropriate to that risk, including, as appropriate, the measures referred to in Article 32(1)(a), (b), (c) and (d) of the UK GDPR, and the measures shall, at a minimum, comply with the requirements of the Data Protection Legislation, including Article 32 of the UK GDPR.
- 3.8 A Party Processing Personal Data for the purposes of the Contract shall maintain a record of its Processing activities in accordance with Article 30 UK GDPR and shall make the record available to the other Party upon reasonable request.
- 3.9 Where a Party receives a request by any Data Subject to exercise any of their rights under the Data Protection Legislation in relation to the Personal Data provided to it by the other Party pursuant to the Contract (**“Request Recipient”**):
- 3.9.1 the other Party shall provide any information and/or assistance as reasonably requested by the Request Recipient to help it respond to the request or correspondence, at the cost of the Request Recipient; or
- 3.9.2 where the request or correspondence is directed to the other Party and/or relates to that other Party's Processing of the Personal Data, the Request Recipient will:
- a) promptly, and in any event within five (5) Working Days of receipt of the request or correspondence, inform the other Party that it has received the same and shall forward such request or correspondence to the other Party; and
- b) provide any information and/or assistance as reasonably requested by the other Party to help it respond to the request or correspondence in the timeframes specified by Data Protection Legislation.
- 3.10 Each Party shall promptly notify the other Party upon it becoming aware of any Personal Data Breach relating to Personal Data provided by the other Party pursuant to the Contract and shall:
- 3.10.1 do all such things as reasonably necessary to assist the other Party in mitigating the effects of the Personal Data Breach;
- 3.10.2 implement any measures necessary to restore the security of any compromised Personal Data;
- 3.10.3 work with the other Party to make any required notifications to the Information Commissioner's Office or any other regulatory authority and affected Data Subjects in accordance with the Data Protection Legislation (including the timeframes set out therein); and
- 3.10.4 not do anything which may damage the reputation of the other Party or that Party's relationship with the relevant Data Subjects, save as required by Law.
- 3.11 Personal Data provided by one Party to the other Party may be used exclusively to exercise rights and obligations under the Contract as specified in Annex 1 (*Processing Personal Data*).

- 3.12 Personal Data shall not be retained or processed for longer than is necessary to perform each Party's respective obligations under the Contract which is specified in Annex 1 (*Processing Personal Data*).
- 3.13 Notwithstanding the general application of Paragraphs 2.1 to 2.14 of this Schedule 20 to Personal Data, where the Supplier is required to exercise its regulatory and/or legal obligations in respect of Personal Data, it shall act as an Independent Controller of Personal Data in accordance with Paragraphs 3.2 to 3.12 of this Schedule 20.

Annex 1 - Processing Personal Data

1. This Annex shall be completed by the Controller, who may take account of the view of the Processor, however the final decision as to the content of this Annex shall be with the Buyer at its absolute discretion.

1.1 The contact details of the Buyer's Data Protection Officer are:
cefassecurityteam@cefas.gov.uk

1.2 The contact details of the Supplier's Data Protection Officer are: [REDACTED]

1.3 The Processor shall comply with any further written instructions with respect to Processing by the Controller.

1.4 Any such further instructions shall be incorporated into this Annex.

Description	Details
Identity of Controller for each Category of Personal Data	<p>The Buyer is Controller and the Supplier is Processor</p> <p>The Parties acknowledge that in accordance with Paragraph 2 and for the purposes of the Data Protection Legislation, the Buyer is the Controller and the Supplier is the Processor of the following Personal Data:</p> <p><i>Please refer to the Cefas Privacy Statement 2021</i></p>
Duration of the Processing	The duration of the Contract Period.
Nature and purposes of the Processing	<p>The nature of the Processing means any operation such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction of data (whether or not by automated means) etc.</p> <p>The purpose might include: Any personal data which is necessary in order to provide the Services under the Contract. This could include name, address, contact details, National Insurance number, pay, images, passport number, and any other information which is provided to the Supplier from time to time in connection with the Services.</p>

Type of Personal Data	This could include: name, address, contact details, National Insurance number, pay, images, passport number, and any other information
Categories of Data Subject	<p>Buyer and the Buyer's Staff, , Sub-Contractor Staff and supplier Staff.</p> <p>The processing might also include Personal Data of individuals connected in some other way with the provision of the Services.</p>
<p>Plan for return and destruction of the data once the Processing is complete</p> <p>UNLESS requirement under law to preserve that type of data</p>	Only to be retained for the minimum period required to deliver the Services.
Locations at which the Supplier and/or its Sub-contractors process Personal Data under this Contract	<i>Please refer to the Cefas Privacy Statement 2021</i>
Protective Measures that the Supplier and, where applicable, its Sub-contractors have implemented to protect Personal Data processed under this Contract Agreement against a breach of security (insofar as that breach of security relates to data) or a Personal Data Breach	<i>Please refer to the Cefas Privacy Statement 2021</i>

Annex 2 - Joint Controller Agreement – NOT APPLICABLE

1. Joint Controller Status and Allocation of Responsibilities

- 1.1 With respect to Personal Data under Joint Control of the Parties, the Parties envisage that they shall each be a Data Controller in respect of that Personal Data in accordance with the terms of this Annex 2 (Joint Controller Agreement) in replacement of Paragraph 2 of this Schedule 20 (Where one Party is Controller and the other Party is Processor) and Paragraphs 3.2 -3.12 of this Schedule 20 (Independent Controllers of Personal Data). Accordingly, the Parties each undertake to comply with the applicable Data Protection Legislation in respect of their Processing of such Personal Data as Data Controllers.
- 1.2 The Parties agree that the [Supplier/Buyer]:
- 1.2.1 is the exclusive point of contact for Data Subjects and is responsible for using all reasonable endeavours to comply with the UK GDPR regarding the exercise by Data Subjects of their rights under the UK GDPR;
 - 1.2.2 shall direct Data Subjects to its Data Protection Officer or suitable alternative in connection with the exercise of their rights as Data Subjects and for any enquiries concerning their Personal Data or privacy;
 - 1.2.3 is solely responsible for the Parties' compliance with all duties to provide information to Data Subjects under Articles 13 and 14 of the UK GDPR;
 - 1.2.4 is responsible for obtaining the informed consent of Data Subjects, in accordance with the UK GDPR, for Processing in connection with the Services where consent is the relevant legal basis for that Processing; and
 - 1.2.5 shall make available to Data Subjects the essence of this Annex (and notify them of any changes to it) concerning the allocation of responsibilities as Joint Controller and its role as exclusive point of contact, the Parties having used their best endeavours to agree the terms of that essence. This must be outlined in the [Supplier's/Buyer's] privacy policy (which must be readily available by hyperlink or otherwise on all of its public facing services and marketing).
- 1.3 Notwithstanding the terms of Paragraph 1.2, the Parties acknowledge that a Data Subject has the right to exercise their legal rights under the Data Protection Legislation as against the relevant Party as Controller.

2. Undertakings of both Parties

- 2.1 The Supplier and the Buyer each undertake that they shall:
- 2.1.1 report to the other Party every [12] months on:
 - a) the volume of Data Subject Access Request (or purported Data Subject Access Requests) from Data Subjects (or third parties on their behalf);
 - b) the volume of requests from Data Subjects (or third parties on their behalf) to rectify, block or erase any Personal Data;

- c) any other requests, complaints or communications from Data Subjects (or third parties on their behalf) relating to the other Party's obligations under applicable Data Protection Legislation;
- d) any communications from the Information Commissioner or any other regulatory authority in connection with Personal Data; and
- e) any requests from any third party for disclosure of Personal Data where compliance with such request is required or purported to be required by Law,

that it has received in relation to the subject matter of the Contract during that period;

- 2.1.2 notify each other immediately if it receives any request, complaint or communication made as referred to in Paragraphs 2.1.1(a) to (e);
- 2.1.3 provide the other Party with full cooperation and assistance in relation to any request, complaint or communication made as referred to in Paragraphs 2.1.1(c) to (e) to enable the other Party to comply with the relevant timescales set out in the Data Protection Legislation;
- 2.1.4 not disclose or transfer the Personal Data to any third party unless necessary for the provision of the Services and, for any disclosure or transfer of Personal Data to any third party, (save where such disclosure or transfer is specifically authorised under the Contract or is required by Law) that disclosure or transfer of Personal Data is otherwise considered to be lawful processing of that Personal Data in accordance with Article 6 of the UK GDPR or EU GDPR (as the context requires). For the avoidance of doubt, the third party to which Personal Data is transferred must be subject to equivalent obligations which are no less onerous than those set out in this Annex;
- 2.1.5 request from the Data Subject only the minimum information necessary to provide the Services and treat such extracted information as Confidential Information;
- 2.1.6 ensure that at all times it has in place appropriate Protective Measures to guard against unauthorised or unlawful Processing of the Personal Data and/or accidental loss, destruction or damage to the Personal Data and unauthorised or unlawful disclosure of or access to the Personal Data;
- 2.1.7 use all reasonable endeavours to ensure the reliability and integrity of any of its Personnel who have access to the Personal Data and ensure that its Personnel:
 - a) are aware of and comply with their duties under this Annex 2 (Joint Controller Agreement) and those in respect of Confidential Information
 - b) are informed of the confidential nature of the Personal Data, are subject to appropriate obligations of confidentiality and do not publish, disclose or divulge any of the Personal Data to any third party where the that Party would not be permitted to do so;
 - c) have undergone adequate training in the use, care, protection and handling of personal data as required by the applicable Data Protection Legislation;

- 2.1.8 ensure that it has in place Protective Measures as appropriate to protect against a Personal Data Breach having taken account of the:
- a) nature of the data to be protected;
 - b) harm that might result from a Personal Data Breach;
 - c) state of technological development; and
 - d) cost of implementing any measures;
- 2.1.9 ensure that it has the capability (whether technological or otherwise), to the extent required by Data Protection Legislation, to provide or correct or delete at the request of a Data Subject all the Personal Data relating to that Data Subject that the Supplier holds; and
- 2.1.10 ensure that it notifies the other Party as soon as it becomes aware of a Personal Data Breach;
- 2.1.11 where the Personal Data is subject to UK GDPR, not transfer such Personal Data outside of the UK unless the prior written consent of the non-transferring Party has been obtained and the following conditions are fulfilled:
- a) the transfer is in accordance with Article 45 of the UK GDPR or DPA 2018 Section 73; or
 - b) the transferring Party has provided appropriate safeguards in relation to the transfer (whether in accordance with Article 46 of the UK GDPR or DPA 2018 Section 75) as agreed with the non-transferring Party which could include the International Data Transfer Agreement (the “**IDTA**”), or International Data Transfer Agreement Addendum to the European Commission’s SCCs (the “**Addendum**”), as published by the Information Commissioner’s Office from time to time, as well as any additional measures;
 - c) the Data Subject has enforceable rights and effective legal remedies;
 - d) the transferring Party complies with its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavours to assist the non-transferring Party in meeting its obligations); and
 - e) the transferring Party complies with any reasonable instructions notified to it in advance by the non-transferring Party with respect to the processing of the Personal Data; and
- 2.1.12 where the Personal Data is subject to EU GDPR, not transfer such Personal Data outside of the EU unless the prior written consent of non-transferring Party has been obtained and the following conditions are fulfilled:
- a) the transfer is in accordance with Article 45 of the EU GDPR; or
 - b) the transferring Party has provided appropriate safeguards in relation to the transfer in accordance with Article 46 of the EU GDPR as determined by the non-transferring Party which could

include relevant parties entering into Standard Contractual Clauses in the European Commission's decision 2021/914/EU as well as any additional measures;

- c) the Data Subject has enforceable rights and effective legal remedies;
- d) the transferring Party complies with its obligations under the EU GDPR by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavours to assist the non-transferring Party in meeting its obligations); and
- e) the transferring Party complies with any reasonable instructions notified to it in advance by the non-transferring Party with respect to the processing of the Personal Data.

2.2 Each Joint Controller shall use its reasonable endeavours to assist the other Controller to comply with any obligations under applicable Data Protection Legislation and shall not perform its obligations under this Annex in such a way as to cause the other Joint Controller to breach any of its obligations under applicable Data Protection Legislation to the extent it is aware, or ought reasonably to have been aware, that the same would be a breach of such obligations

3. Data Protection Breach

3.1 Without prejudice to Paragraph 3.2, each Party shall notify the other Party promptly and without undue delay, and in any event within 48 hours, upon becoming aware of any Personal Data Breach or circumstances that are likely to give rise to a Personal Data Breach, providing the Buyer and its advisors with:

- 3.1.1 sufficient information and in a timescale which allows the other Party to meet any obligations to report a Personal Data Breach under the Data Protection Legislation;
- 3.1.2 all reasonable assistance, including:
 - a) co-operation with the other Party and the Information Commissioner investigating the Personal Data Breach and its cause, containing and recovering the compromised Personal Data and compliance with the applicable guidance;
 - b) co-operation with the other Party including using such reasonable endeavours as are directed by the Buyer to assist in the investigation, mitigation and remediation of a Personal Data Breach;
 - c) co-ordination with the other Party regarding the management of public relations and public statements relating to the Personal Data Breach; and/or
 - d) providing the other Party and to the extent instructed by the other Party to do so, and/or the Information Commissioner investigating the Personal Data Breach, with complete information relating to the Personal Data Breach, including, without limitation, the information set out in Paragraph 3.2.

- 3.2 Each Party shall use all reasonable endeavours to restore, re-constitute and/or reconstruct any Personal Data where it has lost, damaged, destroyed, altered or corrupted as a result of a Personal Data Breach as it was that Party's own data at its own cost with all possible speed and shall provide the other Party with all reasonable assistance in respect of any such Personal Data Breach, including providing the other Party, as soon as possible and within 48 hours of the Personal Data Breach relating to the Personal Data Breach, in particular:
- 3.2.1 the nature of the Personal Data Breach;
 - 3.2.2 the nature of Personal Data affected;
 - 3.2.3 the categories and number of Data Subjects concerned;
 - 3.2.4 the name and contact details of the Supplier's Data Protection Officer or other relevant contact from whom more information may be obtained;
 - 3.2.5 measures taken or proposed to be taken to address the Personal Data Breach; and
 - 3.2.6 describe the likely consequences of the Personal Data Breach.

4. Audit

- 4.1 The Supplier shall permit:
- 4.1.1 the Buyer, or a third-party auditor acting under the Buyer's direction, to conduct, at the Buyer's cost, data privacy and security audits, assessments and inspections concerning the Supplier's data security and privacy procedures relating to Personal Data, its compliance with this Annex 2 and the Data Protection Legislation; and/or
 - 4.1.2 the Buyer, or a third-party auditor acting under the Buyer's direction, access to premises at which the Personal Data is accessible or at which it is able to inspect any relevant records, including the record maintained under Article 30 UK GDPR by the Supplier so far as relevant to the Contract, and procedures, including premises under the control of any third party appointed by the Supplier to assist in the provision of the Services.
- 4.2 The Buyer may, in its sole discretion, require the Supplier to provide evidence of the Supplier's compliance with Paragraph 4.1 in lieu of conducting such an audit, assessment or inspection.

5. Impact Assessments

The Parties shall:

- 5.1 provide all reasonable assistance to each other to prepare any Data Protection Impact Assessment as may be required (including provision of detailed information and assessments in relation to Processing operations, risks and measures); and
- 5.2 maintain full and complete records of all Processing carried out in respect of the Personal Data in connection with the Contract, in accordance with the terms of Article 30 UK GDPR.

6. ICO Guidance

The Parties agree to take account of any guidance issued by the Information Commissioner and/or any relevant Central Government Body. The Buyer may on not less than thirty (30) Working Days' notice to the Supplier amend the Contract to ensure that it complies with any guidance issued by the Information Commissioner and/or any relevant Central Government Body.

7. Liabilities for Data Protection Breach

[Guidance: This Paragraph represents a risk share, you may wish to reconsider the apportionment of liability and whether recoverability of losses are likely to be hindered by the contractual limitation of liability provisions]

- 7.1 If financial penalties are imposed by the Information Commissioner on either the Buyer or the Supplier for a Personal Data Breach ("**Financial Penalties**") then the following shall occur:
- 7.1.1 if in the view of the Information Commissioner, the Buyer is responsible for the Personal Data Breach, in that it is caused as a result of the actions or inaction of the Buyer, its employees, agents, contractors (other than the Supplier) or systems and procedures controlled by the Buyer, then the Buyer shall be responsible for the payment of such Financial Penalties. In this case, the Buyer will conduct an internal audit and engage at its reasonable cost when necessary, an independent third party to conduct an audit of any such Personal Data Breach. The Supplier shall provide to the Buyer and its third party investigators and auditors, on request and at the Supplier's reasonable cost, full cooperation and access to conduct a thorough audit of such Personal Data Breach;
 - 7.1.2 if in the view of the Information Commissioner, the Supplier is responsible for the Personal Data Breach, in that it is not a Personal Data Breach that the Buyer is responsible for, then the Supplier shall be responsible for the payment of these Financial Penalties. The Supplier will provide to the Buyer and its auditors, on request and at the Supplier's sole cost, full cooperation and access to conduct a thorough audit of such Personal Data Breach; or
 - 7.1.3 if no view as to responsibility is expressed by the Information Commissioner, then the Buyer and the Supplier shall work together to investigate the relevant Personal Data Breach and allocate responsibility for any Financial Penalties as outlined above, or by agreement to split any financial penalties equally if no responsibility for the Personal Data Breach can be apportioned. In the event that the Parties do not agree such apportionment then such Dispute shall be referred to the Dispute Resolution Procedure set out in Clause 39 of the Core Terms (Resolving disputes).
- 7.2 If either the Buyer or the Supplier is the defendant in a legal claim brought before a court of competent jurisdiction ("Court") by a third party in respect of a Personal Data Breach, then unless the Parties otherwise agree, the Party that is determined by the final decision of the court to be responsible for the Personal Data Breach shall be liable for the losses arising from such Personal Data

Breach. Where both Parties are liable, the liability will be apportioned between the Parties in accordance with the decision of the Court.

- 7.3 In respect of any losses, cost claims or expenses incurred by either Party as a result of a Personal Data Breach (the “Claim Losses”):
- 7.3.1 if the Buyer is responsible for the relevant Personal Data Breach, then the Buyer shall be responsible for the Claim Losses;
 - 7.3.2 if the Supplier is responsible for the relevant Personal Data Breach, then the Supplier shall be responsible for the Claim Losses: and
 - 7.3.3 if responsibility for the relevant Personal Data Breach is unclear, then the Buyer and the Supplier shall be responsible for the Claim Losses equally.
- 7.4 Nothing in either Paragraph 7.2 or Paragraph 7.3 shall preclude the Buyer and the Supplier reaching any other agreement, including by way of compromise with a third party complainant or claimant, as to the apportionment of financial responsibility for any Claim Losses as a result of a Personal Data Breach, having regard to all the circumstances of the Personal Data Breach and the legal and financial obligations of the Buyer.

8. Termination

If the Supplier is in material Default under any of its obligations under this Annex 2 (*Joint Controller Agreement*), the Buyer shall be entitled to terminate the Contract by issuing a Termination Notice to the Supplier in accordance with Clause 14 of the Core Terms (Ending the contract).

9. Sub-Processing

In respect of any Processing of Personal Data performed by a third party on behalf of a Party, that Party shall:

- 9.1 carry out adequate due diligence on such third party to ensure that it is capable of providing the level of protection for the Personal Data as is required by the Contract, and provide evidence of such due diligence to the other Party where reasonably requested; and
- 9.2 ensure that a suitable agreement is in place with the third party as required under applicable Data Protection Legislation.

10. Data Retention

The Parties agree to erase Personal Data from any computers, storage devices and storage media that are to be retained as soon as practicable after it has ceased to be necessary for them to retain such Personal Data under applicable Data Protection Legislation and their privacy policy (save to the extent (and for the limited period) that such information needs to be retained by the Party for statutory compliance purposes or as otherwise required by the Contract), and taking all further actions as may be necessary to ensure its compliance with Data Protection Legislation and its privacy policy.

Annex 3 - Cefas Privacy Statement 2021



Cefas Privacy Notice for employees, workers and contractors (UK).

Cefas, as part of Defra, will be referred to as Defra for the remainder of this document.

1. What is the purpose of this document?

Defra is committed to protecting the privacy and security of your personal information. This privacy notice describes how we collect and use personal information about you during and after your working relationship with us, in accordance with data protection law, including the UK General Data Protection Regulation (UK GDPR) and The Data Protection Act, 2018 (DPA 2018). It applies to all employees, workers and contractors. All equality and socio- economic data references apply only to employees.

Defra is a "data controller". This means that we are responsible for deciding how we hold and use personal information about you. We are required under data protection legislation to notify you of the information contained in this privacy notice.

This notice applies to current and former employees, workers and contractors. This notice does not form part of any contract of employment or other contract to provide services. This notice can be updated at any time and we will inform you if this occurs.

It is important that you read this notice, together with any other privacy notice that is provided on specific occasions when we are collecting or processing personal information about you, so that you are aware of how and why we are using such information.

2. Data protection principles

We will comply with data protection law. This says that the personal information we hold about you must be:

1. Used lawfully, fairly and in a transparent way.
2. Collected only for valid purposes that we have clearly explained to you and not used in any way that is incompatible with those purposes.
3. Relevant to the purposes we have told you about and limited only to those purposes.
4. Accurate and kept up to date.
5. Kept only as long as necessary for the purposes we have told you about.
6. Kept securely.

3. The kind of information we hold about you

Personal data, or personal information, means any information about an individual from which that person can be identified. It does not include data where the identity has been removed (anonymous data). There are "special categories" of more sensitive personal data which require a higher level of protection.

We collect, store, and use the following categories of personal information about you:

- Personal contact details such as name, title, addresses, telephone numbers, and personal email addresses.
- Dates of birth, marriage and divorce.
- Gender.
- Marital status and dependants.
- Next of kin, emergency contact and death benefit nominee(s) information.
- National Insurance number.
- Bank account details, payroll records and tax status information.
- Salary, annual leave, pension and benefits information.
- Start date, leaving date.
- Location of employment or workplace.
- Copy of driving licence, passport, birth and marriage certificates, decree absolute.
- Recruitment information (including copies of right to work documentation, references and other information included in a CV or cover letter or as part of the application process).
- Full employment records for Civil Service employment (including contract, terms and conditions, job titles, work history, working hours, promotion, absences, attendances, training records and professional memberships).
- Compensation history.
- Performance and appraisal information.
- Disciplinary and grievance information.
- Secondary employment and volunteering information
- CCTV footage and other information obtained through electronic means such as swipecard records.
- Information about your use of our information and communications systems.
- Photographs, videos.
- Accident book, first aid records, injury at work and third party accident information.

- Evidence of how you meet the Civil Service nationality rules and confirmation of your security clearance. This can include passport details, nationality details and information about convictions/allegations of criminal behaviour.

- Evidence of your right to work in the UK/immigration status

We will also collect, store and use the following "special categories" of more sensitive personal information:

- Information about your race or ethnicity, religious beliefs, sexual orientation and, if you provide to us, political opinions.

- Trade union membership.

- Information about your health, including any medical condition, health and sickness records which may potentially include genetic information and biometric data.

As part of SEB and equality data collection we also collect, store, and use the following categories of personal information about you:

- Personal socio-economic background data

- Equality, Diversity & Inclusion data (ethnicity, nationality, gender, religion & sexuality)

- Parents education level

4. How is your personal information collected?

We typically collect personal information about employees, workers and contactors through the application and recruitment process, either directly from candidates or sometimes from an employment agency or background check provider. We will sometimes collect additional information from third parties including former employers, credit reference agencies or other background check agencies, including:

- Employee's doctors, medical and occupational health professionals

- DBS (Disclosure Barring Service)

- UKVS

- UKBA

- consultants and other professionals who advise Defra generally

We will collect additional personal information in the course of job-related activities throughout the period of you working for us. Some of this will be voluntarily provided, as is the case with SEB and equality information.

5. How we will use information about you

We will only use your personal information when the law allows us to. Most commonly, we will use your personal information in the following circumstances:

1. Where it is necessary for performing the contract we have entered into with you.

2. Where we need to comply with a legal obligation.

3. Where it is in the public interest to do so; or for official purposes; or in the exercise of a function of the Crown, a Minister of the Crown or GLD as a government department. There can be rare occasions where it becomes necessary to use your personal information to protect your interests (or someone else's interests).

Situations in which we will use your personal information

We need all the categories of information in the list in section 3, the kind of information we hold about you, to enable us to perform our contract with you; to enable us to comply with legal obligations, to carry out our functions as a government department/functions of the Crown; or where it is necessary to do so in the public interest.

The situations in which we will process your personal information are listed below.

- Making a decision about your recruitment or appointment.
- Determining the terms on which you work for us.
- Checking you are legally entitled to work in the UK and to provide you with the security clearance appropriate for your role. For Civil Servants, to check eligibility to become and remain a Civil Servant.
- Paying you – or recovery of any overpayment - and if you are an employee, deducting tax and National Insurance contributions.
- Providing employment-related benefits to you including:
 - All types of leave in line with organisational policy
 - Pension
 - Advances of salary
- Liaising with your pension provider, providing information about changes to your employment such as promotions, changing in working hours.
- General administration of the contract we have entered into with you.
- Business management and planning, including accounting and auditing.
- Conducting performance reviews, managing performance and determining performance requirements.
- Making decisions about salary reviews and compensation.
- Assessing qualifications for a particular job or task, including decisions about promotions.
- Gathering evidence and any other steps relating to possible grievance or disciplinary matters and associated hearings.
- Making decisions about your continued employment or engagement.
- Making arrangements for the termination of our working relationship.

- Education, training and development requirements.
- Dealing with legal disputes involving you, or other employees, workers and contractors, including accidents at work.
- Ascertaining your fitness to work, managing sickness absence.
- Complying with health and safety obligations.
- To prevent fraud.
- To monitor your business and personal use of our information and communication systems to ensure compliance with our IT policies.
- To ensure network and information security, including preventing unauthorised access to our computer and electronic communications systems and preventing malicious software distribution.
- To conduct data analytics studies to review and better understand employee retention and attrition rates.
- Equality, Diversity & Inclusion monitoring
- Dealing with Freedom of Information Act/Environmental Information Regulations requests, if data protection laws allow

Some of the purposes will overlap and there can be several grounds which justify our use of your personal information.

If you fail to provide personal information

If you fail to provide certain information when requested, we will not be able to fully perform the contract we have entered into with you (such as paying you or providing a benefit), or we could be prevented from complying with our legal obligations (such as to ensure the health and safety of our workers).

Change of purpose

We will only use your personal information for the purposes for which we collected it, unless we reasonably consider that we need to use it for another reason and that reason is compatible with the original purpose. If we need to use your personal information for an unrelated or new purpose, we will notify you and we will explain the legal basis which allows us to do so.

Please note that we will if necessary process your personal information without your knowledge or consent, in compliance with the above rules, where this is required or permitted by law.

6. How we use particularly sensitive personal information

"Special categories" of particularly sensitive personal information require higher levels of protection. We need to have further justification for collecting, storing and using this type of personal information. We will, if necessary, process special categories of personal information in the following circumstances: 1. Where we need to carry out our legal obligations or exercise our employment-related legal rights and in line with our data protection policy 2. Where it is in line with our data protection policy, it is substantially in the public interest to do so and necessary for: a. performing our functions as a Government Department or a function of the Crown b. equal opportunities monitoring. c. administering our pension scheme d. preventing or detecting unlawful acts 3. Where it is needed to

assess your working capacity on health grounds, subject to appropriate confidentiality safeguards. In some circumstances, we will process this type of information where it is needed in relation to legal claims or where it is needed to protect your interests (or someone else's interests) and you are not capable of giving your consent, or where you have already made the information public.

Our obligations as an employer

We will use your particularly sensitive personal information in the following ways:

- We will use information relating to leaves of absence; this can include sickness absence or family related leave, to comply with employment and other laws.
- We will use information about your physical or mental health, or disability status, to ensure your health and safety in the workplace and to assess your fitness to work, to provide appropriate workplace adjustments, to monitor and manage sickness absence and to administer benefits.
- We will use information about your race or national or ethnic origin, religious, philosophical or moral beliefs, or your sexual life or sexual orientation, to ensure meaningful equal opportunity monitoring and reporting.
- We will use trade union membership information to pay trade union premiums, register the status of a protected employee and to comply with employment law obligations.

Do we need your consent?

We do not need your consent if we use special categories of your personal information in accordance with our written policy to carry out our legal obligations, or for one of the other reasons outlined in the box above: 'How we use particularly sensitive personal information'. In limited circumstances, if the need arises, we will approach you for your written consent to allow us to process certain particularly sensitive data. If we do so, we will provide you with full details of the information that we would like and the reason we need it, so that you can carefully consider whether you wish to consent. You should be aware that it is not a condition of your contract with us that you agree to any request for consent from us.

7. Information about criminal convictions

We will only use information relating to criminal convictions or alleged criminal behaviour where the law allows us to do so. This can arise when it is necessary for us to comply with the law or for another reason where there is a substantial public interest in us doing so. Less commonly, we will, if necessary, use information relating to criminal convictions or alleged criminal behaviour where it is necessary in relation to legal claims, where it is necessary to protect your interests (or someone else's interests) and you are not capable of giving your consent, or where you have already made the information public.

We will only collect information about criminal convictions or allegations of criminal behaviour where it is appropriate given the nature of the role and where we are legally able to do so. Where appropriate, we will collect information about criminal convictions/allegations as part of the recruitment process or if we are notified of such information directly by you in the course of you working for us. We will use information about criminal convictions/allegations and offences in the following ways:

- To make decisions regarding suitability for the role, or in relation to possible grievance or disciplinary matters and associated hearings.
- Reference policy or operational instructions relevant to this;

- Guidance for Recruiting Managers

<https://intranet.defra.gov.uk/hr/jobs-and-recruitment/filling-vacancy/pre-employment-checks/>

- National Security Vetting

<https://intranet.defra.gov.uk/forms/ctc-clearance/>

- The code of conduct and any contractual terms and conditions which form your contract of employment with Defra.

We are allowed to use your personal information in this way where it is in line with our data protection policy and where one of the following reasons arises:

- Where we need to carry out our legal obligations or exercise our employment-related legal rights;
- Where it is substantially in the public interest to do so and necessary for performing our functions as a Government Department or a function of the Crown

8. Data sharing

We will in some circumstances have to share your data with third parties, including third- party service providers and other Civil Service bodies such as the Civil Service Commission, the Advisory Committee on Business Appointments and the Office of the Commissioner for Public Appointments. We require third parties to respect the security of your data and to treat it in accordance with the law.

Why might you share my personal information with third parties?

We will share your personal information with third parties where required by law, where it is necessary to administer the working relationship with you; where it is in the public interest to do so or where it is necessary for the performance of our functions as a Government Department or a function of the Crown. This will, in some circumstances, involve sharing special categories of personal data and, where relevant, data about criminal convictions/allegations. If we are contacted by your new/prospective employer for an employment reference, or by a third party requesting a financial reference - for example to support tenant or mortgage applications. We may also share information on how your personal data relating to financial transactions may be used in counter-fraud and error data matching exercises.

Which third-party service providers process my personal information?

"Third parties" includes third-party service providers (including contractors and designated agents) and other entities within the Civil Service. The following activities are carried out by third-party service providers: payroll, pension administration, benefits provision and administration, IT services, security vetting.

These external parties include:

Third Party	Purpose
HM Revenue and Customs	Tax and pay
DBS, UKVA and UKSB	Visa applications and security vetting
Service providers	Administration of your HR, pay and pension records

Pension service providers, and any additional voluntary contributions providers	Pensions administration
The National Archives and any other holder of official records	If records are deemed to have historical interest
The Office of National Statistics	Data relating to special employment conditions, such as apprenticeships and fast-stream
External auditors	Variety of audit checks to assure compliance with process/policy
Third party service providers, such as childcare voucher schemes	Administration of benefits
Debt collection agencies	Collection of money owed post-employment
Occupational health providers	Legal obligation to support employees health and wellbeing
Outplacement support providers	Support for at risk employees
Lease and fleet car	Administration of lease and fleet car
Travel providers	Travel and accommodation arrangements

Offsite document storage providers	Storage of your HR, pay and pension records
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How secure is my information with third-party service providers?

All our third-party service providers are required to take appropriate security measures to protect your personal information in line with our policies. We do not allow our third-party service providers to use your personal data for their own purposes. We only permit them to process your personal data for specified purposes and in accordance with our instructions.

When might you share my personal information with other organisations within the Civil Service?

We will share your personal information with other Civil Service organisations as part of our regular reporting activities on departmental performance, in the context of a business reorganisation or restructuring exercise, for system maintenance support and hosting of data; business planning/talent management initiatives, succession planning, statistical analysis; and general management and functioning of the Civil Service. Pseudonymised personal data - replacing most identifying fields within a data record by one or more artificial identifiers - is also shared with the Office for National Statistics, mainly for statistical purposes. ONS, along with other auditing bodies such as National Audit Office can also see and review personal data in an audit. As part of the National Fraud Initiative your data may be shared with the Audit Commission.

What about other third parties?

If required, we will need to share your personal information with a regulator or to otherwise comply with the law.

Third Party	Data Shared	Purpose
Unit4 Business World	All data	Cefas' ERP software provider, for the purpose of maintaining and updating the system.
Department for Environment, Food and Rural Affairs	Anonymised/pseudonymised data	Data relating to makeup of the workforce, and for monitoring purposes.
Cabinet Office	Anonymised/pseudonymised data	Data relating to makeup of the workforce, and for monitoring purposes.
Office for National Statistics	Anonymised/pseudonymised data	Data relating to makeup of the workforce, and for monitoring purposes.

Processing information outside the EU

We do not transfer data outside the EU, however some of your personal data may be processed offshore by our services provider, Agresso.

Your personal data receives the same level of protection when processed offshore as it does onshore. This protection is delivered by the use of standard data protection clauses adopted by the European Commission, and used in their entirety in the contract with Agresso.

9. Data security

We have put in place measures to protect the security of your information. Details of these measures are available on the intranet. Third parties will only process your personal information on our instructions and where they have agreed to treat the information confidentially and to keep it secure.

We have put in place appropriate security measures to prevent your personal information from being accidentally lost, used or accessed in an unauthorised way, altered or disclosed. In addition, we limit access to your personal information to those employees, agents, contractors and other third parties who have a business need to know. They will only process your personal information on our instructions.

We have put in place procedures to deal with any suspected data security breach and will notify you and any applicable regulator of a suspected breach where we are legally required to do so.

10. Data retention

How long will you use my information for?

We will only retain your personal information for as long as necessary to fulfil the purposes we collected it for, including for the purposes of satisfying any legal, accounting, or reporting requirements.

To determine the appropriate retention period for personal data, we consider the amount, nature, and sensitivity of the personal data, the potential risk of harm from unauthorised use or disclosure of your personal data, the purposes for which we process your personal data and whether we can achieve those purposes through other means, and the applicable legal requirements.

In some circumstances we will anonymise your personal information so that it can no longer be associated with you, in which case we will use such information without further notice to you. Once you are no longer an employee, worker or contractor of the company we will retain and securely destroy your personal information in accordance with our data retention policy.

11. Rights of access, correction, erasure, and restriction

Your duty to inform us of changes

It is important that the personal information we hold about you is accurate and current. Please keep us informed if your personal information changes during your working relationship with us.

Your rights in connection with personal information

Under certain circumstances, by law you have the right to:

- Request access to your personal information (commonly known as a "data subject access request"). This enables you to receive a copy of the personal information we hold about you and to check that we are lawfully processing it.
- Request correction of the personal information that we hold about you. This enables you to have any incomplete or inaccurate information we hold about you corrected.
- Request erasure of your personal information. This enables you to ask us to delete or remove

personal information where there is no good reason for us continuing to process it. You also have the right to ask us to delete or remove your personal information where you have exercised your right to object to processing (see below).

- Object to processing of your personal information where we are relying on a legitimate interest (or those of a third party) and there is something about your particular situation which makes you want to object to processing on this ground. You also have the right to object where we are processing your personal information for direct marketing purposes.
- Request the restriction of processing of your personal information. This enables you to ask us to suspend the processing of personal information about you, for example if you want us to establish its accuracy or the reason for processing it.
- Request the transfer of your personal information to another party.

If you want to review, verify, correct or request erasure of your personal information, object to the processing of your personal data, or request that we transfer a copy of your personal information to another party, please contact cefassecurityteam@cefas.gov.uk in writing.

No fee is usually required

You will not have to pay a fee to access your personal information (or to exercise any of the other rights). However, we are allowed under the law to charge a reasonable fee if your request for access is clearly unfounded or excessive. Alternatively, we can refuse to comply with the request in such circumstances.

What we need from you

We sometimes need to request specific information from you to help us confirm your identity and ensure your right to access the information (or to exercise any of your other rights). This is another appropriate security measure to ensure that personal information is not disclosed to any person who has no right to receive it.

12. Right to withdraw consent

In the limited circumstances where you have provided your consent to the collection, processing and transfer of your personal information for a specific purpose, you have the right to withdraw your consent for that specific processing at any time. To withdraw your consent, please contact cefassecurityteam@cefas.gov.uk . Once we have received notification that you have withdrawn your consent, we will no longer process your information for the purpose or purposes you originally agreed to, unless we have another legitimate basis for doing so in law.

[Subject to Contract]

Schedule 20 (Processing Data)

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13. Data protection officer

We have appointed a data protection officer (DPO) to oversee compliance with this privacy notice. If you have any questions about this privacy notice or how we handle your personal information, please contact the DPO via cefassecurityteam@cefas.gov.uk

Alternatively, you may wish to contact the DPO at Core Defra via DefraGroupDataProtectionOfficer@defra.gov.uk

You have the right to make a complaint at any time to the Information Commissioner's Office (ICO), the UK supervisory authority for data protection issues. Should you wish to exercise that right full details are available at: [Individual rights | ICO](#)

14 Changes to this privacy notice

We reserve the right to update this privacy notice at any time, and we will provide you with a new privacy notice when we make any substantial updates. We will also notify you in other ways from time to time about the processing of your personal information.

Schedule 21 (Variation Form)

This form is to be used in order to change a contract in accordance with Clause 28 of the Core Terms (Changing the Contract)

Contract Details		
This variation is between:	[Buyer] ("the Buyer") And [insert] name of Supplier ("the Supplier")	
Contract name:	[insert] name of contract to be changed ("the Contract")	
Contract reference number:	[insert] contract reference number	
Details of Proposed Variation		
Variation initiated by:	[delete] as applicable: Buyer/Supplier	
Variation number:	[insert] variation number	
Date variation is raised:	[insert] date	
Proposed variation		
Reason for the variation:	[insert] reason	
An Impact Assessment shall be provided within:	[insert] number] days	
Impact of Variation		
Likely impact of the proposed variation:	[Supplier to insert] assessment of impact	
Outcome of Variation		
Contract variation:	This Contract detailed above is varied as follows: <ul style="list-style-type: none"> [Buyer to insert] original Clauses or Paragraphs to be varied and the changed clause 	
Financial variation:	Original Contract Value:	£ [insert] amount
	Additional cost due to variation:	£ [insert] amount
	New Contract value:	£ [insert] amount

1. This Variation must be agreed and signed by both Parties to the Contract and shall only be effective from the date it is signed by the Buyer
2. Words and expressions in this Variation shall have the meanings given to them in the Contract.

Schedule 21 (Variation Form)
Crown Copyright 2022

3. The Contract, including any previous Variations, shall remain effective and unaltered except as amended by this Variation.

Schedule 21 (Variation Form)

Crown Copyright 2022

Signed by an authorised signatory for and on behalf of the Buyer

Signature

Date

Name (in Capitals)

Address

Signed by an authorised signatory to sign for and on behalf of the Supplier

Signature

Date

Name (in Capitals)

Address

Schedule 22 (Insurance Requirements)

1. The insurance you need to have

- 1.1 The Supplier shall take out and maintain or procure the taking out and maintenance of the insurances as set out in the Annex to this Schedule and any other insurances as may be required by applicable Law (together the “**Insurances**”). The Supplier shall ensure that each of the Insurances is effective no later than the Start Date in respect of those Insurances set out in the Annex to this Schedule and those required by applicable Law; and
- 1.2 The Insurances shall be taken out and maintained with insurers who are of good financial standing and of good repute in the international insurance market.
- 1.3 Where specified in the Annex to this Schedule the Supplier shall ensure that the relevant policy of insurance shall contain an indemnity to principals clause under which the Buyer shall be indemnified in respect of claims made against the Buyer in respect of death or bodily injury or third party property damage arising out of or in connection with the Deliverables and for which the Supplier is legally liable.

2. How to manage the insurance

- 2.1 Without limiting the other provisions of this Contract, the Supplier shall:
 - 2.1.1 take or procure the taking of all reasonable risk management and risk control measures in relation to Deliverables as it would be reasonable to expect of a prudent contractor acting in accordance with Good Industry Practice, including the investigation and reports of relevant claims to insurers;
 - 2.1.2 promptly notify the insurers in writing of any relevant material fact under any Insurances of which the Supplier is or becomes aware; and

3. What happens if you aren't insured

- 3.1 The Supplier shall not take any action or fail to take any action or (insofar as is reasonably within its power) permit anything to occur in relation to it which would entitle any insurer to refuse to pay any claim under any of the Insurances.
- 3.2 Where the Supplier has failed to purchase or maintain any of the Insurances in full force and effect, the Buyer may elect (but shall not be obliged) following written notice to the Supplier to purchase the relevant Insurances and recover the reasonable premium and other reasonable costs incurred in connection therewith as a debt due from the Supplier.

4. Evidence of insurance you must provide

- 4.1 The Supplier shall upon the Start Date and within 15 Working Days after the renewal of each of the Insurances, provide evidence, in a form satisfactory to the Buyer, that the Insurances are in force and effect and meet in full the requirements of this Schedule.

5. Making sure you are insured to the required amount

- 5.1 Where the minimum limit of indemnity required in relation to any of the Insurances is provided as being "in the aggregate" and the level of insurance cover available falls below that minimum because a claim or claims, the Supplier shall ensure that the insurance cover is reinstated to maintain at all times the minimum limit of indemnity specified in the Annex to this Schedule.

6. Cancelled Insurance

- 6.1 The Supplier shall notify the Buyer in writing at least five (5) Working Days prior to the cancellation, suspension, termination or non-renewal of any of the Insurances. This Clause 6.1 shall not apply where the termination of any Insurances occurs purely as a result of a change of insurer in respect of any of the Insurances required to be taken out and maintained in accordance with this Schedule.

7. Insurance claims

- 7.1 The Supplier shall promptly notify to insurers any matter arising from, or in relation to, the Deliverables, or the Contract for which it may be entitled to claim under any of the Insurances. In the event that the Buyer receives a claim relating to or arising out of the Contract or the Deliverables, the Supplier shall co-operate with the Buyer and assist it in dealing with such claims including without limitation providing information and documentation in a timely manner.
- 7.2 Except where the Buyer is the claimant party, the Supplier shall give the Buyer notice within twenty (20) Working Days after any insurance claim in excess of £100,000 relating to or arising out of the provision of the Deliverables or this Contract on any of the Insurances or which, but for the application of the applicable policy excess, would be made on any of the Insurances and (if required by the Buyer) full details of the incident giving rise to the claim.
- 7.3 Where any Insurance requires payment of a premium, the Supplier shall be liable for and shall promptly pay such premium.
- 7.4 Where any Insurance is subject to an excess or deductible below which the indemnity from insurers is excluded, the Supplier shall be liable for such excess or deductible. The Supplier shall not be entitled to recover from the Buyer any sum paid by way of excess or deductible under the Insurances whether under the terms of this Contract or otherwise.

ANNEX: REQUIRED INSURANCES

PART A: THIRD PARTY PUBLIC AND PRODUCTS LIABILITY INSURANCE

1 Insured

- 1.1 The Supplier

2 Interest

- 2.1 To indemnify the insured in respect of all sums which the insured shall become legally liable to pay as damages, including claimant's costs and expenses, in respect of accidental:

- (a) death or bodily injury to or sickness, illness or disease contracted by any person; and
- (b) loss of or damage to physical property;

happening during the period of insurance and arising out of or in connection with the provision of the Deliverables and in connection with this Contract.

3 Limit of indemnity

- 3.1 Not less than £10,000,000 in respect of any one occurrence, the number of occurrences being unlimited in any annual policy period, but £10,000,000 in the aggregate per annum in respect of products and pollution liability (to the extent covered by the relevant policy).

4 Period of insurance

- 4.1 From the Start Date of this Contract for the Initial Period and any extension of the Initial Period, and renewable on an annual basis until the conclusion of Parts A and B unless agreed otherwise by the Buyer in writing.

5 Principal cover features and extensions

- 5.1 Indemnity to principals clause under which the Buyer shall be indemnified in respect of claims made against the Buyer in respect of death or bodily injury or third party property damage arising out of or in connection with the Contract and for which the Supplier is legally liable.

6 Principal exclusions

- 6.1 War and related perils.
- 6.2 Nuclear and radioactive risks.
- 6.3 Liability for death, illness, disease or bodily injury sustained by employees of the Insured arising out of the course of their employment.
- 6.4 Liability arising out of the use of mechanically propelled vehicles whilst required to be compulsorily insured by applicable Law in respect of such vehicles.

Schedule 22 (Insurance Requirements)

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- 6.5 Liability in respect of predetermined penalties or liquidated damages imposed under any contract entered into by the Insured.
- 6.6 Liability arising out of technical or professional advice other than in respect of death or bodily injury to persons or damage to third party property.
- 6.7 Liability arising from the ownership, possession or use of any aircraft or marine vessel.
- 6.8 Liability arising from seepage and pollution unless caused by a sudden, unintended, unexpected and accidental occurrence.

7 Maximum deductible threshold

- 7.1 Not to exceed **£2,500** for each and every third party property damage claim (personal injury claims to be paid in full).

PART B: UNITED KINGDOM COMPULSORY INSURANCES

The Supplier shall meet its insurance obligations under applicable Law in full, including, United Kingdom employers' liability insurance and motor third party liability insurance.

PART C: PROFESSIONAL INDEMNITY INSURANCE

1. Insured

The Supplier

2. Interest

To indemnify the insured in respect of all sums which the insured shall become legally liable to pay (including claimants' costs and expenses) as a result of claims first made against the insured during the period of insurance by reason of any negligent act, error and/or omission arising from or in connection with the provision of the Deliverables.

3. Limit of indemnity

Not less than ten million pounds (£10,000,000) in respect of any one claim and in the aggregate per annum.

4. Period of insurance

From the Start Date of this Contract for the Initial Period and any extension of the Initial Period, and renewable on an annual basis unless agreed otherwise by the Buyer in writing (a) throughout the duration of the Initial Period or until earlier termination of this Contract and (b) for a period of six (6) years thereafter.

5. Principal cover features and extensions

Retroactive cover to apply to any "claims made policy wording" in respect of this Contract or retroactive date to be no later than the start of the Contract.

[Subject to Contract]

Schedule 22 (Insurance Requirements)

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6. PRINCIPAL EXCLUSIONS

6.1 War and related perils.

6.2 Nuclear and radioactive risks.

7. MAXIMUM DEDUCTIBLE THRESHOLD

Not to exceed **£50,000** for each and every claim.

Schedule 24 (Financial Difficulties)

1. Definitions

- 1.1 In this Schedule, the following words shall have the following meanings and they shall supplement Schedule 1 (Definitions):

“Applicable Financial Indicators”	means the financial indicators from Part C of Annex 2 which are to apply to the Monitored Suppliers as set out in Part B of Annex 3;
"Credit Rating Threshold"	the minimum credit rating level for each entity in the FDE Group as set out in Part A of Annex 2;
“Credit Reference Agencies”	the credit reference agencies listed in Part B of Annex 1;
“Credit Score Notification Trigger”	the minimum size of any downgrade in a credit score, set out in Part B of Annex 2, which triggers a Credit Score Notification Trigger Event;
“Credit Score Notification Trigger Event”	any downgrade of a credit score which is equal to or greater than the Credit Score Notification Trigger;
"Credit Score Threshold"	the minimum credit score level for each entity in the FDE Group as set out in Part B of Annex 2;
"Financial Distress Service Continuity Plan"	a plan setting out how the Supplier will ensure the continued performance and delivery of the Deliverables in accordance with the Contract in the event that a Financial Distress Event occurs. This plan should include what the Buyer would need to put in place to ensure performance and delivery of the Deliverables in accordance with this Contract up to and including any Insolvency Event in respect of the relevant FDE Group entity;
“Financial Indicators”	in respect of the Supplier, Key Sub-contractors and the Guarantor, means each of the financial indicators set out at Part C of Annex 2; and in respect of each Monitored Supplier, means those Applicable Financial Indicators;

"Financial Target Thresholds"	means the target thresholds for each of the Financial Indicators set out at Part C of Annex 2;
"Primary Metric"	[credit rating pursuant to Paragraph 3.3]/[credit score pursuant to Paragraph 4.3]/[financial indicators pursuant to Paragraph 5.4]
"Monitored Supplier"	those entities specified in Part B of Annex 3;and
"Rating Agencies"	the rating agencies listed in Part A of Annex 1.

2. When this Schedule applies

- 2.1 The Parties shall comply with the provisions of this Schedule in relation to the assessment of the financial standing of the FDE Group and the consequences of a change to that financial standing.
- 2.2 The terms of this Schedule shall survive under the Contract until the termination or expiry of the Contract.

3. Credit Ratings

- 3.1 The Supplier warrants and represents to the Buyer that as at the Start Date the long term credit ratings issued for each entity in the FDE Group by each of the Rating Agencies are as set out in Part A of Annex 2.
- 3.2 The Supplier shall:
 - 3.2.1 regularly monitor the credit ratings of each entity in the FDE Group with the Rating Agencies; and
 - 3.2.2 promptly (and in any event within five (5) Working Days) notify the Buyer in writing if there is any downgrade in the credit rating issued by any Rating Agency for any entity in the FDE Group.
- 3.3 For the purposes of determining whether a Financial Distress Event has occurred, and for the purposes of determining relief under Paragraph 8 if credit rating is the Primary Metric, the credit rating of an FDE Group entity shall be deemed to have dropped below the applicable Credit Rating Threshold if any of the Rating Agencies have given a credit rating level for that FDE Group entity which is below the applicable Credit Rating Threshold.

4. Credit Scores

- 4.1 The Supplier warrants and represents to the Buyer that as at the Start Date the credit scores issued for each entity in the FDE Group by each of the Credit Reference Agencies are as set out in Part B of Annex 2.
- 4.2 The Supplier shall:
 - 4.2.1 regularly monitor the credit scores of each entity in the FDE Group with the Credit Reference Agencies; and
 - 4.2.2 promptly notify (or shall procure that its auditors promptly notify) the Buyer in writing if there is any Credit Score Notification Trigger Event for any entity in the FDE Group (and in any event within five (5) Working Days).
- 4.3 For the purposes of determining whether a Financial Distress Event has occurred, and for the purposes of determining relief under Paragraph 8 if credit score is the Primary Metric, the credit score of an FDE Group entity shall be deemed to have dropped below the applicable Credit Score Threshold if any of the Credit Reference Agencies have given a credit score for that FDE Group entity which is below the applicable Credit Score Threshold.

5. Financial Indicators

- 5.1 The Supplier shall monitor and report on the Financial Indicators for each entity in the FDE Group against the Financial Target Thresholds at least at the frequency set out for each at Part C of Annex 2 (where specified) and in any event, on a regular basis and no less than once a year within one hundred and twenty (120) days after the accounting reference date
- 5.2 Subject to the calculation methodology set out at Annex 4 of this Schedule, the Financial Indicators and the corresponding calculations and thresholds used to determine whether a Financial Distress Event has occurred in respect of those Financial Indicators, shall be as set out in Appendix I: *Standard Financial Ratios of Assessing and Monitoring the Economic and Financial Standing of Bidders and Suppliers – May 2021* (as amended, supplemented or replaced from time to time) which as at the Start Date can be found at:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/987132/Assessing and monitoring the economic and financial standing of suppliers guidance note May 2021.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/987132/Assessing_and_monitoring_the_economic_and_financial_standing_of_suppliers_guidance_note_May_2021.pdf)
- 5.3 Each report submitted by the Supplier pursuant to Paragraph 5.1 shall:
 - 5.3.1 be a single report with separate sections for each of the FDE Group entities;
 - 5.3.2 contain a sufficient level of information to enable the Buyer to verify the calculations that have been made in respect of the Financial Indicators;

- 5.3.3 include key financial and other supporting information (including any accounts data that has been relied on) as separate annexes; [and]
 - 5.3.4 be based on the audited accounts for the date or period on which the Financial Indicator is based or, where the Financial Indicator is not linked to an accounting period or an accounting reference date, on unaudited management accounts prepared in accordance with their normal timetable[.]/[; and]
 - 5.3.5 include a history of the Financial Indicators reported by the Supplier in graph form to enable the Buyer to easily analyse and assess the trends in financial performance.]
- 5.4 For the purposes of determining whether a Financial Distress Event has occurred, and for the purposes of determining relief under Paragraph 8 if financial indicators are the Primary Metric, the Financial Indicator of an FDE Group entity shall be deemed to have dropped below the applicable Financial Target Threshold if:
- 5.4.1 a report submitted by the Supplier pursuant to Paragraph 5.1 shows that any FDE Group entity has failed to meet or exceed the Financial Target Threshold for any [one] of the Financial Indicators set out in Part C of Annex 2 of this Schedule;
 - 5.4.2 a report submitted by the Supplier pursuant to Paragraph 5.1 does not comply with the requirements set out in Paragraph 5.3; or
 - 5.4.3 the Supplier does not deliver a report pursuant to Paragraph 5.1 in accordance with the applicable monitoring and reporting frequency.

6. What happens if there is a financial distress event

- 6.1 The Supplier shall promptly notify (or shall procure that its auditors promptly notify) the Buyer in writing following the occurrence of a Financial Distress Event or any fact, circumstance or matter which could cause a Financial Distress Event and in any event, ensure that such notification is made within 10 Working Days of the date on which the Supplier first becomes aware of the Financial Distress Event or the fact, circumstance or matter which could cause a Financial Distress Event.
- 6.2 In the event of a Financial Distress Event then, immediately upon notification of the Financial Distress Event (or if the Buyer becomes aware of the Financial Distress Event without notification and brings the event to the attention of the Supplier), the Supplier shall have the obligations and the Buyer shall have the rights and remedies as set out in Paragraphs 6.4 to 6.6.

6.3 NOT USED

6.4 The Supplier shall (and shall procure that each Additional FDE Group Member shall):

6.4.1 at the request of the Buyer meet the Buyer as soon as reasonably practicable (and in any event within three (3) Working Days of the initial notification (or awareness) of the Financial Distress Event) to review the effect of the Financial Distress Event on the continued performance of the Contract and delivery of the Deliverables in accordance the Contract; and

6.4.2 where the Buyer reasonably believes (taking into account the discussions and any representations made under Paragraph 6.4.1) that the Financial Distress Event could impact on the continued performance of the Contract and delivery of the Deliverables in accordance with the Contract:

- a) submit to the Buyer for its Approval, a draft Financial Distress Service Continuity Plan as soon as reasonably practicable (and in any event, within ten (10) Working Days of the initial notification (or awareness) of the Financial Distress Event);
- b) use reasonable endeavours to put in place the necessary measures with each Additional FDE Group Member to ensure that it is able to provide financial information relating to that Additional FDE Group Member to the Buyer; and
- c) provide such financial information relating to FDE Group entity as the Buyer may reasonably require.

6.5 If the Buyer does not (acting reasonably) approve the draft Financial Distress Service Continuity Plan, it shall inform the Supplier of its reasons and the Supplier shall take those reasons into account in the preparation of a further draft Financial Distress Service Continuity Plan, which shall be resubmitted to the Buyer within five (5) Working Days of the rejection of the first or subsequent (as the case may be) drafts. This process shall be repeated until the Financial Distress Service Continuity Plan is either:

6.5.1 Approved;

6.5.2 referred, by notice sent by either Party to the other Party explaining why it thinks the Financial Distress Service Continuity Plan has not been Approved, to commercial negotiation led by senior representatives who have authority to agree the Financial Distress Service Continuity Plan (to be held within 28 days of the date of the notice); or

6.5.3 finally rejected by the Buyer.

- 6.6 Following Approval of the Financial Distress Service Continuity Plan by the Buyer, the Supplier shall:
- 6.6.1 on a regular basis (which shall not be less than Monthly), review the Financial Distress Service Continuity Plan and assess whether it remains adequate and up to date to ensure the continued performance the Contract and delivery of the Deliverables in accordance with the Contract;
 - 6.6.2 provide a written report of the results of each review and assessment carried out under Paragraph 6.6.1 to the Buyer;
 - 6.6.3 where the Financial Distress Service Continuity Plan is not adequate or up to date in accordance with Paragraph 6.6.1, submit an updated Financial Distress Service Continuity Plan to the Buyer for its Approval, and the provisions of Paragraphs 6.5 shall apply to the review and Approval process for the updated Financial Distress Service Continuity Plan; and
 - 6.6.4 comply with the Financial Distress Service Continuity Plan (including any updated Financial Distress Service Continuity Plan).
- 6.7 Where the Supplier reasonably believes that the relevant Financial Distress Event (or the circumstance or matter which has caused or otherwise led to it) no longer exists, it shall notify the Buyer and subject to the agreement of the Parties, the Supplier may be relieved of its obligations under Paragraph 6.6.

7. When the Buyer can terminate for financial distress

- 7.1 The Buyer shall be entitled to terminate this Contract for material Default if:
- 7.1.1 the Supplier fails to notify the Buyer of a Financial Distress Event in accordance with Paragraph 6.1;
 - 7.1.2 the Supplier fails to comply with any part of Paragraph 6.4;
 - 7.1.3 subject to Paragraph 7.2, the Buyer finally rejects a Financial Distress Service Continuity Plan (or any updated Financial Distress Service Continuity Plan) in accordance with Paragraph 6.5.3;
 - 7.1.4 the senior representatives who have authority to agree the Financial Distress Service Continuity Plan (acting reasonably) do not meet within 28 days of the date of the notice of referral pursuant to Paragraph 6.5.2;
 - 7.1.5 the senior representatives who have authority to agree the Financial Distress Service Continuity Plan (acting reasonably) do not agree the Financial Distress Service Continuity Plan after it has been referred pursuant to Paragraph 6.5.2; and/or

7.1.6 the Supplier fails to comply with the terms of the Financial Distress Service Continuity Plan (or any updated Financial Distress Service Continuity Plan) in accordance with Paragraph 6.6.4.

7.2 A material Default may only occur under Paragraph 7.1.3 after the expiry of the first five (5) Working Days period for the Supplier to submit a revised draft of the first draft of the Financial Distress Service Continuity Plan starting on and from the date on which the Buyer first notified the Supplier that Supplier must submit a revised draft of the first draft Financial Distress Service Continuity Plan.

8. What happens If your Primary Metric is still good

Without prejudice to the Supplier's obligations and the Buyer's rights and remedies under Paragraph 6, if, following the occurrence of a Financial Distress Event, the Supplier evidences to the Buyer's satisfaction that the Primary Metric shows that the Financial Distress Event no longer exists, then:

8.1 the Supplier shall be relieved automatically of its obligations under Paragraphs 6.4 to 6.6; and

8.2 the Buyer shall not be entitled to require the Supplier to provide financial information in accordance with Paragraph 6.4.2c).

ANNEX 1: RATING AGENCIES AND CREDIT REFERENCE AGENCIES

Part A: Rating Agencies

[Rating Agency 1]

[Rating Agency 2]

Part B: Credit Reference Agencies

[Credit Reference Agency 1]

[Credit Reference Agency 2]

ANNEX 2: CREDIT RATINGS, CREDIT SCORES AND FINANCIAL INDICATORS

Part A: Credit Rating

Entity	Credit rating (long term)	Credit Rating Threshold
Supplier		
Guarantor		
[Key Subcontractor]		
[Monitored Supplier]		

Part B: Credit Score

Entity	Credit score	Credit Score Notification Trigger	Credit Score Threshold
Supplier			
Guarantor			
[Key Subcontractor]			
[Monitored Supplier]			

Part C: Financial Indicators

Financial Indicator	Calculation ¹	Financial Target Threshold:	Monitoring and Reporting Frequency [if different from the default position set out in Paragraph 5.1]
1 [Operating Margin] OR	[Operating Margin = Operating Profit / Revenue]	[> [X%]]	Tested and reported [yearly / half yearly] in arrears within [120 / 90] days of each [accounting reference date / half year end] based upon figures

Financial Indicator	Calculation ¹	Financial Target Threshold:	Monitoring and Reporting Frequency [if different from the default position set out in Paragraph 5.1]
[The higher of (a) the Operating Margin for the most recent 12 month period and (b) the average Operating Margin for the last two 12 month periods]			for the 12 months ending on the relevant [accounting reference date / half year end]
2 [Free Cash Flow to Net Debt Ratio] OR [Net Debt to EBITDA Ratio]	[Free Cash Flow to Net Debt Ratio = Free Cash Flow / Net Debt] OR [Net Debt to EBITDA ratio = Net Debt / EBITDA]	[> [X%]] OR [< [X]] times	Tested and reported [yearly / half yearly] in arrears within [120 / 90] days of each [accounting reference date / half year end] based upon [Free Cash Flow / EBITDA] for the 12 months ending on, and Net Debt at, the relevant [accounting reference date / half year end]
3 [Net Debt + Net Pension Deficit to EBITDA ratio]	[Net Debt + Net Pension Deficit to EBITDA Ratio = (Net Debt + Net Pension Deficit) / EBITDA]	[< [X]] times	Tested and reported yearly in arrears within 120 days of each accounting reference date based upon EBITDA for the 12 months ending on, and the Net Debt and Net Pension Deficit at, the relevant accounting reference date
4 [Net Interest Paid Cover]	[Net Interest Paid Cover = Earnings Before Interest and Tax / Net Interest Paid]	[> [X]] times	Tested and reported [yearly / half yearly] in arrears within [120 / 90] days of each [accounting reference date / half year end] based upon figures for the 12 months ending on the relevant

Financial Indicator	Calculation ¹	Financial Target Threshold:	Monitoring and Reporting Frequency [if different from the default position set out in Paragraph 5.1]
			[accounting reference date / half year end]
5 [Acid Ratio]	[Acid Ratio = (Current Assets – Inventories) / Current Liabilities]	[> [X]] times	Tested and reported [yearly / half yearly] in arrears within [120 / 90] days of each [accounting reference date / half year end] based upon figures at the relevant [accounting reference date / half year end]
6 [Net Asset value]	[Net Asset Value = Net Assets]	[> £0]	Tested and reported [yearly / half yearly] in arrears within [120 / 90] days of each [accounting reference date / half year end] based upon figures at the relevant [accounting reference date / half year end]
7 [Group Exposure Ratio]	[Group Exposure / Gross Assets]	[< [X]]%	Tested and reported yearly in arrears within 120 days of each accounting reference date based upon figures at the relevant accounting reference date
Financial Target 8 [etc.]	[etc.]	[etc.]	[etc.]

Key: ¹ – See Annex 4 of this Schedule which sets out the calculation methodology to be used in the calculation of each Financial Indicator.

ANNEX 3 – ADDITIONAL FDE GROUP MEMBERS AND MONITORED SUPPLIERS

Part A: Additional FDE Group Members

1. **[[Guarantor]**
2. **[Key-Subcontractors]**; and
3. **[Monitored Suppliers]**;

Part B: Monitored Suppliers

[Guidance: Insert details of any other entities which the Supplier is required to monitor against the Financial Indicators. These are in addition to the Supplier's monitoring of itself, the Guarantor and the Key Subcontractors. Not all the Financial Indicators may be applicable to a Monitored Supplier, so indicate which of those are to apply in the table below]

Entity Name	Company Number	Applicable Financial Indicators (these are the Financial Indicators from the table in Part C of Annex 2 which are to apply to the Monitored Suppliers)

Schedule 25 (Rectification Plan)

Request for [Revised] Rectification Plan			
Details of the Notifiable Default:	[Guidance: Explain the Notifiable Default, with clear schedule and clause references as appropriate]		
Deadline for receiving the [Revised] Rectification Plan:	[add] date (minimum 10 days from request)		
Signed by Buyer:		Date:	
Supplier [Revised] Rectification Plan			
Cause of the Notifiable Default	[add] cause]		
Anticipated impact assessment:	[add] impact]		
Actual effect of Notifiable Default:	[add] effect]		
Steps to be taken to rectification:	Steps	Timescale	
	1.	[date]	
	2.	[date]	
	3.	[date]	
	4.	[date]	
	[...]	[date]	
Timescale for complete Rectification of Notifiable Default	[X] Working Days		
Steps taken to prevent recurrence of Notifiable Default	Steps	Timescale	
	1.	[date]	
	2.	[date]	
	3.	[date]	
	4.	[date]	

	[...]	[date]	
Signed by the Supplier:		Date:	
Review of Rectification Plan Buyer			
Outcome of review	[Plan Accepted] [Plan Rejected] [Revised Plan Requested]		
Reasons for rejection (if applicable)	[add reasons]		
Signed by Buyer		Date:	

Schedule 26 (Sustainability)

Definitions

“Modern Slavery Assessment Tool”	means the modern slavery risk identification and management tool which can be found online at: https://supplierregistration.cabinetoffice.gov.uk/msat
“Supply Chain Map”	<p>means details of (i) the Supplier, (ii) all Subcontractors and (iii) any other entity that the Supplier is aware is in its supply chain that is not a Subcontractor, setting out at least:</p> <ul style="list-style-type: none">(a) the name, registered office and company registration number of each entity in the supply chain;(b) the function of each entity in the supply chain; and(c) the location of any premises at which an entity in the supply chain carries out a function in the supply chain;]
“Waste Hierarchy”	<p>means prioritisation of waste management in the following order of preference as set out in the Waste (England and Wales) Regulation 2011:</p> <ul style="list-style-type: none">(a) Prevention;(b) Preparing for re-use;(c) Recycling;(d) Other Recovery; and(e) Disposal.

Part A

1. Public Sector Equality Duty

1.1. In addition to legal obligations, where the Supplier is providing a Deliverable to which the Public Sector Equality duty applies, the Supplier shall support the Buyer in fulfilling its Public Sector Equality duty under S149 of the Equality Act 2010 by ensuring that it fulfils its obligations under the Contract in a way that seeks to:

1.1.1. eliminate discrimination, harassment or victimisation and any other conduct prohibited by the Equality Act 2010; and

1.1.2. advance:

1.1.2.1. equality of opportunity; and

1.1.2.2. good relations,

between those with a protected characteristic (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation, and marriage and civil partnership) and those who do not share it.

2. Employment Law

2.1. The Supplier must perform its obligations meeting the requirements of all applicable Law regarding employment.

3. Modern Slavery

3.1. The Supplier:

- 3.1.1. shall not use, nor allow its Subcontractors to use forced, bonded or involuntary prison labour;
- 3.1.2. shall not require any Supplier Staff or Subcontractor Staff to lodge deposits or identity papers with the employer and shall be free to leave their employer after reasonable notice;
- 3.1.3. warrants and represents that it has not been convicted of any slavery or human trafficking offences anywhere around the world;
- 3.1.4. warrants that to the best of its knowledge it is not currently under investigation, inquiry or enforcement proceedings in relation to any allegation of slavery or human trafficking offences anywhere around the world;
- 3.1.5. shall make reasonable enquires to ensure that its officers, employees and Subcontractors have not been convicted of slavery or human trafficking offences anywhere around the world;
- 3.1.6. shall have and maintain throughout the Term its own policies and procedures to ensure its compliance with the Modern Slavery Act 2015 and include in its contracts with its Subcontractors anti-slavery and human trafficking provisions;
- 3.1.7. shall implement due diligence procedures to ensure that there is no slavery or human trafficking in any part of its supply chain performing obligations under the Contract;
- 3.1.8. shall prepare and deliver to the Buyer, an annual slavery and human trafficking report setting out the steps it has taken to ensure that slavery and human trafficking is not taking place in any of its supply chains or in any part of its business with its annual certification of compliance with this Paragraph 3;

- 3.1.9. shall not use, nor allow its employees or Subcontractors to use physical abuse or discipline, the threat of physical abuse, sexual or other harassment and verbal abuse or other forms of intimidation of its employees or Subcontractors;
- 3.1.10. shall not use or allow child or slave labour to be used by its Subcontractors; and
- 3.1.11. shall report the discovery or suspicion of any slavery or trafficking by it or its Subcontractors to the Buyer and Modern Slavery Helpline.

4. Environmental Requirements

- 4.1. The Supplier must perform its obligations meeting in all material respects the requirements of all applicable Laws regarding the environment.
- 4.2. In performing its obligations under the Contract, the Supplier shall, where applicable to the Contract, to the reasonable satisfaction of the Buyer:
 - 4.2.1. prioritise waste management in accordance with the Waste Hierarchy as set out in Law;
 - 4.2.2. be responsible for ensuring that any waste generated by the Supplier and sent for recycling, disposal or other recovery as a consequence of this Contract is taken by a licensed waste carrier to an authorised site for treatment or disposal and that the disposal or treatment of waste complies with the Law; and
 - 4.2.3. ensure that it and any third parties used to undertake recycling, disposal or other recovery as a consequence of this Contract do so in a legally compliant way, and can demonstrate that reasonable checks are undertaken to ensure this on a regular basis and provide relevant data and evidence of recycling, recovery and disposal.
- 4.3. In circumstances that a permit, licence or exemption to carry or send waste generated under this Contract is revoked, the Supplier shall cease to carry or send waste or allow waste to be carried by any Subcontractor until authorisation is obtained from the Environment Agency.
- 4.4. In performing its obligations under the Contract, the Supplier shall to the reasonable satisfaction of the Buyer (where the anticipated Charges in any Contract Year are above £5 million per annum (excluding VAT)), where related to and proportionate to the contract in accordance with PPN 06/21), publish and maintain a credible Carbon Reduction Plan in accordance with PPN 06/21.
- 4.5. The Supplier shall meet the applicable Government Buying Standards applicable to Deliverables which can be found online at:

<https://www.gov.uk/government/collections/sustainable-procurement-the-government-buying-standards-gbs>.

5. Supplier Code of Conduct

- 5.1. In February 2019, HM Government published a Supplier Code of Conduct setting out the standards and behaviours expected of suppliers who work with government which can be found online at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/779660/20190220-Supplier_Code_of_Conduct.pdf

The Buyer expects to meet, and expects its suppliers and subcontractors to meet, the standards set out in that Code.

6. Reporting

The Supplier shall comply with reasonable requests by the Buyer for information evidencing compliance with any of the requirements in Paragraphs 1-5 of this Part A above within fourteen (14) days of such request, [provided that such requests are limited to [two] per requirement per Contract Year].

Schedule 29 (Key Supplier Staff)

- 1.1 The Annex 1 to this Schedule lists the key roles ("**Key Roles**") and names of the persons who the Supplier shall appoint to fill those Key Roles at the Start Date ("**Key Staff**").
- 1.2 The Supplier shall ensure that the Key Staff fulfil the Key Roles at all times during the Contract Period.
- 1.3 The Buyer may identify any further roles as being Key Roles and, following agreement to the same by the Supplier, the relevant person selected to fill those Key Roles shall be included on the list of Key Staff.
- 1.4 The Supplier shall not and shall procure that any Subcontractor shall not remove or replace any Key Staff unless:
 - 1.4.1 requested to do so by the Buyer or the Buyer Approves such removal or replacement (not to be unreasonably withheld or delayed);
 - 1.4.2 the person concerned resigns, retires or dies or is on maternity or long-term sick leave; or
 - 1.4.3 the person's employment or contractual arrangement with the Supplier or Subcontractor is terminated for material breach of contract by the employee.
- 1.5 The Supplier shall:
 - 1.5.1 notify the Buyer promptly of the absence of any Key Staff (other than for short-term sickness or holidays of two (2) weeks or less, in which case the Supplier shall ensure appropriate temporary cover for that Key Role);
 - 1.5.2 ensure that any Key Role is not vacant for any longer than ten (10) Working Days;
 - 1.5.3 give as much notice as is reasonably practicable of its intention to remove or replace any member of Key Staff and, except in the cases of death, unexpected ill health or a material breach of the Key Staff's employment contract, this will mean at least three (3) Months' notice;
 - 1.5.4 ensure that all arrangements for planned changes in Key Staff provide adequate periods during which incoming and outgoing staff work together to transfer responsibilities and ensure that such change does not have an adverse impact on the provision of the Deliverables; and
 - 1.5.5 ensure that any replacement for a Key Role has a level of qualifications and experience appropriate to the relevant Key Role and is fully competent to carry out the tasks assigned to the Key Staff whom he or she has replaced.
- 1.6 The Buyer may require the Supplier to remove or procure that any Subcontractor shall remove any Key Staff that the Buyer considers in any

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Schedule 29 (Key Supplier Staff)

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respect unsatisfactory. The Buyer shall not be liable for the cost of replacing any Key Staff.

Annex 1- Key Roles

Key Role	Key Staff	Contract Details
Project Manager	██████████	Full-time PAYE employee
Lead Naval Architect	██████████	Full-time PAYE employee
Technical Authority	██████████	Full-time PAYE employee

[Subject to Contract]

Schedule 36 (Intellectual Property Rights)

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1. Intellectual Property Rights

1.1. Each Party keeps ownership of its own Existing IPR. Neither Party has the right to use the other Party's IPR, including any use of the other Party's names, logos or trademarks, except as expressly granted elsewhere under the Contract or otherwise agreed in writing.

1.2. Except as expressly granted elsewhere under the Contract, neither Party acquires any right, title or interest in or to the IPR owned by the other Party or any third party.

1.3. Licences granted by the Supplier: Supplier Existing IPR

1.3.1. Where the Buyer orders Deliverables which contain or rely upon Supplier Existing IPR, the Supplier hereby grants the Buyer a Supplier Existing IPR Licence on the terms set out in Paragraph 1.3.2.

1.3.2. The Supplier Existing IPR Licence granted by the Supplier to the Buyer is a non-exclusive, perpetual, royalty-free, irrevocable, transferable, worldwide licence to use, change and sub-license any Supplier Existing IPR which is reasonably required by the Buyer to enable it:

1.3.2.1. or any End User to use and receive the Deliverables; or

1.3.2.2. to use, sub-licence or commercially exploit (including by publication under Open Licence) the New IPR and New IPR Items,

for any purpose relating to the exercise of the Buyer's (or, if the Buyer is a Public Sector Body, any other Public Sector Body's) business or function.

1.4. Licences granted by the Buyer and New IPR

1.4.1. Any New IPR created under the Contract is owned by the Buyer. The Buyer gives the Supplier a licence to use any Buyer Existing IPR and New IPR for the purpose of fulfilling its obligations during the Contract Period.

1.4.2. Where a Party acquires ownership of IPR incorrectly under this Contract it must do everything reasonably necessary to complete a transfer assigning them in writing to the other Party on request and at its own cost.

Schedule 36 (Intellectual Property Rights)

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- 1.4.3. Unless otherwise agreed in writing, the Supplier and the Buyer will record any New IPR in the table at Annex 1 to this Schedule 36 and keep this updated throughout the Contract Period.

1.5. Open Licence Publication

- 1.5.1. Subject to Paragraph 1.5.4, the Supplier agrees that the Buyer may at its sole discretion publish under Open Licence all or part of the New IPR Items.
- 1.5.2. Subject to Paragraph 1.5.4, the Supplier hereby warrants that the New IPR Items are suitable for release under Open Licence.
- 1.5.3. The Supplier will supply any or all New IPR Items in a format suitable for publication under Open Licence ("the Open Licence Publication Material") within 30 days of written request from the Buyer ("Buyer Open Licence Request").
- 1.5.4. The Supplier may within 15 days of a Buyer Open Licence Request under Paragraph 1.5.3 request in writing that the Buyer excludes all or part of:
 - 1.5.4.1. the New IPR; or
 - 1.5.4.2. Supplier Existing IPR or Third Party IPR that would otherwise be included in the Open Licence Publication Material supplied to the Buyer pursuant to Paragraph 1.5.3

from Open Licence publication.

- 1.5.5. Any decision to Approve any such request from the Supplier pursuant to Paragraph 1.5.4 shall be at the Buyer's sole discretion, not to be unreasonably withheld, delayed or conditioned.
- 1.5.6. Subject to Clause 15 of the Core Terms, the Buyer will not be liable in the event that any Supplier Existing IPR or Third Party IPR is included in the Open Licence Publication Material published by the Buyer.

1.6. Third Party IPR

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1.6.1. The Supplier shall not use in the delivery of the Deliverables any Third Party IPR unless Approval is granted by the Buyer and it has procured that the owner or an authorised licensor of the relevant Third Party IPR has granted a Third Party IPR Licence on the terms set out in Paragraph 1.6.3. If the Supplier cannot obtain for the Buyer a licence on the terms set out in Paragraph 1.6.3 in respect of any Third Party IPR the Supplier shall:

1.6.1.1. notify the Buyer in writing; and

1.6.1.2. use the relevant Third Party IPR only if the Buyer has provided authorisation in writing, with reference to the acts authorised and the specific IPR involved.

1.6.2. In spite of any other provisions of the Contract and for the avoidance of doubt, award of this Contract by the Buyer and the ordering of any Deliverable under it does not constitute an authorisation by the Crown under Sections 55 and 56 of the Patents Act 1977 Section 12 of the Registered Designs Act 1949 or Sections 240 – 243 of the Copyright, Designs and Patents Act 1988.

1.6.3. The Third Party IPR Licence granted to the Buyer shall be a non-exclusive, perpetual, royalty-free, irrevocable, transferable, worldwide licence to use, change and sub-licence any Third Party IPR which is reasonably required by the Buyer to enable it or any End User to receive and use the Deliverables and make use of the deliverables provided by a Replacement Supplier.

1.7. Termination of licences

1.7.1. The Supplier Existing IPR Licence granted pursuant to Paragraph 1.3 and the Third Party IPR Licence granted pursuant to Paragraph 1.6 shall survive the Expiry Date and termination of this Contract.

1.7.2. The Supplier shall, if requested by the Buyer in accordance with Schedule 30 (Exit Management) and to the extent reasonably necessary to ensure continuity of service during exit and transition to any Replacement Supplier, grant (or procure the grant) to the Replacement Supplier a licence to use any Supplier Existing IPR or Third Party IPR on terms equivalent to the Supplier Existing IPR Licence or Third Party IPR Licence (as applicable) subject to the Replacement Supplier entering into reasonable confidentiality undertakings with the Supplier.

Schedule 36 (Intellectual Property Rights)

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1.7.3. Any licence granted to the Supplier pursuant to Paragraph 1.4 (Licence granted by the Buyer) shall terminate automatically on the Expiry Date and the Supplier shall:

1.7.3.1. immediately cease all use of the Buyer Existing IPR (including the Buyer Data within which the Buyer Existing IPR may subsist);

1.7.3.2. at the discretion of the Buyer, return or destroy documents and other tangible materials that contain any of the Buyer Existing IPR and the Buyer Data, provided that if the Buyer has not made an election within six months of the termination of the licence, the Supplier may destroy the documents and other tangible materials that contain any of the Buyer Existing IPR and the Buyer Data (as the case may be); and

1.7.3.3. ensure, so far as reasonably practicable, that any Buyer Existing IPR and Buyer Data that are held in electronic, digital or other machine-readable form ceases to be readily accessible from any computer, word processor, voicemail system or any other device of the Supplier containing such Buyer Existing IPR or Buyer Data.

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Schedule 36 (Intellectual Property Rights)

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ANNEX 1: NEW IPR

Name of New IPR	Details