CONTRACT FOR THE PROVISION OF CLIMATE SERVICES FOR A NET ZERO RESILIENT WORLD (CS-N0W) TO THE DEPARTMENT FOR BUSINESS, ENERGY AND INDUSTRIAL STRATEGY

Purchase Order Number:

DUNS Number: [This information has been redacted]

This Contract is dated 14th July 2021 and is made between:-

1. The Secretary of State for Business, Energy and Industrial Strategy [("the Authority")] of 1 Victoria Street, London SW1H 0ET, acting as part of the Crown;

and

2. Ricardo-AEA Ltd. (the "Contractor") whose registered office is at Shoreham Technical Centre, Shoreham-by-Sea, West Sussex BN43 5FG, UK and address for all correspondence is Gemini Building, Fermi Avenue, Harwell, Didcot OX11 0QR, UK.

INTRODUCTION

- (A) On 15th March 2021 the Authority issued an invitation to tender for the provision of Climate Services for a Net Zero resilient World (CS-N0W), this including the specification a copy of which is set out in Schedule 1 (the "Specification").
- (B) In response the Contractor submitted a proposal dated 7th May 2021 and entitled 'Tender for Climate Services for a Net-Zero Resilient World ('CS-N0W'), explaining how it would provide the services, a copy of which is set out in Schedule 2 (the "Proposal").

The parties agree as follows:-

1. SUPPLY OF SERVICES AND PRICE

In consideration of payment by the Authority to the Contractor of the sum of up to £4,980,000 (exclusive of Value Added Tax) as per work packages in Table 1 (the "Contract Price") and in accordance with (a) the Specification; (b) the Proposal; and (c) the Authority's Standard Terms and Conditions of Contract for Supplies/Services (the "Standard Terms" (a copy of which were issued by the Authority with the Invitation to Tender and are attached at Schedule 3); the Contractor shall provide the Services described in the Specification and the Proposal to the Authority.

Work Package	Total maximum price per WP (£M, to 3	Pricing Mechanism
	decimal places)	

A	[This information has been redacted]	Fixed for deliverables A1.1, A1.2, A2.1, A3.1 and secondments. Deliverable 3.2 is milestone dependent. Monthly invoices.
В	[This information has been redacted]	Time and materials for WPB1 and WPB2 dependent upon review requirement as set out in the ITT.
		WPB3 – staff input fixed price on delivery of Workshops. Non-staff costs actuals against evidence.
С	[This information has been redacted]	Quarterly invoices. Fixed price, quarterly invoices.
D	[This information has been redacted]	Fixed for deliverables D1.1-1.4; D3.1-3.9; D4.1-4.4
		Deliverable D2.1 is milestone dependent.
E	[This information has been redacted]	Quarterly invoices. Fixed price, quarterly invoices.
F	[This information has been redacted]	F1 – fixed price based on scenario in ITT. Any additional work will be based on same rates – additional expenditure will need to be preapproved.
		F2 and F3 – fixed price – milestone dependent.

Ad hoc fund	0.980	F4 – mixture of fixed price for staff input and time and materials for non-staff costs, based on actual costs as per ITT. Monthly invoices. Dependent on additional HMG needs, as agreed with Programme board.
Total Maximum price	4.980	

Table 1: Maximum price per work package

2. COMMENCEMENT AND CONTINUATION

This contract shall commence on 14th July 2021 and subject to any provisions for earlier termination contained in the Standard Terms shall end on 31st March 2025.

3. TERMS AND CONDITIONS

- 3.1 The Standard Terms shall form part of this Contract.
- 3.2 The Standard Terms shall be amended as follows:

In section

"27. Intellectual Property Rights", in place of paragraph (4), the following paragraph is added: 'If the Contractor in providing the Services uses any materials in which there are pre-existing Intellectual Property Rights owned by itself, its agents, sub-contractors or third parties, such pre-existing Intellectual Property Rights shall remain the property of the party (or its licensors) who introduces it. Contractor shall grant the Authority a non-exclusive, non-transferable licence to use such pre-existing Intellectual Property Rights in connection with the Services. The Authority shall not be entitled to use such pre-existing Intellectual Property Rights for any other purpose not connected with the Services. Such licence or sub-licence shall be perpetual and irrevocable and granted at no cost to the Authority."

27. Intellectual Property Rights", after paragraph (5), the following paragraph is added: "(5b) Notwithstanding its sole right to use any information collected or collated pursuant to the Contract, the Authority may allow the Contractor to: (5b)(i) publish results of the Project in peer-reviewed journals. The Contractor will need written approval from the Authority before proceeding to any submission of an article to a peer-review journal using results of the project that have not yet been made public by the Authority. (5b)(ii) present the essentials of the Project to UK's

Research Excellence Framework or to use materials derived from the Project for teaching purpose provided written permission from the Authority has been obtained beforehand prior to any specific application or use.

(5b)(iii) use materials or results derived from the Project in support of similar work for Government Departments and Arms-Length Bodies, provided written permission from the Authority has been obtained prior to any specific application or use. The decision to provide any such approval under this Clause (5b) shall be determined on a case by case basis and at the absolute discretion of the Authority."

These amendments are for the purposes of this Contract only and do not set a precedent for future contracts between the Contractor and the Authority.

- 3.4 The Contractor's Standard Terms and Conditions of business shall not apply to this Contract.
- 3.5 This Contract is formed of these clauses and the Schedules hereto. Any other attachments are provided for information purposes only and are not intended to be legally binding. In the event of any conflict or inconsistency, the documents prevail in the following order:
 - a) these clauses
 - b) the Standard Terms
 - c) the Specification
 - d) and finally, the Proposal

4. CONTRACTOR'S OBLIGATIONS

4.1 Where the Contractor is supplying goods to the Authority these shall be delivered to the Authority in full compliance with the Specification and shall be of satisfactory quality and fit for purpose. Where the Contractor is performing services for the Authority it shall do so in accordance with the Specification and exercise reasonable skill and care.

5. MANAGEMENT AND COMMUNICATIONS

- 5.1 The Contractor shall perform the Services under the direction of the Authority.
- 5.2 Any direction by the Authority may be given by Kenneth Wright (the "Contract Manager") who is an officer in the Authority's Science and Innovation for Climate and Energy Directorate, BEIS, 1 Victoria Street, London SW1H 0ET, or such other person as is notified by the Authority to the Contractor in writing.

- 5.3 The Contractor appoints [This information has been redacted] to be the Contractor's first point of contact for this Contract. All queries to the Contractor from the Authority's Contract Manager shall initially be addressed to the Contractor's first point of contact.
- 5.4 The Contractor's first point of contact and the Contract Manager shall meet as often as either the Contractor or the Authority may require to review the Contractor's performance of the Contract.

6. INVOICES AND PAYMENT

6.1 Subject to the Contractor providing the Services to the Authority in accordance with this Contract and submitting invoice/s to the Contract Manager in the manner reasonably required by the Contract Manager payment will be made by the Authority to the Contractor in accordance with (as referred to in Condition 11 of the Standard Terms & Conditions).

7. TRANSPARENCY

7.1 The Authority is required to publish information about this contract within the Official Journal of the European Union and through the Governments Transparency website, Contracts Finder.

The Authority's decision not to publish full details of the contract does not however preclude it publishing such information in the future (subject to applicable redactions) and the Authority may be required to disclose such information under the Freedom of Information Act 2000, the Environmental Information Regulations 2004 (EIR) or other legal requirement. In such cases, the Authority would need to consider disclosure in the context of the particular circumstances of the request or requirement concerned.

Signed by the parties' duly authorised representatives:-

For the Secretary of State for Business, Energy and Industrial Strategy

Signature: This information has been redacted.

Print Name: This information has been redacted.

Job Title: Head of Climate Science Team, SICE Directorate

Date: 13.07.2021

For the Contractor

Signature: This information has been redacted.

Print Name: This information has been redacted.

Job Title: [This information has been redacted]

Date: 14.07.2021

The following Schedules [if applicable and Annex] form part of this Contract:

Schedule 1 The Authority's Specification Schedule 2 The Contractor's Proposal

Schedule 3 the Authority's Standard Terms & Conditions of Contract for

Supplies/Services

[If applicable] Schedule 4 [The Correspondence]

Invitation to Tender for Climate Services for a Net Zero resilient World (CS-NoW) - The delivery of climate services to BEIS Tender Reference Number: 4925/03/2021

Deadline for Tender Responses: 2:00pm 7th May 2021

Department for Business, Energy & Industrial Strategy

Date: 15 March 2021

The Department for Business, Energy & Industrial Strategy (BEIS) wishes to commission a supplier to provide climate services to BEIS.

Enclosed are the following sections:

- Section 1 (page 12) Instructions and Information on Tendering Procedures
 Section 2 (page 18) Specification of Requirements
 Section 3 (page 78) Further Information on Tender Procedure
- Section 4 (page 81) Declarations to be submitted by the Tenderer:
 - Statement of Non-Collusion
 - Form of Tender
 - Conflict of Interest
 - Standard Selection Questionnaire
 - The General Data Protection Regulation Assurance Questionnaire for Contractors
 - Code of Practice for Research
- Annex A: Pricing Schedule
- Annex B: Code of Practice for Research
- Annex C: Exclusion Grounds
- Annex D: Glossary
- Annex K: Performance Management Framework
- Annex M: List of documents that need to be returned
- Annex N: Terms and Conditions

To apply for this tender please also register on the following website <u>www.delta-esourcing.com</u>. This will ensure you receive immediate notification of updates to the ITT process or answers to questions raised by potential bidders.

Please read the instructions on the tendering procedures carefully since failure to comply with them may invalidate your tender. Your tender must be returned by 2:00pm 7th May 2021, clearly marked as "TENDER".

I look forward to receiving your response.

Yours sincerely,

Ken Wright

Email: climatescience@beis.gov.uk

Privacy Notice

This notice sets out how we will use your personal data, and your rights. It is made under Articles 13 and/or 14 of the General Data Protection Regulation (GDPR).

YOUR DATA

We will process the following personal data:

Names and contact details of employees involved in preparing and submitting the bid; Names and contact details of employees proposed to be involved in delivery of the contract;

Names, contact details, age, qualifications and experience of employees whose CVs are submitted as part of the bid.

Purpose

We are processing your personal data for the purposes of the tender exercise described within the remainder of this Invitation to Tender, or in the event of legal challenge to such tender exercise.

Legal basis of processing

The legal basis for processing your personal data is processing is necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the data controller, such as the exercise of a function of the Crown, a Minister of the Crown, or a government department; the exercise of a function conferred on a person by an enactment; the exercise of a function of either House of Parliament; or the administration of justice.

Recipients

Your personal data will be shared by us with other Government Departments or public authorities where necessary as part of the tender exercise. We may share your data if we are required to do so by law, for example by court order or to prevent fraud or other crime.

Retention

All tenders will be retained for a period of 6 years from the date of contract expiry, unless the contract is entered into as a deed in which case it will be kept for a period of 12 years from the date of contract expiry.

YOUR RIGHTS

You have the right to request information about how your personal data are processed, and to request a copy of that personal data.

You have the right to request that any inaccuracies in your personal data are rectified without delay.

You have the right to request that any incomplete personal data are completed, including by means of a supplementary statement. You have the right to request that your personal data are erased if there is no longer a justification for them to be processed. You have the right in certain circumstances (for example, where accuracy is contested) to request that the processing of your personal data is restricted.

You have the right to object to the processing of your personal data where it is processed for direct marketing purposes.

You have the right to object to the processing of your personal data.

INTERNATIONAL TRANSFERS

Your personal data will not be processed outside the European Union.

COMPLAINTS

If you consider that your personal data has been misused or mishandled, you may make a complaint to the Information Commissioner, who is an independent regulator. The Information Commissioner can be contacted at: Information Commissioner's Office

Information Commission Wycliffe House Water Lane Wilmslow Cheshire SK9 5AF

0303 123 1113

casework@ico.org.uk

Any complaint to the Information Commissioner is without prejudice to your right to seek redress through the courts.

CONTACT DETAILS

The data controller for your personal data is the Department for Business, Energy Industrial Strategy (BEIS).

You can contact the BEIS Data Protection Officer at: BEIS Data Protection Officer, Department for Business, Energy and Industrial

Strategy, 1 Victoria Street, London SW1H 0ET. Email: dataprotection@beis.gov.uk.

Section 1

Instructions and Information on Tendering Procedures

Invitation to Tender for the delivery of climate services to BEIS Tender Reference Number: 4925/03/2021 Deadline for Tender Responses: 2:00pm 7 May 2021

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A. Indicative Timetable

The anticipated timetable for this tender exercise is as follows. The Department reserves the right to vary this timetable. Any variations will be published on www.delta-esourcing.com or circulated to all organisations who have registered an interest in notifications.

Tender timeline	Dates	
ITT published	March 15 th 2021	
Deadline for questions relating to the	March 29 nd 2021	
tender		
Answers to questions published	April 6 th 2021	
Deadline for tenders	2:00pm May 7 th 2021	
Invite suppliers for bid clarification (if	By May 17 th 2021	
needed)		
All suppliers alerted of outcome	May 24 th 2021	
10-day standstill period	May 25 th – June 3 rd 2021	
Due diligence conducted during this period		
Contract start date	June 15 th 2021	

[&]quot;The term of the contract will run from 15th June 2021 until 31 March 2025, unless terminated by the Department in accordance with the terms of the contract. The programme will be subject to annual Stage-gate reviews.

B. Supplier Day

A Supplier Day took place on 22 September 2020 (as per the Prior Information Notice sent out on 7 September 2020). The session provided information on the requirement and answered questions from attendees. The background slides, slides for the day and write-up of the questions answered are provided with this ITT for information. See Annex H

C. Procedure for Submitting Tenders

The maximum page limit for tenders is 60 single-sided pages (excluding declarations, pricing schedule, text references, annexes, and CVs). The font type should be in Arial, minimum size 10 with single line spacing and minimum 2.5cm margins.

To apply for this tender please register on the following website www.delta-esourcing.com. Please contact the Delta Helpdesk on 0845 270 7050 for any registration queries. Please upload your proposal before the deadline via BIP Solutions Delta Website www.delta-esourcing.com.

For questions regarding the procurement process please contact Ken Wright at: climatescience@beis.gov.uk.

Tenders will be received up to the time and date stated. Please ensure that your tender is delivered not later than the appointed time on the appointed date. The Department does not undertake to consider tenders received after that time. The Department requires tenders to remain valid for a period indicated in the specification of requirements.

The Department shall have the right to disqualify you from the procurement if you fail to fully complete your response, or do not return all the fully completed documentation and declarations requested in this ITT. The Department shall also have the right to disqualify you if it later becomes aware of any omission or misrepresentation in your response to any question within this invitation to tender. If you require further information concerning the tender process, or the nature of the proposed contract, email <u>climatescience@beis.gov.uk</u>. All questions should be submitted by 29th March 2021; questions submitted after this date may not be answered. Should questions arise during the tendering period, which in our judgement are of material significance, we will publish these questions with our formal reply by the end of 6th April 2021 and circulate – unnamed – to all organisations that have expressed an interest in bidding. All contractors should then take that reply into consideration when preparing their own bids, and we will evaluate bids on the assumption that they have done so.

You will not be entitled to claim from the Department any costs or expenses that you may incur in preparing your tender whether or not your tender is successful.

D. Conflict of Interest

The Department's standard terms and conditions of contract include reference to conflict of interest and require contractors to declare any potential conflict of interest to the Secretary of State.

For research and analysis, conflict of interest is defined by the presence of an interest or involvement of the contractor, subcontractor (or consortium member) which could affect the actual or perceived impartiality of the research or analysis. Where there may be a potential conflict of interest, it is suggested that the consortia or organisation designs a working arrangement such that the findings cannot be influenced (or perceived to be influenced) by the organisation which is the owner of a potential conflict of interest. For example, consideration should be given to the different roles which organisations play in the research or analysis, and how these can be structured to ensue maintain an impartial approach to the project is maintained.

The process by which this is managed in the procurement process is as follows:

During the bidding process, organisations may contact BEIS to discuss
whether or not their proposed arrangement is likely to yield a conflict of
interest. Any responses given to individual organisations or consortia
will be published on contract finder (in a form which does not reveal the
questioner's identity). Any organisation thinking of submitting a bid,

- should share their contact details with the staff member responsible for this procurement, to ensure they receive an update when any responses to questions are published.
- Contractors are asked to sign and return Declaration 3 to indicate
 whether or not any conflict of interest may be, or be perceived to be, an
 issue. If this is the case, the contractor or consortium should give a full
 account of the actions or processes that it will use to ensure that
 conflict of interest is avoided. In any statement of mitigating actions,
 contractors are expected to outline how they propose to achieve a
 robust, impartial and credible approach to the research.
- When tenders are scored, this declaration will be subject to a pass/fail score, according to whether, on the basis of the information in the proposal and declaration, there remains a conflict of interest which may affect the impartiality of the research.

Failure to declare or avoid conflict of interest at this or a later stage may result in exclusion from the procurement competition, or in the Department exercising its right to terminate any contract awarded.

E. Evaluation of Responses

The tender process will be conducted to ensure that bids are evaluated fairly and transparently, in accordance with agreed assessment criteria. Further details are provided in the specification.

F. Terms and conditions applying to this Invitation to Tender

The Department's Standard Terms and Conditions of Contract will apply to this contract. These are published alongside this ITT. The Terms and Conditions are final. Upon submitting a tender, bidders accept the Terms and Conditions of Contract, should they be successful.

G. Further Instructions to Contractors

The Department reserves the right to amend the enclosed tender documents at any time prior to the deadline for receipt of tenders. Any such amendment will be numbered, dated and issued by March 29th 2021. Where amendments are significant, the Department may at its discretion extend the deadline for receipt of tenders. The Department reserves the right to withdraw this contract opportunity without notice and will not be liable for any costs incurred by contractors during any stage of the process. Contractors should also note that, in the event a tender is considered to be fundamentally unacceptable on a key issue, regardless of its other merits, that tender may be rejected. By issuing this invitation the Department is not bound in any way and does not have to accept the lowest or any tender and reserves the right

to accept a portion of any tender unless the tenderer expressly stipulates otherwise in their tender.

H. Checklist of Documents to be Returned

- Proposal (maximum 60 pages) excluding CVs and Declarations
- CVs
- Annex A: Pricing Schedule
- Declaration 1: Statement of non-collusion
- Declaration 2: Form of Tender
- Declaration 3: Conflict of Interest
- Declaration 4: Standard Selection Questionnaire
- Declaration 5: The General Data Protection Regulation Assurance Questionnaire for Contractors
- Declaration 6: Code of Practice

Section 2

Specification of Requirements

Invitation to Tender for the delivery of climate services to BEIS Tender Reference Number: 4925/03/2021

Deadline for Tender Responses: 2:00pm 7 May 2021

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1 Introduction and summary of requirements

This ITT invites potential suppliers to set out their proposal to deliver climate services for the Department of Business, Energy and Industrial Strategy (BEIS). The overall aim of this provision is to ensure that BEIS policies and priorities, including:

- Its domestic Net Zero efforts;
- Infrastructure, housing and engagement with local authorities on local climate action plans;
- Bilateral and multilateral interactions on climate change & trade;
- Activities within international fora such as the Intergovernmental Panel on Climate Change (IPCC) and the United Nations Framework Convention on Climate Change (UNFCCC)
- Cross-government international climate strategies

are informed by up-to-date policy-relevant evidence & scientific advice, where this is required to inform decisions. The project covers the provision of new evidence, original research & analysis, knowledge translation, & communication, in support of BEIS domestic and international work, covering the following areas of science:

- Interactions between the energy system and the atmosphere
- Global decarbonisation and ambition
- Climate impacts, globally, regionally, and at a country-level
- Co-benefits of climate action
- Improving the accessibility of UK climate data (knowledge translation only)
- Physical climate change (knowledge translation only)

The advice and evidence will cover a broad and interdisciplinary evidence base, including energy, land-use, and a range of scientific-economic models and approaches including integrated assessment models, climate science, and social science. The outputs will include brief, focused written advice underpinned by detailed analysis and referencing, innovative climate data visualisation tools, on-call advice and briefings, policy cards, workshops, and scientific support in reviewing key reports including Intergovernmental Panel on Climate Change (IPCC) assessments. Outputs will be user-centred, integrate across disciplines, and be targeted at specific domestic and international policy teams, as well as contributing to socialising key science messages internationally. Two secondees to the BEIS Climate Science Team will support knowledge translation and integration, cutting across the work packages below, with one secondee sourced from the lead

supplier and the second sourced from another supplier such as a subcontractor or other member of the consortium.

Suppliers must note that the Authority reserves the right to withdraw this contract opportunity without notice and will not be liable for any costs incurred by Suppliers during any stage of the process.

2 Policy context

We require a major new climate services Programme for BEIS, which will provide up-to-date policy-relevant evidence and scientific advice to inform BEIS policy.

2.1 International context

Historically, UK leadership, underpinned by the latest climate science, has been pivotal in securing ambitious international climate outcomes, including the 2015 Paris Agreement, under the UN Framework Convention on Climate Change (UNFCCC). From November 2021, the UK will hold the Presidency of the international climate negotiations at the 26th Conference of the Parties (COP26). To support an acceleration of progress towards clean growth and resilience, the UK will be running major legacy campaigns on Nature, Adaptation and Resilience, and Energy Transitions among others. Ahead of COP26, countries are expected to submit their updated Nationally Determined Contributions (NDC), representing an increase in global mitigation ambition. On 12 December 2020, the UK announced an ambitious NDC, committing to reducing economy-wide greenhouse gas emissions by at least 68% by 2030, compared to 1990 levels. Following COP26, global progress towards meeting the long-term goals of the Paris Agreement will be assessed under the Global Stocktake in 2023, ahead of the 2025 NDC update under the Paris Agreement's ratchet mechanism. Outside the UNFCCC, the UK holds key roles in initiatives such as the Powering Past Coal Alliance, while climate change holds increasing prominence in other international for such as the G7 and the G20. These milestones point to the need for a well-communicated and robust evidence base to support the UK's climate change objectives in a range of international settings. The provision outlined here will provide a comprehensive package of new analysis to inform these processes, by addressing key knowledge gaps, and translating and communicating this evidence internationally to inform and influence the broader landscape. Through this, it will build a positive environment for science and evidence under the negotiations, in support of UK international climate objectives.

2.2 Domestic context

A new Cabinet Committee on Climate Change, chaired by the PM, will coordinate and drive decarbonisation and adaptation and resilience action across Government, necessarily including how 'net-zero' is achieved. A comprehensive climate services programme will be well placed to inform decarbonisation work within the UK, including advice for future Carbon Budgets. The service will also provide relevant advice and briefing to support the climate science team in answering Parliamentary Questions and correspondence, advising Ministers, and in their work providing technical and scientific advice to a wide range of policy teams across BEIS.

The UK is increasingly seeing the impacts of climate change, which will worsen as global temperatures continue to rise. The proposed programme will ensure BEIS policy teams

have the necessary information to build resilience to climate risks in their workstreams. It will bridge the gap between climate information and decision-makers, to change the way this information is used by BEIS to deliver its agenda. By building on, and translating, the 2018 UK Climate Projections (UKCP18) data, and using reports and innovative data visualization tools as appropriate, the contract will work to improve the accessibility of climate impacts data. In particular, the contract will deliver:

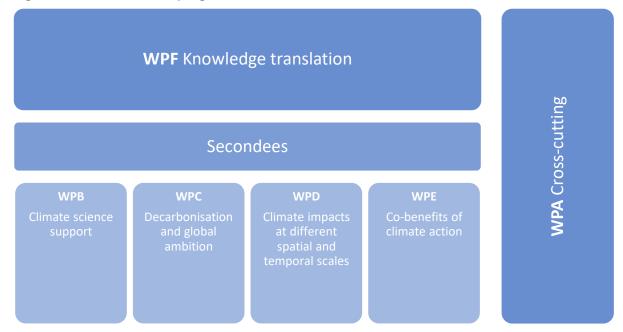
- Information on projected extreme heat and cold in buildings in England to inform decision-making processes around domestic, public sector, and local authority energy efficiency decisions in buildings, including fuel poverty;
- Information on projected climate impacts to water flows, to provide actionable information to the energy and industrial sector which builds on the Environment Agency's work, in permitting sustainable water resource use for the energy decarbonisation technologies that will need to be introduced and implemented in order for the UK to successfully achieve Net Zero ambitions.

3 Climate services overview and work packages

The climate services programme has been divided up into 4 discrete, but inter-related technical work packages, as well as a cross-cutting knowledge translation and communication function which covers all 4 of the technical work packages (WPB-E), and a cross-cutting programme management and coordination work package (WP-A).

For technical work packages, bidders must explain clearly what expertise they can bring to each research area, and how they could build on other, on-going and related research efforts, both within the UK, and more widely, in order to do so. All communications products, including reports, summaries, and presentations, should use clear language appropriate to a non-expert audience.

Figure 1 Climate services programme structure



3.1 Work Package A (WPA) - Cross-cutting [core]

3.1.1 Programme Management and coordination [core]

Bidders are required to provide a draft Delivery Plan as part of their Tender proposal. The draft delivery plan will cover:

- A detailed mobilisation plan setting out how bidders plan to get the service up and running, by August 2021.
- Timing, content and form of outputs to be provided alongside each deliverable, noting the need for
 - Where specified below, agreement with Government on the final form of research questions and methodology to be applied to specific pieces of work
 - If required, testing of methodology and initial results with users / the wider scientific community
 - Quality Assurance, following your internal QA process, which you will set out in your tender
 - Review of draft products by HMG before finalisation
- Approach to risk management, change control, finance control and forecasting, and Quality Assurance
- Resources allocated against deliverables, including identification of skills and expertise required against each
- Key milestones within the Programme, including Stage Gate,
 Programme Board and Working Group meetings (see below)
- Approach to programme management and approach to ensuring transdisciplinary working across research questions

At the start of the Contract BEIS and the Supplier selected will then meet for a 'kick off' meeting where the timing of outputs to be delivered, and the format of finished deliverables, will be finalised. Once finalised, the Delivery Plan will form the primary document through which BEIS will assess Programme Performance.

The Supplier will be required to meet with BEIS every six months for Programme Board meetings to discuss progress against the Delivery Plan, contract performance, risks and any issues relating to the contract. These meetings should be co-ordinated by the Supplier, with papers agreed with BEIS in advance, and can be hosted by the supplier, or at BEIS buildings, or – if the situation demands - virtually.

The Programme Board's membership will comprise the Supplier, BEIS Programme SRO, BEIS National Climate Capability lead, representative of the independent Scientific Advisory Group, and representatives of the customer group. The Board will ensure that the Programme remains on track to deliver outputs and advice as outlined in the agreed Delivery Plan. The Board will take stock of

the evolving policy landscape to ensure the right research questions are being answered in the right way, at the right time. The Programme Board will agree on changes in workstream priorities or redeployment of resource within the programme. Any change requests require sign-off by the Programme SRO and will be recorded in an updated Delivery Plan. Appropriate representatives from the Supplier at Programme Boards should, at a minimum, include Programme Lead and Work Package Leads. Once a year the Programme Board will take the form of a 'Stagegate', chaired by BEIS Head of Climate and Energy Science, to ensure that (a) the Programme continues to provide good value for money through (i) timely production of scientifically robust deliverables and (ii) results communicated with clarity and impact, and (b) to formally sign-off the upcoming year's activities and any impacts on budgets. Should the Programme Board consider, at the Stage Gate, that the Programme no longer offers value for money, we would move to terminate the programme.

The Supplier is required to invoice BEIS on a monthly basis for work done, including an itemised breakdown of charges. Invoices should be received on an agreed regular date (for example, the 7th calendar day of the month).

The Supplier will also be required to attend monthly Programme Working Group meetings with BEIS, to give formal updates of progress, discuss progress towards deliverables, manage crosscutting issues and risks, including reviewing the Risk Register, and to manage interdependencies between the work packages. These meetings should be coordinated by the Supplier. Membership should, at a minimum, consist of the BEIS contract manager, programme delivery manager at the Supplier, and Work Package leads. Working Group meetings will occur a fortnight after receiving the last monthly invoice.

The Supplier will be required to submit progress reports to BEIS on a quarterly basis (Deliverable A1.1) detailing progress towards deliverables and spend on the budget. Invoices will only be signed off on receipt and acceptance of these reports. The timing of these should be aligned so that every second quarterly report arrives 2 weeks before each biannual Programme Board meeting. The quarterly reports must contain:

- An up-to-date version of the risk register for the contract deliverables
- An up-to-date assessment of progress against each of the deliverables and KPIs in the contract, highlighting any likely slippage that may cause a delay and knock-on effects for linked work packages and knowledge integration plans

 An up-to-date tracker of spend on contract deliverables, including baseline and projected spends to highlight where delays or over/underspend may occur

An independent Scientific Advisory Group will be established by BEIS to act as an external quality assurance group, who will review the effectiveness and rigour of these products. The Group will report its findings and recommendations annually to the Programme Board. The bidder will be expected to consider these recommendations within the Programme going forward, and if requested by BEIS provide a response to them. In their tender Bidders should set out their Delivery Plan which should include not just milestones and deliverables, but also approach to programme management, including roles and responsibilities, and how they will ensure smooth working, including across organisations if a consortium is the successful bidder.

As part of programme management, the Supplier is required to coordinate across work packages to ensure that work is aligned and consistent in the approaches taken and assumptions made; to ensure research is not conducted in silos; and to ensure that a transdisciplinary approach is taken. Coordination updates and issues will be discussed at monthly Working Group meetings. Bidders should set out their plan for ensuring analytical consistency, and supporting transdisciplinary working, highlighting where new relationships might be supported, and including their risk management approach to ensure smooth coordination.

At the end of this contract, where any new Supplier is invited to provide climate services to BEIS, there will necessarily be a period of handover to allow the new supplier to take possession of, and become familiar with, any databases and products in use, the knowledge management system including any external website, and to prepare for taking over full operation of the services. BEIS requires that the Supplier of climate services provides the assistance required to ensure a smooth transition of intellectual property associated with the contract including underlying data produced within this contract and, where relevant, any rights pertaining to BEIS regarding pre-existing intellectual property (see Terms and Conditions clause 27(4)), to a new Supplier at the end of this contract, should it be required. This will include the preparation of materials for handover, including but not limited to, documentation, spreadsheets, reports, databases, any IT code required for website functionality and any information in relation

to TUPE if applicable. The Supplier should, within six months of the contract start, produce an exit and handover plan (deliverable A1.2).

Bidders should price this work package as fixed price.

3.1.2 Risk management [core]

The Supplier will be required to manage risk within the programme, including identifying, prioritising, mitigating, and communicating risk in a clear and comprehensive manner. This includes producing and maintaining a programme risk register (deliverable A2.1) which will be reviewed monthly at Working Group meetings and biannually by the Programme Board. This risk register also forms part of the Quarterly Update to be provided (see above). The timing of updates to the risk register should be aligned so that it arrives one week before each Working Group meeting.

Bidders should include in their tender their approach to risk management and their risk management schedule, and details of any perceived risks for the project which could affect the Supplier's ability to deliver the required outputs.

The risk assessment should include what the risk is, who the risk owner is, the unmitigated level of risk (high medium or low), the mitigation measures to be put in place and the resulting final level of risk. Alongside the risk appraisal, a description should be provided that details the implications for the Authority of project failure at different levels of risk. Monthly reviews will consider if appropriate mitigation activity has been undertaken and if this is having the desired impact on mitigating the risk(s), as well as record and manage new risks.

Bids should also include details on the amount of cover available for key members of the project team or organisations in the event that they are temporarily or permanently no longer available for work on the project. This must be complete cover for the position(s) in question. It is expected that mitigation measures for this risk are robustly provided, and where possible, evidenced. Where relevant, the selection methods for sub-contractors or consortium members should be included.

Bidders should price this work package as fixed price.

3.1.3 Knowledge Management [core]

The Supplier is responsible for knowledge management, and should produce a knowledge management strategy (deliverable A3.1)

within 2 months of contract start. The strategy should cover how the Supplier will ensure tacit and explicit knowledge on climate science is shared and understood across BEIS and HMG, including:

- ensuring the BEIS climate science team has sufficient understanding of key policy-relevant science issues
- enabling stakeholders and policy teams to fully engage with outputs and research as they develop policies and priorities
- ensuring both wider BEIS and other departments across HMG can easily access and understand outputs.

The strategy should also include how the Supplier will ensure activities are effective, and how they will monitor this. The strategy should be agreed with BEIS within one month of the contract starting, and progress against it should be reviewed every quarter.

Knowledge management will be supported by secondee 1 (see section 3.1.4). Engagement with BEIS will be underpinned by, but not limited to, SharePoint and MS Teams software. BEIS will provide a SharePoint site hosted within the BEIS system, which will be used to share information on climate science within the Department. Secondee 1 will be responsible for developing the structure and content, and for maintaining and developing it, with support from the BEIS Knowledge and Information Management team. In addition to sharing explicit knowledge within BEIS via SharePoint, Secondee 1 will also be responsible for sharing tacit knowledge on climate science between teams in BEIS and elsewhere (see section 3.1.4 of this ITT).

Bidders should price this work package as fixed price, for creation and maintenance of a site on BEIS Sharepoint, to host easily accessible information stemming from the research programme.

Where outputs can't be hosted on SharePoint, or also have an external audience (for example, data visualisation tools, or are to be shared with other government departments), these will need to be hosted externally. The Supplier is therefore required to produce a programme website (deliverable A3.2), which will publicise and communicate findings externally, and make programme outputs available. The website should be fully accessible, easy to navigate, and use eye-catching design. Bidders should base their proposal on the assumption that the website will be hosted on the gov.uk domain, although this could change depending on website design and function. Milestones for website delivery:

Milestone 1: Approval of initial design (within two months of contract start)

Milestone 2: Website prototype finalised (by March 2022)

Milestone 3: User testing of website finalised (May 2022)

Milestone 4: Website live (June 2022)

Milestone 5: Ongoing maintenance as material is produced

Publishing new analysis produced under work packages B-F in the peer-reviewed literature is not a deliverable in the requirement, unless specified, but BEIS strongly encourages the Supplier to publish where appropriate to ensure new knowledge can be effectively used by the wider community. BEIS reserves the right to be informed of the material prior to publication. Further details are given in section 4.

Bidders should set out clearly their approach to knowledge management and how they will ensure knowledge management works across the entire programme.

Bidders should price this work package as fixed price. Please break down this price per milestone, using the milestones listed above. For milestone 5, we would expect to pay quarterly for costs associated with maintaining the website.

3.1.4 Secondments to BEIS

The Supplier will provide the equivalent of two full-time secondees to the Authority for the duration of the contract.

Secondee roles are described below. Both roles will require sufficiently broad climate science knowledge to critically engage with policy teams and across the consortium. Both roles will require strong communication & stakeholder engagement skills. In both cases, secondees will be expected to contribute climate science expertise to the wider team, for example through contributing to Government Reviews of IPCC reports, or advising on technical issues.

Secondees may come from the lead organisation, a sub-contractor, or in the case of a consortium, from consortium members.

Secondee 1 – internal engagement

This secondee will be responsible for stakeholder engagement with policy teams within BEIS and across other government departments, to support and shape the products that the programme will deliver for them, and ensure products are meeting customer requirements. They will support the Supplier and the

Authority in producing high quality products that meet the Authority's needs.

They will also support knowledge management for the programme, working with the lead knowledge integration team at the Supplier, and with the BEIS Knowledge Information Management team in matters relating to SharePoint. They will raise awareness of the programme and ensure knowledge is shared across BEIS and HMG, by delivering seminars including BEIS Academy seminars, organising COP-related and other in-house programme events for policy teams, and coordinating briefings related to the programme. They will also support the sharing of tacit knowledge through peer-assists, building connections and sharing knowledge between teams, or other mechanisms. This work will also include ensuring any programme website is up to date, and developing an engaging structure and content for the programme SharePoint and updating it.

Many BEIS policymaking teams are based in offices in Central London. When current requirements to work from home are lifted and BEIS teams return to working from offices, the secondee will be required to work in the BEIS London offices between 2 and 3 days a week, to facilitate relationship-building and stakeholder engagement with policy teams. Secondee 1 should start in BEIS within one month of the contract starting.

Secondee 2 – external engagement

This secondee will be responsible for external stakeholder engagement with the wider UK climate science community and Horizon Europe, to support the community in understanding UK Government evidence needs and help build stronger links between the BEIS climate science team and the science community. They will also engage with other research programmes funded across government (e.g. through UKRI, Government Office for Science, FCDO, Defra, the Office for National Statistics), ensuring this information is brought into the climate services programme, and ensures these programmes are aware of and understand the BEIS programme.

The secondee will play a strong role in delivering WPB and be responsible for coordinating and managing external workshops, for example work package B3.

This secondee will also coordinate programme management activities, supporting the BEIS contract manager in running Programme Working Group meetings, and providing secretariat duties to the Programme Board and Advisory Group.

There is greater flexibility for this secondee to be based outside of London, although they would need to travel to the London office

around once a week, once current requirements to work from home are lifted and BEIS teams return to working from offices. Secondee 2 should start within three months of the contract starting. Bidders should set out how they will ensure secondees meet the required skills and expertise as set out above.

Bidders should price this work package as fixed price.

3.2 Work Package B (WPB) – Climate science support for international reports

This work package provides an expert advice service to support BEIS in its engagement with international reports, including IPCC and UN Gap Reports. It aims to give BEIS ready access to expert advice for review comments and in forming the UK position, as well as informing the broader international climate science landscape., Pricing approaches are detailed under each subpackage.

3.2.1 Assistance in reviewing international reports [core]

A number of important international reports are due to be reviewed and published during the contract. BEIS requires technical support during the government reviews of these reports, listed below (but not exclusively).

Deliverable	Report	Timing (all tbd)
B1.1 Approved	IPCC AR6 Working Group	June - August 2021
comments	I Final Government Draft –	
	Summary for Policymakers	
	only	
B1.2 Approved	IPCC AR6 Working Group	Oct – November 2021
comments	II Final Government Draft	
	– Summary for	
	Policymakers	
B1.3 Approved	IPCC AR6 Working Group	August – September 2021
comments	III Final Government Draft	2
	- Summary for	
	Policymakers only	
B1.4 Approved	IPCC AR6 Synthesis	Mid-late 2022
comments	Report Second Order Draft	
B1.5 Approved	IPCC AR6 Synthesis	Late 2022
comments	Report Final Government	
	Draft	
B1.6 Approved	UN Emissions Gap Reports	Annually (subject to
comments		timetable)

The timing of these reviews is subject to change. For the reviews of IPCC Working Groups I, II and III, this review will only encompass the SPM, although there is a possibility that BEIS will require views on specific issues in the underlying report. For all reports, BEIS teams will identify SPM sections/paragraphs, or for Emissions Gap reports, specific chapter sections/paragraphs where technical assistance is required at the start of review periods, and will communicate these to the contractor. The contractor should use the specified review templates for each review. Comments

would need to be returned at a date set by BEIS, which will be at least two weeks before the end of the review period, so that all comments can be collated, discussed, and reviewed ahead of submission to the relevant body.

IPCC draft reports are confidential and may not be cited, quoted, or distributed, so Suppliers are required to take appropriate care of physical and digital copies. Bidders should include assurance measures for ensuring the confidentiality of draft reports in their submitted bids.

Reviewers will be required to work with BEIS to understand what is policy-relevant to the UK Government, and to discuss their comments. All reviews should:

- ensure the reviewed sections accurately reflect the underlying assessment and the available literature; and
- suggest amendments which would enhance the robustness of the assessment, including missing literature or correcting unclear language;

Contributions from technical experts to the IPCC government review should:

- identify key policy-relevant messages that could be elevated to Summary for Policymakers (SPM);
- · identify and highlight to BEIS any areas of concern; and
- ensure the SPM is written in clear language, with a strong structure and overarching narrative, and that confidence statements are appropriate and have a clear line of sight to the underlying chapters.

For all reviews, contractors should ensure that comments are:

- Constructive authors contribute a significant amount of (voluntary) time to produce reports
- Precise the issue should be clearly described, and ideally contain a line-of-sight either to suggested text in underlying chapters, or to elsewhere in the report
- Actionable authors should be given clear instruction of the change to be made, including alternative text or additions, which should be included within the comment

Where required, comments will be discussed with contributors to ensure clarity, balance, and relevance. If comments are vague, unclear, or not relevant, these will be removed from the final UK government review response as it will not be possible for authors to action these.

Bidders should detail their approach for ensuring a rigorous review of the relevant sections of reports, including how they will ensure

the necessary expertise is available for reviewing the reports in a timely manner.

Bidders should price this sub-work package **B1** according to the following scenario:

- Review of five IPCC reports on the basis of five person days per report (corresponding to deliverables B2.1-5)
- Review of four UN Emissions Gap Report on the basis of five person days per report.

Payments for this element of the work will be made on the basis of reviews delivered and agreed with BEIS, and will be on a Time & Materials basis (based on the costings provided in these scenarios). Please note, the actual work required could be more or less than the scenario presented; work will be paid for based on actual work completed, using the day rates provided by the Supplier.

3.2.2 IPCC approval session support [non-core, with needs dictated by level of assessment report challenge]

Additional technical support for IPCC approval sessions may be needed for Working Groups I-III, and the Synthesis Report. This work would consist of:

- Informally reviewing the updated version of the Final Government Draft of the SPM (received ahead of the approval session), or specified sections thereof, for a given report, focusing on accuracy, clarity of language, line-of-sight, and balance, reporting back to BEIS (Deliverable B2.1);
- Ahead of, and during, the approval session, the provision of on-call advice by telephone, video call, or email, to UK delegates on specific technical issues relating to the SPM or the underlying report (Deliverable B2.2).
- Assistance in providing a short, concise briefing summarising the approved SPM (Deliverable B2.3).

IPCC authors revise the Final Government Draft of the SPM following the government review. The revised draft is circulated to governments - this can be received up to two weeks before the approval session.

Approval sessions last between 4-5 days and can include weekends. In the past, some approval sessions have been extended by 24 hours or more. BEIS would not expect suppliers to provide 24 hour cover (for example if the approval session were in a different time zone, or where approval sessions run into evening and night-time sessions), but suppliers would be required to provide timely responses to requests for information and briefing at short notice. Some work outside of standard office hours e.g. weekends, may be required.

Bidders should detail how they will ensure the necessary expertise is available for providing timely review of the Summary for Policymakers and on-call advice for IPCC approval sessions in a timely manner.

Bidders should price **WPB2** according to the following scenario:

On-call support required for four x five-day approval sessions during the lifetime of the contract, based on two day's support priced using normal hourly rates; and ten hours of evening/weekend work per session.

Payments for this element of the work will be made on the basis of advice delivered and will be on a Time & Materials basis (based on the costings provided in the scenario). Please note, the actual work required could be more or less than the scenario presented; work will be paid for based on actual work completed, using the hourly rates provided by the Supplier.

3.2.3 Understanding the climate science landscape ahead of scoping the IPCC's Seventh Assessment Cycle [core]

Following the publication of the IPCC's Synthesis Report in its Sixth Assessment Cycle in 2022, the IPCC will transition to its Seventh Assessment Cycle, and begin scoping its Seventh Assessment Report (AR7). This sub-work Package will support the expert community and countries in understanding the scientific landscape, to inform the scoping process.

The Supplier is required to deliver a series of three expert workshops covering subject areas that fall under or across one or more of the three Working Groups, with a particular focus on working across disciplines and Working Groups in new and innovative ways.

The coordination and management of these workshops will be led by secondee 2. Each workshop will focus on a particular area of key policy relevance. The Supplier will work with BEIS to develop and agree the focus and agenda for each workshop (deliverable B3.1). They will contact and encourage the attendance of a suitable selection of experts, including consideration of transdisciplinary working where appropriate. Workshop attendees should include a range of expertise, including but not exclusively subject matter experts, should represent a balance across geographies internationally, gender, and seniority including early-career researchers. The attendee list should be designed to bring together a new and diverse range of experts in innovative ways to cross subject matter boundaries and enable inter/trans-disciplinary working. BEIS will approve the final attendee list (Deliverable B3.2).

The Supplier is required to successfully facilitate the workshop (Deliverable B3.3) to elucidate expert views from attendees. Suppliers should describe their approach to soliciting and capturing workshop attendee responses, including whether professional skills are used. The contract will provide funding for

the venue, and travel and subsistence of attendees (if the workshop is held in person; virtual options may also be explored).

The Supplier is required to synthesise and record the findings of each workshop in papers to be published in the peer-reviewed scientific literature (deliverable B3.4), which will include a synthesis of:

- The current state of play in the literature;
- Notable advances since the publication of the AR6 reports;
- Major policy-relevant gaps identified in AR6 and planned future research directions to fill them
- Transdisciplinary knowledge gaps and research priorities for addressing them

The papers should be accompanied by summary materials to facilitate communication of the report to internal and external stakeholders, including policy summary and infographics as appropriate.

The workshops should be held ahead of IPCC AR7 scoping meetings, with sufficient timing to enable dissemination of the workshop findings across the international research community. Scoping meeting dates are currently uncertain, but bidders should work on the assumption that they will be held in 2023. The current assumption is that workshops will be two days long each.

For **WPB3**, please price separately, as fixed price, for:

- Facilitation of three expert workshops, lasting two days each
- Preparation and delivery of three peer-reviewed papers, with accompanying summary materials.

In addition, please assume a figure of £30k per workshop for the purposes of pricing your bid, covering travel and subsistence for attendees. Please note reimbursement for T&S will be based on actual costs, which should be in line with BEIS travel policy. A summary of BEIS expense policy is given in Annex G . Venue and catering will be booked through the relevant Crown Commercial Service Events Framework e.g.

https://www.crowncommercial.gov.uk/agreements/RM6016 to ensure value for money. Within the budget, £20k per workshop has been earmarked for this.

3.3 Work Package C (WPC) – Decarbonisation and global ambition

A comprehensive package of analysis to inform international and domestic decarbonisation policy and processes, looking at global mitigation pathways.

Along with work packages D and E it will also feed into WPF and contribute a comprehensive package of analysis to support international processes, by addressing key knowledge gaps not covered by IPCC Reports available for COP26 and the Global Stocktake. This analysis will be translated and communicated domestically and internationally in support of UK international climate objectives through targeted briefings and science events surrounding international milestones, helping to socialise important scientific messages that support and amplify key policy messages.

3.3.1 New global decarbonisation analysis [core]

The Supplier is required to address the specified research questions below, and should price on a fixed price basis, for each.

1. Establish the consequences of overshoot pathways (where the temperature goals of the Paris Agreement are temporarily exceeded, but reduced using negative emissions technologies), in particular their implications for Sustainable Development Goals (particularly SDGs 1, 2, 3, 6, 7, 10, 14 & 15) and the challenges for their real-world implementation, particularly with regard to the engineering, environmental, finance and governance challenges associated with substantially reducing the volume of GHGs in the atmosphere. The Supplier should analyse and report on how the magnitude and duration of a temperature overshoot leads to different impacts to human and natural systems globally and regionally. They should also assess and report on the likelihood of irreversible impacts in specific systems, passing physical or socioeconomic tipping points, consideration of lowprobability, high impact scenarios, and consider the effects of hysteresis in the climate system. This analysis should consider impacts at a global level as a minimum. The supplier will be required to communicate the findings of the research to the Authority through a final report, workshop to discuss results, and produce a clear policyrelevant briefing with key messages aimed at non-experts.

Final research questions and methodologies to be used should be agreed with BEIS within three months of the contract starting. Initial findings should be presented to BEIS for comment by May 2022 (Deliverable C1.1), along with a half-day seminar with Government stakeholders for further discussion and explanation

(Deliverable C1.2). Findings addressing all research questions should be presented to BEIS in a final report (Deliverable C1.3) and a 2-page policy briefing with key messages (deliverable C1.4) by December 2022. All analysis on this question will use robust modelling and analysis combining climate science, economics, and impacts in a consistent way. In all appropriate cases, Work Package C will ensure consistency with, and consider, the findings of work packages D and E. The analyses in Work Package C are required to consider synergies and trade-offs with other societal priorities, including the Sustainable Development Goals and biodiversity, and how these vary regionally, including considering different pathways to (different) Net Zero Worlds.

2. In 2018, the International Maritime Organisation committed to reducing GHG emissions from international shipping by at least 50% by 2050, with a view towards phasing them out as soon as possible this century. This Strategy is due to be revised in 2023. The Supplier is required to produce a review of existing evidence on maritime emissions reduction pathways consistent with the long-term temperature goals of the Paris Agreement. This should include potential shares of annual global emissions, potential shares of the global carbon budget (cumulative emissions), and required changes in carbon intensity. This review should cover at least the period to 2050 and include separate consideration of domestic shipping and international shipping where feasible. It would also be helpful for the review to identify the timings of important emissions reduction milestones, where possible. The review should be completed, and a final report (deliverable C2.1) including key messages produced by October 2021.

This output would help to address the following policy relevant questions

- How the Paris Agreement could be met, and provide insight into different pathways, at a regional level, to meeting it.
- Whether climate mitigation impedes growth, and if particular pathways are better at providing jobs and growth than others.
- How other societal priorities, such as the Sustainable Development Goals, can be tackled at the same time as climate change.

Bidders should price WPC1 and deliverable C2.1 as fixed price.

Bidders should detail their proposed methods for addressing the specified research questions above including their approach to quality assurance, ensuring the necessary expertise, and ensuring access to the appropriate models and data.

Bidders should detail their approach for ensuring the necessary expertise and capability is in place to deliver on supplementary areas as described above.

Bidders should detail their proposed approach for ensuring research in this work package is integrated with the research and analysis conducted under the other technical work packages.

In addition to the specified questions above, BEIS requires the Supplier to have the expertise and capability to address research questions in a similar area, which would be funded through the ad hoc fund. Examples of these include:

- Produce, using a range of evidence and approaches beyond the current set of 1.5°C pathways available in the literature (for example through expert elicitation, bottom-up approaches or use of databases), mitigation pathways consistent with the Paris Agreement¹. This work would inform, at a more granular level than currently available, how global Net Zero can be achieved, and provide detail that current Integrated Assessment Models are not able to provide. This analysis should identify, where possible, synergies and trade-offs with the Sustainable Development Goals, and how trade-offs can be minimised. There are a number of elements to this work including:
 - Improving understanding of investment needs and economic costs and benefits of pathways compatible with the Paris Agreement.
 - Consideration of the role of different technologies and behaviour change at sector level, including their related trade-offs and how they vary regionally. An understanding of how innovation is driving technological and behavioural change is a key part of this work.
 - Improved estimates of land use emissions and non-CO₂ greenhouse gases globally, and how mitigation of these contributes to pathways.
 - Analysis on the role of a range of short-lived climate pollutants (SLCPs), including the key features of global, regional and sectoral mitigation pathways, and co-reduction with other greenhouse gases.

¹ Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels.

- Identification of the implications of different pathways for employment and growth across different sectors, at a global and regional level (minimum disaggregation Asia, sub-Saharan Africa, MENA, North America, South America and Europe).
- Further analysis of Paris-compliant mitigation pathways for the maritime and/or aviation sectors
- Integrated assessment models play an important role in helping our understanding of possible future decarbonisation pathways and the choices and trade-offs that lie before us. However, interpretation of their results and their policy significance would be enhanced if there were an improved understanding of model behaviour, for example why carbon capture and storage emerges from Integrated Assessment Models (IAMs) as a key technology. We could therefore seek policy relevant insights into IAMs and the way that they behave. This could be supplemented with an analysis of the impact of policies, technologies and behaviours that are not currently well represented in IAMs, to understand their mitigation potential and if and how this changes our perspective on the decarbonisation pathways that emerge from mainstream models.
- An improved understanding of the impact of different mechanisms to enhance global ambition, including how policies and technologies are (dis)incentivised by their different applications, and implications for decarbonisation and ambition.
- The policy implications of different metrics for calculating the CO₂ equivalence of greenhouse gas emissions and removals (e.g. Global Warming Potentials) on global and regional ambition including on the (dis)incentivisation of different mitigation policies at a national level, and through international emissions trading; the implications of such metrics for global temperature outcomes.
- The potential for mitigation itself to generate further technological, behavioural and system change.

3.3.2 Interactions between mitigation measures and the atmosphere

The energy system and measures taken to deliver net zero will lead to greater quantities of existing activities, such as widespread deployment of renewables, but also novel technologies and substances being used, including hydrogen as a fuel in numerous applications, greater use of bioenergy and potentially energy from waste and other sources, as well as various approaches to Greenhouse Gas Removal. The impact of these activities on the atmosphere and other environmental compartments needs to be adequately addressed in policy development to reduce the risks of unforeseen negative consequences of climate mitigation

approaches. Action may need to be taken in technology or policy design to eliminate or minimise negative impacts. BEIS therefore needs to have access to the capability to address these challenges as they are identified.

Examples of the breadth of recent and emerging issues include:

- Scenarios of future hydrogen usage in the UK and globally, assessing the global impact such as indirect radiative forcing and decreasing stratospheric ozone and the net atmospheric impacts of using hydrogen in place of more carbon-intensive fuels.
- Engineering assessment of the costs and effectiveness of options to mitigate ammonia emissions from biogas generation through anaerobic digestion.
- Options for including the impacts of Anaerobic Digestion (AD) digestate on carbon storage in soils.

Bidders should cost for the following work to be carried out:

- In liaison with BEIS scientists, provide a short report (Deliverable
 C3.1) which identifies a range of different mitigation measures
 which might be deployed in the UK and are likely to have significant
 direct or indirect impact on the atmosphere
- For a priority list of 3 5 possible mitigation measures, to be taken from C3.1 and agreed with BEIS, quantifies these impacts globally using metrics and assumptions agreed with BEIS and consistent with the pathways used within WP-C. Provide interim (**Deliverable C3.2**) and final (**Deliverable C3.3**) reports which detail the methodology and metrics used, and the results.
- Produce up to 3 short (no more than 4-page), summary reports for policy-makers working on particular mitigation measures (Deliverable C3.4)

At a minimum, the following mitigation measures should be considered:

- Afforestation
- Hydrogen deployment
- Anaerobic digestion
- Biomass for heat
- Herd size reduction for cattle
- Agricultural intensification

Consequences to be taken into account include impacts on local and global air quality, stratospheric ozone production or loss, and global climate forcing, expressed in MtCO₂e for long-lived pollutants, and relevant metrics for short-lived pollutants.

Bidders should price WP C3 as a fixed price.

3.4 Work Package D (WPD) – Climate impacts at different spatial and temporal scales

This work package will examine the impacts of climate change to natural and human systems over a range of levels of global warming and at different timescales (near, medium, and long term). The purpose of this Work Package is particularly to deliver a better understanding of the impact on human systems of climate hazards (i.e. hazard to impact analysis).

It will produce spatially granular estimates of UK climate impacts, in support of BEIS domestic policy teams. It also is required as underpinning analysis for Work Package F5, where, along with work packages C and E, it will contribute a comprehensive package of climate impacts analysis to support international processes, by addressing key knowledge gaps available for the Global Stocktake and translating and communicating this evidence domestically internationally to build an enabling environment for science under the negotiations, in support of UK international climate objectives.

3.4.1 Climate impacts at a global, regional, and country scale [core]

Assessments of climate impacts will consider appropriate and policy-relevant metrics and consider a range of sectors including food security, physical security, water, health, biodiversity, ecosystems and ecosystem services, and economic impacts, and the inter-linkages between them. This work will also consider extremes, low-probability high-impact events, and tipping points, as well as low-likelihood, high-impact scenarios (e.g. equilibrium climate sensitivity greater than the IPCC's likely range), considering tail risks where appropriate. In particular, the Supplier is required to include robust assessments of the contribution of exposure and vulnerability to climate risk including consideration of different Shared Socioeconomic Pathways, being clear about assumptions made.

Research questions required include:

- 1. A review of the existing and planned evidence of country-level climate impacts across countries which are also party to the Paris Accord, including countries covered, its degree of aggregation, levels of warming considered, the climate impact sectors covered, research gaps, UK research capability in this area, and areas for potential future research. Findings should be communicated in a final report (**Deliverable D1.1**) by November 2021.
- 2. Drawing on UKCP18 and existing research where appropriate, an assessment of the avoided climate impacts to the UK from limiting global warming to 1.5°C, compared to higher levels of warming,

including 2°C, 3°C, and 4°C of this century. This should include direct and indirect impacts to the UK, including risks to UK prosperity and security from European and other regional impacts, and imported supply chain impacts to the UK from global supply chain vulnerability. Bidders should propose a set of climate impacts metrics, which will be finalised and agreed with BEIS within the first three months of the contract starting. The supplier will be required to communicate the findings of the research to the Authority through a final report, presentations, and produce a clear policy-relevant briefing aimed at non-experts with key messages (**deliverables D1.2, 3 and 4, respectively**), finalised by May 2022.

In all instances, deliverables communicating research findings should be clear, concise, aimed at a non-expert audience, and be clear about uncertainties, the limitations of analysis, assumptions made and any other caveats.

Bidders should set out their proposed methods for addressing the specified research questions above including their approach to quality assurance, ensuring the necessary expertise, and ensuring access to the appropriate models and data.

Bidders should set out their approach for ensuring the necessary expertise and capability is in place to deliver on the areas described above.

Bidders should detail their proposed approach for ensuring research in this work package is integrated with the research and analysis conducted under the other technical work packages. Bidders should detail their approach to ensuring climate impact metrics are policy-relevant and resonate with policy audiences.

For WPD1 (deliverables D1.1 – D1.4), bidders should price as fixed price. If further analysis for additional countries is required, it will be funded through the *ad hoc* fund and based on the costings provided in this scenario. Details of the ad hoc fund can be found in section 3.7.

3.4.2 Climate impacts and UK infrastructure [core]

Additional climate impacts data analysis at a UK level is required in support of Work Package F2.

3.4.2.1 Future water availability for water-intensive energy infrastructure

This piece of analysis will support BEIS in improving UK energy resilience – in line with BEIS Departmental Objective 4.3 "Ensure our energy system is reliable and secure" – by working with the Environment Agency to update relevant climate information. The Agency manages and permits water abstraction in England to ensure there is sufficient water for people and a healthy

environment and in order to provide climate-proofed advice, there is a need for an accessible dataset of future water availability for energy infrastructure to be generated.

The Supplier will provide an accessible dataset (Deliverable D2.1) which combines up-to-date timeseries of projections of water availability and flows in the UK (for example through the UK Centre for Ecology and Hydrology's eFLaG project, funded through the UKRI Climate Resilience Strategic Priorities Fund), with regulatory thresholds (e.g. Q95), and information about existing abstraction permits, to produce estimates of water availability. These estimates would be needed for historic, current, and future timeframes (out to 2100), and at different spatial scales (regional, catchment, local). Supplier will need to work closely with the Environment Agency to ensure access to the correct datasets, and to ensure appropriate thresholds and metrics are used. Bidders should detail which future flows dataset they will be using and why, including any caveats. If eFLaG is used, bidders should be clear how they will manage any delays in the provision of eFLaG data and propose a timeline for dataset production. Bidders should detail their approach to gathering the appropriate datasets, including how this affects the timeline for delivery, and

their approach for ensuring the dataset is appropriate for the Environment Agency's use.

The dataset is required as an input to knowledge translation work under WPF2. Bidders should set out their approach for aligning with the work for deliverables F2.1 – F2.5.

Work package **D2** will be priced on a milestone basis, according to the following milestones:

- 1. Consultation with Environment Agency Climate Science team on dataset needs and methodology; agreement with BEIS and Environment Agency on final dataset, methodology, thresholds, and metrics (by Nov 2021). [20%]
- 2. Access to all necessary datasets secured (by Feb 2022). [20%]
- 3. Post-processing and data analysis complete (by May 2022). [30%]
- 4. Delivery of final dataset to BEIS and the Environment Agency, and to Work Package F (June 2022) [30%]

Payment will be on the basis of successful completion of milestones described above (% breakdown of total in square brackets).

3.4.2.2 Enhancing resilience in UK energy networks

This piece of analysis will support BEIS in improving UK energy resilience – in line with BEIS Departmental Objective 4.3 "Ensure our energy system is reliable and secure" - by improving Departmental understanding of climate risks to UK energy network infrastructure, including cascading and systemic risks. National Policy Statements for Energy require Energy Companies to take into account a range of possible climate change impacts² when seeking approval for new developments. The outputs delivered through this Work Package should be designed to support energy companies in understanding climate risk in a straightforward way, enable the use of the latest science to ensure forecast impacts on individual energy assets are as accurate as possible and reflect the full range of climate risks. The work also needs to go beyond individual assets to look systemic risks across the whole energy system, in order to ensure BEIS, Ofgem and energy companies can access a wholesystem picture of the risks climate poses to energy supply and distribution in the UK. Where appropriate this work should draw on and synthesise existing evidence, including the 2018 National Infrastructure Assessment, Committee on Climate Change reports, and UK Climate Change Risk Assessments. The questions to be addressed through this analysis are:

- 1. What are current weather and climate risks to energy network infrastructure, assets, and processes, including cascading and systemic risks?
- 2. What are the future weather and climate risks to energy network infrastructure, assets, and processes, including cascading and systemic risks? This work should quantify risks where possible, look at timescales of 5, 10, 20, and 30 years from now. The work should identify the role of critical energy infrastructure in propagating these cascading and systemic climate risks in the UK.
- 3. How will trends and projections in the identified risks, consumer energy demand, and energy infrastructure changes (out to 2050) interact to enhance or diminish climate resilience of energy networks?
- 4. What are existing and new no- or low-regrets options to enhance climate resilience of infrastructure, assets, and processes against current and future risks, including cascading/systemic risks?
- 5. What are appropriate approaches or metrics for GB gas and electricity network companies to measure their resilience to climate change and monitor/demonstrate their progress in improving this?
- 6. What standards or levels of service (new or existing) should the GB gas and electricity network companies be developing and have in place by 2050 considering the consequences of climate change and expected future developments of the UK? Standards could consider particular resilience measures, or broader standards such as yearround requirements for service delivery. This should consider the availability of resources and budgets to integrate climate resilience into strategies over the short-term, and should draw on recommendations from organisations such as the National Infrastructure Commission where appropriate.

This research will require a co-development approach with BEIS, the Planning Inspectorate, Ofgem and energy network companies, particularly regarding research questions 4, 5, and 6. The Supplier should produce a brief engagement plan (deliverable D3.1) for their work with network companies, to be agreed with BEIS and Ofgem within the first three months of the programme. The plan should clearly set out how they plan to co-develop with energy network companies, climate resilience options, metrics, and appropriate standards/levels of service, as specified in the research questions, and how the Supplier will ensure measures are feasible and appropriate for the sector.

Already identified engagement channels include energy network working group meetings and 1:1s with individual companies, although additional approaches are also welcome. This approach should also ensure that risks are relevant, an appropriate risk appetite is considered (for example, whether 1-in-100 or 1-in-500 year events should be considered), and to understand how best to communicate research.

The Supplier is required to clearly and engagingly communicate the outputs of the research and co-development processes to BEIS, Ofgem and energy network companies, in support of improving the climate resilience of the energy system, particularly through informing planning and investment decisions and assisting energy companies in meeting their statutory duties, including those set out in the National Policy Statements for energy. Outputs should include identification of climate resilience measures appropriate for energy network assets and processes to address climate risk (including cascading or systemic risk), appropriate metrics, and appropriate standards/levels of service in relation to climate resilience. At a minimum this should be communicated via:

- Initial set of online seminars to introduce the Work Package and ensure energy network companies have an adequate and consistent knowledge of climate and weather risk to energy infrastructure, assets and processes; and climate resilience and its importance (deliverable D3.2). The Supplier is required to deliver a seminar energy network companies in each sector (gas and electricity) by December 2021.
- Follow-up meetings with individual energy network companies to further discuss the contents of deliverable D3.2 (deliverable D3.3) by April 2022.
- Online seminars (two per sector; four in total) covering research findings on future risks, options to enhance resilience, and metrics and standards/levels of service (**deliverable D3.4**) by December 2023.
- Additional follow-up 1:1 meetings with energy network company to ensure climate risks, metrics, and standards, are understood (deliverable D3.5) by February 2024.
- Attendance at energy network working group meetings on climate resilience, to answer questions or provide short presentations on the topics addressed in this WP as appropriate (deliverable D3.6) by April 2024.

The Supplier will also produce a set of tailored communications materials in support of the engagement activities that clearly and engagingly present the most up-to-date evidence on the above topics. These should consist of an interim (**deliverable D3.7**) and final report (**deliverable D3.8**), and accompanying digestible summary materials to support communication of the findings including 2 page briefings (**deliverable D3.9**) or an additional targeted report, if appropriate. All communications should use clear, simple language with accompanying illustrations and infographics, and should focus on regions and energy networks. This work will require expertise in climate adaptation and resilience, and in bringing stakeholders together and supporting them in understanding and developing

Bidders should demonstrate they have the required expertise_in applying extensive climate adaptation/resilience knowledge to bring together stakeholders, advise them and co-develop practical measures. Bidders should demonstrate the scientific capability to develop a robust understanding, based on the latest available climate science, of likely future weather and climate risks as they relate to the energy system. Bidders should state the approach they would take to understand the needs and current landscape of climate resilience within the energy network companies' strategies to build on their current work and existing knowledge.

Bidders should price Deliverables D3.1 – D3.9 as a fixed price

practical measures.

3.4.2.3 Projections of temperature change and impacts in UK housing

This piece of analysis will support the BEIS Local Climate and Energy team in its work providing advice and guidance to local authorities (LAs) and Local Enterprise Partnerships (LEPs) on their plans for climate adaption and decarbonisation. As such, it will also support development of the Climate Action Plans being developed, at pace, by the LAs that have declared Climate Emergencies. In addition, it will support the BEIS Fuel Poverty team in delivering on the Government's legally binding fuel poverty target. It will do this by helping the team to further understand the impacts of climate change on the cost of heating and moderating temperatures within poorly insulated homes for lower income households and on future cooling requirements. The Supplier is required to produce spatially disaggregated data for current and projected temperatures in the UK to support local authorities in their decisions around energy efficiency in buildings, and in understanding projected cooling requirements in the UK. This work will also feed into work package F3. The following research question should be answered:

 What is the impact of a changing UK climate on heating and cooling needs in different regions of the UK, and what are the implications for different groups, including the elderly, the fuel poor and other vulnerable groups? Analysis should address the ability of these groups to adequately heat and cool their homes, capital outlay required to adapt dwellings to a changing climate, and energy consequences, including bills, of doing so. An assessment of any low-cost measures that could be adapted to minimise these impacts should be conducted.

Data is required at different levels of spatial disaggregation and bidders should use the Domestic Energy Map (http://www.domesticenergymap.uk/) as a guide. Projections are required to 2030, as well as at 2040 and 2050. At a minimum, temperature data should include consideration of annual and seasonal temperatures and temperature extremes (including hot extremes and heatwaves, and cold snaps). Final research questions and methodology should be agreed with BEIS within three months of the contract starting (deliverable D4.1), a draft report with initial findings by June 2022 (deliverable D4.2), and a final report (deliverable D4.3) and dataset (deliverable D4.4) by March 2023 shared for approval with BEIS. Bidders should set out the level of spatial disaggregation possible, their proposed metrics, and how they will produce the dataset. Bidders should explain clearly the uncertainties and limitations of their methodology and proposed dataset.

Bidders should price Deliverables **D4.1 – 4.4** as fixed price.

3.5 Work Package E (WPE) – The co-benefits of climate action [core]

This work package is required to provide new underpinning analysis, on the co-benefits of climate action, which can support governments to decarbonise and adapt to climate change alongside achieving other priorities. Alongside work packages C and D, it will enhance understanding of the case for Net Zero both in the UK and internationally, and in particular support UK COP26 Presidency campaigns on Adaptation and Resilience, and Energy Transitions.

It will cover a range of co-benefits from climate change mitigation and adaptation, including health, air-quality, food production, energy security, biodiversity, livelihoods, employment, growth and other economic factors, and other societal priorities such as the Sustainable Development Goals. Co-benefits will be quantitatively valued where possible, and be at policy relevant levels, e.g. employment changes and opportunities by sector, industry etc.

3.5.1 International regional/country level assessments of climate change mitigation co-benefits

The supplier is required to produce updated, credible assessments of mitigation cobenefits to health and the economy at a global-regional scale and communicate these to BEIS through a report, presentations, and through policy-relevant summaries and briefings including key messages, clearly communicating an evidence-based narrative supporting the case for global and regional decarbonisation. Analysis is required for Asia, sub-Saharan Africa, Middle East and North Africa (MENA), North America, South America and Europe. These should include clear explanations of the uncertainties and limitations of the analysis. Bidders should explore synergies with the separately commissioned analysis within the Net Zero Visions programme, currently being separately commissioned by BEIS: https://www.deltaesourcing.com/tenders/UK-UK-London:-Research-and-development-services-andrelated-consultancy-services./RF8WZO7W58. Bidders should clearly describe their proposed methodologies and any uncertainties and limitations, and whether any countries or geographies would pose a particular challenge. The supplier will be required to communicate the findings of the research to the Authority through presentation of interim results and an accompanying half-day seminar with Government stakeholders to discuss them, a final report (highlighting the key messages), and to produce a clear policy-relevant briefing aimed at nonexperts (deliverables E1.1, E1.2, E1.3, and E1.4 respectively) by March 2023 at the latest.

3.5.2 UK adaptation-mitigation co-benefits and trade-offs

Updated assessments of the interlinkages between adaptation and mitigation, including co-benefits of adaptation for emissions reductions, the co-benefits of mitigation for adaptation, synergies and trade-offs between mitigation and adaptation options, and the implications of delayed mitigation action for adaptation and the scale of adaptation required within the UK. The Supplier should identify

where there are interlinkages that can lead to no/low-regret decisions, using case studies where appropriate to illustrate.

Findings should be communicated to BEIS through a report, half-day seminar with Government stakeholders to present and discuss findings, and through policy-relevant summaries and briefings including key messages (deliverables E2.1, 2.2 and 2.3, respectively), March 2023 at the latest. These should include clear explanations of the uncertainties and limitations of the analysis. Bidders should clearly describe their proposed analytical framework for understanding and evaluating links, their methodology and its uncertainties and limitations.

Bidders should detail their proposed methods for addressing the specified research questions above including their approach to quality assurance, ensuring the necessary expertise, and ensuring access to the appropriate models and data.

Bidders should detail their proposed approach for ensuring research in this work package is integrated with the research and analysis conducted under the other technical work packages. Bidders should detail their approach to ensuring indicators for cobenefits are policy-relevant and resonate with policy audiences.

Bidders should price Work Package E (deliverables E1.1 - E1.4 and E2.1 - E2.3) as fixed price.

3.6 Work Package F (WPF) – Knowledge synthesis and translation

3.6.1 Monitoring of the climate science landscape and provision of on-call briefing [core]

A knowledge synthesis, translation and communication service is required to support the Climate Science team's work in advising and briefing BEIS and Government. The Supplier is required to maintain an up-to-date knowledge and understanding of the relevant scientific literature covering the full range of disciplines covered by this programme. This should cover a range of topics, including (but not exclusively):

- Physical climate science including the observed state of the global or UK climate, trends and projections in key climate indicators, climate sensitivity, climate tipping points and irreversible changes, event attribution, global carbon budgets, indicators of solar radiation management; CMIP (Coupled Model Intercomparison Project) and other model intercomparison projects.
- The latest science on observed and projected climate impacts and adaptation including but not limited to, natural systems and biodiversity, economic impacts including global supply chain vulnerability, and security & geopolitical impacts (migration, conflict etc).
- Costs of climate action, and co-benefits of climate action (mitigation and adaptation).
- Global mitigation pathways, mitigation options (including Greenhouse Gas Removals) and their synergies and trade-offs, emissions including from land-use change and agriculture, greenhouse gas removal technologies, and "blue" carbon, among others.

The Supplier will be required to draw on this knowledge to support BEIS in maintaining an up-to-date knowledge of the key scientific papers, and to provide on-call briefing. The Supplier will:

- Draw relevant recent research to our attention with monthly climate science literature updates (**Deliverable F1.1**)
- Create summaries and presentations where appropriate for significant publications or science reports which clearly communicates the policyrelevance, including of embargoed copies if possible (**Deliverable** F1.2)
- Produce on-call policy-relevant briefings (written or verbal) and advice where appropriate and where required, which may require synthesising across multiple disciplines (**Deliverable F1.3**).

Bidders should detail how they will ensure sufficient knowledge and understanding of the relevant literature within the programmer delivery team.

Bidders should set out how they will ensure there is sufficient resilience within the team to respond to on-call requests.

This work package should be priced as fixed price, based on the following scenario:

- Monthly climate science literature updates
- Producing a summary (1-2 pages) for a significant publication or report 4 x a year
- Produce written or verbal policy-relevant briefing (2-4 pages if written) on a technical question 4 x a year

Any similar requirements for this sub-work package over and above this in the delivery of the contract will be priced based on the base rates for this scenario.

3.6.2 Future water availability for water-intensive energy infrastructure – data visualisation [core]

This piece of work will produce a tool to support the energy transition necessary to successfully achieve Net Zero ambitions. This tool will provide information on projected climate impacts to water flows, to provide actionable information to the energy and industrial sector, building on Environment Agency work, in permitting and regulating sustainable water resource use for proposed energy decarbonisation technologies and infrastructure.

Using the dataset of future UK water availability produced in Work Package D (deliverable D2.1), the Supplier will produce a tool that enables teams in the Environment Agency and beyond to click and collect this data in an accessible way. The tool should enable users to select water availability data spatially (at a regional, catchment, and local level) and at different timescales, and visualise this. The user should also be able to click and obtain the underlying data, and save the data visualisations. An example of what can be done using a web-based tool is the prototype climate change viewer created in the EU-funded demonstration project, EDgE (see http://edge.climate.copernicus.eu/). Any web-based tool should be adaptive.

Effective production of the tool will require significant co-creation and co-production with the Environment Agency climate science and user teams. The Environment Agency will be a user of this tool, not a party to the contract. It is expected that some tool development will run in parallel to the development of deliverable D2.1.

BEIS Digital tools are required to meet Cabinet Office spend control assessment criteria and conform to the Technology Code of Practice. It's expected that an agile approach would be taken. The Supplier will need to go through an initial discovery

phase to identify and test the problem statement against service users; identify candidate solutions; develop an alpha phase; and test and pre-release a beta phase. The following milestones are envisaged:

- Milestone 1: Self-assessment against Cabinet Office digital spend controls pipeline assessment criteria agreed with BEIS Digital Portfolio Board, prior to beginning of Discovery.
- Milestone 2: End of discovery and submission of interim report (deliverable F2.1) detailing evidence needs, decision contexts and practices, a finalised problem statement, and candidate solutions, agreed with BEIS.
- Milestone 3: Design of prototype/alpha product (deliverable F2.2) completed and agreed.
- Milestone 4: Testing and refining the developed tool (beta) (deliverable
 F2.3) completed and agreed.
- Milestone 5: Final tool agreed (**deliverable F2.4**) and implementation and the production of user guidance (**deliverable F2.5**).

We envisage that overall this process will take around 15 months, dependent on deliverable D2.1. The tool should be developed in full by December 2023. The Supplier is required to ensure that all digital outputs conform to the Technology Code of Practise (https://www.gov.uk/government/publications/technology-code-of-practice) and is fully accessible to all users.

Bidders should provide a timeline for production and achievement of milestones, including alignment with production of deliverable D2.1.

Bidders should detail their approach to co-production and cocreation with teams and how they will ensure the product is fit for purpose including a list of the key areas they expect to cover with them.

Bidders should detail their proposed approach to quality assurance, including consideration of BEIS QA processes, and how they will ensure the tool is fit for purpose, tracking, monitoring and reporting progress against the milestones to BEIS, as the work package progresses.

Work Package F2 should be priced as fixed price and will be paid proportionally on the delivery of milestones defined above.

Suggested milestone payments are as follows, and will be agreed with BEIS prior to work commencing:

Milestone 1 Self-assessment agreed with BEIS (5%)

Milestone 2 End of discovery (15%)

Milestone 2 Alpha design completed and agreed (30%)

Milestone 3 Testing completed and agreed (30%)

Milestone 4 Final tool and user guidance (20%)

3.6.3 Spatially granular UK climate impacts for local authorities – data visualisation [core]

Work Package F4 will support BEIS in providing climate information to local authorities and LEPs, assisting them in understanding climate change implications for local climate adaption and decarbonisation plans.

Drawing on the underlying dataset for deliverable D4.4, as well as wider climate data sources, the Supplier will develop a tool to enable teams in BEIS, Local Enterprise Partnerships, and Local Authorities to access and understand this data. The output should, at a minimum, enable users to select temperature and precipitation (including seasonal averages and extremes) projection data spatially and at different timescales, and visualise it. It should enable users to overlay additional socioeconomic data, for example, data from the Domestic Energy Map, and visualise this. The user should also be able obtain the underlying data and save the data visualisations. The tool should enable decision-makers to understand uncertainties in the projections and identify hotspots where further risk assessment may be needed. An example of what can be produced is the prototype climate change viewer created in the EU-funded demonstration project, EDgE (see http://edge.climate.copernicus.eu/). As with F2, any digital solutions will need to be fully accessible to all audiences, and developed in line with the Technology Code of Conduct.

Effective production of this output will require significant co-creation and co-production with BEIS Local Climate and Energy Team and user teams in LEPs and LAs. It is expected that some data visualisation development will run in parallel to the development of deliverable D4.4.

As described in F2, BEIS Digital tools are required to meet Cabinet Office spend control assessment criteria and conform to the Technology Code of Practice. It's expected that an agile approach would be taken. The Supplier will need to go through an initial discovery phase to identify and test the problem statement against service users; identify candidate solutions; develop an alpha phase; and test and prerelease a beta phase. The following milestones are envisaged:

Milestone 1: Self-assessment against Cabinet Office digital spend controls pipeline assessment criteria agreed with BEIS Digital Portfolio Board, prior to beginning of discovery phase.

Milestone 2: End of discovery and submission of interim report (**deliverable F3.1**) detailing evidence needs, decision contexts and practices, a finalised problem statement, and candidate solutions, agreed with BEIS.

Milestone 3: Design of prototype/alpha product (**deliverable F3.2**) completed and agreed.

Milestone 4: Testing and refining the developed tool (beta) (**deliverable F3.3**) completed and agreed.

Milestone 5: Final tool agreed (**deliverable F3.4**) and implementation and the production of user guidance (**deliverable F3.5**).

We envisage that the process will take around 15 months. The entire process should be completed by Jan 2024 at the latest, but sooner if possible, particularly if deliverable 4.4 can be delivered on a shorter timescale. Similar/additional work using other climate variables (e.g. precipitation, storms), if required, would be funded through the ad hoc fund.

Bidders should provide a timeline for production and achievement of milestones, including alignment with production of deliverables D4.3 and D4.4

Bidders should detail their approach to co-production and cocreation with teams and how they will ensure the product is fit for purpose including a list of the key areas they expect to cover with them.

Bidders should detail their proposed approach to quality assurance, including consideration of BEIS QA processes, and how they will ensure the tool is fit for purpose, tracking, monitoring and reporting progress against the milestones to BEIS, as the work package progresses.

Work Package F3 should be priced as fixed price and will be paid proportionally on the delivery of milestones defined above.

Suggested milestone payments are as follows, and will be agreed with BEIS prior to work commencing:

Milestone 1 Self-assessment agreed with BEIS (5%)

Milestone 2 End of discovery (15%)

Milestone 2 Alpha design completed and agreed (30%)

Milestone 3 Testing completed and agreed (30%)

Milestone 4 Final tool and user guidance (20%)

We expect the tool to cost between £150-180k, plus maintenance and support as required.

3.6.4 International climate science engagement [core]

Work Package F4 will act in support of the UK international climate objectives of enhancing global climate ambition, through translating, synthesising, and communicating the key scientific findings of this programme and the wider literature domestically and internationally. It will do this through targeted briefings and science engagement events using innovative communications products and tools, surrounding important international

milestones, which will socialise scientific messages that support and amplify key policy messages.

International milestones will need to be planned and agreed with BEIS, however, the following international events are considered of particular importance:

- COP26 and UK Presidency in following year (November 2021 November 2022).
- Subsequent COP meetings, once a year.
- G7 and G20 meetings, once a year.
- First UNFCCC Global Stocktake (2023, with sub-milestones).
- Other international opportunities to influence on climate, e.g. Davos.

Briefings and events will need to carefully consider the target audience in each instance, in order to ensure that messages will resonate. These should be identified and refined with BEIS, but example topics that may be relevant have been listed below:

- Managing climate risk through mitigation and adaption, including temperature overshoot pathways that avoid dangerous climate change;
- What do current rates of technological development, and different climate solutions, mean for livelihoods and economic growth?

The Supplier is expected to work with BEIS and UK embassies to identify the right people and communication strategies and framings. Target audiences will need to be identified and agreed with BEIS, but are likely to include:

- International audiences, such as through mandated events, side events or similar at COP.
- International science-policy workshops that help key international policy audiences understand the science.
- Indirect influencing, by providing communications materials for use by HMG Chief Scientific Advisers, or UK Negotiations team.

The following deliverables are required:

- Two science side events at COP26, consisting of science presentations followed by panel discussions (deliverable F4.1)
- Science briefing for international audience (x 3 for different audiences;
 COP26), max 2 page per briefing (deliverable F4.2)
- One side event each at COP27, 28, 29, consisting of science presentations followed by panel discussions (**deliverable F4.3**)
- Regional science-policy workshops x 2 leading up to the Global Stocktake (deliverable F4.4), plus the production of accompanying summary materials from workshops including short reports (10 pages, deliverable F4.5) and 2-page policy briefings (deliverable F4.6).

Bidders should set out how they will identify key scientific messages and ensure that they resonate with different international audiences.

Bidders should describe how they will ensure briefings and events are engaging and targeting the right people, including whether, and how, they will draw on international networks.

Bidders should price Work Package F4 as fixed price:

- Two science side events at COP26; (deliverable F4.1)
- Science briefing for international audience (x 3 for different audiences; COP26) (deliverable F4.2)
- One side event each at COP27, 28, 29 (including T&S for speakers; for the purposes of pricing please assume a ring-fenced amount of £5k per side event for travel and subsistence, however it will be paid based on actual costs and in with BEIS travel policy) (deliverable F4.3)
- Regional science-policy workshops x 2 leading up to the Global Stocktake (deliverable F4.4). Please assume a figure of £50k per workshop for the purposes of pricing your bid, covering travel and subsistence for attendees, venue and catering. Please note reimbursement for T&S and venue costs will be based on actual costs, which should be in line with BEIS travel policy. Final decision of venue will be agreed with BEIS before booking; the Supplier is required to obtain three quotes for venues in order to ensure value for money.
- Please also price the facilitation of the workshops (deliverable 4.5), preparation and delivery of summary materials from workshops including short reports (10 pages, deliverable F4.6 and 2-page policy briefings (deliverable F4.7).

3.7 Ad hoc funding

In addition to the work packages described above, the programme will contain an ad hoc fund of no more than £980k over the lifespan of the programme. The purpose of the ad hoc fund is to address emerging evidence needs driven by policy customers and BEIS throughout the project lifetime. Based on our previous experience, a mechanism that enables us to commission strategically significant evidence in a timely and coherent manner will support us in addressing emerging climate policy evidence needs on short timescales in support of BEIS international and domestic climate objectives.

Calls on the ad hoc fund will be designed by the BEIS Contract Manager, supported by the Programme Working Group, and then agreed between the BEIS Contract Manager and the Lead Supplier ensuring that resource is available, and the question(s) to be addressed are tractable given the skills, experience and availability in the Programme team. Proposals will be approved by the Programme SRO. Expertise required for these projects will be within the scope and capabilities defined in work packages A-F. i.e. ad hoc work can only be undertaken in this contract where it directly relates to the programme of science already procured through this procurement. Any requirements which are outside the scope and capabilities defined in work packages A-F and/or where it does not directly relate to the programme of science in this contract, will be tendered for separately. Bidders will need to record day rates for ad-hoc work. If the lead contractor needs to subcontract for additional resource to meet ad hoc requirements, transparency will be ensured using the following process:

- For requirements under £10k, three quotes will be needed;
- For requirements above £10k, the opportunity should be advertised on a transparent national basis by the Supplier e.g. Contracts Finder/ Find a Tender.

4 Terms and conditions

BEIS Standard Terms and Conditions of Contract, will apply to this Contract.

The Standard Terms and Conditions will be amended as follows: In section

- "27. Intellectual Property Rights", after paragraph (5), the following paragraph is added:
- "(5b) Notwithstanding its sole right to use any information collected or collated pursuant to the Contract, the Authority may allow the Contractor to:
- (5b)(i) publish results of the Project in peer-reviewed journals. The Contractor will need written approval from the Authority before proceeding to any submission of an article to a peer-review journal using results of the project that have not yet been made public by the Authority.
- (5b)(ii) present the essentials of the Project to UK's Research Excellence Framework or to use materials derived from the Project for teaching purpose provided written permission from the Authority has been obtained beforehand prior to any specific application or use.
- (5b)(iii) use materials or results derived from the Project in support of similar work for Government Departments and Arms-Length Bodies, provided written permission from the Authority has been obtained prior to any specific application or use. The decision to provide any such approval under this Clause (5b) shall be determined on a case by case basis and at the absolute discretion of the Authority."

5 Ownership and publication

BEIS is committed to openness and transparency. Project outputs should be accessible, non-disclosive and suitable for publication and further use. The exceptions to this are where:

- The intellectual property rights to an output (or part of an output) are owned by someone other than the contractor. Contractors should state in their tender if this is the case and indicate whether the third party copyrighted materials can be redacted.
- Data is commercial in confidence.
- Any non-anonymised datasets are required for the project but cannot be made public due to privacy constraints. Details about personal data handling are provided in the GDPR section (section 10).
- The outputs are internal process documents only for BEIS e.g. project updates and the research plan.

Where applicable, contractors can provide optional costs for obtaining rights to data or outputs. These will be agreed before BEIS lets the contract.

All outputs from a research project will be assumed to be owned by BEIS. The outputs, raw data and tools developed in the research will be transferred to BEIS at times agreed with BEIS and cannot therefore be used for contractors for purposes other than our work. The exceptions are for use in teaching, submissions to the Research Excellence Framework, publication in peer-reviewed scientific journals, and in support of similar work for other Government Departments and Arms-Length Bodies, with prior written approval from BEIS (see section 4).

5.1 Non-disclosure

All outputs must be provided to BEIS in a format that is non-disclosive (i.e. no individuals or individual organisations are identifiable from the data or analysis, directly or indirectly). The contractor is responsible for ensuring that the data is supplied in this form alongside a report on the checks made. A minimum standard for checking includes cell counts within sub-groups for all outputs and analysis. The contractor will be asked to agree their approach to checking for disclosure with BEIS during the course of the contract, before the checks are carried out. Where data or analysis is found to be disclosive during checking, the contractor will be required to suggest an approach or approaches to aggregate the analysis and to agree this with BEIS.

5.2 Storage and Transfer

The contractor will need to ensure that all appropriate regulations are adhered to regarding safe storage and transfer, compliant with BEIS requirements for the data processing of restricted data. All survey respondents will need to be made aware of all potential uses of their data.

5.3 Further Information

BEIS reserves the right to request an audit of projects against the BEIS Code of Practice for Research and the commitments made in the tender documents and subsequent contract.

Other useful sources of guidance and advice that will help bids and the resulting work be of the highest quality include:

The Green Book: appraisal and evaluation in central government. https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent (last updated 23 April 2020)

 UK Statistics Authority Code of Practice for Statistics. https://code.statisticsauthority.gov.uk/the-code/

6 Quality Assurance

Bidders should provide a detailed proposal for how they will apply Quality Assurance and Quality Control to analysis and products throughout the programme. This should include how they will clearly communicate assumptions, uncertainty, verification, validation of methods or models, and how they will build this into delivery timelines.

Bidders may find it useful to review the Aqua Book for further guidance on analytical assurance

(<u>https://www.gov.uk/government/publications/the-aqua-book-guidance-on-producing-quality-analysis-for-government</u>).

7 Timetable

Major milestones:

Milestone	Date	Work packages
Contract start	15 th June 2021	All
Contract mobilisation end	August 2021	All
Progress reports	Quarterly	All
Programme Boards	September 2021, and	All
	every 6 months thereafter	
Stage-gates	Annually, prior to 31st March	All
IPCC AR6 WGI Review	May-June 2021	B1
IPCC AR6 WGIII Review	Aug-September 2021	B1
Maritime emissions review finalised	October 2021	C2
IPCC AR6 WGII Review	Oct-November 2021	B1
UNEP Gap Report Review	November, annually	B1
Country-level impacts review	November 2021	D1
Delivery of COP26 briefings and communications	November 2021	C-F
Website prototype finalised	March 2022	All
Website live	June 2022	All
UK climate impacts	May 2022	D1
Water availability accessible dataset	June 2022	D2
IPCC SYR Review	Late 2022	B1
Global decarbonisation research finalised	September 2022	C1
Temperature overshoot research finalised	December 2022	C1
Climate impacts and UK housing	March 2023	D4
Country-level co-benefits	March 2023	Е
Mitigation/adaptation interlinkages	March 2023	Е
Country-level impacts	April 2023	D1
Water availability data visualisation tool completed	December 2023	F2
UK Climate impacts - data visualisation	January 2024	F3
Energy System Risks work completed and seminars attended	April 2024	D3
Contract closure, with data and information handover to new supplier, if necessary	March 2025	A1

8 Challenges

There will be a number of challenges in delivering this requirement; some are identified below. Bidders should consider how these, and any other challenges, will be addressed and mitigated while designing and developing the programme.

- Availability of sufficiently broad expertise to cover the wide range of topics.
- Integration of the outputs from 'traditional' climate sciences with applied sciences such as hydrology, public health, agronomy, buildings science etc. to provide outputs which can be used to inform policy-making.
- Resourcing the programme at peak periods if individuals with specialist knowledge are unavailable or deployed elsewhere.
- [If bidders are a consortium] Ensuring effective working across multiple organisations and work packages so that project deadlines and milestones are met.
- Successful and effective co-production of outputs with policy teams.
- Producing an effective communications strategy for a variety of policy audiences.
- Delivering accessible and user-friendly data visualisation tools.
- Delivery of a technically complex programme with multiple domestic and international milestones with uncertain timing (e.g. the Global Stocktake).
- Timely delivery of products with short deadlines for COP26.

9 Working Arrangements

The successful contractor will be expected to identify one named point of contract through whom all enquiries can be filtered. A BEIS contract manager will be assigned to the project and will be the central point of contact.

10 Data Protection

The Contractor will be compliant with the Data Protection Legislation as defined in the terms and conditions applying to this Invitation to Tender. A guide to the UK General Data Protection Regulation published by the Information Commissioner's Office, can be found here.

The only processing that the Contractor is authorised to do is listed in Annex 1 by BEIS, "the Authority" and may not be determined by the Contractor.

Annex 1: Processing, Personal Data and Data Subjects

(1) The contact details of the Authority's Data Protection Officer are:

BEIS Data Protection Officer
Department for Business, Energy and Industrial Strategy
1 Victoria Street
London
SW1H 0ET

Email: dataprotection@beis.gov.uk

- (2) The contact details of the Contractor's Data Protection Officer (or if not applicable, details of the person responsible for data protection in the organisation) are: [To be completed by the Contractor]
- (3) The Contractor shall comply with any further written instructions with respect to processing by the Authority.
- (4) Any such further instructions shall be incorporated into this Annex 1.

Description	Details	
Data Protection Legislation	The UK GDPR and any applicable national	
	implementing Laws as amended from time to time;	
	or	
	the DPA 2018 to the extent that it relates to	
	Processing of personal data and privacy; or	
	all applicable Law about the Processing of personal	
	data and privacy	
UK General Data Protection	The retained EU law version of the General Data	
Regulation (UK GDPR)	Protection Regulation (Regulation (EU) 2016/679)	
	as transposed into UK Law by the Data Protection,	
	Privacy and Electronic Communications	
	(Amendments etc) (EU Exit) Regulations 2019.	
Subject matter of the	The processing is needed in order to ensure that	
processing	the Contractor can effectively deliver the contract	
	to provide regular project updates to email	
	distribution lists to relevant policy-makers and	

Duration of the processing	researchers, and to log contact details of those attending associated workshops and conferences. The processing of names and business contact details of staff of both the Authority and the Contractor will be necessary to deliver the services exchanged during the course of the Contract, and to undertake contract and performance management. The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract. Processing will take place from 15th June 2021 for the duration of the Contract plus a 6 month
	retention period. The Contract will end on March 31st 2025.
Nature and purposes of the	The nature of the processing will include
processing	collection, recording, organisation, storage,
	retrieval, consultation, use, dissemination or
	otherwise making available, alignment or
	combination and automated erasure or destruction of data.
	Processing takes place for the purposes of ensuring
	information from the programme reaches the
	correct audience.
	The nature of processing will include the storage and use of names and business contact details of
	staff of both the Authority and the Contractor as
	necessary to deliver the services and to undertake
	contract and performance management. The
	Contract itself will include the names and business
	contact details of staff of both the Authority and
Type of Personal Data	the Contractor involved in managing the Contract. Names, business telephone numbers and email
Type of Fersonal Data	addresses, office location and position of staff of
	both the Authority and the Contractor as necessary
	to deliver the services and to undertake contract
	and performance management. The Contract itself
	will include the names and business contact details
	of staff of both the Authority and the Contractor
Categories of Data Subject	involved in managing the Contract. Policy officials, advisers and researchers who have
Categories of Data Subject	expressed an interest in the outputs of the research
	programme; users of the CS-NOW website.
	Staff of the Authority and the Contractor,
	including where those employees are named within
	the Contract itself or involved within contract
	management.

Plan for return and destruction of the data once the processing is complete UNLESS requirement under UK GDPR to preserve that type of data The Personal Data will be retained by the Contractor for a 6 month retention period, following which the Contractor will provide the Authority with a complete and uncorrupted version of the Personal Data in electronic form (or such other format as reasonably required by the Authority) and erase from any computers, storage devices and storage media that are to be retained by the Contractor after the expiry of the Contract and the Contractor retention period. The Contractor will certify to the Authority that it has completed such deletion.

Where Personal Data is contained within the Contract documentation, this will be retained in line with the Department's privacy notice found within the Invitation to Tender.

The nature of the service will require the Contractor to collect personal data directly from data subjects. The Contractor will use the agreed BEIS privacy notice as instructed by the Authority.

BEIS will be relying on consent as the relevant legal basis of processing. The Contractor will ensure that all communications requesting the provision on personal data allow for the data subject to provide clear, affirmative, informed, freely given and unambiguous consent, which requires a positive 'opt-in.' The Contractor will have mechanisms in place to ensure that consent is recorded and shown through an audit trail.

11 Skills and experience

BEIS would like you to demonstrate that you have the experience and capabilities to undertake the project. Your tender response should include a summary of each proposed team member's experience and capabilities.

Contractors should propose named members of the project team, and include the tasks and responsibilities of each team member, and provide an organogram. This should be clearly linked to the work programme, indicating the grade/ seniority of staff and number of days allocated to specific tasks.

Contractors should identify the individual(s) who will be responsible for managing the project. This/these individuals should have demonstrated appropriate PPM skills.

The following skills & knowledge are considered particularly important for the project team:

- Demonstrated capability in the delivery of complex and time-critical projects to high quality.
- Knowledge and understanding of the technical details associated with climate science, mitigation, climate impacts, adaptation and resilience and co-benefits.
- Knowledge of the domestic and international climate change landscape, including UK climate resilience, the UNFCCC, and international climate audiences.
- Expertise in the design and delivery of climate science research programmes to high quality and a demonstrated capability in the use of the range of methodologies adopted.
- Demonstrated capability in conducting transdisciplinary research and working across disciplines in new ways.
- Demonstrated capabilities in spatial data analysis, manipulation, and visualisation.
- Demonstrated capability in stakeholder engagement to support understanding customer requirements and co-producing products with stakeholders.
- A demonstrated understanding and evidence of delivering, building and maintaining models, including spatial modelling and projections in line with Government best practice³. This needs to include demonstrated capabilities in:
 - using suitable methodologies, analysis and tools;
 - applying sound quality assurance processes and procedures to minimise modelling and input errors and to ensure model outputs are robust;
 - understanding and communicating of assumptions, uncertainty, sensitivities and limitations;
 - o verification of model outputs, including with real world data; and

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³ https://www.gov.uk/government/uploads/system/uploads/ attachment data/file/416478/agua book final web.pdf

- producing clear documentation (including model logic, procedures for updating and producing outputs, assumptions, limitations, data sources and quality assurance checks).
- Demonstrated capability in delivering robust quality assurance and quality control processes with an appropriate audit trail.
- Demonstrated capability in stakeholder management to support the gathering, analysis and interpretation of data.
- Demonstrated capability in written and verbal communication skills including the ability to communicate technical details to non-specialists in a clear, concise and informative manner.
- Demonstrated capability in communicating transdisciplinary science and integrating disparate complex information into compelling messages.
- Demonstrated capability in risk and issues management and identifying and implementing mitigation strategies.

Bidders should provide details of the proposed project team (including any sub-contractors if appropriate) and the key personnel who will be involved in delivering the project. This should include specified roles and responsibilities, grade/seniority and number of days allocated to specific tasks.

Bidders should detail individuals' relevant skills and expertise to deliver the scope of services, along with evidence for these skills in the form of short CVs (maximum 2 pages each), added as appendices to the proposal.

Bidders should show how the expertise of the project team will be maintained or improved throughout this contract.

12 Consortium Bids

BEIS welcomes bids from consortia. SMEs can be included within bidding consortia or as sub-contractors.

In the case of a consortium tender, only one submission covering all of the partners is required but consortia are advised to make clear the proposed role that each partner will play in performing the contract as per the requirements of the technical specification. We expect the bidder to indicate who in the consortium will be the lead contact for this project, and the organisation and governance associated with the consortia.

Contractors must provide details as to how they will manage any sub-contractors and what percentage of the tendered activity (in terms of monetary value) will be sub-contracted.

BEIS will issue a contract to a single legal entity, i.e. the lead organisation in a consortium, or to the entire consortium if this is recognised formally as a single legal entity. If a consortium is not proposing to form a corporate entity, full details of alternative proposed arrangements should be provided in the Annex. However, please note the Department reserves the right to require a successful consortium to form a single legal entity in accordance with Regulation 28 of the Public Contracts Regulations 2006.

The Department recognises that arrangements in relation to consortia may (within limits) be subject to future change. Potential Providers should therefore respond in the light of the arrangements as currently envisaged. Potential Providers are reminded that any future proposed change in relation to consortia must be notified to the Department so that it can make a further assessment by applying the selection criteria to the new information provided.

13 Budget

The budget for this programme is a maximum of £4.980 million excluding VAT. This includes a £980k ad hoc fund for additional projects within the scope of this project, directed by BEIS (see section 3.7). The total budget cannot be exceeded, and the ad hoc budget should be reserved and should not be allocated against any of the WPs described in this ITT.

- Bidders should provide a full and detailed breakdown of all costs for each WP, including staff and day rate allocated to specific tasks.
- The total cost of the programme quoted by bidders should include a separate line for the *ad hoc* fund but note that the fund is ring-fenced.
- Cost will be a criterion against which bids which will be assessed.
- Deliverables for fixed price WPs will be paid for quarterly at the end of the quarter to which the invoice relates.
- Deliverables for WPs which have milestones will be paid on delivery of successfully completed milestones.
- The payment methodology for Ad hoc work will be agreed at the time of commissioning the work.

This can be adjusted and agreed with the contractor based on the tender response/details. Please advise in your tender response how this breakdown reflects your usual payment processes.

The contract price will be capped at £4.980 million.

In submitting full tenders, contractors confirm in writing that the price offered will be held for a minimum of 90 calendar days from the date of submission. Any payment conditions applicable to the prime contractor must also be replicated with sub-contractors.

The Department aims to pay all correctly submitted invoices as soon as possible with a target of 10 days from the date of receipt and within 30 days at the latest in line with standard terms and conditions of contract.

Travel and subsistence may only be claimed where it is in line with BEIS T&S policy.

14 Key Performance Indicators

Information on the specific KPIs and scoring methodology can be found in Annex F. The approach to KPI's is outlined below.

KPIs will be used to align the Supplier's performance with the requirements of the Authority. KPIs will be realistic and achievable. KPIs must be maintain a green rating in order to demonstrate that the service is being delivered to an adequate quality. The Authority reserves the right to amend the existing KPIs detailed below or add any new KPIs throughout delivery with agreement of the supplier. A KPI to measure the Social Value element of the contract will be agreed within the first month of the contract. Any changes to the KPIs will be agreed with the Supplier and be confirmed in writing.

Performance against KPIs will need to be monitored on a quarterly basis by the Supplier. The Authority will reserve the right to request reporting of KPIs on a more frequent basis if performance levels suggest increased monitoring is required.

Performance of each KPI will be recorded against a red, amber, green "score", as described below. Performance against each KPI should be submitted (Deliverable A1.1). quarterly along with the invoice for each invoicing period, and will be discussed along with quarterly progress reports at Working Group meetings. Scoring methodology for KPI criteria:

Green score: If a green score has been awarded to a KPI then no further action is required from the Supplier, with the exception of continuing activities to maintain this score for the next reporting period.

Amber score: If an amber score is awarded, the Contractor should examine and implement measures to prevent this KPI being scored an amber or below in subsequent reporting periods. The Authority will not expect formal improvement measures at that stage. If a single KPI is awarded amber in two consecutive invoice periods, or twice in four consecutive invoicing periods then the Contractor should create a Remediation Plan at their own cost. This should detail how they will change their practices to prevent another amber score being awarded for this KPI. The timeline for producing this Remediation Plan should be agreed between the Authority and the Contractor and should only be implemented following approval by the Authority. The Authority reserves the right to terminate the Contract if a satisfactory Remediation Plan cannot be agreed.

Red score: If a red score is awarded, the Contractor should create a Remediation Plan at their own cost. This Remediation Plan should detail how they will change practices to prevent another red score being awarded for this KPI. As above, the Authority must agree to the timelines and contents of the Remediation Plan prior to implementation and reserves the right to terminate the Contract if a satisfactory plan cannot be agreed. If, following implementation of a Remediation Plan, the Contractor scores a red in the same KPI in any subsequent period throughout the duration of the Contract, the Authority reserves the right to terminate the Contract. The Authority also reserves the right to terminate this Contract based on a red score without requesting a Remediation Plan, if it is of the Authority's view that a material default has occurred. The Authority reserves the right to suspend, or partially terminate this Contract, while a Remediation Plan is being developed and agreed, where there is justification to do so.

Annual review of programme performance

The Authority will undertake an Annual review of the Contractor's performance (Annual Stage Gate meeting), which will be judged by assessing programme progress and the quality of deliverables, KPIs to measure quality of deliverables, programme milestones, feedback from stakeholders and other criteria. If the Contractor's performance does not conform to the quality and standards agreed by the Authority, the Authority reserves the right to terminate the contract, utilising the appropriate clauses and timelines in the Contract.

15 Social Value

Social Value is a broad term used to describe the wider social, environmental and economic effects of an organisation's actions, and how they contribute to the long-term wellbeing of individuals, communities and societies. Social value is not just what the contract delivers but the legacy or footprint of the contract. The supplier should be going above and beyond the specified requirements to create added social value *through the contract*.

Bidders should describe, over and above the contractual and legal requirements, how your organisation would demonstrate action, *in the course of delivering this requirement,* to identify and tackle inequality in employment, skills and pay in the contract workforce, and how you would monitor and measure this. You should base your proposal to deliver value under this Priority Policy Area around the following activities that demonstrate and describe the tenderer's existing or planned:

- Understanding of the issues affecting inequality in employment, skills and pay in the market, industry or sector relevant to the contract, and in the tenderer's own organisation and those of its key sub-contractors.
- Measures to tackle inequality in employment, skills and pay in the contract workforce. Illustrative examples:
 - Inclusive and accessible recruitment practices, and retentionfocussed activities.
 - Offering a range of quality opportunities with routes of progression if appropriate, e.g. T Level industry placements, students supported into higher level apprenticeships.
 - Working conditions which promote an inclusive working environment and promote retention and progression.
 - Demonstrating how working conditions promote an inclusive working environment and promote retention and progression.
 - A time-bound action plan informed by monitoring to ensure employers have a workforce that proportionately reflects the diversity of the communities in which they operate, at every level.
 - Including multiple women, or others with protected characteristics, in shortlists for recruitment and promotions.
 - Using skill-based assessment tasks in recruitment.
 - Using structured interviews for recruitment and promotions.
 - Introducing transparency to promotion, pay and reward processes.
 - Positive action schemes in place to address underrepresentation in certain pay grades.
 - Jobs at all levels open to flexible working from day one for all workers.
 - Collection and publication of retention rates, e.g. for pregnant women and new mothers, or for others with protected characteristics.
 - Regular equal pay audits conducted.

Bidders may find the following resources useful:

 Procurement Policy Note 06/20 – taking account of social value in the award of central government contracts: https://www.gov.uk/government/publications/procurement-policy-note-0620-taking-account-of-social-value-in-the-award-of-central-government-contracts

16 Evaluation of Tenders

Contractors are invited to submit full tenders of no more than 60 pages, excluding declarations. Tenders will be evaluated by two BEIS staff, and an independent assessor from the Environment Agency.

16.1 Pass/fail criteria

- Conflict of interest: [pass/fail] See page 14 of the ITT for further information.
- Terms and conditions: [pass/fail] BEIS Terms and Conditions apply to this contract. You accept the BEIS Terms and Conditions as set out for this contract.

Yes/No

• Standard Selection Questionnaire: Please note that there are additional PASS/FAIL questions in – Declaration 4: Standard Selection Questionnaire on page 94.

16.2 Scored criteria

Subject to pass/fail results, BEIS will select the bidder that scores highest against the criteria and weighting listed below:

Criterion	Description	Weighting
01	Programme plan, team, and management	30%
	Assessment of this criteria will be on the basis of:	
	(a) Delivery plan	
	(i) Submission of a clear, robust, and realistic Delivery Plan,	
	including a legible Gantt Chart in MS Project or similar software	
	(the Gantt Chart is outside of the page limit). (5%)	
	(ii) Providing a clear and workable plan for overall project	
	management, including the management of any sub-contractors	
	across contrasting academic disciplines, and engagement with	
	stakeholders and data providers as well as the use of clear change	
	control processes. (5%)	
	(iii) Providing a clear, comprehensive, and realistic plan for the	
	identification, prioritisation, mitigation, management and	
	communication of project risk. (5%)	
	(b) Skills and experience	
	(iv) Clearly assigned roles and responsibilities within the Project	
	Team and between sub-contractors (if appropriate), and an	
	appropriate allocation of resources for each task, with a clear and	
	realistic plan for key roles in the event of staff loss. (5%)	
	(v) Demonstrating that the project team has the appropriate skills	
	and expertise for the roles to which they have been assigned and	
	can build on other, on-going and related research efforts, both	
	within the UK and more widely. This will involve both	

	transdisciplinary science skills, and science communication skills	
02	Methodology Assessment of this criteria will be on the basis of: (i) Clearly demonstrating the capability of the proposed methodologies and processes to meet the requirement for timely, policy-relevant, transdisciplinary and integrated climate services to BEIS stakeholders. (10%) (ii) Inclusion of a clear, robust and demonstrable plan for Quality Assurance of analytical and translation/communications work, and a clear plan of communications to ensure the results of WPs are effectively communicated (10%) (iii) Where this applies to a particular work package: bidders should detail the approach to data gathering (with rationale and caveats), including	25%
	 For WP C1, and also for WP E, how Paris-consistent emissions scenarios, including overshooting scenarios, will be established and tested For WP D2 which future flows dataset they will be using For WP D3 how suitable data to establish trends and projections in the identified risks for the energy sector will be obtained (5%) 	
03	Understanding the requirement Assessment of this criteria will be on the basis of a demonstration of a clear understanding of the requirement.	10%
04	Price Price will be marked proportionately to the lowest bid. The lowest bid will receive maximum marks (25%) and then all other bids will be marked proportionately to that bid.	25%
O5	Social Value Using a maximum of 2 pages describe the commitment your organisation will make to ensure that opportunities under the contract demonstrate effective measures to deliver the following benefits through the contract: (i) Demonstrate action to identify and tackle inequality in employment, skills and pay in the contract workforce. (5%) (ii) Demonstrate how team members from traditionally underrepresented backgrounds will be offered opportunities through the programme. (5%) Please include: (a.) your 'Method Statement', stating how you will achieve this and how your commitment meets the Award Criteria, and (b.) a timed project plan and process, including how you will implement your commitment and by when. Also, how you will monitor, measure and report on your commitments/the impact of your proposals. You should include but not be limited to:	10%
	(i) timed action plan (ii) use of metrics	

(iii) tools/processes used to gather data	
(iv) reporting	
(v) feedback and improvement	
(vi)transparency	
	100%

16.3 Evaluation criteria for Criterion 1 and 2

Non-exclusive guidance on addressing the evaluation criteria is set out in boxes throughout the document. Below is a reminder of the guidance on addressing Criteria 1 and 2.

Bidders must explain clearly what expertise they can bring to each research area, and how they could build on other, ongoing and related research efforts in order to do so. In their tender Bidders should set out their programme management plan, including roles and responsibilities, and how they will ensure smooth working, including across organisations if a consortium is the successful bidder. Bidders should detail their plan for ensuring analytical consistency, and supporting transdisciplinary working, highlighting where new relationships might be supported, and including their risk management approach to ensure smooth coordination.

Bids should include details of any perceived risks for the project which could affect the Supplier's ability to deliver the required outputs.

Bids should also include details on the amount of cover available for key members of the project team or organisations in the event that they are temporarily or permanently no longer available for work on the project. This must be complete cover for the position(s) in question. Bids should detail how the Supplier will engage with BEIS to ensure their knowledge management strategy is implemented.

Bidders should detail how they will prepare materials for handover, with consideration for the needs of a new Supplier and the likely activities required for a handover. Bidders should detail how they will make experts available

during the handover period and how they will work together with any new Supplier to ensure that imminent deliverables are produced on time, including partially completed work at the time of contract end.

Bidders should detail their approach for ensuring a rigorous review of the relevant chapter sections of IPCC Reports and UN Gap Reports, including how they will ensure the necessary expertise is available for reviewing the reports in a timely manner.

Bidders should detail how they will ensure the necessary expertise is available for providing timely review of the Summary for Policymakers and on-call advice for IPCC approval sessions in a timely manner.

Bidders should set out their proposed methods for addressing the specified research questions [for Work Packages C, D and E, separately] including their approach to quality assurance, ensuring the necessary expertise, and ensuring access to the appropriate models and data.

Bidders should set out their approach for ensuring the necessary expertise and capability is in place to deliver on supplementary areas as described above in Work Packages C, D, and E (separately).

Bidders should detail their proposed approach for ensuring research in Work Package C-E is integrated with the research and analysis conducted under the other technical work packages.

Bidders should detail their approach to ensuring climate impact metrics are policy-relevant and resonate with policy audiences (Work Package D).

For deliverable D2.1, Bidders should detail which future flows dataset they will be using and why, including any caveats. If eFLaG is used, bidders should be clear how they will manage any delays in the provision of eFLaG data and propose a timeline for dataset production.

For deliverable D2.1, Bidders should detail their approach to gathering the appropriate datasets, including how this affects the timeline for delivering, and their approach for ensuring the dataset is appropriate for the Environment Agency's use. Bidders should set out their approach for aligning work on deliverable D2.1 with DF2.

Bidders should set out their approach for understanding and meeting evidence needs for Work Package D3, and for Work Package D4

Bidders should detail their approach to ensuring indicators for co-benefits are policy-relevant and resonate with policy audiences.

Bidders should detail how they will ensure sufficient knowledge and understanding of the relevant literature within the programmer delivery team to deliver on-call briefings on a range of climate science topics.

Bidders should set out how they will ensure there is sufficient resilience within the team to respond to on-call requests for briefing and technical advice.

Bidders should provide a timeline for production and achievement of milestones towards deliverable F2.1, including alignment with production of deliverable D2.1. For deliverable F2.1, Bidders should detail their approach to co-production and co-creation with teams and how they will ensure the product is fit for purpose including a list of the key areas they expect to cover with them.

For all analytical and research work, Bidders should detail their proposed approach to quality assurance, including consideration of BEIS QA processes. In addition, for tools, including F2 and F3, bidders should set out how they will ensure the tool is fit for purpose.

Bidders should state the approach they would take to understand the needs and current landscape of climate resilience within the energy network companies' strategies. Bidders should detail how they will co-create a methodology with the energy network companies, and how they intend to offer guidance to these organisations.

For all communication deliverable, including summaries and reports, Bidders should set out how they would present the data within the report and the other forms of data presentation they would use to communicate the results effectively, including how they will deal with uncertainty. For international science engagement, Bidders should set out how they will identify key scientific messages, and ensure that they resonate with different international audiences. Bidders should describe how they will ensure briefings and events are engaging and targeting the right people, including whether, and how, they will draw on international networks. Bidders should set out how they will ensure secondees meet the required skills and expertise as set out in the specification.

16.4 Scoring Method

Tenders will be scored against each of the criteria above, according to the extent to which they meet the requirements of the tender. The meaning of each score is outlined in the table below. The total score will be calculated by applying the weighting set against each criterion, outlined above; the maximum number of marks possible will be 100. Should any contractor score 1 in any of the criteria, they will be excluded from the tender competition.

Same Description		
Score	Description	
1	Not Satisfactory: Proposal contains significant shortcomings and	
	does not meet the required standard	
2	Partially Satisfactory: Proposal partially meets the required	
	standard, with one or more moderate weaknesses or gaps	
3	Satisfactory: Proposal mostly meets the required standard, with	
	one or more minor weaknesses or gaps.	
4	Good: Proposal meets the required standard, with moderate levels	
	of assurance	
5	Excellent: Proposal fully meets the required standard with high	
	levels of assurance	

16.5 Scoring for Pricing Evaluation

Price will be marked using proportionate pricing. Please see the example below.

Proportionate Pricing scoring example (e.g. If 25% = 25 marks)

Supplier	Price	Marks
1 (lowest bid)	£50,000	25
2	£60,000	50/60 * 25 = 20.8
3	£75,000	50/75 * 25 = 16.7

16.6 Structure of Tenders

Contractors are strongly advised to structure their tender submissions to cover each of the criteria above. Complete the price schedule attached at Annex A, specifying the daily rates (ex-VAT) you will charge for each level of your staff.

16.7 Bid Clarification

After reviewing and evaluating the written proposals, BEIS may decide to hold bid clarifications with suppliers.

16.8 Feedback

Feedback will be given in the unsuccessful letters or emails.

Section 3

Further Information on Tender Procedure

Tender Reference Number: 4925/03/2021

Deadline for Tender Responses: 2:00pm 7th May April 2021

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A. Definitions

Please note that references to the "Department" throughout these documents mean The Secretary of State for Business, Energy and Industrial Strategy acting through his/her representatives in the Department for Business Energy & Industrial Strategy.

The Freedom of Information Act 2000 ("FOIA") and the Environmental Information Regulations 2004 ("EIR") apply to the Department. You should be aware of the Department's obligations and responsibilities under FOIA or EIR to disclose, on written request, recorded information held by the Department. Information provided in connection with this procurement exercise, or with any contract that may be awarded as a result of this exercise, may therefore have to be disclosed by the Department in response to such a request, unless the Department decides that one of the statutory exemptions under the FOIA or the exceptions in the EIR applies. If you wish to designate information supplied as part of this response as confidential, of if you believe that its disclosure would be prejudicial to any person's commercial interests, you must provide clear and specific detail as to the precise information involved and explain (in broad terms) what harm may result from disclosure if a request is received, and the time period applicable to that sensitivity. Such designation alone may not prevent disclosure if in the Department's reasonable opinion publication is required by applicable legislation or Government policy or where disclosure is required by the Information Commissioner or the First-tier Tribunal (Information Rights).

Additionally, the Government's transparency agenda requires that tender documents (including ITTs such as this) are published on a designated, publicly searchable web site. The same applies to other tender documents issued by the Department (including the original advertisement and the pre-qualification questionnaire (if used)), and any contract entered into by the Department with its preferred supplier once the procurement is complete. By submitting a tender, you agree that your participation in this procurement may be made public. The answers you give in this response will not be published on the transparency web site (but may fall to be disclosed under FOIA or EIR (see above)). Where tender documents issued by the Department or contracts with its suppliers fall to be disclosed the Department will redact them as it thinks necessary, having regard (inter alia) to the exemptions/exceptions in the FOIA or EIR.

B. Data security

The successful tenderer must comply with all relevant Data Protection Legislation, as defined in the terms and conditions applying to this Invitation to Tender.

Section 4 contains a "The General Data Protection Regulation Assurance Questionnaire for Contractors" (Declaration 5) to evidence the extent of readiness. The Authority may ask the Contractor to provide evidence to support the position stated in the questionnaire. The Authority may require the successful Contractor to increase their preparedness where the Authority is not satisfied that the Contractor will be in a position to meet its obligations under the terms and conditions. If the Contractor fails to satisfy the Authority that it will be in a position to meet its obligations under the terms and conditions in the event that the Contractor is successful, the Authority reserves the right to exclude the bidder from this procurement.

C. Non-Collusion

No tender will be considered for acceptance if the contractor has indulged or attempted to indulge in any corrupt practice or canvassed the tender with an officer of the Department. Section 4 contains a "Statement of non-collusion" (declaration 1); any breach of the undertakings covered under items 1 - 3 inclusive will invalidate your tender. If a contractor has indulged or attempted to indulge in such practices and the tender is accepted, then grounds shall exist for the termination of the contract and the claiming damages from the successful contractors. You must not:

- Tell anyone else what your tender price is or will be, before the time limit for delivery of tenders.
- Try to obtain any information about anyone else's tender or proposed tender before the time limit for delivery of tenders.
- Make any arrangements with another organisation about whether or not they should tender, or about their or your tender price.

Offering an inducement of any kind in relation to obtaining this or any other contract with the Department will disqualify your tender from being considered and may constitute a criminal offence.

Section 4

Declarations to be submitted by the Tenderer

Tender Reference Number: 4925/03/2021

Deadline for Tender Responses: 2:00pm 7^{th} May 2021

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17 - Declaration 1: Statement of non-collusion

To: The Department for Business, Energy & Industrial Strategy

- 1. We recognise that the essence of competitive tendering is that the Department will receive a bona fide competitive tender from all persons tendering. We therefore certify that this is a bona fide tender and that we have not fixed or adjusted the amount of the tender or our rates and prices included therein by or in accordance with any agreement or arrangement with any other person.
- 2. We also certify that we have not done and undertake not to do at any time before the hour & date specified for the return of this tender any of the following acts:
 - (a) communicate to any person other than the Department the amount or approximate amount of our proposed tender, except where the disclosure, in confidence, of the approximate amount is necessary to obtain any insurance premium quotation required for the preparation of the tender;
 - (b) enter into any agreement or arrangement with any other person that he shall refrain for submitting a tender or as to the amount included in the tender;
 - (c) offer or pay or give or agree to pay or give any sum of money, inducement or valuable consideration directly or indirectly to any person doing or having done or causing or having caused to be done, in relation to any other actual or proposed tender for the contract any act, omission or thing of the kind described above.
- 3. In this certificate, the word "person" shall include any person, body or association, corporate or unincorporated; and "any agreement or arrangement" includes any such information, formal or informal, whether legally binding or not.

Signature (duly authorised on behalf of the tenderer,	
Print name	
On behalf of (organisation name)	

18 - Declaration 2: Form of Tender

To: The Department for Business, Energy & Industrial Strategy

- 1. Having considered the invitation to tender and all accompanying documents (including without limitation, the terms and conditions of contract and the Specification) we confirm that we are fully satisfied as to our experience and ability to deliver the goods/services in all respects in accordance with the requirements of this invitation to tender.
- 2. We hereby tender and undertake to provide and complete all the services required to be performed in accordance with the terms and conditions of contract and the Specification for the amount set out in the Pricing Schedule.
- 3. We agree that any insertion by us of any conditions qualifying this tender or any unauthorised alteration to any of the terms and conditions of contract made by us may result in the rejection of this tender.
- 4. We agree that this tender shall remain open to be accepted by the Department for 8 weeks from the date below.

We certify that this is a bona fide tender.

- 5. We understand that if we are a subsidiary (within the meaning of section 1159 of (and schedule 6 to) the Companies Act 2006) if requested by the Department we may be required to secure a Deed of Guarantee in favour of the Department from our holding company or ultimate holding company, as determined by the Department in their discretion.
- 6. We understand that the Department is not bound to accept the lowest or any tender it may receive.

Signature (duly authorised on behalf of the tenderer)		
Print i	name	
On be	chalf of (organisation name)	

19 - Declaration 3: Conflict of Interest

I have nothing to declare with respect to any current or potential interest or conflict in relation to this research (or any potential providers who may be subcontracted to deliver this work, their advisers or other related parties). By conflict of interest, I mean, anything which could be reasonably perceived to affect the impartiality of this research, or to indicate a professional or personal interest in the outcomes from this research. Signed
Name
Position
OR I wish to declare the following with respect to personal or professional interests related to relevant organisations*;
• X • X
Where a potential conflict of interest has been declared for an individual or organisation within a consortia, please clearly outline the role which this individual or organisation will play in the proposed project and how any conflict of interest has or will be mitigated.
• X • X
Signed
Name
Position

Please complete this form and return this with your ITT documentation - Nil returns are required.

- These may include (but are not restricted to);
 - A professional or personal interest in the outcome of this research
 - For evaluation projects, a close working, governance, or commercial involvement in the project under evaluation

- Current or past employment with relevant organisations
- Payment (cash or other) received or likely to be received from relevant organisations for goods or services provided (Including consulting or advisory fees)
- Gifts or entertainment received from relevant organisations
- Shareholdings (excluding those within unit trusts, pension funds etc) in relevant organisations
- Close personal relationship or friendships with individuals employed by or otherwise closely associated with relevant organisations

All of the above apply both to the individual signing this form and their close family / friends / partners etc.

If your situation changes during the project in terms of interests or conflicts, you must notify the Department straight away.

A DECLARATION OF INTEREST WILL NOT NECESSARILY MEAN THE INDIVIDUAL OR ORGANISATION CANNOT WORK ON THE PROJECT; BUT IT IS VITAL THAT ANY INTEREST OR CONFLICT IS DECLARED SO IT CAN BE CONSIDERED OPENLY.

20.1 Background

20.1.1 Financial Credit Checks

BEIS use Dun & Bradstreet to assist them with their financial due diligence and will request Dun and Bradstreet to provide comprehensive reports on the preferred bidder/s where the opportunity being tendered for exceeds £1M (excluding VAT). BEIS will review the Dun and Bradstreet report prior to notifying bidders of the result of the competition and may need to check with bidders that the information within the report is correct. BEIS may also request the latest accounts and financial information from the preferred bidder/s.

Suppliers assessed with a high financial risk status may not be awarded a contract, at this stage we will revert to the bidder to discuss further.

20.1.2 Potential Supplier Information and Exclusion Grounds: Part 1 and Part 2.

The standard Selection Questionnaire is a self-declaration, made by you (the potential supplier), that you do not meet any of the grounds for exclusion⁴. If there are grounds for exclusion, there is an opportunity to explain the background and any measures you have taken to rectify the situation (we call this self-cleaning).

A completed declaration of Part 1 and Part 2 provides a formal statement that the organisation making the declaration has not breached any of the exclusions grounds. Consequently we require all the organisations that you will rely on to meet the selection criteria to provide a completed Part 1 and Part 2. For example these could be parent companies, affiliates, associates, or essential sub-contractors, if they are relied upon to meet the selection criteria. This means that where you are joining in a group of organisations, including joint ventures and partnerships, each organisation in that group must complete one of these self-declarations. Sub-contractors that you rely on to meet the selection criteria must also complete a self-declaration (although sub-contractors that are not relied upon do not need to complete the self-declaration).

 $https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/551130/List_of_Mandatory_and_Discretionary_Exclusions.pdf$

⁴ For the list of exclusion please see

When completed, this form is to be sent back to the contact point given in the procurement documents along with the selection information requested in the procurement documentation.

Alternatively you can submit the completed Exclusion Grounds of the <u>EU</u> <u>ESPD</u> (Part III) as a downloaded XML file to the buyer contact point along with the selection information requested in the procurement documentation.

20.1.3 Supplier Selection Questions: Part 3

The procurement document will provide instructions on the selection questions you need to respond to and how to submit those responses. If you are bidding on behalf of a group (consortium) or you intend to use subcontractors, you should complete all of the selection questions on behalf of the consortium and/or any sub-contractors.

If the relevant documentary evidence referred to in the Selection Questionnaire is not provided upon request and without delay, we reserve the right to amend the contract award decision and award to the next compliant bidder.

20.1.4 Consequences of misrepresentation

If you seriously misrepresent any factual information in filling in the Selection Questionnaire, and so induce an authority to enter into a contract, there may be significant consequences. You may be excluded from the procurement procedure, and from bidding for other contracts for three years. If a contract has been entered into you may be sued for damages and the contract may be rescinded. If fraud, or fraudulent intent, can be proved, you or your responsible officers may be prosecuted and convicted of the offence of fraud by false representation, and you must be excluded from further procurements for five years.

Invitation to Tender to deliver Climate Services for a Net Zero resilient World (CS-N0W) - The delivery of climate services to BEIS

TRN: 4925/03/2021
OPEN PROCEDURE

Notes for completion

- 1. The "authority" means the contracting authority, or anyone acting on behalf of the contracting authority, that is seeking to invite suitable candidates to participate in this procurement process.
- 2. "You" / "Your" refers to the potential supplier completing this standard Selection Questionnaire i.e. the legal entity responsible for the information provided. The term "potential supplier" is intended to cover any economic operator as defined by the Public Contracts Regulations 2015 (referred to as the "regulations") and could be a registered company; the lead contact for a group of economic operators; charitable organisation; Voluntary Community and Social Enterprise (VCSE); Special Purpose Vehicle; or other form of entity.
- 3. Please ensure that all questions are completed in full, and in the format requested. If the question does not apply to you, please state 'N/A'. Should you need to provide additional information in response to the questions, please submit a clearly identified annex.
- 4. The authority recognises that arrangements set out in section 1.2 of the standard Selection Questionnaire, in relation to a group of economic operators (for example, a consortium) and/or use of sub-contractors, may be subject to change and will, therefore, not be finalised until a later date. The lead contact should notify the authority immediately of any change in the proposed arrangements and ensure a completed Part 1 and Part 2 is submitted for any new organisation relied on to meet the selection criteria. The authority will make a revised assessment of the submission based on the updated information.
- 5. For Part 1 and Part 2 every organisation that is being relied on to meet the selection must complete and submit the self-declaration.
- 6. All sub-contractors are required to complete Part 1 and Part 25.
- 7. For answers to Part 3 If you are bidding on behalf of a group, for example, a consortium, or you intend to use sub-contractors, you should complete all of the questions on behalf of the consortium and/ or any sub-contractors, providing one composite response and declaration.

The authority confirms that it will keep confidential and will not disclose to any third parties any information obtained from a named customer contact, other than to the Cabinet Office and/or contracting authorities defined by the regulations, or pursuant to an order of the court or demand made by any competent authority or body where the authority is under a legal or regulatory obligation to make such a disclosure.

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⁵ See PCR 2015 regulations 71 (8)-(9)

Part 1: Potential Supplier Information

Please answer the following questions in full. Note that every organisation that is being relied on to meet the selection must complete and submit the Part 1 and Part 2 self-declaration.

Section 1 Potential supplier information		
Question number	Question	Response
1.1(a)	Full name of the potential supplier submitting the information	
1.1(b) - (i)	Registered office address (if applicable)	
1.1(b) – (ii)	Registered website address (if applicable)	
1.1©	Trading status a) public limited company b) limited company c) limited liability partnership d) other partnership e) sole trader f) third sector g) other (please specify your trading status)	
1.1(d)	Date of registration in country of origin	
1.1(e)	Company registration number (if applicable)	
1.1(f)	Charity registration number (if applicable)	
1.1(g)	Head office DUNS number (if applicable)	
1.1(h)	Registered VAT number	
1.1(i) - (i)	If applicable, is your organisation registered with the appropriate professional or trade register(s) in the member state where it is established?	Yes □ No □ N/A □
1.1(i) - (ii)	If you responded yes to 1.1(i) - (i), please provide the relevant details, including the registration number(s).	
1.1(j) - (i)	Is it a legal requirement in the state where you are established for you to possess a particular authorisation, or be a member of a particular organisation in order to provide the services specified in this procurement?	Yes □ No □
1.1(j) - (ii)	If you responded yes to 1.1(j) - (i), please provide additional details of what is required and confirmation that you have complied with this.	
1.1(k)	Trading name(s) that will be used if successful in this procurement	
1.1(l)	Relevant classifications (state whether you fall within one of these, and if so which one) a) Voluntary Community Social Enterprise (VCSE) b) Sheltered Workshop	

	c) Public service mutual	
1.1(m)	Are you a Small, Medium or Micro Enterprise (SME) ⁶ ?	Yes □ No □
1.1(n)	Details of Persons of Significant Control (PSC), where appropriate: ⁷ - Name; - Date of birth; - Nationality; - Country, state or part of the UK where the PSC usually lives; - Service address; - The date he or she became a PSC in relation to the company (for existing companies the 6 April 2016 should be used); - Which conditions for being a PSC are met; - Over 25% up to (and including) 50%, - More than 50% and less than 75%, - 75% or more. ⁸	
	(Please enter N/A if not applicable)	
1.1(0)	Details of immediate parent company: - Full name of the immediate parent company - Registered office address (if applicable) - Registration number (if applicable) - Head office DUNS number (if applicable) - Head office VAT number (if applicable)	
	(Please enter N/A if not applicable)	
1.1(p)	Details of ultimate parent company: - Full name of the ultimate parent company - Registered office address (if applicable) - Registration number (if applicable) - Head office DUNS number (if applicable) - Head office VAT number (if applicable) (Please enter N/A if not applicable)	

Please note: A criminal record check for relevant convictions may be undertaken for the preferred suppliers and the persons of significant in control of them.

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⁶ See EU definition of SME: http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/

⁷ UK companies, Societates European (SEs) and limited liability partnerships (LLPs) will be required to identify and record the people who own or control their company. Companies, SEs and LLPs will need to keep a PSC register, and must file the PSC information with the central public register at Companies House. See PSC guidance

House. See PSC guidance.

8 Central Government contracting authorities should use this information to have the PSC information for the preferred supplier checked before award.

Please provide the following information about your approach to this procurement:

Section 1	Bidding model		
Question number	Question	Response	
1.2(a) - (i)	Are you bidding as the lead contact for a group of economic operators?	Yes □ No □ If yes, please provide details listed in questions 1.2(a) (ii), (a) (iii) and to 1.2(b) (i), (b) (ii), 1.3, Section 2 and 3. If no, and you are a supporting bidder please provide the name of your group at 1.2(a) (ii) for reference purposes, and complete 1.3, Section 2 and 3.	
1.2(a) - (ii)	Name of group of economic operators (if applicable)		
1.2(a) - (iii)	Proposed legal structure if the group of economic operators intends to form a named single legal entity prior to signing a contract, if awarded. If you do not propose to form a single legal entity, please explain the legal structure.		
1.2(b) - (i)	Are you or, if applicable, the group of economic operators proposing to use sub-contractors?	Yes □ No □	
1.2(b) - (ii)		e provide additional details for each sub- y ask them to complete this form as well.	

Contact details and declaration

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

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

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

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

I am aware of the consequences of serious misrepresentat ion.Section 1	Contact details and decla	aration
Question number	Question	Response
1.3(a)	Contact name	
1.3(b)	Name of organisation	
1.3©	Role in organisation	
1.3(d)	Phone number	
1.3(e)	E-mail address	
1.3(f)	Postal address	
1.3(g)	Signature (electronic is acceptable)	
1.3(h)	Date	

Part 2: Exclusion Grounds

Please answer the following questions in full. Note that every organisation that is being relied on to meet the selection must complete and submit the Part 1 and Part 2 self-declaration.

Section 2	Grounds for mandatory exclusion		
Question number	Question Response		
2.1(a)	Regulations 57(1) and (2) The detailed grounds for mandatory exclusion of an organisation are set out on this web page, which should be referred to before completing these questions.		
	Please indicate if, within the past five years y person who has powers of representation, do organisation been convicted anywhere in the the summary below and listed on the webparts.	ecision or control in the world of any of the offences within	
	Participation in a criminal organisation.	Yes □ No □ If Yes please provide details at 2.1(b)	
	Corruption.	Yes □ No □ If Yes please provide details at 2.1(b)	
	Fraud.	Yes □ No □ If Yes please provide details at 2.1(b)	
	Terrorist offences or offences linked to terrorist activities	Yes □ No □ If Yes please provide details at 2.1(b)	
	Money laundering or terrorist financing	Yes □ No □ If Yes please provide details at 2.1(b)	
	Child labour and other forms of trafficking in human beings	Yes □ No □ If Yes please provide details at 2.1(b)	
2.1(b)	If you have answered yes to question 2.1(a), please provide further details.		
	Date of conviction, specify which of the grounds listed the conviction was for, and the reasons for conviction,		
	Identity of who has been convicted		
	If the relevant documentation is available electronically please provide the web address, issuing authority, precise reference of the documents.		
2.2	If you have answered Yes to any of the points above have measures been taken to demonstrate the reliability of the organisation despite the existence of a relevant ground for exclusion ? (Self Cleaning)	Yes □ No □	

2.3(a)	Regulation 57(3) Has it been established, for your organisation by a judicial or administrative decision having final and binding effect in accordance with the legal provisions of any part of the United Kingdom or the legal provisions of the country in which the organisation is established (if outside the UK), that the organisation is in breach of obligations related to the payment of tax or social security contributions?	Yes □ No □
2.3(b)	If you have answered yes to question 2.3(a), please provide further details. Please also confirm you have paid, or have entered into a binding arrangement with a view to paying, the outstanding sum including where applicable any accrued interest and/or fines.	

Please Note: The Authority reserves the right to use its discretion to exclude a potential supplier where it can demonstrate by any appropriate means that the potential supplier is in breach of its obligations relating to the non-payment of taxes or social security contributions.

		Grounds for discretionary exclusion		
	Question Response			
3.1	Regulation 57 (8)			
		ne detailed grounds for discretionary exclusion of an organisation are set out on is web page, which should be referred to before completing these questions.		
	Please indicate if, within the past three years, following situations have applied to you, your who has powers of representation, decision or	organisation or any other person		
3.1(a)	Breach of environmental obligations?	Yes □ No □ If yes please provide details at 3.2		
3.1 (b)	Breach of social obligations?	Yes □ No □ If yes please provide details at 3.2		
3.1 ©	Breach of labour law obligations?	Yes □ No □ If yes please provide details at 3.2		
	Bankrupt or is the subject of insolvency or winding-up proceedings, where the organisation's assets are being administered by a liquidator or by the court, where it is in an arrangement with creditors, where its business activities are suspended or it is in any analogous situation arising from a similar procedure under the laws and regulations of any State?	Yes □ No □ If yes please provide details at 3.2		
3.1(e)	Guilty of grave professional misconduct?	Yes □ No □ If yes please provide details at 3.2		
	Entered into agreements with other economic operators aimed at distorting competition?	Yes □ No □ If yes please provide details at 3.2		
	Aware of any conflict of interest within the meaning of regulation 24 due to the participation in the procurement procedure?	Yes □ No □ If yes please provide details at 3.2		
	Been involved in the preparation of the procurement procedure?	Yes □ No □ If yes please provide details at 3.2		
	Shown significant or persistent deficiencies in the performance of a substantive requirement under a prior public contract, a prior contract with a contracting entity, or a prior concession contract, which led to early termination of that prior contract, damages or other comparable sanctions?	Yes □ No □ If yes please provide details at 3.2		
3.1(j)	Please answer the following statements	Yes □		

3.1(j) - (i)	The organisation is guilty of serious misrepresentation in supplying the information required for the verification of the absence of grounds for exclusion or the fulfilment of the selection criteria.	No □ If Yes please provide details at 3.2
3.1(j) - (ii)	The organisation has withheld such information.	Yes □ No □ If Yes please provide details at 3.2
3.1(j) –(iii)	The organisation is not able to submit supporting documents required under regulation 59 of the Public Contracts Regulations 2015.	Yes □ No □ If Yes please provide details at 3.2
3.1(j)-(iv)	The organisation has influenced the decision-making process of the contracting authority to obtain confidential information that may confer upon the organisation undue advantages in the procurement procedure, or to negligently provided misleading information that may have a material influence on decisions concerning exclusion, selection or award.	Yes □ No □ If Yes please provide details at 3.2
3.2	If you have answered Yes to any of the above, explain what measures been taken to demonstrate the reliability of the organisation despite the existence of a relevant ground for exclusion? (Self Cleaning)	

Part 3: Selection Questions⁹

Section 4	Economic and Financial Standing	
	Question	Response
4.1	Are you able to provide a copy of your audited accounts for the last two years, if requested? If no, can you provide one of the following: answer with Y/N in the relevant box.	Yes □ No □
	(a) A statement of the turnover, Profit and Loss Account/Income Statement, Balance Sheet/Statement of Financial Position and Statement of Cash Flow for the most recent year of trading for this organisation.	Yes □ No □
	(b) A statement of the cash flow forecast for the current year and a bank letter outlining the current cash and credit position.	Yes □ No □
	(c) Alternative means of demonstrating financial status if any of the above are not available (e.g. forecast of turnover for the current year and a statement of funding provided by the owners and/or the bank, charity accruals accounts or an alternative means of demonstrating financial status).	Yes □ No □
4.2	Where we have specified a minimum level of economic and financial standing and/ or a minimum financial threshold within the evaluation criteria for this procurement, please self-certify by answering 'Yes' or 'No' that you meet the requirements set out.	Yes □ No □

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⁹ <u>See Action Note 8/16 Updated Standard Selection Questionnaire</u>

Section 5	If you have indicated in the Selection Questionnaire question 1.2 that you are part of a wider group, please provide further details below:	
Name of or	rganisation	
Relationship to the Supplier completing these questions		

5.1	Are you able to provide parent company accounts if requested to at a later stage?	Yes □ No □
5.2	If yes, would the parent company be willing to provide a guarantee if necessary?	Yes □ No □
5.3	If no, would you be able to obtain a guarantee elsewhere (e.g. from a bank)?	Yes □ No □

Section 6	Technical and Professional Ability	
6.1	Relevant experience and contract examples	
	Please provide details of up to three contracts, in any combination from either the public or private sector; voluntary, charity or social enterprise (VCSE) that are relevant to our requirement. VCSEs may include samples of grant-funded work. Contracts for supplies or services should have been performed during the past three years. Works contracts may be from the past five years.	
	The named contact provided should be able to provide written evidence to confirm the accuracy of the information provided below.	
	Consortia bids should provide relevant examples of where the consortium has delivered similar requirements. If this is not possible (e.g. the consortium is newly formed or a Special Purpose Vehicle is to be created for this contract) then three separate examples should be provided between the principal member(s) of the proposed consortium or Special Purpose Vehicle (three examples are not required from each member).	
	Where the Supplier is a Special Purpose Vehicle, or a managing agent not intending to be the main provider of the supplies or services, the information requested should be provided in respect of the main intended provider(s) or subcontractor(s) who will deliver the contract.	
	If you cannot provide examples see question 6.3	

	Contract 1	Contract 2	Contract 3
Name of customer organisation			
Point of contact in the organisation			
Position in the organisation			
E-mail address			
Description of contract			
Contract Start date			
Contract completion date			
Estimated contract value			

6.2	Where you intend to sub-contract a proportion of the contract, please demonstrate how you have previously maintained healthy supply chains with your sub-contractor(s) Evidence should include, but is not limited to, details of your supply chain management tracking systems to ensure performance of the contract and including prompt payment or membership of the UK Prompt Payment Code (or equivalent schemes in other countries)		
Selection	Selection Questions 1- 6 Self-declarations ¹⁰		
6.2.1	Please confirm if you intend to use a supply chain for this contract. If you answer "No" you do not need to complete the rest of this section. [INFORMATION ONLY]	Yes/No NOT SCORED	
6.2.2	Please confirm that you have systems in place to ensure that those in your supply chain are paid within your agreed contractual terms.	Yes/No PASS/FAIL	
6.2.3	Please confirm you have procedures for resolving disputed invoices promptly and effectively with those in your supply chain.	Yes/No PASS/FAIL	
6.2.4	Please confirm whether you are a signatory to a code or standard on payment practices. [INFORMATION ONLY]	Yes / No NOT SCORED	
6.2.5	If you have answered "Yes" to question 4 above, please confirm whether you have taken steps to ensure that you meet the requirements of the code or standard.	Yes/No PASS/FAIL	

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¹ Procurement Policy Note 04/18: Taking account of a supplier's approach to payment in the procurement of major contracts

PUBLIC S	SECTOR CONTRACTS ONLY – Requirement und	er the Public Contracts					
Regulation	ns 2015 ("PCR 2015") (Reg 113)						
6.2.6	For all contracts entered into pursuant to a procurement carried out under the PCR 2015, please confirm you include 30 day payment terms in all of your sub-contracts (and you require your supply chain to do so) on all such contracts. AND PRIVATE SECTOR CONTRACTS	Yes / No PASS/FAIL					
6.2.7	Please provide the percentage of invoices paid by you to chain on all contracts within 60 days of the receipt of the six month periods. This should include the percentage of following categories:- • within 30 days • in 31 to 60 days • in 61 days or more. Please include the total volume of invoices in each category to information that has previously been submitted to Go (provided it covers the requested period), in which case, insert link(s):- If you are unable to demonstrate that 95% of invoices part contracts have been paid within 60 days of the receipt of two six month periods, please explain why and if application have taken and/or are planning to take.	gory. It is acceptable to cross referovernment or is publicly available please provide details and/or ayable to your supply chain on all f the invoice in each of the last					

6.3	If you cannot provide at least one example for questions 6.1, in no more than 500 words please provide an explanation for this e.g. your organisation is a new start-up or you have provided services in the past but not under a contract.

Section 7	Modern Slavery Act 2015: Requirements under M 2015 ¹¹	lodern Slavery Act
7.1	Are you a relevant commercial organisation as defined by section 54 ("Transparency in supply chains etc.") of the Modern Slavery Act 2015 ("the Act")?	Yes □ N/A □
7.2	If you have answered yes to question 1 are you compliant with the annual reporting requirements contained within Section 54 of the Act 2015?	Yes □ Please provide relevant the url No □

¹¹ Procurement Policy Note 9/16 Modern Slavery Act 2015

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	Please provide an
	explanation

Section 8	The General Data Protection Regulation (GDPR)	2
8.1	Compliance with the GDPR is a mandatory requirement for all contracts or agreements that involve the transfer and processing of personal data from 25 th May 2018. Will your organisation be compliant with the GDPR and all Data Protection Legislation (as defined in the terms and conditions applying to this Invitation to Tender) in regards to the processing required under this contract by the time of contract award?	Yes □ No □
	Contractors are also required to complete Declaration 5: The General Data Protection Regulation Assurance Questionnaire for Contractors, to evidence the extent of readiness. The Authority may ask the Contractor to provide evidence to support the position stated in the questionnaire. The Authority may require the successful Contractor to increase their preparedness where the Authority is not satisfied that the Contractor will be in a position to meet its obligations under the terms and conditions. If the Contractor fails to satisfy the Authority that it will be in a position to meet its obligations under the terms and conditions in the event that the Contractor is successful, the Authority reserves the right to exclude the bidder from this procurement.	

¹² <u>Procurement Policy Note 02/18 Changes to Data Protection Legislation & General Data Protection Regulation</u>

9. Additional Questions

Suppliers who self-certify that they meet the requirements to these additional questions will be required to provide evidence of this if they are successful at contract award stage.

Section 9	Additional Questions
9.1	Insurance
a.	Please self-certify whether you already have, or can commit to obtain, prior to the commencement of the contract, the levels of insurance cover indicated below:
	Y/N
	Employer's (Compulsory) Liability Insurance = £5m
	Public Liability Insurance = (as per contract T&Cs) Professional Indemnity Insurance = (if relevant, please advise amount held)
	*It is a legal requirement that all companies hold Employer's (Compulsory) Liability Insurance of £5 million as a minimum. Please note this requirement is not applicable to Sole Traders.

9.2	Suppliers' Past Performance ¹³ - (please refer to supplier seleguidance - this question should only be included by central contracting authorities)	
a.	Can you supply a list of your relevant principal contracts for goods and/or services provided in the last three years?	Yes □ No □
b.	On request can you provide a certificate from those customers on the list?	Yes □ No □
C.	If you cannot obtain a certificate from a customer can you explain the reasons why?	Yes □ No □
d.	If the certificate states that goods and/or services supplied were not satisfactory are you able to supply information which shows why this will not recur in this contract if you are awarded it?	Yes □ No □
е.	Can you supply the information in questions a. to d. above for any sub-contractors [or consortium members] who you are relying upon to perform this contract?	Yes □ No □

¹³ Procurement Policy Note 04/15 Taking Account of Suppliers' Past Performance

21 - Declaration 5: The General Data Protection Regulation Assurance Questionnaire for Contractors

The attached must be completed and returned as part of your bid.



22 - Declaration 6: Code of Practice for Research 14

I confirm that I am aware of the requirements of the Department's Code of Practice¹⁵ for Research (See Annex B) and, in the proposed project, I will use my best efforts to ensure that the procedures used conform to those requirements under the following headings:

- Responsibilities
- Competence
- Project planning
- Quality Control
- Handling of samples and materials
- Facilities and equipment
- Documentation of procedures and methods
- Research/work records

I understand that the Department has the right to inspect our procedures and practices against the requirements of the Code of Practice, and that I may be asked to provide documentary evidence of our working practices or provide access and assistance to auditors appointed by the Department.

(There is some flexibility in the application of the Code of Practice to specific research projects. Contractors are encouraged to discuss with the Department any aspects that cause them concern, in order to reach agreement on the interpretation of each requirement.)

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¹⁴ Please note that this declaration applies to individuals, single organisations and consortia.

¹⁵ The Code of Practice is attached to this ITT as Annex B



Annexes

Annex A Pricing Schedule

Please submit a pricing breakdown in your proposal - the tables below illustrate the information we would like to see. Work undertaken by subcontractors should also be broken down by their team members, rather than submitted as non-labour costs. Pricing breakdown should be given for all Work Packages.

For non-labour costs, e.g. expenses, we need a breakdown of what these are – either in the expenses column, against the relevant work package, or as separate rows underneath the relevant work package.

Please provide costs exclusive of VAT.

Staff/project team charges

All prices must exclude VAT Staffing costs table

Name	Grade and description of	Day rate	Hourly rate for	Hourly rate for
	responsibilities within this Contract	(ex-VAT)	evening work	weekend work

Work package charges

Please add lines as required for each task/deliverable and for each WP

Work Package	Task title	Deliverables	Target date	Pricing mechanism	please by required		(within eac ce and time	Grade/ level of staff	Daily rate	No. days over course of	Additional information		
					21/22	22/23	23/24	24/25	Total			contract	
WPA –	O .		break down by role)										
Cross- cutting	Coordinating and monitoring progress	A1.1 Quarterly progress reports	Quarterly, aligned so that every second quarterly report arrives 2 weeks before each biannual Programme Board meeting.	Core, fixed price									
	Handover	A1.2 Exit and handover plan	Within six months of contract start	Core, fixed price									
	A2 Risk Manager	ment				1				L	l.		<u>l</u>
			,	,			_						
	Identify, mitigating and managing risks	A2.1 Programme risk register	Updated monthly, one week before each Working Group meeting	Core, fixed price									
	_	anagement (please l											
	Knowledge management across programme	A3.1 Knowledge Management Strategy	Agreed and in place within 2 months of the contract starting	Core, fixed price									
	Knowledge mgmt. externally	A3.2 Website build and maintenance if required	Fully operational by March 2022	Core, fixed price (with milestones, see below)									
	Secondees to BEI	IS											

Work Package	Task title	Deliverables	Target o	late	Pricing mechanism						Grade/ level of staff	Daily rate	No. days over course of contract	Additional information
	Two secondees to BEIS Climate Science team	Provide 2 secondorequired skills to		Ongoing	Fixed price		22/20	20721	21, 20	1000				
		n reviewing interna	tional clin	nate science re	ports	1	<u> </u>			I	I			I
WPB Climate science support	Technical support for Government Review of IPCC reports	Scenario of five re five days; please s day rates and pric appropriate year	pecify ee in	Variable	Core, Time and materials									
	Technical support for Government Review of UN Emissions gap reports	Scenario of four reports x five days; please specify day rates and price in appropriate year	Variable		Core, Time and materials									
	Support for IPCC approval plenaries	Scenario of support for four x approval sessions, as set out on page 27	Variable		Non-core, Time and materials									
	B3 Understanding	g the climate scienc	·		oping the IPCC's S	Seventh As	ssessment	Cycle	1	•	l		1	
	Costs of workshop (do not change)	T&S 30 x experts for 3 workshops (£30k per workshop)	tbc, likel early 209	y late 2022 / 23	Core, Actual costs	30	60							

Work Package	Task title	Deliverables	Target date	Pricing mechanism	Cost (£l- please br required) 21/22	eak down	ncial year by resource	(within each earth	th line,	Grade/ level of staff	Daily rate	Additional information
	Workshop venue and catering for 3 x workshop (do not change)	(£20k per workshop)	tbc, likely late 2022 / early 2023	Core, Actual costs	20	40	20721		13441			
	Workshop facilitation	Facilitation of three expert workshops, last two days each	Variable	Core, fixed price								
	Preparation and delivery of 3 x PRP with accompanying materials	B3.4 Peer- reviewed publications	December 2022	Core, fixed price								
WPC -	C1 New global de	 ecarbonisation anal	 ysis and C2 Maritime En	 nissions Reductio	 n Pathway	l s Final rep	oort					
Decarboni	Temperature	C1.1 Initial	May 2022	Core, Fixed			1	1				
sation	overshoot analysis	findings C1.2 Seminar C1.3 Final	June 2022 December 2022	price								
		report C1.4 Policy briefing with key messages	December 2022									
	Maritime	C2.1 Final	October 2021	Core, fixed								
	emissions literature	report		price								
	review Ca Interactions b	etwoon mitigation	 measures and the atmosp	horo	1		1					<u> </u>
					1		1				I	
	Impacts of mitigation	C3.1 Approach agreed	December 2021	Core, fixed price								
	measures	C3.2 Interim	April 2023	Price								
		Report	April 2024									

Work Package	Task title	Deliverables	Target date	Pricing mechanism	Cost (£1) please br required 21/22	eak down	ncial year by resource	(within eac e and time	h line,	Grade/ level of staff	Daily rate	No. days over course of contract	Additional information
		C3.3 Final Report C3.4 Policy summary(ies)	May 2024		21722	227 23	237 24	247 23	Total			Contract	
WPD -	D1 Climate impac	cts at a global, regio	onal, and country scale										
Climate impacts	Review of country-level climate impacts	D1.1 Final report	Nov 2020	Core, Fixed price									
	UK Climate impacts	D1.2 Final report D1.3 Seminar to discuss D1.4 Policy briefing with key messages	May 2022	Core, Fixed price									
	D2, D3, D4 Climate impacts and UK infrastructure												
	Water needs	D2.1 Water availability dataset	June 2022	Core, fixed price based on milestones below									
	Energy System Risks	D3.1 – D3.9	Completed by March 2025	Core, Fixed price									
	Climate change and UK housing	D4.1 (Methodology) D4.2 (Draft) D4.3 (Final report) and D4.4 (Dataset)	December 2021	Core, Fixed price									
WPE –	E1 International	regional/country as	ssessments of mitigation	co-benefits and r	nitigation-	adaptation	1						
Co- benefits of climate action	Health and economic co- benefits of mitigation	E1.1 Interim results E1.2 Final report E1.3 Seminar to discuss results	November 2021 March 2023 March 2023 March 2023	Fixed price									

Work Package	Task title	Deliverables	Target date	Pricing mechanism	please break down by resource and time level of rate required) staff				No. days over course of contract	Additional information		
		E1.4 Policy briefings with			21/22	22/20	20721	21720	Total		contract	
		key messages										
	_	-	offs and co-benefits									
	Mitigation and adaptation interlinkages	E2.1 Interim results E2.2 Final report E2.3 Seminar to discuss results	March 2022 March 2023 March 2023	Fixed price								
	Climate science literature support	F1.1 Monthly literature updates F1.2 Summaries / presentations for significant publications F1.3 Briefings	Ongoing	Time and materials based on scenario provided.								
	F2 Future water	availability for wate	er-intensive energy infra	structure – data	visualisatio	n						
	Discover, design, sign-off and guidance	F2.1 Interim report F2.2 Prototype design completed F2.3 Beta tool F2.4 Final tool F2.5 User guidance	Completed by Feb 2024 with milestones captured below	Core, Fixed price (with milestones, see below)								

Work Package	Task title	Deliverables	Target date	Pricing mechanism	please br	Cost $(\pounds k)$ - by financial year (within each line, please break down by resource and time required) 21/22 22/23 23/24 24/25 Total			Grade/ level of staff	Daily rate	No. days over course of contract	Additional information	
	F3 Spatially gran	 	pacts for local authoritie	<u> </u>	21/22	22/23	23/24	24/23	Total			contract	
	Discover, design, sign-off and guidance	F2.1 Interim report F2.2 Prototype design completed F2.3 Beta tool	Completed by Jan 2024 with milestones	Core, Fixed price (with milestones, see below)									
		F2.4 Final tool F2.5 User	captured below										
	F4 International	guidance climate science eng	l agement						<u> </u>				
	Science around COP26	F4.1 Side event COP26 x 2 F4.2 Science briefing x 3	November 2021	Time and materials									
	Science at COP beyond COP26	F4.3 Side event at COP27, COP28, COP29	Normally December annually, but tbd	Fixed price	-	5	5	5	15				
	Science around the Global Stocktake	F4.4 2 science-policy workshops (workshop costs)	Tbc, likely latter half of 2022	Fixed price	-	2 x 50	-	-	100				
F – Knowledg e synthesis and translation	Science around the Global Stocktake	F4.5 (Facilitation of 2 workshops) F4.6 (Short report) F4.7 (2-page policy briefings)	Tbc, likely latter half of 2022	Fixed price									
Ad hoc fund – [do not change these figures]					55	100	400	425	980				

Work Package	Task title	Deliverables	Target date	Pricing mechanism	Cost $(\mathcal{L}k)$ - by financial year (within each line, please break down by resource and time required)			Grade/ level of staff	Daily rate	No. days over course of	Additional information		
					21/22	22/23	23/24	24/25	Total			contract	
GRAND													
TOTAL													

Additional detail required for milestone based deliverables:

For the deliverables with milestone payments in this ITT, the milestones are set out below and bidders will need to price them accordingly.

Deliverable A3.2 - Website

Milestone	Deadline	Description	Proposed proportion of payment due on completion	Proposed Price
1	Aug 2021	Approval of initial design	5%	
2	Nov 2021	Website prototype finalised	15%	
3	Feb 2022	User testing of website finalised	15%	
4	Mar 2022	Website live	15%	
5	Quarterly from Jun 2022	Ongoing maintenance as material is produced	50%	
Total			100%	

Deliverable D2.1 - Water availability Accessible Dataset

Milestone	Deadline	Description	Proposed proportion of payment due on completion	Proposed Price
1	by Nov 2021	Consultation with Environment Agency (EA) on dataset needs and methodology; agreement with BEIS & EA on final dataset, methodology, thresholds, and metrics	20%	
2	by Feb 2022	Access to all necessary datasets secured	20%	
3	by May 2022	Post-processing and data analysis complete	30%	
4	June 2022	Delivery of final dataset to EA, and to Work Package F	30%	
Total			100%	

Deliverables F2.1 – 2.5 Data Visualisation Tool (Future water availability for energy)

Milestone	Deadline	Description	Proportion due on completion	Proposed Price
1	End of discovery and submission of interim report (deliverable F2.2) detailing evidence needs, decision contexts and practices, a finalised problem statement, and candidate solutions, agreed with BEIS.		20%	
2	August 2023	Design of prototype/alpha product (deliverable F2.3) completed and agreed	30%	

3	December 2023	Testing and refining the developed tool (beta) (deliverable F2.4) completed and agreed	30%	
4	February 2024	Implementation and the production of user guidance (deliverable F2.5)	20%	
Total			100%	

Deliverable F3.2 Data Visualisation Tool (Granular UK climate impacts for local authorities)

Milestone	Deadline	Description	Proportion due on completion	Proposed Price
1	January 2023	Milestone 1: End of discovery and submission of interim report (deliverable F3.2) detailing evidence needs, decision contexts and practices, a finalised problem statement, and candidate solutions, agreed with BEIS.	20%	
2	June 2023	Milestone 2: Design of prototype/alpha product (deliverable F3.3) completed and agreed	30%	
3	November 2023	Milestone 3: Testing and refining the developed tool (beta) (deliverable F3.4) completed and agreed	30%	
4	January 2024	Milestone 4: Implementation and the production of user guidance (deliverable F3.5)	20%	
Total			100%	

Annex B Code of Practice for Research

Issued by the Department for Business, Energy and Industrial Strategy

The Department has developed this Code of Practice from the Joint Code of Practice issued by BBSRC; the Department for Environment, Food and Rural Affairs (Defra); the Food Standards Agency; and the Natural Environment Research Council (NERC) which lays out a framework for the proper conduct of research. It sets out the key aspects of the research process and the importance of making judgements on the appropriate precautions needed in every research activity.

The Code applies to all research funded by The Department. It is intended to apply to all types of research, but the overriding principle is fitness of purpose and that all research must be conducted diligently by competent researchers and therefore the individual provisions must be interpreted with that in mind.

PRINCIPLES BEHIND THE CODE OF PRACTICE

Contractors and consortia funded by the Department are expected to be committed to the quality of the research process in addition to quality of the evidence outputs.

The Code of Practice has been created in order to assist contractors to conduct research of the highest quality and to encourage good conduct in research and help prevent misconduct.

Set out over 8 responsibilities the code of practice provides general principles and standards for good practice in research.

Most contractors will already have in place many of the measures set out in the

Code and its adoption should not require great effort.

COMPLIANCE WITH THE CODE OF PRACTICE

All organisations contracting to the Department (including those subcontracting as part of a consortium) will be expected to commit to upholding these responsibilities and will be expected to indicate acceptance of the Code when submitting proposals to the Department. Contractors are encouraged to discuss with the Department any clauses in the Code that they consider inappropriate or unnecessary in the context of the proposed research project. The Code, and records of the discussions if held, will become part of the Terms and Conditions under which the research is funded.

Additionally, The Department may conduct (or request from the Contractor as appropriate) a formal risk assessment on the project to identify where additional controls may be needed.

MONITORING OF COMPLIANCE WITH THE CODE OF PRACTICE Monitoring of compliance with the Code is necessary to ensure:

Policies and managed processes exist to support compliance with the Code.

That these are being applied in practice.

In the short term, the Department can require contractors to conduct planned internal audits although the Department reserves the right to obtain evidence that a funded project is carried out to the required standard. The Department may also conduct an audit of a Contractor's research system if deemed necessary.

In the longer term it is expected that most research organisations will assure the quality of their research processes by means of a formal system that is audited by an impartial and competent third party against an appropriate internationally recognised standard that is fit for purpose. A recommended checklist for researchers can be found on the UK Research Integrity Office (UKRIO) website at http://www.ukrio.org/what-we-do/code-of-practice-for-research SPECIFIC REQUIREMENTS IN THE CODE OF PRACTICE

1. Responsibilities

All organisations contracting to the Department (including those sub-contracting as part of a consortium will be responsible for the overall quality of research they conducted. Managers, group leaders and supervisors have a responsibility to ensure a climate of good practice in the research teams, including a commitment to the development of scientific and technical skills.

The Principal Investigator or Project Leader is responsible for all the work conducted in the project including that of any subcontractors. All staff and students must have defined responsibilities in relation to the project and be aware of these responsibilities.

2. Competence

All personnel associated with the project must be competent to perform the technical, scientific and support tasks required of them. Personnel undergoing training must be supervised at a level such that the quality of the results is not compromised by the inexperience of the researcher.

3. Project planning

An appropriate level of risk assessment must be conducted to demonstrate awareness of the key factors that will influence the success of the project and the ability to meet its objectives. There must be a written project plan showing that these factors (including research design, statistical methods and others) have been addressed. Projects must be ethical and project plans must be agreed in collaboration with the Department, taking account of the requirements of ethical committees¹⁶ or the terms of project licences, if relevant.

Significant amendments to the plan or milestones must be recorded and approved by the Department if applicable.

¹⁶ Please note ethical approval does not remove the responsibility of the individual for ethical behaviour.

4. Quality Control

The organisation must have planned processes in place to assure the quality of the research undertaken by its staff Projects must be subjected to formal reviews of an appropriate frequency. Final and interim outputs must always be accompanied by a statement of what quality control has been undertaken. The authorisation of outputs and publications shall be as agreed by the Department, and subject to senior approval in the Department, where appropriate. Errors identified after publication must be notified to the Department and agreed corrective action initiated.

5. Handling of samples and materials

All samples and other experimental materials must be labelled (clearly, accurately, uniquely and durably), and retained for a period to be agreed by the Department. The storage and handling of the samples, materials and data must be as specified in the project plan (or proposal), and must be appropriate to their nature. If the storage conditions are critical, they must be monitored and recorded.

6. Documentation of procedures and methods

All the procedures and methods used in a research project must be documented, at least in the personal records of the researcher. This includes analytical and statistical procedures and the generation of a clear audit trial linking secondary processed information to primary data. There must be a procedure for validation of research methods as fit for purpose, and modifications must be trackable through each stage of development of the method.

7. Research/work records

All records must be of sufficient quality to present a complete picture of the work performed, enabling it to be repeated if necessary. The project leader is accountable for the validity of the wok and responsible for ensuring that regular reviews of the records of each researcher are conducted¹⁷ The location of all project records, including critical data, must be recorded. They must be retained in a form that ensures their integrity and security, and prevents unauthorised modification, for a period to be agreed by the Department.

A recommended checklist for researchers can be found on the UK Research Integrity Office (UKRIO) website at http://www.ukrio.org/what-we-do/code-of-practice-for-research

¹⁷ Please note that this also applies to projects being undertaken by consortia.

Annex C Mandatory Exclusion Grounds

Public Contract Regulations 2015 R57(1), (2) and (3)

Public Contract Directives 2014/24/EU Article 57(1)

Participation in a criminal organisation

Participation offence as defined by section 45 of the Serious Crime Act 2015

Conspiracy within the meaning of

- section 1 or 1A of the Criminal Law Act 1977 or
- article 9 or 9A of the Criminal Attempts and Conspiracy (Northern Ireland) Order 1983

where that conspiracy relates to participation in a criminal organisation as defined in Article 2 of Council Framework Decision 2008/841/JHA on the fight against organised crime;

Corruption

Corruption within the meaning of section 1(2) of the Public Bodies Corrupt Practices Act 1889 or section 1 of the Prevention of Corruption Act 1906;

The common law offence of bribery;

Bribery within the meaning of sections 1, 2 or 6 of the Bribery Act 2010, or section 113 of the Representation of the People Act 1983;

Fraud

Any of the following offences, where the offence relates to fraud affecting the European Communities' financial interests as defined by Article 1 of the convention on the protection of the financial interests of the European Communities:

- the common law offence of cheating the Revenue;
- the common law offence of conspiracy to defraud;
- fraud or theft within the meaning of the Theft Act 1968, the Theft Act (Northern Ireland) 1969, the Theft Act 1978 or the Theft (Northern Ireland) Order 1978;
- fraudulent trading within the meaning of section 458 of the Companies Act 1985, article 451 of the Companies (Northern Ireland) Order 1986 or section 993 of the Companies Act 2006;
- fraudulent evasion within the meaning of section 170 of the Customs and Excise Management Act 1979 or section 72 of the Value Added Tax Act 1994:
- an offence in connection with taxation in the European Union within the meaning of section 71 of the Criminal Justice Act 1993;
- destroying, defacing or concealing of documents or procuring the execution of a valuable security within the meaning of section 20 of the Theft Act 1968 or section 19 of the Theft Act (Northern Ireland) 1969:
- fraud within the meaning of section 2, 3 or 4 of the Fraud Act 2006;

 the possession of articles for use in frauds within the meaning of section 6 of the Fraud Act 2006, or the making, adapting, supplying or offering to supply articles for use in frauds within the meaning of section 7 of that Act;

Terrorist offences or offences linked to terrorist activities Any offence:

- listed in section 41 of the Counter Terrorism Act 2008:
- listed in schedule 2 to that Act where the court has determined that there is a terrorist connection;
- under sections 44 to 46 of the Serious Crime Act 2007 which relates to an offence covered by the previous two points;

Money laundering or terrorist financing

Money laundering within the meaning of sections 340(11) and 415 of the Proceeds of Crime Act 2002

An offence in connection with the proceeds of criminal conduct within the meaning of section 93A, 93B or 93C of the Criminal Justice Act 1988 or article 45, 46 or 47 of the Proceeds of Crime (Northern Ireland) Order 1996

Child labour and other forms of trafficking human beings

An offence under section 4 of the Asylum and Immigration (Treatment of Claimants etc.) Act 2004;

An offence under section 59A of the Sexual Offences Act 2003

An offence under section 71 of the Coroners and Justice Act 2009;

An offence in connection with the proceeds of drug trafficking within the meaning of section 49, 50 or 51 of the Drug Trafficking Act 1994

An offence under section 2 or section 4 of the Modern Slavery Act 2015

Non-payment of tax and social security contributions

Breach of obligations relating to the payment of taxes or social security contributions that has been established by a judicial or administrative decision.

Where any tax returns submitted on or after 1 October 2012 have been found to be incorrect as a result of:

- HMRC successfully challenging the potential supplier under the General Anti – Abuse Rule (GAAR) or the "Halifax" abuse principle; or
- a tax authority in a jurisdiction in which the potential supplier is established successfully challenging it under any tax rules or legislation that have an effect equivalent or similar to the GAAR or "Halifax" abuse principle;
- a failure to notify, or failure of an avoidance scheme which the supplier is or was involved in, under the Disclosure of Tax Avoidance Scheme rules (DOTAS) or any equivalent or similar regime in a jurisdiction in which the supplier is established

Other offences

Any other offence within the meaning of Article 57(1) of the Directive as defined by the law of any jurisdiction outside England, Wales and Northern Ireland

Any other offence within the meaning of Article 57(1) of the Directive created after 26th February 2015 in England, Wales or Northern Ireland

Discretionary exclusions

Obligations in the field of environment, social and labour law.

Where an organisation has violated applicable obligations in the fields of environmental, social and labour law established by EU law, national law, collective agreements or by the international environmental, social and labour law provisions listed in Annex X to the Directive (see copy below) as amended from time to time; including the following:-

- Where the organisation or any of its Directors or Executive Officers has been in receipt of enforcement/remedial orders in relation to the Health and Safety Executive (or equivalent body) in the last 3 years.
- In the last three years, where the organisation has had a complaint upheld following an investigation by the Equality and Human Rights Commission or its predecessors (or a comparable body in any jurisdiction other than the UK), on grounds of alleged unlawful discrimination.
- In the last three years, where any finding of unlawful discrimination has been made against the organisation by an Employment Tribunal, an Employment Appeal Tribunal or any other court (or incomparable proceedings in any jurisdiction other than the UK).
- Where the organisation has been in breach of section 15 of the Immigration, Asylum, and Nationality Act 2006;
- Where the organisation has a conviction under section 21 of the Immigration, Asylum, and Nationality Act 2006;
- Where the organisation has been in breach of the National Minimum Wage Act 1998.

Bankruptcy, insolvency

Bankrupt or is the subject of insolvency or winding-up proceedings, where the organisation's assets are being administered by a liquidator or by the court, where it is in an arrangement with creditors, where its business activities are suspended or it is in any analogous situation arising from a similar procedure under the laws and regulations of any State;

Grave professional misconduct

Guilty of grave professional misconduct

Distortion of competition

Entered into agreements with other economic operators aimed at distorting competition

Conflict of interest

Aware of any conflict of interest within the meaning of regulation 24 due to the participation in the procurement procedure

Been involved in the preparation of the procurement procedure.

Prior performance issues

Shown significant or persistent deficiencies in the performance of a substantive requirement under a prior public contract, a prior contract with a contracting entity, or a prior concession contract, which led to early termination of that prior contract, damages or other comparable sanctions.

Misrepresentation and undue influence

The organisation has influenced the decision-making process of the contracting authority to obtain confidential information that may confer upon the organisation undue advantages in the procurement procedure, or to negligently provided misleading information that may have a material influence on decisions concerning exclusion, selection or award.

Additional exclusion grounds

Breach of obligations relating to the payment of taxes or social security contributions.

ANNEX X Extract from Public Procurement Directive 2014/24/EU

LIST OF INTERNATIONAL SOCIAL AND ENVIRONMENTAL CONVENTIONS REFERRED TO IN ARTICLE 18(2) —

- ILO Convention 87 on Freedom of Association and the Protection of the Right to Organise;
- ILO Convention 98 on the Right to Organise and Collective Bargaining;
- ILO Convention 29 on Forced Labour;
- ILO Convention 105 on the Abolition of Forced Labour;
- ILO Convention 138 on Minimum Age;
- ILO Convention 111 on Discrimination (Employment and Occupation);
- ILO Convention 100 on Equal Remuneration;
- ILO Convention 182 on Worst Forms of Child Labour;
- Vienna Convention for the protection of the Ozone Layer and its Montreal Protocol on substances that deplete the Ozone Layer;
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention);
- Stockholm Convention on Persistent Organic Pollutants (Stockholm POPs Convention)
- Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (UNEP/FAO) (The PIC Convention) Rotterdam, 10 September 1998, and its 3 regional Protocols.

Consequences of misrepresentation

A serious misrepresentation which induces a contracting authority to enter into a contract may have the following consequences for the signatory that made the misrepresentation:-

 The potential supplier may be excluded from bidding for contracts for three years, under regulation 57(8)(h)(i) of the PCR 2015;

- The contracting authority may sue the supplier for damages and may rescind the contract under the Misrepresentation Act 1967.
- If fraud, or fraudulent intent, can be proved, the potential supplier or the responsible officers of the potential supplier may be prosecuted and convicted of the offence of fraud by false representation under s.2 of the Fraud Act 2006, which can carry a sentence of up to 10 years or a fine (or both).
- If there is a conviction, then the company must be excluded from procurement for five years under reg. 57(1) of the PCR (subject to self-cleaning).

Annex D Glossary

AR6 – 6th Assessment Report of the Intergovernmental Panel on Climate Change

AR7 – 7th Assessment Report of the Intergovernmental Panel on Climate Change

AD – Anaerobic Digestion

BEIS - UK Department for Business, Energy and Industrial Strategy

CCCC - Cabinet Committee on Climate Change

CCRA - Climate Change Risk Assessment

CEH – Centre for Ecology and Hydrology

CMIP - Coupled Model Intercomparison Project

COP - UNFCCC Conference of the Parties

DEFRA – UK Department for Environment, Food and Rural Affairs

DNO – Distributed Network Operator

EA – Environment Agency

eFLAG – Enhanced Future Flows and Groundwater project (of CEH)

FCDO – UK Foreign Commonwealth and Development Office

GDNO - Gas Distributed Network Operator

GDPR - General Data Protection Regulation

GGR - Greenhouse Gas Removal

GHGs - Greenhouse Gases

GWP - Global Warming Potential

HMG – Her Majesty's Government

IAMs – Integrated Assessment Models

IMO – International Maritime Organisation

IPCC - Intergovernmental Panel on Climate Change

KPIs – Key Performance Indicators

LAs - Local Authorities

LEPs - Local Enterprise Partnerships

MENA – Middle East and North Africa (region)

NCC - National Climate Capability

NDC - Nationally Declared Contribution (process within the UNFCCC Paris

Agreement)

Ofgem – UK Office for Gas and Electricity Markets

ONS - Office for National Statistics

QA - Quality Assurance

SDGs – Sustainable Development Goals (of the United Nations)

SLCPs - Short-Lived Climate Pollutants

SPM – Summary for Policy Makers (of IPCC Assessment Reports)

SRO – Senior Responsible Owner

TUPE – Transfer of Undertakings (Protection of Employment) Regulations 2006

UKCP – UK Climate Projections (latest version of which are UKCP18)

UKRI - UK Research and Innovation

UN – United Nations

UNFCCC – United Nations Framework Convention on Climate Change

Annex E List of documents that need to be returned

As a reminder, the below is a list of documents to be returned as part of the tender process:

- 1. Proposal (maximum 60 pages)
 - The page limit excludes CVs and the documents listed below.
- 2. Annex A Pricing Schedule
- 3. Declaration 1: Statement of non-collusion
- 4. Declaration 2: Form of Tender
- 5. Declaration 3: Conflict of Interest
- 6. Declaration 4: Standard Selection Questionnaire
- 7. Declaration 5: The General Data Protection Regulation Assurance Questionnaire for Contractors)
- 8. Declaration 6: Code of Practice

Annex F Performance Management Framework

The below table sets out the Key Performance Indicators (KPIs) which will be used throughout the duration of the contract.

KPI Category	KPI Ref	KPI Criteria	KPI measure	KPI Rating		
ery	1	Deadlines	Work delivered to the agreed standard on the timescale agreed with the Authority.	More than three deadlines missed by 3 working days or more in a 12-month period.	More than one deadline missed by 3 working days or more in a 12-month period.	Meets expectations - All deliverables sent to the Authority on time and to the required standard.
Delivery	2	Invoices	Invoices to be produced by the agreed deadline and should include a comprehensive breakdown (as agreed with the Authority).	Invoices sent to the Authority with either a delay and/or without the required breakdown on more than three occasions in a 12-month period.	Invoices sent to the Authority with either a delay and/or without the required breakdown on more than two occasions in a 12-month period.	Meets expectations - All invoices sent to the Authority on time and accurately reflect agreed work
1 anagement	3	Attendance	Attendance of appropriate representatives at governance and working group meetings. Any presentation should meet the expectations agreed with the Authority.	Attendance target is not met on more than three occasions. Material provided contains inaccuracies or is not appropriate for the audience on more than three occasions.	Attendance target is not met on more than once occasion. Material provided contains inaccuracies or is not appropriate for the audience on more than one occasion.	100% attendance is achieved, and products meet the agreed requirements.
Programme Management	4	Risk	An up-to-date risk register is provided one week in advance of monthly Working Group meetings. Risks should also be presented at each Programme Board and stagegate in a transparent and clear way.	A risk register is not provided on more than two occasions or contains significant omissions on more than two occasions.	A risk register is not provided on more than one occasion or contains significant omissions on more than one occasion.	Meets requirements
.	5	Adherence to budget	Percentage variance against agreed forecast	Deviation is 10% or more from the agreed variance	Deviation is 5% or more from the agreed variance	There is no deviation.
Financial Management	6	Ad-Hoc spend	All charges to the ad-hoc budget to be itemised in every invoice period.	Invoices are missed on two or more occasions. Three or more warnings are served to the Supplier by the Authority for use of the ad-hoc outside of the agreed terms.	Invoices are missed on more than one occasion. Two or more warnings are served to the Supplier by the Authority for use of the ad-hoc outside of the agreed terms.	Invoices are delivered on time and no warning are issued.

Annex G Summary Table of BEIS expense policy rates

Section	Description	Relevant Rates	Referen
	•		ce
Error! Reference source not found.	Hotel rates	\pounds 140 London and international	Error! Reference source not found.
Error! Reference source not found.	Hotel rates	\pounds 100 outside London (UK)	Error! Reference source not found.
Error! Reference source not found.	Incidental expenditure for overnight room charges, laundry newspaper etc.	up to $\pounds 5$ per day UK, up to $\pounds 10$ per day overseas	Error! Reference source not found.
Error! Reference source not found.	Economy Class	<3.5hrs flight time	Error! Reference source not found.
Error! Reference source not found.	Premium Class	3.5hrs to 5.5hrs flight time	Error! Reference source not found.
Error! Reference source not found.	Business Class	>5.5hrs flight time	Error! Reference source not found.
Error! Reference source not found.	Oyster cards to be used around London	Oyster or Contactless rate for journey rather than top-up value.	Error! Reference source not found.
Error! Reference source not found.	Eurostar	Standard Class Advanced ticket	Error! Reference source not found.
Error! Reference source not found.	Eurostar, with line manager approval	Fully flexible business	Error! Reference source not found.
Error! Reference source not found.	Advance open return	Standard Class flexible ticket	Error! Reference source not found.
Error! Reference source not found.	Permitted under certain exceptional circumstances.	First Class	Error! Reference source not found.
Error! Reference source not found.	Breakfast (early start) costs receipted.	\pounds 5 benchmark (UK and overseas travel outside of Europe and North America) \pounds 10 benchmark (Europe and North America) 18	Error! Reference

¹⁸ There are specific Europe and North America benchmarks to reflect the higher cost of subsistence when travelling to Europe and North America on behalf of the Department. Whilst other countries may have similar costs, less regular travel and the flexibility of the Expenses Policy means that it is not appropriate to set specific benchmarks for these countries. Staff travelling to these countries are able to exceed the benchmarks subject to the provisions of the policy being met.

Error! Reference source not found.	Lunch costs receipted	£5 benchmark (UK and overseas travel outside of Europe and North America) £15 benchmark (Europe and North America)	source not found. Error! Reference source not
Error! Reference source not found.	Dinner costs receipted	£15 benchmark(UK and overseas travel outside of Europe and North America) £25 benchmark (Europe and North America)	found. Error! Reference source not found.
Error! Reference source not found.	Staying with friends and family	£5 Lunch and £15 Dinner (£20 limit per 24hr period) – requires line manager approval.	Error! Reference source not found.
Error! Reference source not found.	Car journeys ≤10,000	45p per mile	Error! Reference source not found.
Error! Reference source not found.	Car journeys >10,000	25p per mile	Error! Reference source not found.
Error! Reference source not found.	Per passenger supplement	5p per mile	Error! Reference source not found.
Error! Reference source not found.	Motorbike journeys	24p per mile	Error! Reference source not found.
Professional Subscriptions	HMRC list of tax deductible professional subscriptions	No limit	Error! Reference source not found.

Annex H Supplier Engagement Day

Presentation from the supplier engagement event, 22nd September, 2020:



BEIS Climate

services - Supplier Da

Follow-up questions and answers after the supplier engagement event, September 2020:



BEIS climate services supplier day Q&A su

BEIS DPF31 - BEIS STANDARD TERMS AND CONDITIONS OF CONTRACT

FOR SERVICES

(including Hire, Lease and Facilities Management)

Clauses	<u>Index</u>
1	Definitions and Interpretation
2	Acts by the Authority
3	Service of Notices and Communications
4	Assignment and Sub-contracting
5	Entire Agreement
6	Waiver
7	Severability
8	Confidentiality
9	Freedom of Information
10	Amendments and Variations
11	Invoices and Payment
12	Accounts
13	Recovery of Sums Due
14	Value Added Tax
15	Provision of Services
16	Progress Report
17	Contractor's Personnel
18	Indemnities and Insurance
19	Termination for Insolvency or Change of Control
20	Termination of Breach of Contract
21	Cancellation
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26	Conflict of Interest
27	Intellectual Property Rights
28	Rights of Third Parties
29	Government Property
30	Data Protection
31	Payment of taxes: income tax and NICs
32	Payment of taxes: Occasions of Tax Non-compliance
33	Equality and non-discrimination
34	Welsh Language Act
35	Sustainable Procurement
36	Other Legislation
37	Contractor Status
38	Transfer of Services
39	Law and Jurisdiction
40	Transparency
41	Monitoring and Management Information
42	Information confidential to the Contractor

BEIS STANDARD TERMS AND CONDITIONS OF CONTRACT FOR SERVICES

(including Hire, Lease and Facilities Management)

1. Definitions and Interpretation

(1) In these terms and conditions of contract for services ("Conditions"):

"Annex 1" means the Annex 1 (Processing, Personal Data and Data Subjects) attached to the Authority's specification of requirements which forms part of this Contract;

"Authority" means the Secretary of State for Business, Energy and Industrial Strategy, acting as part of the Crown;

"Authority's Premises" means land or buildings owned or occupied by the Authority;

"Confidential Information":

- a) means all information obtained by the Contractor from the Authority or any other department or office of Her Majesty's Government relating to and connected with the Contract and the Services; but
- b) does not include the Contract itself and the provisions of the Contract where, or to the extent that, the Authority publishes them by virtue of Condition 40;

the "Contract" means the agreement concluded between the Authority and the Contractor for the supply of Services, including without limitation these Conditions (to the extent that they are not expressly excluded or modified), all specifications, plans, drawings and other documents which are incorporated into the agreement;

the "Contract Period" means the period from the date of this Contract to the date of expiry of this Contract set out in the DPF41 Contract offer letter or such earlier date as this Contract is terminated in accordance with its terms:

the "Contract Year" means a period of 12 consecutive months starting on the date of this Contract and each anniversary thereafter;

the "Contractor" means the person who agrees to supply the Services and includes any person to whom all or part of the Contractor's obligations are assigned pursuant to Condition 4;

"Contractor Personnel" means all directors, officers, employees, agents, consultants and contractors of the Contractor and/or of any sub-contractor engaged in the performance of its obligations under this Contract, pursuant to Condition 4;

"Contracts Finder" means the Government's publishing portal for public sector procurement opportunities;

"the Charges" means the price agreed in respect of the Services, excluding Value Added Tax:

"Data Controller" shall have the same meaning as given in the Data Protection Legislation;

"Data Loss Event" means any event that results, or may result, in unauthorised access to Personal Data held by the Contractor under this Contract and/or actual or potential loss and/or alteration and/or destruction of Personal Data in breach of this Contract, including any Personal Data Breach;

"Data Protection Legislation" means (i) the General Data Protection Regulation (GDPR)(Regulation (EU) 2016/679), the Law Enforcement Directive (LED) (Directive (EU) 2016/680) and any applicable national implementing Laws as amended from time to time; (ii) the Data Protection Act 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;

"Data Processor" shall have the same meaning as given in the Data Protection Legislation;

"Data Protection Impact Assessment" means an assessment by the Data Controller of the impact of the envisaged processing on the protection of Personal Data;

"Data Protection Officer" shall have the same meaning as given in the Data Protection Legislation;

"Data Subject" shall have the same meaning as given in the Data Protection Legislation;

"Data Subject Request" means 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;

"Government Property" means anything issued or otherwise furnished in connection with the Contract by or on behalf of the Authority, including but not limited to documents, papers, data issued in electronic form and other materials;

"Intellectual Property Rights" means patents, trade marks, service marks, design rights (whether registrable or not), applications for any of those rights, copyright, database rights, trade or business names and other similar rights or obligations, whether registrable or not, in any country, including but not limited to, the United Kingdom;

"Law" means any law, subordinate legislation within the meaning of Section 21(1) of the Interpretation Act 1978, bye-law, enforceable right within the meaning of Section 2 of the European Communities Act 1972, regulation, order, regulatory policy, mandatory guidance or code of practice, judgment of a relevant court of law, or directives or requirements with which the Contractor is bound to comply;

"MI Reporting Template" means the document (included as an annex to the DPF41 Contract offer letter) as amended in accordance with Condition 41;

"Party" means a Party to this Contract, and "Parties" shall mean both of them;

"Personal Data" shall have the same meaning as given in the Data Protection Legislation;

"Personal Data Breach" shall have the same meaning as given in the Data Protection Legislation;

"Protective Measures" means any appropriate technical and organisational measures which may include: 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;

"Purchase Order" means the document so described by the Authority to purchase the Services which makes reference to the Conditions;

the "Services" means the services to be supplied under the Contract;

"SME" means an enterprise falling within the category of micro, small and mediumsized enterprises defined by the Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises;

"Sub-Processor" means any third Party appointed to process Personal Data on behalf of the Contractor related to this Contract;

"VCSE" means a non-governmental organisation that is value-driven and which principally reinvests its surpluses to further social, environmental or cultural objectives.

- (2) The interpretation and construction of the Contract shall be subject to the following provisions:
 - (a) a reference to any statute, enactment, order, regulation or similar instrument shall be construed as a reference to the statute, enactment, order, regulation or instrument as subsequently amended or re-enacted;
 - (b) the headings in these Conditions are for ease of reference only and shall not affect the interpretation or construction of the Contract;
 - (c) references to "person", where the context allows, includes a corporation or an unincorporated association.

2. Acts by the Authority

Any decision, act or thing which the Authority is required or authorised to take or do under the Contract may be taken or done by any person authorised, either expressly or impliedly, by the Authority to take or do that decision, act or thing.

3. Service of Notices and Communications

Any notice or other communication that either party gives under the Contract shall be made in writing and given either by hand, first class recorded postal delivery or facsimile transmission. Notice given by hand shall be effective immediately, notice given by recorded postal delivery shall be effective two working days after the date of posting, notice given by facsimile transmission shall be effective the working day after receipt by the notifying party of a transmission slip showing that the transmission has succeeded.

4. Assignment and Sub-contracting

- (1) The Contractor shall not give, bargain, sell, assign, sub-contract or otherwise dispose of the Contract or any part thereof without the previous agreement in writing of the Authority.
- (2) The Contractor shall not use the services of self-employed individuals in connection with the Contract without the previous agreement in writing of the Authority.
- (3) If the Contractor uses a sub-contractor for the purpose of performing the Services or any part of it, the Contractor shall include in the relevant contract a provision which requires the Contractor to pay for those goods or services within 30 days of the Contractor receiving a correct invoice from the sub-contractor.
- (4) The Contractor shall be responsible for the acts and omissions of his subcontractors as though they were his own.
- (5) The Authority shall be entitled to assign any or all of its rights under the Contract to any contracting authority as defined in Regulation 2(1) of the Public Services Contracts Regulations 2006, provided that such assignment shall not materially increase
 - the burden of the Contractor's obligations under the Contract.
- (6) Where the Authority notifies the Contractor that it estimates the Charges payable under this Contract are due to exceed £5 million in one or more Contract Years the Contractor shall:
 - (a) subject to Condition 4(9), advertise on Contracts Finder all subcontract opportunities arising from or in connection with the provision of the Goods and/or Services and/or Works above a minimum threshold of £25,000 that arise during the Contract Period;
 - (b) within 90 days of awarding a subcontract to a subcontractor, update the notice on Contracts Finder with details of the successful subcontractor;
 - (c) monitor the number, type and value of the subcontract opportunities placed on Contracts Finder advertised and awarded in its supply chain during the Contract Period:
 - (d) provide reports on the information in Condition 4(6)(c) to the Authority in the format and frequency as reasonably specified by the Authority; and
 - (e) promote Contracts Finder to its Contractors and encourage those organisations to register on Contracts Finder.
- (7) Each advert referred to in Condition 4(6)(a) above shall provide a full and detailed description of the subcontract opportunity with each of the mandatory fields being completed on Contracts Finder by the Contractor.

- (8) The obligation in Condition 4(6)(a) shall only apply in respect of subcontract opportunities arising after the contract award date.
- (9) Notwithstanding Condition 4(6), the Contracting Authority may, by giving its prior written approval, agree that a subcontract opportunity is not required to be advertised on Contracts Finder.

5. Entire Agreement

The Contract constitutes the entire agreement and understanding between the parties and supersedes all prior written and oral representations, agreements or understandings between them relating to the subject matter of the Contract provided that neither party excludes liability for fraudulent misrepresentations upon which the other party has relied.

6. Waiver

- (1) The failure by either party to exercise any right or remedy shall not constitute a waiver of that right or remedy.
- (2) No waiver shall be effective unless it is communicated to the other party in writing.
- (3) A waiver of any right or remedy arising from a breach of the Contract shall not constitute a waiver of any right or remedy arising from any other breach of the Contract.

7. Severability

If any Condition, clause or provision of the Contract not being of a fundamental nature is held to be unlawful, invalid or unenforceable by a court or tribunal in any proceedings relating to the Contract, the validity or enforceability of the remainder of the Contract shall not be affected. If the court finds invalid a provision so fundamental as to prevent the accomplishment of the purpose of the Contract, the parties shall immediately commence negotiations in good faith to remedy the invalidity.

8. Confidentiality

- (1) The Contractor agrees not to disclose any Confidential Information to any third party without the prior written consent of the Authority. To the extent that it is necessary for the Contractor to disclose Confidential Information to its staff, agents and subcontractors, the Contractor shall ensure that such staff, agents and subcontractors are subject to the same obligations as the Contractor in respect of all Confidential Information.
- (2) Condition 8(1) shall not apply to information which:
 - (a) is or becomes public knowledge (otherwise than by breach of these Conditions or a breach of an obligation of confidentiality);
 - (b) is in the possession of the Contractor, without restriction as to its disclosure, before receiving it from the Authority or any other department or office of Her Majesty's Government;
 - (c) is required by law to be disclosed;
 - (d) was independently developed by the Contractor without access to the Confidential Information.

- (3) The obligations contained in this Condition shall continue to apply after the expiry or termination of the Contract.
- (4) The Contractor shall not handle or examine any document or thing bearing a Government security classification of "Confidential", "Secret" or "Top Secret" other than in a Government establishment and the Contractor shall not remove any such document or thing from such Government establishment without the prior written consent of the Authority.
- (5) The Contractor shall not communicate with representatives of the general or technical press, radio, television or other communications media, with regard to the Contract, unless previously agreed in writing with the Authority.
- (6) Except with the prior consent in writing of the Authority, the Contractor shall not make use of the Contract or any Confidential Information otherwise than for the purposes of carrying out the Services.

9 Freedom of Information

- (1) The Contractor acknowledges that the Authority is subject to the requirements of the Freedom of Information Act 2000 ("FOIA") and the Environmental Information Regulations SI 2004 No. 3391 ("EIR") and shall assist and cooperate with the Authority, at the Contractor's expense, to enable the Authority to comply with these information disclosure requirements.
- (2) In this Condition:-

"Information" has the meaning ascribed to it in section 84 of the FOIA;

"Request for Information" has the meaning ascribed to it in section 8 of the FOIA, or any apparent request for information under the FOIA or EIR.

- (3) The Contractor shall (and shall procure that its subcontractors shall):- (a) Transfer any Request for Information to the Authority as soon as practicable after receipt and in any event within two working days; (b) Provide the Authority with a copy of all Information in its possession or power in the form that the Authority requires within five working days (or such other period as the Authority may specify) of the Authority requesting that Information;
 - (c) Provide all necessary assistance as reasonably requested by the Authority to enable it to respond to a Request for Information within the time for compliance set out in section 10 of the FOIA or regulation 5 of the EIR.
- (4) The Authority shall be responsible for determining, at its absolute discretion, whether any Information:-
 - (a) is exempt from disclosure in accordance with the provisions of the FOIA or the EIR:
 - (b) is to be disclosed in response to a Request for Information. In no event shall the Contractor respond directly to a Request of Information unless expressly authorised to do so in writing by the Authority.
- (5) The Contractor acknowledges that the Authority may, acting in accordance with the Secretary of State for Constitutional Affairs' Code of Practice on the discharge of

public authorities' functions under Part 1 of the FOIA (issued under section 45 of the FOIA in November 2004), be obliged under the FOIA or the EIR to disclose Information unless an exemption applies. The Authority may at its discretion consult the Contractor with regard to whether the FOIA applies to the Information and whether an exemption applies.

- (6) The Contractor shall ensure that all Information produced in the course of the Contract or relating to the Contract is retained for disclosure and shall permit the Authority to inspect such records as requested from time to time.
- (7) The Contractor acknowledges that any lists or schedules provided by it outlining information it deems confidential or commercially sensitive are of indicative value only and that the Authority may nevertheless be obliged to disclose information which the Contractor considers confidential in accordance with Conditions 9(4) and (5).

10. Amendments and Variations

Subject to Condition 18(7) no amendment or variation to the terms of the Contract shall be valid unless previously agreed in writing between the Authority and the Contractor.

11. Invoices and Payment

- (1) The Contractor shall submit invoices at times or intervals agreed by the Authority in the Contract or otherwise. The Contractor shall ensure that any invoice it submits sets out the Authority's Purchase Order or contract number, the Charges and, where not all of the Services have been completed, the relevant part of the Charges with an appropriate breakdown of time worked, the part of the Services (if all the Services have not been completed) and period to which the invoice relates, and its confirmation that the Services (or relevant part of the Services referred to on the invoice) have been fully performed.
- (2) In consideration of the provision of the Services by the Contractor, the Authority shall pay the Charges after receiving a correctly submitted invoice as set out in Condition 11(1). Such payment shall normally be made within 30 days of receipt of the correctly submitted invoice.
- (3) The Contractor shall not be entitled to charge for the provision of any services that are not part of the Services agreed within the Contract, unless the Contract has been properly varied in advance in accordance with Condition 10.
- (4) The Authority may reduce payment in respect of any Services that the Contractor has either failed to provide or has provided inadequately, without prejudice to any other rights or remedies of the Authority.
- (5) If the Contractor believes that payment for a correctly submitted invoice is overdue, he should, in the first instance, speak to the named contact on the face of the Contract. In the event that the problem is not resolved to his satisfaction, he should write to the Head of Procurement at the Department for Business, Energy and Industrial Strategy setting out his case. The Head of Procurement shall ensure that the complaint is dealt with by an official who is independent of the main contact and that the Contractor is not treated adversely in future for having made a complaint.

(6) For the purpose of calculating any statutory interest under the Late Payment of Commercial Debts (Interest) Act 1998, the relevant date for the payment of the debt shall be deemed to be the last day of a period of 30 days commencing on the day when the Authority received the invoice, or, if the Contractor had not completed the Services (or the part of the Services to which the invoice relates) before submitting the invoice, the last day of a period of 30 days commencing on the day when the Contractor completed the Services, (or the part of the Services to which the invoice relates).

12. Accounts

- (1) The Contractor shall keep full and proper accounts, records and vouchers relating to all expenditure reimbursed by the Authority and all payments made by the Authority in respect of the Services.
- (2) The Contractor shall permit the Authority acting by its officers, servants and agents or independent auditor on request and at all reasonable times to examine all accounts, records and vouchers at the offices of the Contractor or at such other places as the Authority shall direct, and to take copies of such accounts, records and vouchers and the Contractor shall provide the Authority or its independent auditor with such explanations relating to that expenditure as the Authority may request.
- (3) The Contractor shall ensure that the said accounts, records and vouchers are available for a period of six years after termination or expiry of the Contract.

13. Recovery of Sums Due

- (1) Whenever under the Contract any sum of money shall be recoverable from or payable by the Contractor, such sum may be deducted from any amount then due, or which at any time thereafter may become due, to the Contractor under this Contract or any other agreement or arrangement with the Authority or with any other department or office of Her Majesty's Government.
- (2) Any over-payment by the Authority to the Contractor whether in respect of the Charges or Value Added Tax shall be a sum of money recoverable from the Contractor pursuant to Condition 13(1) above or otherwise.

14. Value Added Tax

- (1) The Authority shall pay to the Contractor, in addition to the Charges, a sum equal to the Value Added Tax chargeable on the value of the Services provided in accordance with the Contract.
- (2) Any invoice or other request for payment of monies due to the Contractor under the Contract shall, if he is a taxable person, be in the same form and contain the same information as if the same were a tax invoice for the purposes of Regulations made under the Value Added Tax Act 1994.
- (3) The Contractor shall, if so requested by the Authority, furnish such information as may reasonably be required by the Authority relating to the amount of Value Added Tax chargeable on the Services.

15. Provision of Services

- (1) The Contractor shall provide the Services in accordance with and as specified in the Contract to the satisfaction of the Authority whose decision shall be final and conclusive. The Authority shall have the power to inspect and examine the performance of the Services at the Authority's Premises at any reasonable time or, provided that the Authority gives reasonable notice to the Contractor, at any other premises where any part of the Services is being performed.
- (2) If the Authority informs the Contractor that the Authority considers any part of the Services to be inadequate or in any way differing from the Contract, and this is other than as a result of default or negligence on the part of the Authority, the Contractor shall at his own expense re-schedule and perform the work correctly within such reasonable time as may be specified by the Authority.
- (3) The Authority may at any time demand that the Contractor suspend the provision of the Services. If the Authority exercises such right to suspend the provision of the Services or any part of them, or if the Contractor is delayed in proceeding with the provision of the Services by the Authority (otherwise than as a consequence of a breach of the Contract, or a breach of duty or fault or negligence on the part of the Contractor), the Authority shall be responsible for loss incurred by the Contractor as a result of such suspension or delay. Subject to the Contractor taking reasonable steps to mitigate its loss, the Contractor will be able to recover from the Authority under this Condition only for those losses which:
 - (a) were reasonably foreseeable by the Authority as arising as a direct result of the suspension or delay; and
 - (b) relate to the cost of any commitments entered into by the Contractor which cannot be met as a result of the suspension or delay and in respect of which the Contractor cannot obtain a refund (where the Contractor has already paid in relation to the commitment) or is obliged to pay (where the Contractor has not already paid in relation to the commitment).

The provisions of this Condition shall not apply where the reason for the suspension of the Services arises from circumstances beyond the control of the Authority.

- (4) If the performance of the Contract by the Contractor is delayed by reason of any act on the part of the Authority or by industrial dispute (other than by an industrial dispute occurring within the Contractor's or its sub-contractor's organisation) or any other cause which the Contractor could not have prevented then the Contractor shall be allowed a reasonable extension of time for completion. For the purposes of this Condition, the Contractor shall be deemed to have been able to prevent causes of delay
 - that are within the reasonable control of the Contractor's staff, agents and subcontractors.
- (5) Timely provision of the Services shall be of the essence of the Contract, including in relation to commencing the provision of the Services within the time agreed or on a specified date.
- (6) The Contractor warrants that it shall provide the Services with all due skill, care and diligence, and in accordance with good industry practice and legal requirements.

(7) Without prejudice to the provision of Condition 13(1), the Contractor shall reimburse the Authority for all reasonable costs incurred by the Authority which have arisen as a direct consequence of the Contractor's delay in the performance of the Contract which the Contractor had failed to remedy after being given reasonable notice by the Authority.

16. Progress Report

(1) Where formal progress reports are required by the Contract, the Contractor shall render such reports at such time and in such form as may be specified by the Authority, or as otherwise agreed between the Contractor and the Authority.

(2) The submission and acceptance of progress reports shall not prejudice any rights of the Authority under the Contract.

17. Contractor's Personnel

(1) The Authority reserves the right to refuse to admit to the Authority's Premises any person employed by the Contractor or its sub-contractors, whose admission would be undesirable in the opinion of the Authority.

(2) If and when requested by the Authority, the Contractor shall provide a list of the names and addresses of all persons who may at any time require admission in connection with the performance of the Services to the Authority's Premises, specifying the role in which each such person is concerned with the Contractor and giving such other particulars as the Authority may require.

(3) If and when requested by the Authority, the Contractor shall procure from each person identified by the request, a signed statement that he understands that the Official Secrets Acts 1911 to 1989 applies to him both during the carrying out and after expiry or termination of the Contract and that he will comply with the provisions of those Acts in so far as they apply to the work he is performing under the Contract.

(4) If and when requested by the Authority the Contractor agrees that it will submit any person employed by the Contractor or its sub contractors to the Authority's security vetting procedure. The Contractor further agrees that any individual who refuses to submit to such vetting procedure or does not attain the clearance it affords will not carry out any work on the Contract which the Authority certifies as suitable only for people who have passed its security vetting procedure.

(5) If the Contractor fails to comply with paragraph (2) (3) or (4) of this Condition and the Authority decides that such failure is prejudicial to its interests, the Authority may immediately terminate the Contract by notice in writing to the Contractor, provided that such termination shall be without prejudice to any accrued rights of, or to any rights that shall accrue thereafter to, the Authority.

18. Indemnities and Insurance

(1) The Contractor shall hold

harmless and indemnify the Authority on demand from and against all claims, demands, proceedings, actions, damages, costs (including legal costs), expenses and any other liabilities arising from claims made by the Authority's staff or agents, or by third parties, in respect of any death or personal injury, or loss or destruction of or damage to property, or any other loss, destruction or damage, including but not limited to financial losses which are caused, whether directly or indirectly, by the breach of contract or breach of duty (whether in negligence, tort, statute or otherwise) of the Contractor, its employees, agents or sub-contractors.

(2) The Contractor shall be liable to the Authority for any loss, damage, destruction, injury or expense, whether direct or indirect, (and including but not limited to loss or destruction of or damage to the Authority's property, which includes data) arising from the Contractor's breach of contract or duty (whether arising in negligence, tort, statute or otherwise).

(3) The Contractor shall effect with a reputable insurance company a policy or policies of insurance providing an adequate level of cover in respect of all risks which may be incurred by the Contractor in respect of the indemnities provided under the Contract, which in any event shall not be less than £1,000,000, and shall at the request of the Authority produce the relevant policy or policies together with receipt or other evidence of payment of the latest premium due there under.

(4) Nothing in these Conditions nor in any part of the Contract shall impose any liability on any member of the staff of the Authority or its representatives in their personal capacity.

(5) The Contractor shall indemnify the Authority against all proceedings, actions, claims, demands, costs (including legal costs), charges, expenses and any other liabilities arising from or incurred by reason of any infringement or alleged infringement of any third party's Intellectual Property Rights used by or on behalf of the Contractor for the purpose of the Contract, providing that any such infringement or alleged infringement is not knowingly caused by, or contributed to, by any act of the Authority.

(6) The Authority shall indemnify the Contractor against all proceedings, actions, claims, demands, costs (including legal costs), charges, expenses and any other liabilities arising from or incurred by reason of any infringement or alleged infringement of any third party's Intellectual Property Rights used at the request of the Authority by the Contractor in the course of providing the Services, providing that any such infringement or alleged infringement is not knowingly caused by, or contributed to by, any act of the Contractor.

(7) Except in relation to death or personal injury as referred to in Condition 18(1), and subject to Conditions 18(5) and 30(15) the amount of liability under this clause shall be limited to a sum of $\pounds 4,000,000$ or twice the contract value, whichever is the greater, or such other sum

as may be agreed in writing between the Head of Procurement on behalf of the Authority and the Contractor.

19 Termination for Insolvency or Change of Control

- (1) The Contractor shall notify the Authority in writing immediately upon the occurrence of any of the following events:
 - a) where the Contractor is an individual, if a petition is presented for his bankruptcy, or he makes any composition or arrangement with or for the benefit of creditors, or makes any conveyance or assignment for the benefit of creditors, or if an administrator is appointed to manage his affairs; or
 - b) where the Contractor is not an individual but is a firm or a number of persons acting together, if any event in Condition 19(1)(a) or (c) occurs in respect of any partner in the firm or any of those persons, or if a petition is presented for the Contractor to be wound up as an unregistered company; or
 - c) where the Contractor is a company or limited liability partnership, if the company or limited liability partnership enters administration or passes a resolution to wind up or the court makes an administration order or a winding-up order, or the company makes a composition or arrangement with its creditors, or an administrative receiver, receiver or manager is appointed by a creditor or by the court, or possession is taken of any of its property under the terms of a floating charge; or
 - d) the Contractor undergoes a change of control, where "control" is interpreted in accordance with Section 1124 of the Corporation Tax Act 2010.
- (2) After receipt of the notice under paragraph (1) above or earlier discovery by the

Authority of the occurrence of any of the events described in that paragraph, the Authority may, by notice in writing to the Contractor, terminate the Contract with immediate effect without compensation to the Contractor and without prejudice to any right or action or remedy which may accrue to the Authority thereafter. The Authority's right to terminate the Contract under Condition 19(1)(d) will exist until the end of a period of three months starting from receipt of the notice provided by the Contractor pursuant to Condition 19(1), or such other period as is agreed by the parties.

20. Termination for Breach of Contract

If either party commits a material breach of the Contract which is either not capable of remedy, or, if it is capable of remedy, he fails to remedy such breach within 28 days of being notified by the other party in writing to do so, that other party shall be entitled to terminate the Contract with immediate effect by notice in writing to the party that committed the material breach and without prejudice to any other rights or remedies of either party in respect of the breach concerned or any other breach of the Contract.

21. Cancellation

The Authority shall be entitled to terminate the Contract, or to terminate the provision of any part of the Services, by giving to the Contractor not less than 28 days' notice in writing to that effect. Once it has given such notice, the Authority

may extend the period of notice at any time before it expires, subject to agreement on the level of Services to be provided by the Contractor during the period of extension.

22. Dispute Resolution

- (1) The parties shall attempt in good faith to negotiate a settlement to any dispute between them arising out of or in connection with the Contract.
- (2) If the parties cannot resolve the dispute pursuant to paragraph (1) of this Condition, the dispute may, by agreement between the parties, be referred to mediation pursuant to paragraph (4) of this Condition.
- (3) The performance of the Services shall not cease or be delayed by the reference of a dispute to mediation pursuant to paragraph (2) of this Condition.
 - (4) If the parties agree to refer the dispute to mediation:
 - (a) in order to determine the person who shall mediate the dispute (the "Mediator") the parties shall by agreement choose a neutral adviser or mediator from one of the dispute resolution providers listed by the Government

Procurement Service on its website or in its printed guidance on dispute resolution within 30 days after agreeing to refer the dispute to mediation;

- (b) the parties shall within 14 days of the appointment of the Mediator meet with him in order to agree a programme for the exchange of all relevant information and the structure to be adopted for negotiations to be held. If considered appropriate, the parties may at any stage seek assistance from the Government Procurement Service to provide guidance on a suitable procedure;
- (c) unless otherwise agreed, all negotiations connected with the dispute and any settlement agreement relating to it shall be conducted in confidence and without prejudice to the rights of the parties in any future proceedings;
- (d) if the parties reach agreement on the resolution of the dispute within 60 days of the Mediator being appointed, or such longer period as may be agreed between the parties, the agreement shall be reduced to writing and shall be binding on the parties once it is signed by both the Authority and the Contractor;
- (e) failing agreement within 60 days of the Mediator being appointed, or such longer period as may be agreed between the parties, either of the parties may invite the Mediator to provide a non-binding but informative opinion in writing. Such an opinion shall be provided on a without prejudice basis and shall not be used in evidence in any proceedings relating to the Contract without the prior written consent of both parties.

(5) If the parties do not agree to refer the dispute to mediation, or if the parties fail to reach agreement as to who shall mediate the dispute pursuant to Condition 22(4)(a) or if they fail to reach agreement in the structured negotiations within 60 days of the Mediator being appointed or such longer period as may be agreed by the parties, then any dispute or difference between them may be referred to the courts.

23. Bribery and corruption

- (1) The Contractor shall not, and shall ensure that its staff, sub-contractors and agents do not:
 - a) offer or promise, to any person employed by or on behalf of the Authority any financial or other advantage as an inducement or reward for the improper performance of a function or activity, or for showing or not showing favour or disfavour to any person in relation to this Contract or any other contract with the Authority;
 - b) agree to receive or accept any financial or other advantage as an inducement or reward for any improper performance of a function or activity in relation to this Contract or any other contract with the Authority; or
 - c) enter into the Contract or any other contract with the Authority or any other department or office of Her Majesty's Government in connection with which commission has been paid, or agreed to be paid by him or on his behalf, or to his knowledge, unless, before the Contract is made, particulars of any such commission and the terms and conditions of any agreement for the payment thereof, have been disclosed in writing to any person duly authorised by the Authority to act as its representative for the purpose of this Condition.

Nothing contained in this Condition shall prevent the Contractor paying such commission or bonuses to his own staff in accordance with their agreed contracts of employment.

- (2) Any breach of this Condition by the Contractor, or by any person employed or engaged by him or acting on his behalf (whether with or without his knowledge), or any act or omission by the Contractor, or by such other person, in contravention of the Bribery Act 2010 or any other anti-corruption law, in relation to this Contract or any other contract with the Authority, shall entitle the Authority to terminate the Contract with immediate effect by notice in writing and to recover from the Contractor the amount of any loss resulting from such termination and the amount of the value of any such gift, consideration or commission as the Authority shall think fit.
- (3) Where the Contract has been terminated under paragraph (2) of this Condition, there shall be deemed to be a failure to commence the provision of the Services, enabling the Authority to terminate the Contract with immediate effect and the Authority will not be obliged to pay the Charges.
 - (4) In any dispute, difference or question arising in respect of:

 a) the interpretation of this Condition (except so far as the same may relate to the amount recoverable from the Contractor

under paragraph (2) of this Condition in respect of any loss resulting from such determination of the Contract); or

b) the right of the Authority to determine the

Contract; or

or commission.

c) the amount or value of any gift, consideration

the decision of the Authority shall be final and conclusive.

24. Official Secrets

The Contractor's attention is drawn to the provisions of the Official Secrets Acts 1911 to 1989. The Contractor shall take all reasonable steps by display of notices or by other appropriate means to ensure that all persons employed in connection with the Contract have notice that these statutory provisions apply to them and will continue so to apply after the expiry or earlier termination of the Contract.

25. Special Provisions

In the case of any conflict or inconsistency between these general Conditions and any specific terms of the Contract, the latter shall prevail.

26. Conflict of Interest

- (1) The Contractor shall ensure that there is no conflict of interest as to be likely to prejudice his independence and objectivity in performing the Contract and undertakes that upon becoming aware of any such conflict of interest during the performance of the Contract (whether the conflict existed before the award of the Contract or arises during its performance) he shall immediately notify the Authority in writing of the same, giving particulars of its nature and the circumstances in which it exists or arises and shall furnish such further information as the Authority may reasonably require.
- (2) Where the Authority is of the opinion that the conflict of interest notified to it under paragraph (1) above is capable of being avoided or removed, the Authority may require the Contractor to take such steps as will, in its opinion, avoid, or as the case may be, remove the conflict and:
 - a) if the Contractor fails to comply with the Authority's requirements in this respect; or
 - b) if, in the opinion of the Authority, it is not possible to remove the conflict.

the Authority may terminate the Contract immediately and recover from the Contractor the amount of any loss resulting from such termination.

(3) Notwithstanding Condition 26(2), where the Authority is of the opinion that the conflict of interest which existed at the time of the award of the Contract could have been discovered with the application by the Contractor of due diligence and ought to have been disclosed as required by the tender documents pertaining to it, the Authority may terminate the Contract immediately for breach of a fundamental

condition and, without prejudice to any other rights, recover from the Contractor the amount of any loss resulting from such termination.

27. Intellectual Property Rights

- (1) Subject to any pre-existing rights of third parties and of the Contractor, the Intellectual Property Rights (other than copyright) in all reports, documents and other materials which are generated or acquired by the Contractor (or any of its sub-contractors or agents) ("the Contractor Materials") in the performance of the Services shall belong to and be vested automatically in the Authority.
- (2) The Contractor hereby assigns any copyright that it owns in the Contractor Materials to the Crown. The Contractor waives all moral rights relating to the Contractor Materials.
- (3) The Contractor warrants to the Authority that all of their staff, agents and subcontractors are and will be engaged in relation to the Contract on terms which do not entitle any of them to any Intellectual Property Rights in the Contractor Materials, and which require them to waive all moral rights.
- (4) If the Contractor in providing the Services uses any materials in which there are pre-existing Intellectual Property Rights owned by itself, its agents, sub-contractors or third parties, it shall itself provide, or procure from such agent, subcontractor or third party a non-exclusive licence for, or, if the Contractor is itself a licensee of those Intellectual Property Rights, it shall grant a sub-licence to, the Authority to use, reproduce, modify, adapt and enhance the material as the Authority sees fit. Such licence or sub-licence shall be perpetual and irrevocable and granted at no cost to the Authority.
- (5) The Authority shall have the sole right to use any information (whether or not it is Confidential Information) collected or collated pursuant to the Contract (excluding any information which in the opinion of the Authority is confidential to the Contractor or which has been communicated to the Contractor under a condition that it shall be confidential to the Contractor), and all original documents in whatever form which contain that information, including any computer tape or disk, any voice recording and any special computer program written to give access to the information, shall on request be deposited with the Authority.
- (6) Nothing in this Contract or done under the Contract shall be taken to diminish any Crown copyright, patent rights or any other Intellectual Property Rights which would, apart from this Contract, vest in the Crown or Authority.
- (7) The Contractor shall ensure that all royalties licence fees or similar expenses in respect of Intellectual Property Rights in materials used in connection with the Contract have been paid and are included in the Charges.
- (8) If the Authority reimburses the Contractor for the cost of any equipment, such equipment shall become the property of the Authority and the Contractor shall on request deliver such equipment to the Authority. The

Contractor shall keep a proper inventory of such equipment and shall deliver that inventory to the Authority on request and on completion of the Services.

28. Rights of Third Parties

It is not intended that the Contract, either expressly or by implication, shall confer any benefit on any person who is not a party to the Contract and accordingly the Contracts (Rights of Third Parties) Act 1999 shall not apply.

29. Government Property

- (1) All Government Property shall remain the property of the Authority and shall be used in the execution of the Contract and for no other purpose whatsoever except with the prior agreement in writing of the Authority.
- (2) All Government Property shall be deemed to be in good condition when received by or on behalf of the Contractor unless he notifies the Authority to the contrary within 14 days or such other time as is specified in the Contract.
- (3) The Contractor undertakes to return any and all Government Property on completion of the Contract or on any earlier request by the Authority.
- (4) The Contractor shall, except as otherwise provided for in the Contract, repair or replace or, at the option of the Authority, pay compensation for all loss, destruction or damage occurring to any Government Property caused or sustained by the Contractor, or by his servants, agents or sub-contractors, whether or not arising from his or their performance of the Contract and wherever occurring, provided that if the loss, destruction or damage occurs at the Authority's Premises or any other Government premises, this Condition shall not apply to the extent that the Contractor is able to show that any such loss, destruction or damage was not caused or contributed to by his negligence or default or the neglect or default of his servants, agents, or sub-contractors.
- (5) Where the Government Property comprises data issued in electronic form to the Contractor (including Personal Data) the Contractor shall not store, copy, disclose or use such electronic data except as necessary for the performance by the Contractor of its obligations under the Contract (including its obligation to back up electronic data as provided in Condition 29(6) below) or as otherwise expressly authorised in writing by the Authority.
- (6) The Contractor shall perform secure back ups of all such electronic data in its possession and shall ensure that an up to date back up copy is securely stored at a site other than that where any original copies of such electronic data are being stored.
- (7) The Contractor shall, and shall procure that its sub-contractors, agents and personnel, shall observe best practice when handling or in possession of any such electronic data. By way of example if the Contractor removes any such data or information from a Government establishment, or is sent such data or information by the Authority it shall ensure that the data and any equipment on which it is stored or is otherwise being processed is kept secure at all times. The Contractor shall impress on any of its sub-contractors, agents and personnel who are required to handle or have possession of such electronic data that they must safeguard it all

- times, and shall not place it in jeopardy for example by leaving it unattended in a vehicle or on public transport or by transmitting or posting it by insecure means.
- (8) If at any time the Contractor suspects or has reason to believe that such electronic data has or may become corrupted, lost, destroyed, altered (other than to the extent that the Contractor alters it by lawful processing in accordance with its obligations under this contract) or so degraded as a result of the Contractor's default so as to be unusable then the Contractor shall notify the Authority immediately and inform the Authority of the remedial action the Contractor proposes to take.
- (9) The Contractor shall indemnify the Authority against all claims and proceedings, and all costs and expenses incurred in connection therewith arising from the corruption, loss, destruction, alteration (other than by lawful processing permitted by this Contract) or degradation of electronic data which claims would not have arisen but for some act, omission, misrepresentation or negligence on the part of the Contractor or subcontractors, agents and personnel and hold it harmless against all costs, losses and liability whatsoever incurred by it arising out of any action or inaction on its part in relation to any of its obligations as set out in this Contract which results in such corruption, loss or degradation.

30. Data Protection

- (1) The Parties acknowledge that for the purposes of the Data Protection Legislation, the Authority is the Data Controller and the Contractor is the Data Processor. The only processing that the Contractor is authorised to do is listed in Annex 1 by the Authority and may not be determined by the Contractor.
- (2) The Contractor shall notify the Authority immediately if it considers that any of the Authority's instructions infringe the Data Protection Legislation.
- (3) The Contractor shall provide all reasonable assistance to the Authority in the preparation of any Data Protection Impact Assessment prior to commencing any processing. Such assistance may, at the discretion of the Authority, include:
 - (a) a systematic description of the envisaged processing operations and the purpose of the processing;
 - (b) an assessment of the necessity and proportionality of the processing operations in relation to the Services;
 - (c) an assessment of the risks to the rights and freedoms of Data Subjects; and
 - (d) the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of Personal Data.
- (4) The Contractor shall, in relation to any Personal Data processed in connection with its obligations under this Contract:
 - (a) process that Personal Data only in accordance with Annex 1, unless the Contractor is required to do otherwise by Law. If it is so required the Contractor shall promptly notify the Authority before processing the Personal Data unless prohibited by Law;

- (b) ensure that it has in place Protective Measures, which have been reviewed and approved by the Authority as appropriate to protect against a Data Loss Event having taken account of the:
 - (i) nature of the data to be protected;
 - (ii) harm that might result from a Data Loss Event;
 - (iii)state of technological development; and
 - (iv)cost of implementing any measures;

The review and approval of the Protective Measures by the Authority shall not relieve the Contractor of its obligations under Data Protection Legislation, and the Contractor acknowledges that it is solely responsible for determining whether such Protective Measures are sufficient for it to have met its obligations under the Data Protection Legislation.

- (c) ensure that:
 - (i) the Contractor Personnel do not process Personal Data except in accordance with this Contract and in particular Annex 1;
 - (ii) it takes all reasonable steps to ensure the reliability and integrity of any Contractor Personnel who have access to the Personal Data and ensure that they:
 - (A) are aware of and comply with the Contractor's duties under this clause;
 - (B) are subject to appropriate confidentiality undertakings with the Contractor or any Sub-Processor;
 - (C) 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 Authority or as otherwise permitted by this Contract; and
 - (D) have undergone adequate training in the use, care, protection and handling of Personal Data.
- (d) do not transfer Personal Data outside of the European Union unless the prior written consent of the Authority has been obtained and provided the following conditions are fulfilled:-
- (i) the Authority or the Contractor has provided appropriate safeguards in relation to the transfer (whether in accordance with GDPR Article 46 or LED Article 37) as determined by the Authority;
- (ii) the Data Subject has enforceable rights and effective legal remedies;
- (iii) the Contractor 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 Authority in meeting its obligations); and

- (iv) the Contractor complies with any reasonable instructions notified to it in advance by the Authority with respect to the processing of the Personal Data.
- (5) Subject to clause (6), the Contractor shall notify the Authority immediately if it:
 - (a) receives a Data Subject Request (or purported Data Subject Request);
 - (b) receives a request to rectify, block or erase any Personal Data;
 - (c) receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation;
 - (d) receives any communication from the Information Commissioner or any other regulatory authority in connection with Personal Data processed under this Contract;
 - (e) 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
 - (f) becomes aware of a Data Loss Event.
- (6) The Contractor's obligation to notify under clause (5) shall include the provision of further information to the Authority in phases, as details become available.
- (7) Taking into account the nature of the processing, the Contractor shall provide the Authority with full assistance in relation to either Party's obligations under Data Protection Legislation and any complaint, communication or request made under clause (5) (and insofar as possible within the timescales reasonably required by the Authority) including by promptly providing:
 - (a) the Authority with full details and copies of the complaint, communication or request;
 - (b) such assistance as is reasonably requested by the Authority to enable the Authority to comply with a Data Subject Request within the relevant timescales set out in the Data Protection Legislation;
 - (c) the Authority, at its request, with any Personal Data it holds in relation to a Data Subject;
 - (d) assistance as requested by the Authority following any Data Loss Event;

- (e) assistance as requested by the Authority with respect to any request from the Information Commissioner's Office, or any consultation by the Authority with the Information Commissioner's Office.
- (8) The Contractor shall maintain complete and accurate records and information to demonstrate its compliance with this clause. This requirement does not apply where the Contractor employs fewer than 250 staff, unless:
 - (a) the Authority determines that the processing is not occasional;
 - (b) the Authority determines the processing includes special categories of data as referred to in Article 9(1) of the GDPR or Personal Data relating to criminal convictions and offences referred to in Article 10 of the GDPR; and
 - (c) the Authority determines that the processing is likely to result in a risk to the rights and freedoms of Data Subjects.
- (9) The Contractor shall allow for audits of its Data Processing activity by the Authority or the Authority's designated auditor.
- (10) The Contractor shall designate a Data Protection Officer if required by the Data Protection Legislation.
- (11) Before allowing any Sub-Processor to process any Personal Data related to this Contract, the Contractor must:
 - (a) notify the Authority in writing of the intended Sub-Processor;
 - (b) obtain the written consent of the Authority;
 - (c) enter into a written Contract with the Sub-Processor which give effect to the terms set out in this Condition 30 such that they apply to the Sub-Processor; and
 - (d) provide the Authority with such information regarding the Sub-Processor as the Authority may reasonably require.
- (12) The Contractor shall remain fully liable for all acts or omissions of any SubProcessor.
- (13) The Parties agree to take account of any guidance issued by the Information Commissioner's Office in respect of the Data Protection Legislation that is applicable to this Contract and shall make such variations to this Contract as the Authority may reasonably require to give effect to such guidance in accordance with Condition 10.
- (14) If the Contractor fails to comply with any provision of this Condition 30, the Authority may terminate the Contract immediately in which event the provisions of Condition 20 shall apply.

- (15) The Contractor shall indemnify the Authority against all claims and proceedings, and all costs and expenses incurred in connection therewith, made or brought against the Authority by any person in respect of the Data Protection Legislation or equivalent applicable legislation in any other country which claims would not have arisen but for some act, omission, misrepresentation or negligence on the part of the Contractor, its subcontractors and Sub-Processors and hold it harmless against all costs, fines, losses and liability whatsoever incurred by it arising out of any action or inaction on its part in relation to any of its obligations as set out in this Contract which results in the Authority being in breach of its obligations under the Data Protection Legislation or equivalent applicable legislation in any other country.
- (16) Upon expiry of this Contract or termination of this Contract for whatever reason, the Contractor shall, unless specified in Annex 1, notified otherwise by the Authority or required by law, immediately cease any processing of the Personal Data on the Authority's behalf and as required by the Authority:
 - (a) provide the Authority with a complete and uncorrupted version of the Personal Data in electronic form (or such other format as reasonably required by the Authority); and
 - (b) erase from any computers, storage devices and storage media that are to be retained by the Contractor after the expiry of the Contract. The Contractor will certify to the Authority that it has completed such deletion.
- (17) Where processing of the Personal Data continues after the expiry or termination of this Contract as specified in Annex 1, notified otherwise by the Authority or required by law, the Contractor shall comply with the provisions of this Condition 30 for as long as the Contractor continues to process the Personal Data and such provisions shall survive the expiry or termination of this Contract.
- (18) Where the Contractor is required to collect any Personal Data on behalf of the Authority, it shall ensure that it provides the data subjects from whom the Personal Data are collected with a privacy notice in a form to be agreed with the Authority.

31. Payment of taxes: income tax and NICs

- (1) Where the Contractor is liable to be taxed in the UK in respect of consideration received under the Contract, the Contractor shall at all times comply with the Income Tax (Earnings and Pensions) Act 2003 and all other statutes and regulations relating to income tax in respect of that consideration.
- (2) Where the Contractor is liable to National Insurance Contributions (NICs) in respect of consideration received under the Contract, the Contractor shall at all times comply with the Social Security Contributions and Benefits Act 1992 and all other statutes and regulations relating to NICs in respect of that consideration.
- (3) The Authority may, at any time during the term of the Contract, require the Contractor to provide information to demonstrate that:

- a) the Contractor has complied with paragraphs (1) and (2) above; or
- b) the Contractor or its staff are not liable to the relevant taxes.
- (4) A request under paragraph (3) above may specify the information which the Contractor must provide and a reasonable deadline for response.
- (5) The Authority may supply any information which it receives under paragraph (3) to the Commissioners of Her Majesty's Revenue and Customs for the purpose of the collection and management of revenue for which they are responsible.
- (6) The Contractor shall ensure that any sub-contractors (including consultants) and agents engaged by the Contractor for the purpose of the Services are engaged on, and comply with, conditions equivalent to those in paragraphs (1) to (5) above and this paragraph (6), and the Contractor shall, on request, provide the Authority with evidence to satisfy the Authority that the Contractor has done so. Those conditions shall provide both the Contractor and the Authority with the right to require the subcontractor or agent to provide information to them equivalent to paragraph (3), and the Contractor shall obtain that information where requested by the Authority.
- (7) The Authority may terminate the Contract with immediate effect by notice in writing where:
 - a) the Contractor does not comply with any requirement of this Condition 31: or
 - b) the Contractor's sub-contractors or agents do not comply with the conditions imposed on them under paragraph (6) above.
- (8) In particular (but without limitation), the Authority may terminate the Contract under paragraph (7) above:
 - a) in the case of a request under paragraph (3):
 - i. the Contractor fails to provide information in response to the request within the deadline specified; or
 - ii. the Contractor provides information which is inadequate to demonstrate how the Contractor or (where relevant) its subcontractors and agents have complied with the conditions set out or referred to in paragraphs (1) to (6);

or

b) the Authority receives information which demonstrates, to its reasonable satisfaction, that the Contractor, its sub-contractors or agents, are not complying with those conditions.

32. Payment of taxes: Occasions of Tax Non-compliance

(1) This Condition 32 applies where the consideration payable by the Contractor under the Contract equals or exceeds £5,000,000 (five million pounds).

- (2) The Contractor represents and warrants that it has notified the Authority in writing of any Occasions of Tax Non-Compliance or any litigation that it is involved in that is in connection with any Occasions of Tax Non Compliance.
- (3) If, at any point during the term of the Contract, an Occasion of Tax Non-Compliance occurs, the Contractor shall:
 - a) notify the Authority in writing of such fact within 5 working days of its occurrence; and
 - b) promptly provide to the Authority:
 - i) details of the steps which the Contractor is taking to address the Occasion of Tax Non-Compliance and to prevent the same from recurring, together with any mitigating factors that it considers relevant; and
 - ii) such other information in relation to the Occasion of Tax Non-Compliance as the Authority may reasonably require.
- (4) In the event that:
 - a) the warranty given by the Contractor pursuant to paragraph (2) of this Condition is materially untrue;
 - b) the Contractor commits a material breach of its obligation to notify the Authority of any Occasion of Tax Non-Compliance as required by paragraph
 - (3) of this Condition; or
 - c) the Contractor fails to provide details of proposed mitigating factors which, in the reasonable opinion of the Authority, are acceptable,

the Authority may terminate the Contract with immediate effect by notice in writing.

- (5) In this condition 32, "Occasion of Tax Non-Compliance" means:
 - a) any tax return of the Contractor submitted to a Relevant Tax Authority on or after 1 October 2012 is found on or after 1 April 2013 to be incorrect as a result of:
 - i) a Relevant Tax Authority successfully challenging the Contractor under the General Anti-Abuse Rule or the Halifax Abuse Principle or under any tax rules or legislation 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 Contractor 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;

and/or

- b) any tax return of the Contractor submitted to a Relevant Tax Authority on or after 1 October 2012 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 commencement of the Contract or to a penalty for civil fraud or evasion.
- (6) For the purpose of paragraph (5):
 - a) "DOTAS" means the Disclosure of Tax Avoidance Schemes rules which require a promoter of tax schemes to tell HM Revenue & Customs 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 by the National Insurance Contributions

(Application of Part 7 of the Finance Act 2004) Regulations 2012, SI 2012/1868 made under s.132A Social Security Administration Act 1992;

- b) "General Anti-Abuse Rule" means:
 - i) the legislation in Part 5 of the Finance Act 2013; and
 - ii) any future legislation introduced into Parliament to counteract tax advantages arising from abusive arrangements to avoid national insurance contributions;
- c) "Halifax Abuse Principle" means the principle explained in the CJEU Case C255/02 Halifax and others; and
- d) "Relevant Tax Authority" means HM Revenue & Customs, or, if applicable, a tax authority in the jurisdiction in which the Contractor is established.

33. Equality and non-discrimination

(1) The Contractor shall not unlawfully discriminate within the meaning and scope of the Equality Act 2010 and any other anti-discrimination legislation in relation to the provision of the Services or otherwise and shall take all reasonable steps to ensure that its staff, sub-contractors and agents do not do so

- (2) The Contractor shall comply with the Authority's equality scheme as published on the Authority's website, and shall take all reasonable steps to ensure that its staff, sub-contractors and agents do so.
- (3) The Authority may (without prejudice to its other rights under the Contract) terminate the Contract with immediate effect by notice in writing where the Contractor fails (or the Contractor's staff, sub-contractors or agents fail) to comply with paragraphs (1) or (2) of this Condition.

34. Welsh Language Act

The Contractor shall for the term of the Contract comply with the principles of the Authority's Welsh Language Scheme.

35. Sustainable Procurement

- (1) The Contractor shall comply in all material respects with all applicable environmental laws and regulations in force from time to time in relation to the Services. Without prejudice to the generality of the foregoing, the Contractor shall promptly provide all such information regarding the environmental impact of the Services as may reasonably be requested by the Authority.
- (2) The Contractor shall meet all reasonable requests by the Authority for information evidencing compliance with the provisions of this Clause by the Contractor.
- (3) All written outputs, including reports, produced in connection with the Contract shall (unless otherwise specified) be produced on recycled paper containing at least 80% post consumer waste and used on both sides where appropriate.

36. Other Legislation

The Contractor shall, and shall procure that its sub-contractors, agents and personnel, comply with all other applicable law.

37. Contractor Status

Nothing in the Contract shall create or be construed as creating a partnership, joint venture, a contract of employment or relationship of employer and employee, or a relationship of principal and agent between the Authority and the Contractor.

38. Transfer of Services

- (1) Where the Authority intends to continue with services equivalent to any or all of the Services after termination or expiry of the Contract, either by performing them itself or by the appointment of a replacement contractor, the Contractor shall (both during the term of the Contract and, where relevant, after its expiry or termination):
 - (a) provide all information reasonably requested to allow the Authority to conduct the procurement for any replacement services; and
 - (b) use all reasonable endeavours to ensure that the transition is undertaken with the minimum of disruption to the Authority.

- (2) Without prejudice to the generality of paragraph (1) of this Condition, the Contractor shall, at times and intervals reasonably specified by the Authority, provide the Authority (for the benefit of the Authority, any replacement Contractor and any economic operator bidding to provide the replacement services) such information as the Authority may reasonably require relating to the application or potential application of the Transfer of Undertakings (Protection of Employment) Regulations 2006 including the provision of employee liability information.
- (3) Without prejudice to the generality of paragraph (1) of this Condition, the contractor shall co-operate fully during the transition period and provide full access to all data, documents, manuals, working instructions, reports and any information, whether held in electronic or written form, which the Authority considers necessary.

39. Law and Jurisdiction

The Contract shall be governed by and construed in accordance with English Law and shall be subject to the exclusive jurisdiction of the courts of England and Wales.

40. Transparency

- (1) In order to comply with the Government's policy on transparency in the areas of procurement and contracts, the Authority will, subject to Conditions 40(2) and (3), publish the Contract and the tender documents issued by the Authority which led to its creation on a designated web site.
- (2) The entire Contract and all the tender documents issued by the Authority will be published on that web site save where the Authority, in its absolute discretion, considers that the relevant documents, or their contents, would be exempt from disclosure in accordance with the provisions of the Freedom of Information Act 2000.
- (3) Where the Authority considers that any such exemption applies, the Authority will redact the relevant documents to the extent that the Authority considers the redaction is necessary to remove or obscure the relevant material, and those documents will be published on the designated web site subject to those redactions.
- (4) Where the Parties later agree changes to the contract, the Authority will publish those changes, and will consider any redaction, on the same basis.
- (5) In Condition 40(1) the expression "tender documents" means the advertisement issued by the Authority seeking expressions of interest, the pre qualification questionnaire and the invitation to tender and the contract includes the Contractor's proposal.

41. Monitoring and Management Information

(1) Where requested by the Authority, the Contractor shall supply to the Authority and/or to the Cabinet Office such information relating to the Services and to the Contractor's management and performance of the Contract as they may require.

- (2) The information referred to in Condition 41(1) may include, but is not limited to, the following: Line Item Amount, Invoice Line Description, Invoice Line Number, Currency Code, Order Date, VAT Inclusion Flag, VAT Rate, List Price, Number of Items, Unit of Purchase Quantity, Price per Unit, Contractor Service Code, Service description and/or name, UNSPSC Code, Taxonomy Code and/or Name, Geographical, Project Code, Project description, Project Start Date, Project Delivery Date (Estimate and Actual), Total project cost and Project Stage. The information may also, without limitation, include information relating to the capability of the Contractor (and any key sub-Contractor) to continue to perform the Contract (including information on matters referred to in regulations 23 to 27 of the Public Contracts Regulations 2006).
- (3) The information referred to in Condition 41(1) shall be supplied in such form and within such timescales as the Authority or the Cabinet Office may reasonably require.
- (4) The Contractor agrees that the Authority may provide the Cabinet Office, any other government department or agency or any other person or entity referred to in Condition 42(2) (Information Confidential to the Contractor), with information obtained under this Condition 41 and any other information relating to the Services procured and any payments made under the Contract.
- (5) Upon receipt of the information supplied by the Contractor in response to a request under Condition 41(1) or receipt of information provided by the Authority to the Cabinet Office under Condition 41(4) the Contractor hereby consents to the Cabinet Office (acting through the Government Procurement Service):
 - a) storing and analysing the information and producing statistics; and
 - b) sharing the information or any statistics produced using the information, with any person or entity referred to in Condition 42(2).
- (6) The Authority may make changes to the type of information which the Contractor is required to supply and shall give the Contractor at least one calendar month's written notice of any such changes.
- (7) Where the Authority notifies the Contractor that it estimates the Charges payable under this Contract are due to exceed £5 million in one or more Contract Years the Contractor agrees and acknowledges that it shall, in addition to any other management information requirements set out in this Contract, at no charge, provide such timely, full, accurate and complete SME management information (MI) reports to the Authority as the Authority shall require which incorporate the data described in the MI Reporting Template which is:
 - a) the total contract revenue received directly on a specific contract;
 - b) the total value of sub-contracted revenues under the contract (including revenues for non-SMEs/non-VCSEs); and
 - c) the total value of sub-contracted revenues to SMEs and VCSEs.

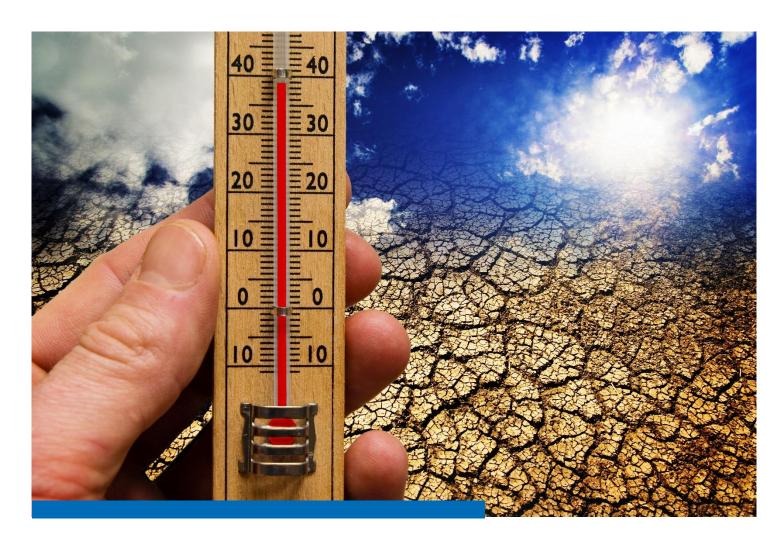
- (8) The SME management information reports referred to in Condition 41(7) shall be provided in the correct format as required by the MI Reporting Template and any guidance issued by the Authority from time to time. The Contractor shall use the initial MI Reporting Template and which may be changed from time to time (including the data required and/or format) by the Authority by issuing a replacement version. The Authority shall give at least thirty (30) days' notice in writing of any such change and shall specify the date from which it must be used.
- (9) The Contractor further agrees and acknowledges that it may not make any amendment to the current MI Reporting Template without the prior written approval of the Authority.

42. Information confidential to the Contractor

- (1) Unless agreed expressly by both parties in writing, in a confidentiality agreement identifying the relevant information, information obtained by the Authority from the Contractor shall not constitute confidential information relating to the Contractor.
- (2) Where any information held by the Authority does constitute confidential information relating to the Contractor, the Authority shall nonetheless have the right to disclose that information:
 - a) on a confidential basis to any other government department or agency for any proper purpose of the Authority or of that department or agency;
 - b) to Parliament and Parliamentary Committees or if required by any Parliamentary reporting requirement;
 - c) to the extent that the Authority (acting reasonably) deems disclosure necessary or appropriate in the course of carrying out its public functions;
 - d) on a confidential basis to a professional adviser, consultant, Contractor or other person engaged by any of the entities described in subparagraph a) (including any benchmarking organisation) for any purpose relating to or connected with the Contract or the Services;
 - e) on a confidential basis for the purpose of the exercise of its rights under the Contract; or
 - f) on a confidential basis to a proposed successor body in connection with any assignment, novation or disposal of any of its rights, obligations or liabilities under the Contract.
- (3) For the purpose of paragraph (2) of this Condition, references to disclosure on a confidential basis mean disclosure subject to a confidentiality agreement.

Creating a world fit for the future





Tender for Climate Services for a Net-Zero Resilient World (CS-NOW)
The Delivery of Climate Services to BEIS

Customer:

BEIS

Customer reference:

4925/03/2021

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Date: 7 May 2021

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Tender for Climate Services for a Net-Zero Resilient World (CS-NoW)

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Tender for Climate Services for a Net-Zero Resilient World (CS-NoW) $\,$

[This information has been redacted]



1 Understanding the Requirement

BEIS Climate Services for a Net-Zero Resilient World (CS-NoW) will harness cutting-edge scientific knowledge to inform UK climate policy and accelerate global ambition, capitalising on the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow and the UK's Presidency the following year. The objective of this programme is twofold:

- **Deliver exceptional research and analysis**, using high-quality data and rigorous methodologies, to improve UK and global understanding of the core themes: climate impacts, global decarbonisation, interactions between the energy system and the atmosphere and co-benefits of climate action.
- Use this research to inform policy by improving the accessibility of climate-relevant data in the UK and internationally and provide critical evidence to policymakers and other decision-makers.

Successful delivery will require not only a team with the leading scientific expertise required for the innovative research and analysis, but also a responsive delivery framework, underpinned by exceptional programme management, that can harness the team's expertise to meet BEIS' demands for high-quality evidence and scientific advice in a timely manner and usable format.

Ricardo Energy & Environment (hereafter Ricardo) has built a consortium (led by Ricardo and subcontracted partners) that marries internationally renowned universities and research institutes, with our own rich experience implementing large-scale research and evidence programmes. Our research partners include University College London (UCL); Tyndall Centre for Climate Change Research, [This information has been redacted]; and the Natural Environment Research Council (NERC) Centres, including the British Antarctic Survey (BAS), British Geological Survey (BGS), National Centre for Atmospheric Science (NCAS), National Centre for Earth Observation (NCEO), National Oceanography Centre (NOC), Plymouth Marine Laboratory (PML) and UK Centre for Ecology & Hydrology (UKCEH).

Our consortium has a deep understanding of both the state of scientific knowledge pertaining to climate change and how to advance it and the steps required to bridge science/academia and real policy-making – drawing on our detailed grasp of evidence-based policy-making and the political economy of climate change policy. Collectively, we provide four pillars for successful delivery

[This information has been redacted]

BEIS CS-NoW aims to enhance scientific understanding of climate impacts, decarbonisation and climate action and improve accessibility of UK climate data. In turn, the programme aims to contribute to evidence-based climate policy in the UK and internationally and strengthened climate resilience of UK infrastructure, housing and communities. Achieving these impacts will require a delivery approach with three overarching elements, as detailed in Figure 2. (1) Cross-cutting management, coordination and policy engagement, (2) Research and analysis, (3) and Knowledge synthesis and translation. The remainder of this section outlines our understanding of BEIS requirements in each of these elements.

[This information has been redacted]



1.1 Cross-cutting Management, Coordination and Policy Engagement

All research programmes face the risk of being 'supply driven' with ideas generated by researchers producing a set of papers for other researchers. Targeted policy engagement will help avoid this pitfall, ensuring that the intended 'users' of the evidence are centre to the programme. Policy engagement, combined with strong programme, knowledge and risk management will ensure that each work package (WP) delivers the specific evidence required by BEIS in an interpretable and actionable format. Ricardo will have overarching responsibility for management and delivery of the programme and will lead on the cross-cutting components outlined in WPA:

- WPA1 Programme management and coordination. A robust and secure programme management system will ensure a stable, low risk, high-quality and consistent approach. These processes will provide confidence that the deliverables will meet BEIS' quality specifications and timescales. Our programme management approach, found in Section 5, details our approach to delivering the core analysis outlined in the invitation to tender (ITT), while ensuring adequate resources and expert personnel remain available to provide ad hoc support as required.
- WPA2 Risk management. Risks are inevitably involved in any programme seeking to influence policy. Our Risk Management Approach, detailed in Section 5.2, outlines the steps we will take to identify, document, communicate and mitigate risks. Strong coordination with BEIS, regular formal reporting and the maintenance of a risk matrix as a 'living document' will help the Programme Directorate to take stock of the progress made so far, address outstanding management and coordination issues and discuss potential threats to the timely delivery of high-quality outputs. Clear lines of accountability and transparent working relationships between partners will ensure that ownership of risks is clearly defined.
- WPA3 Knowledge management. A comprehensive approach to knowledge management is critical to ensure that programme findings and emerging evidence are shared widely both across UK Government departments and internationally in formats that are user-friendly and responsive to needs. Our knowledge management approach, found in Section 4, presents our plans to utilise SharePoint and create a bespoke website (on .Gov.uk) to communicate results to academics, policymakers and other stakeholders and keep all informed about the progress of the programme.
- WPA4 Secondments to BEIS. The two Secondees to the BEIS Climate Science Team will lead on policy engagement throughout the programme. Secondee 1 will engage policy teams within BEIS and across other government departments, while Secondee 2 will engage externally with the UK and international climate science community. They will work closely with BEIS and other governmental departments to ensure that the programme fills defined evidence gaps and informs policy. Further details on the approach of each of the Secondees is provided in Section 6.2.1.

These elements that cut across the technical components of the programme, seek synergies between them and provide the bridge between science and policy are ultimately what will ensure that the CS-NOW programme is greater than the sum of its parts.



1.2 Research and Analysis

The challenges posed by climate change are multifaceted with rapidly emerging evidence, technological innovation, complex social and economic impacts and difficult political economy issues for policy and regulatory decision-making. A coordinated, transdisciplinary approach will be required to tackle these challenges, bringing the best minds from relevant academic disciplines together with key stakeholders. The research projects outlined in the ITT reflect the diversity of climate-related issues:

- WPB Climate science support for international reports will support BEIS
 in its reviews and approvals of the Intergovernmental Panel on Climate
 Change's (IPCC) Sixth Assessment Report (AR6) and UN Gap Reports and
 will help with scoping IPCC AR7. Not only will this WP synthesise the current
 state of scientific knowledge and identify critical knowledge gaps, it will also
 support BEIS' formation of the UK's positions on pressing policy questions.
- WPC Decarbonisation and global ambition will deliver cutting-edge analysis on defined research topics, as well as key knowledge gaps not covered in the IPCC Reports. The defined projects on the consequences of overshoot pathways (WPC1), maritime emissions reduction pathways (WPC2) and the interactions between mitigation measures and the atmosphere (WPC3) will help inform international and domestic decarbonisation policy and processes.
- WPD Climate impacts at different spatial and temporal scales will examine the climate hazards facing natural and human systems in order to inform UK and international adaptation policies and plans. WPD1 will review existing and emerging evidence on the potential climate impacts at different geographical scales (global, regional and country), timescales (near, medium and long term) and levels of warming; and deliver an assessment of the avoided climate impacts to the UK from limiting global warming to 1.5°C compared to higher levels of warming. WPD2–4 will provide spatially granular estimates of the climate hazards facing UK infrastructure including water-intensive energy infrastructure, energy networks and housing.
- WPE Co-benefits of climate action will examine the wide-ranging co-benefits of climate action in order to support governments to decarbonise and adapt to climate change alongside achieving other priorities. WPE1 will provide a credible assessments of mitigation co-benefits to health and the economy at global and regional scales. WPE2 will assess the interlinkages, and associated co-benefits and trade-offs, between UK climate mitigation and UK climate adaptation options. Alongside WPs C and D, this work package will enhance understanding of the case for Net Zero both in the UK and internationally. It will also provide critical inputs during the UK COP26 Presidency campaigns on Adaptation and Resilience, and Energy Transitions.

Our approach to delivering each of these research projects is detailed in Section 2. Generating rigorous, actionable evidence for policymakers will require a combination of new data, new means of data collection and measurement and studies tailored to fill gaps in the evidence base. Our team has a strong track record of developing and employing a range of modelling and empirical research techniques, including climate models, integrated assessment models, economic models, energy models, etc. Our team's scientific expertise is detailed in Section 6.



1.3 Knowledge Synthesis and Translation

Knowledge synthesis and translation will be at the core of the CS-NoW programme. We will deliver research outputs that are not only *scientifically robust*, but also *relevant* (responding to BEIS' and other user's demands to address specific evidence gaps); *accessible* (can be easily understood and internalised in decision-making); and *actionable* (can be used in practical terms by decision-makers). To achieve this objective, we will provide targeted and user-centred communications to present research outputs and emerging evidence in formats that can be interpreted and used by a variety of different audiences to inform decisions. WPF is described further in Section 2.5 and includes four sub-WPs:

- WPF1 Monitoring of the climate science landscape and provision of on-call briefing will systematically monitor climate science literature on an ongoing basis and provide monthly updates, as well as on-call briefings, summaries and presentations on key scientific papers or priority topics.
- WPF2 Future water availability for water-intensive energy infrastructure will provide an innovative data visualisation tool to interpret and manipulate data from WPD2 on projected climate impacts to water flows and the knock-on impacts to the energy infrastructure and industrial sector. This tool will be co-created with the Environment Agency (EA) climate science and user team and will provide actionable evidence for sustainable regulation of water resources.
- WPF3 Spatially granular UK climate impacts for local authorities will
 provide a highly sophisticated tool that will enable users to visualise,
 interpret and apply data from WPD4.4 as well as wider climate and
 socioeconomic data sources. The data visualisation tool will be used for
 local adaptation and decarbonisation planning, supporting users to
 understand uncertainties in projections and identify hotspots of climate risk.
 As such, this tool will be co-created with BEIS Local Climate and Energy
 Team and user teams from Local Enterprise Partnerships and Local
 Authorities.
- WPF4 International climate science engagement will provide targeted on-call knowledge synthesis and communications in support of the UK's climate objectives to enhance global climate ambition. The team will work closely with BEIS to determine topics and target audiences. Communications will be tailored to different stakeholders and may include written briefings, science engagement events, infographics and other innovative communication products and tools, all underpinned by detailed analysis and referencing. These will be disseminated through the team's outstanding research and policy networks and by leveraging major international events such as the COPs, G20 meetings, etc. to reach a wide and influential audience.

1.4 Structure of Proposal

The CS-NoW programme will have many moving parts. This section briefly outlines how this proposal is structured. The Compliance Matrix, found at the beginning of the document, provides further details how each section addresses the scoring criteria. Section 2 details our methodological approach to the WPs focused on research and analysis (WPB-E) and knowledge synthesis and translation (WPF). WPA comprises a number of cross-cutting activities that are applicable across all



WPs. These elements are covered by Section 3 on Quality Assurance (QA), Section 4 on Knowledge Management (WPA2), and Section 5 on Programme Management (WPA1) and Risk Management (WPA2). As core team members, our Secondments to BEIS (WPA4) are presented in Section 6 on Skills and Expertise. Section 7 describes approach to creating added social value and legacy through the CS-NoW programme.

2 Methodology

We have devoted substantial time working across our consortium partners to develop sound methodologies for each of the work packages in BEIS CS-NoW.

Lead organisations for each sub-WP were selected based on their renowned expertise in the research topic. These lead organisations prepared the detailed description of the proposed methodologies for WPs B-F outlined below.

We have also taken proactive steps to integrate the research and analysis conducted under each of the WPs. The proposed sub-WP methodologies were reviewed by each of the consortium members. This approach enabled hard links between the WPs. For example, as detailed below, WPC1 will use insights from both WPC2 and WPC3 and from the literature review in WPD1 and the co-benefits analysis in WPE1. As shown in the boxes throughout, the teams delivering the individual WPs are made up of experts from across the consortium, which will help to facilitate analytical consistency, transdisciplinary working and cross-programme learning.

2.1 WPB - Climate Science Support for International Reports

WPB Team

[This information has been redacted]

WPB will support BEIS in its reviews and approvals of the IPCC Sixth Assessment Report (AR6) and the UN Gap Reports, and the scoping of IPCC AR7.

2.1.1 WPB1 – Assistance in Reviewing International Reports

[This information has been redacted]

2.1.2 WPB2 – IPCC Approval Session Support

This non-core package will have needs dictated by level of assessment report challenge. We will take proactive measures to ensure that we are able to provide timely informal review and support for BEIS during the approval sessions of the Final Government Drafts (Deliverable B2.1). [This information has been redacted]

2.1.3 WPB3 – Understanding the Climate Science Landscape Ahead of Scoping the IPCC's Seventh Assessment Cycle

Our consortium is strongly positioned to play a leading role during the IPCC's transition to its Seventh Assessment Cycle given the wealth of experience we bring across academic disciplines and all IPCC WGs. We will employ a responsive delivery framework to meet BEIS's requirements. [This information has been redacted]



2.2 WPC - Decarbonisation and Global Ambition

WPC will deliver cutting-edge analysis on the consequences of overshoot pathways (WPC1), maritime emissions reduction pathways (WPC2) and the interactions between mitigation measures and the atmosphere (WPC3). Our methodological approach to delivering each of these defined sub-WPs is detailed in the sub-sections below.

In addition to these defined topics, our consortium has the breadth and depth of expertise necessary to deliver supplementary research in each of the areas outlined in the ITT, which would be funded through the ad hoc fund. The consortium's expertise on climate change spans greenhouse gas (GHG) mitigation pathways as well as climate impacts and adaptation, across the natural and social sciences. [This information has been redacted]

2.2.1 WPC1 New Global Decarbonisation Analysis

WPC1 Team

[This information has been redacted]

WPC1 will explore the consequences of following overshoot pathways rather than the Paris Agreement for human and natural systems, globally and regionally. [This information has been redacted]

2.2.2 WPC2 Maritime Review

WPC2 Team

[This information has been redacted]

WPC2 will provide a review of existing evidence on maritime emissions reduction pathways in support of the UK Government contributions to the revision of the IMO Strategy for GHG Reduction. [This information has been reducted]

2.2.3 WPC3 Interactions Between Mitigation Measures and the Atmosphere

WPC3 Team

[This information has been redacted]

BEIS requires expert analysis and review of the potential global atmospheric impacts (for example stratospheric ozone loss, air pollution, climate forcing etc) of climate mitigation measures that might be deployed in the UK. [This information has been redacted]

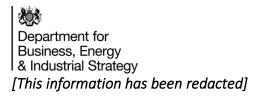
2.3 WPD – Impacts at Different Spatial and Temporal Scales

WPD will analyse the impacts of climate-related hazards to which vulnerable natural and human systems are exposed over a range of global warming levels to inform UK and international climate change mitigation and adaptation policies. Our sub-WP methodology is detailed below. [This information has been redacted]

2.3.1 WPD1 – Climate Impacts at a Global, Regional and Country Scale

WPD1 Team

[This information has been redacted]



2.3.2 WPD2 – Future Water Availability for Water-intensive Energy Infrastructure

WPD2 Team

[This information has been redacted]

[This information has been redacted]

2.3.3 WPD3 - Enhancing Resilience in UK Energy Networks

WPD3 Team

[This information has been redacted]

[This information has been redacted]

2.3.4 WPD4 - Projections of Temperature Change and Impacts in UK Housing

WPD4 Team

[This information has been redacted]

The BEIS Local Climate and Energy Team requires an enhanced understanding of climate change impacts on heating costs, thermal conditions within poorly insulated homes for lower income households and future cooling needs of the housing stock. To address this need, the objectives of WPD4 are to:

- Quantify the impact of climate change on residential heating and cooling needs across different regions of the UK,
- Evaluate the implications of these changes for different groups, including the elderly, the fuel poor and other vulnerable groups, taking into account the ability of these groups to adequately heat and cool their homes and associated impacts on household fuel costs, energy use and carbon emissions,
- Develop a model that identifies the physical building characteristics (size, shape, degree of attachment, etc.) leading to different levels of risk for heating and cooling needs,
- Identify low-cost, low-carbon win-win measures that could be adopted in order to minimise adverse societal and environmental impacts of climate change-induced changes in the thermal performance of the UK housing stock.

We will agree the final research questions and methodology with BEIS within three months of the project starting (**Deliverable D4.1**). [This information has been redacted].

2.4 WPE - The Co-benefits of Climate Action

WPE will examine the wide-ranging co-benefits of climate action in order to support governments to decarbonise and adapt to climate change alongside achieving other priorities. This section outlines our proposed methods for delivering WPE1, a credible assessment of mitigation co-benefits at different geographical scales, and WPE2, an assessment of the co-benefits and trade-offs between UK climate mitigation and UK climate adaptation.



2.4.1 WPE1 – International Regional/Country-Level Assessments of Climate Change Mitigation Co-benefits

WPE1 Team

[This information has been redacted]

[This information has been redacted]

At the outset of WPE1, we will explore synergies with the Net-Zero Future visions. Our proposed approach to analysing and report the co-impacts analysis will comprise three parts.

1. Establish a Co-impacts Conceptual Framework:

[This information has been redacted]

2. Undertaking Co-impacts Modelling

[This information has been redacted]

3. Communicate Co-impacts Evidence

[This information has been redacted]

2.4.2 WPE2 – UK Adaptation–Mitigation Co-benefits and Trade-offs

WPE2 Team

[This information has been redacted]

While climate mitigation actions may have no implications for climate adaptation and may even reduce climate vulnerabilities and risks, they may potentially be maladapted or lead to maladaptation (i.e. by compounding climate vulnerabilities and risks). Similarly, climate adaptation actions may reduce or increase GHG emissions.

WPE2 aims to build an understanding of the co-benefits and trade-offs between UK climate mitigation and adaptation to inform Government efforts to promote decarbonisation and adaptation. Knowledge of co-benefits and trade-offs will aid the Government's identification of no/low-regret decisions. [This information has been redacted]

The outputs of the literature review will inform qualitative rating (e.g., on seven or nine-point \pm scales, backed up quantitatively, where possible) of:

- UK mitigation actions' direct potential to reduce or increase key UK climate risks in relation to component climate sensitivities, adaptive capacities and exposure.
- UK adaptation actions' direct potential to reduce/increase or sequester/release carbon emissions.

To provide "indicators" of co-benefits/trade-offs for UK adaptation that are policy-relevant and resonate with policy audiences, the issues relating to climate sensitivities, adaptive capacities and exposure will be identified in relation to key risk areas identified in the UK CCRA 2017 and the Climate Change Committee's forthcoming independent evidence report. [This information has been redacted]

2.5 WPF - Knowledge Synthesis and Translation

We will apply a user-centred approach to knowledge synthesis and translation, so that we are able to meet BEIS and other stakeholders', evolving needs for evidence in a timely and user-friendly manner. Knowledge synthesis and translation will be delivered through four sub-WPs.



2.5.1 WPF1 – Monitoring Climate Science Landscape and Providing On-call Briefing

WPF1 Team

[This information has been redacted]

WPF1 will harness the wide expertise of our consortium to monitor, review, synthesise and provide on-demand policy advice on the climate science literature landscape, including aspects related to physical climate science (globally and regionally); climate impacts (both observed and modelled, natural systems, (bio)physical, social, economic and geopolitical); climate adaptation (including the economics of co-mitigation and costs of climate action); mitigation options (technological, economics and synergies and trade-offs of these) and associated pathways. Three types of outputs will be delivered:

[This information has been redacted]

2.5.2 WPF2 – Future Water Availability for Water-intensive Energy Infrastructure – Data Visualisation

WPF2 Team

[This information has been redacted]

WPF2 will produce a tool to visualise datasets from WPD2 on future water availability for water-intensive energy infrastructure. [This information has been redacted].

2.5.3 WPF3 – Spatially Granular UK Climate Impacts for Local Authorities – Data Visualisation

WPF3 Team

[This information has been redacted]

BEIS requires a tool for local authorities and local enterprise partnerships that will assist them in understanding climate change implications for local climate adaptation and decarbonisation plans. Drawing on the underlying dataset for **Deliverable D4.4**¹⁹, as well as wider climate data sources, WPF3 will work hand-in-hand with BEIS, Local Enterprise Partnerships and UK Local Authorities to develop a tool enabling users to access and understand these data. The tool will allow the user to identify and locate at-risk homes and groups. [This information has been redacted]

2.5.4 WPF4 – International Climate Science Engagement

WPF4 Team

[This information has been redacted]

COP26 in Glasgow and the UK's Presidency the following year provides an invaluable opportunity to showcase emerging scientific evidence to a wide audience in support of the UK's climate objective to enhance global climate ambition. WPF4 will leverage COP26 other major international events by providing on-call and targeted communications, briefings and events to socialise scientific evidence and

¹⁹ Spatially disaggregated data for current and projected temperatures in the UK to support local authorities in their decisions around energy efficiency in buildings and in understanding projected cooling requirements in the UK.



amplify key UK policy messages. As specified in the ITT, we have budgeted for the following outputs:

- Side events at the COP26 COP29: These will include presentations by our experts on key topics, followed by panel discussions. We have budgeted for two side events at COP26 (Deliverable F4.1) and one each at COP27, 28, 29 (Deliverable F4.3).
- Two-page science briefings for international audience: We have budgeted for three briefings for different audiences at COP26 (Deliverable F4.2).
- Regional science-policy workshops in advance of the First UNFCCC Global Stocktake: We have budgeted for two workshops (Deliverable F4.4), along with accompanying materials including short reports (Deliverable F4.5) and two-page-summary notes (Deliverable F4.6).

According to BEIS' needs, we will have the capacity to flex our international climate science engagement service and to target additional events such as the G7 and G20 meetings.

[This information has been redacted]

3 Quality Assurance

The programme will be managed in accordance with Ricardo's quality management process, policies and systems. These meet the requirements of the International Standard ISO 9001:2015, including provisions for software development and ISO27001 for our Information Security Management System. Our certifications are checked every 6 months by Lloyds Register QA (LRQA). We will develop and apply a Quality Management Plan (QMP) covering all elements of the programme. The plan will describe how we will apply QA and Quality Control (QAQC) to the analysis performed during the contract and the associated outputs. It will also describe the responsibilities and accountabilities for each element of the plan, include (following discussion with BEIS) the role of the independent Scientific Advisory Group (SAG).

Our QAQC approach will follow relevant government guidance, including BEIS Code of Practice for Research and <u>BEIS QA guidance for models</u> and the <u>HM Treasury Aqua Book</u>. Moreover, the data visualisation tools will be checked to ensure they meet the <u>Cabinet Office's spend control assessment criteria</u> and conform to the <u>Technology Code of Practice</u>. Some of the main principles that underpin this guidance are described below, along with how we will embed these principles in our QAQC approach.

[This information has been redacted]

3.1 QAQC Measures for Products and Analysis

We will develop a QAQC approach for each of the different types of activity and apply this consistently across the different WPs. The specific approach that we will take for individual activities is described below, including how we will communicate uncertainties and build time for QAQC in our Delivery Plan.

3.1.1 Report Reviews (WPB1 and WPB2)

To provide the quality of the **review process** for the IPCC and UN gap reports we will select reviewers with the right expertise. In addition, where BEIS has particular



interest or concern with elements of a report, we will draw upon additional specialist within our expert pool to validate conclusions as required.

[This information has been redacted]

3.1.2 Reviews of Existing Research (WPB, WPC2, WPC4, WPD, WPE2, WPF)

Most WPs involve the review and synthesis of existing research. The reviews will be led by researchers experienced in performing analysis of this kind, to a high scientific standard.

[This information has been redacted]

3.1.3 Workshops and Engagement Events (WPB3, WPD2.2, WP2.3, WPF4)

The organisation of the workshops and events will be led by Ricardo's professional event management team who are experienced in delivering activities of this kind to a high standard.

[This information has been redacted]

3.1.4 Policy Briefings (WPF1)

The monitoring of the climate science landscape will be **overseen by senior experts** in the team, with expertise in the relevant topic areas. The senior experts will also provide the verbal briefings, where required. The search methodology, including the scope of the literature sources, will be discussed and agreed with BEIS. Likewise, format of the outputs will also be discussed and agreed, to deliver proposed outputs that meet BEIS' needs.

[This information has been redacted]

3.1.5 Modelling Work and Tools (WPC1, WPD2.1, WPD2.3, WPE1, WPF2, WPF3)

Modelling is a key element of the research. In all cases the modelling work will be **overseen by a senior expert** who is familiar with the model and thus is able to anticipate impacts of any adaptations of the models, as well as to judge the plausibility of model reactions and model results obtained.

An important first step in the QAQC process is to confirm BEIS requirements with respect to the proposed research question and check that our proposed models meet requirements. Once confirmed, we will develop a QA plan for the modelling work, in accordance with BEIS QA guidance.

[This information has been redacted]

Our delivery timeline allows for the verification and validation of the modelling, as well the documentation of the QAQC checks. We recognise this as important and have dedicated resources for these checks.

3.1.6 Website and Data Visualisation (WPA3, WPF2, WPF3)

The development of the programme website, based on delivery of a site on the main .gov.uk domain, will be led by our Website Manager and delivered in accordance with Ricardo's QA systems that have been accredited to ISO27001 as well as ISO9001:2015 by LRQA. The website will be built adhering to the UK Governments Central Digital & Data Office's Technology Code of Practice the



Service Standard. The QAQC of the programme website will involve controls at two levels:

3.1.6.1 Website Architecture

In conjunction with the BEIS Knowledge and Information Management team, we will use a combination of manual testing and where required, automated scanning as part of our overall QA process, ensuring we meet high standards of availability, accessibility and security. We will implement core testing approaches to validate the website iteratively during the development process.

[This information has been redacted]

3.1.6.2 Website Content

Website content will be drafted by Secondee 1 and checked by another member of the Programme Directorate, e.g. Secondee 2. Changes will be made to an internal version of the website and checked for structure and readability, including on different web browsers. Once the checks have been completed and final approval has been given by BEIS, the relevant web pages will be made live externally.

3.1.7 Data Visualisation Tools (WPF2 and WPF3)

[This information has been redacted]

4 Knowledge Management

Ricardo brings a wealth of experience delivering effective knowledge management for policy-relevant science issues. Our Knowledge Management Strategy (Deliverable A3.1) will provide a clear plan for ensuring BEIS, its climate science team and stakeholders and policy teams in other HMG departments are able to access and fully engage with outputs and research as they develop policies and priorities. The Strategy will be agreed with BEIS within 1 month of contract start, published within 2 months and progress will be reviewed annually. This section presents outlines the key components of our Knowledge Management Strategy, which will be developed at the outset of the programme. It highlights our approach to go design and so production of the research and knowledge outputs; our

Strategy, which will be developed at the outset of the programme. It highlights our approach to co-design and co-production of the research and knowledge outputs; our strategy for communication of research findings; our plans for digital services and data storage, sharing and management; and our approach to monitoring and evaluating the effectiveness of our knowledge management approach.

4.1 Co-design and Co-production of Research and Knowledge Outputs

Our approach to knowledge management begins with the principle that the end-user of research should be the focal point throughout the research process. Our aim will be to harness the world-class scientific leadership of our research partners to directly address BEIS', and other stakeholders, priority research and data needs. A collaborative approach to co-designing the research will begin at the outset of the programme.

[This information has been redacted]

4.2 Strategy for Communication of Research Findings

For CS-NoW to have the greatest impact it is important that the research results from the programme are effectively and accurately communicated to their target audience. The Knowledge Management Strategy will include a clear plan for



communication, to ensure that results are effectively communicated. It will define what needs to be communicated, to whom, by when and by what means. CS-NoW will deliver a range of products. The target audience for these products varies by WP and sub-package, as described in the sections above. Moreover, the means by which stakeholders would like the results communication also various across the WPs. To a large extent the needs and requirements have already been reflected in the specification for CS-NoW and are not repeated below. For example, BEIS' needs in terms of written climate science research briefings and their frequency are described in WPF1. However, what has been described less in earlier sections is how to present the research findings to most effectively communicate the results. We share further details on this below.

4.2.1 Communicating Results

When communicating our research results, we will tailor our approach to reflect the needs/requirements of the end-user, the nature of the research, and it potential uses. [This information has been redacted]

4.2.2 Communicating Uncertainty in the Results

We recognise the importance of communicating any uncertainties in the results of the research analyses. This applies to all activities and outputs, although the nature of uncertainty will vary. When communicating the research outputs, wherever appropriate, we will:

- Provide details of the methodology applied, including data sources and assumptions.
- Describe uncertainties associated with the methodology, data and assumptions.
- Describe what is known and what is uncertain.
- Explain the reasons for the uncertainties.
- Clearly document and communicate differences in results from alternative sources when presenting .the results of literature reviews.
- Present a range of results as opposed to a point estimate.
- Carry out scenario and/or sensitivity analysis and communicate the results of such analysis.
- Tailor communications to the target audience.

Overall we will use calibrated language to communicate clearly our degree of certainty in results, including findings that span a range of possible outcomes, by implementing guidance used by the Intergovernmental Panel on Climate Change's Fifth Assessment Report. In doing so, we will avoid casual descriptions of uncertainties, which may be interpreted differently by different readers.

[This information has been redacted]

4.3 Digital Services and Data Storage, Sharing and Management

Sophisticated digital services will be central to our knowledge management approach. For tasks and deliverables involving the development of tools and digital services (including website development), we will use an **agile approach**, highlighting continuous collaboration throughout each stage of the project lifecycle, including carefully managed gateway approval stages to transition through each phase.



The Knowledge Management Strategy will detail our approach to data management and the use of platforms like SharePoint to enable BEIS and other departments across HMG to access collected data and research outputs. It will also outline our plans for a customised website for the programme. The sections below outline our plans for both of these communication tools.

[This information has been redacted]

4.3.1 CS-NOW SharePoint Site

To develop the knowledge management tools and specifically SharePoint, Secondee 1 will engage with the BEIS team to gain a greater understanding of their requirements. This will seek to understand how the team are likely to engage with site and, importantly, the logic they are likely to use to find it. This understanding will enable us to develop the information architecture needed to successfully establish the programme SharePoint site.

[This information has been redacted]

4.3.2 CS-NOW Website

Ricardo's dedicated in-house Digital Services team, has extensive experience of developing website and stakeholder portals for national governments. In the UK, Ricardo has designed, delivered and continue to manage websites such as Defra's UK-AIR (shown here), the UK National Atmospheric Emission Inventory (NAEI) and UK Scenario Modelling Tool (used by both Defra and BEIS). In addition, to the sites managed directly by Ricardo, we have also worked on projects where the website is on the gov.uk domain (managed in conjunction with the BEIS Knowledge and Information Management team), such as the Global 2050 Calculator and the Climate Finance Accelerator.

[This information has been redacted]

4.4 Monitoring and Evaluating

To monitor the effectiveness of our knowledge management approach, our Knowledge Management Strategy will include a logical framework with output, outcome and impact indicators of progress against programme objectives. A range of monitoring and evaluation approaches will be employed, including monitoring of quantitative output and outcome indicators, such as the number of policy briefs produced or the number of visits and downloads from the SharePoint and website, to qualitative assessments of progress against impact indicators. For impacts, we will focus on the value of the outputs to end-users, getting user feedback on the main products and their use in decision-making. Where possible, case studies will examine how knowledge outputs have influenced policy decisions.

5 Programme Management

Ricardo has a wealth of experience successfully delivering complex and time-critical programmes (Table 2). We have delivered a variety of flagship projects such as the National Air Emission Inventory that we have delivered continuously for over 25 years. We have also led multi-partner climate research programmes such as the Programme of research on preparedness, adaptation and risk (PREPARE) and Sustainable Pathways to Low Carbon Energy (SPLiCE). We therefore understand how to deliver large, complex research programmes on time and budget, effectively coordinating research providers to deliver high-quality outputs, exploiting synergies to optimise the advantages of a consortium and mitigating risks and resolving issues as they arise. [This information has been redacted]



5.1 Programme Management and Coordination (WPA1)

Ricardo will have overarching responsibility for management and delivery of CS-NoW and will act as the lead contractor to the other delivery partners, UCL, Tyndall and NERC Centres. **Programme management is a core competency of Ricardo.** We recruit, train and invest in our project management staff and systems to ensure that our projects are managed to the highest quality standards and as cost-effectively as possible for our customers. The following section describes how Ricardo will manage the CS-NoW and how our partners will be integrated into our team.

5.1.1 Programme Communications, Reporting and Tracking of KPIs

Clear lines of communication between Ricardo and BEIS will be critical to ensure that the programme remains on track. Our PM, [This information has been redacted], will be the designated primary point of contact for BEIS. Our Programme Director (PD), [This information has been redacted] provides another senior-level contact and a backup for [This information has been redacted]. We will agree communication arrangements with BEIS at the project inception phase. This will set out the key review and progress meetings along with formal and ad hoc reporting requirements.

5.1.1.1 Regular meetings

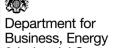
Four sets of meetings will be scheduled at established intervals throughout the programme:

- A Kick-off meeting will be scheduled with BEIS as soon as possible after contract award. This will be attended by the Programme Directorate representatives and a Ricardo Commercial officer. This meeting will address any queries regarding the proposal, finalise contractual arrangements and invoicing schedule and agree the milestones, deliverables and work plan.
- Programme Working Group meetings will be organised monthly by the PM and will track delivery progress, review risks and identify interdependencies between WPs. These meetings will be attended by the PM, PD, Secondee 1 and 2, Research Directors and other members of the delivery team as appropriate. A short meeting note recording decisions and actions will be circulated within 2 working days.
- 6-monthly Programme Board meetings will be organised by our PM to review the progress reports, risks, deliverables, KPIs and priorities for improvement; and discuss issues relating to the contract. These will be attended by the PM, PD, Secondee 1 and 2, Research Directors and relevant PIs as appropriate. We will provide an agenda in advance and minutes of the meetings within 1 week.
- Stage Gate meetings will be held annually and will provide a review of progress on the contract and are a key decision point for the team and BEIS to deliver a programme that continues to provide good value for money and meet all objectives.

Additional ad hoc meetings will be held to deal with any situations as they arise.

5.1.1.2 Regular reporting

The PM will provide Quarterly Progress Reports to BEIS with the first report due in September 2021, 2 weeks ahead of the first Programme Board meeting.



& Industrial Strategy

Reports will be emailed to the Programme Board or relevant nominated BEIS official and will include:

- An update of progress against Delivery Plan highlighting potential changes to forecast delivery dates
- A financial report including spend to date and projected spend compared to baseline
- An updated Risk Register
- Reporting on key performance indicators (KPIs) and a risk rating for each contract deliverable
- A breakdown of ad hoc spend; split by WP
- An outline of stakeholder and other meetings attended
- Social value opportunities created
- Any management and budget issues that should be drawn to the BEIS' attention, including invoicing, resourcing, risks, changes to scope, proposed new tasks and underspend
- A clear indication of where BEIS action is required to sign off or progress specific tasks.

In addition to the Quarterly Reports our PM will also provide email **monthly summary updates** that will include a KPI dashboard and update to the Risk Register.

Because of the complexity and importance of this contract, we encourage a partnership approach to the relationship between Ricardo and BEIS. We anticipate that this will further strengthen as the BEIS **Strategic Supplier Relationship**Management programme and associated joint business plan between BEIS and Ricardo is implemented. The plan complements our aims to improve transparency of our work delivered to BEIS through enhanced visibility of processes, QA checks and data access. We encourage BEIS to share **frequent**, **open and honest feedback** and highlight early any areas where it is felt we are not delivering to expectations.

Engagement with wider stakeholders, including data providers

Along with communication with BEIS, we recognise the importance of effective engagement with other programme stakeholders. This will include direct users of the programme products, as well as wider stakeholders in HMG. In addition, some of the research activities will require inputs from other data providers.

[This information has been redacted]

5.1.1.3 Tracking KPIs

Regular reporting against clear performance metrics will help align Ricardo's management of CS-NoW with BEIS' expectations and ensure that the programme remains on track. Our approach to monitoring and reporting KPIs is designed to meet the Performance Management Framework. Proposed KPIs for programme management are outlined in Table 3. BEIS can amend or add KPIs throughout the programme. Our PM will be responsible for monitoring and reporting performance against the agreed indicators via emailed monthly updates (including a KPI dashboard and Risk Register update) and Quarterly Progress Reports (Deliverable A1.1). Performance will be reviewed quarterly in Working Group meetings (or more frequently if needed), 6-monthly Programme Board meetings and annual Stage Gate meetings.

[This information has been redacted]



5.1.2 Proven and Secure Project Management Systems and Tools

Ricardo operates Project Management, Quality and Environmental Management Systems that are defined in our Group's policies and supporting procedures. Our project management process, policies and systems fully meet the requirements of ISO9001, many of the principles of PRINCE2 and standard **UK Government project management requirements**. These arrangements have been assessed by LRQA against the requirements of BSEN ISO14001:2015, ISO45001:2018 and ISO9001:2015 (certificate no. 10315889). We are accredited to ISO27001 for our Information Security Management System. We undertake regular internal audits and project reviews to maintain standards and to identify opportunities for continuous improvement. This should provide confidence that the deliverables from our delivery partners will be well coordinated and meet BEIS' quality specifications and timescales.

5.1.2.1 Financial Control and Forecasting

Ricardo has robust procedures to deliver financial and commercial probity. [This information has been redacted]

Ricardo operates with the highest level of transparency and accountability, which we also expect of our contracted partners. Contracted partners are subject to strict financial, risk management and monitoring and reporting processes. They are integrated into our management processes and we quality assure all outputs of the funds. If necessary, we support partners to meet our high standards.

5.1.2.2 Change Control Processes

To manage any issues that could impact delivery (e.g. changes to scope, third-party delays or non-compliances), our PM will follow Ricardo's PM Process [This information has been redacted]

5.1.2.3 Subcontractor Management

We recognise that the effective management of subcontracted partners is critical for the success of CS-NoW. Each partner brings specialist knowledge and expertise which collectively spans a range of scientific disciplines. These partners will be brought together, working as a single team, to meet the needs of the programme. Our approach to subcontractor management recognises the importance of this integrated and collaborative working across institutions and disciplines, while also ensuring clarity on roles and responsibilities at the organisational and individual level.

[This information has been redacted]

Ricardo has rigorous measures in place, backed up by detailed management processes, to deal with issues in delivery of work by subcontractors.

[This information has been redacted]

5.1.3 A Clear and Realistic Delivery Plan

A clear, robust and realistic Delivery Plan will be used as the primary tool for managing the programme and assessing performance.

Underpinning our Delivery Plan is a detailed Gantt chart/workplan, which has been provided separately in Appendix 1. The Delivery Plan will be shared electronically with BEIS at the outset of the project. Being created in MS Project,



the Delivery Plan has the flexibility of being displayed in a number of ways, such as by WP or by year, with rolled up tasks. The key milestones and outputs within the Programme are specified below. These will be the responsibility of the Programme Directorate to deliver to BEIS, ensuring that our specified QAQC process is followed prior to submission.

Our Delivery Plan details the timeline for delivery of the key milestones and outputs across the full programme duration, [This information has been redacted]

5.1.3.1 Mobilisation Plan

[This information has been redacted]

5.1.3.2 Exit/Handover Plan

Our Exit/Handover Plan will ensure that CS-NOW delivers a lasting legacy beyond the duration of the programme. Our PM will prepare an Exit/Handover Plan (Deliverable A1.2) within 6 months of the contract start. A draft will be reviewed with BEIS before finalisation. This will describe our proposed approach for the handover of the contract in the event that another contractor takes over management of the programme. We understand what is involved in the planning and execution of a handover, having prepared similar plans for large government programmes that we currently manage, such as the NAEI and the Combined Heat and Power QA programme, which would be severely impacted if there is any break in delivery.

5.2 Risk Management (WPA2)

A central part of our programme management approach is the identification, documentation, communication and mitigation of risks. At the core of our approach to managing risk are:

[This information has been redacted]

As part of Ricardo's Project Risk Process, every project has a comprehensive risk assessment that is reviewed at a senior level within Ricardo in full compliance with ISO 9001.

5.2.1 Identification of Risks

Ricardo's project risk assessments cover all issues around health, safety and the environment, but also include commercial, financial, technical and legislative risks associated with the work as well as potential risks to the public image of Ricardo and/or BEIS and stakeholders. [This information has been redacted]

5.2.2 Prioritisation of Risks

[This information has been redacted]

5.2.3 Mitigation of Risks

[This information has been redacted]

5.2.4 Management of Risks

[This information has been redacted]



[This information has been redacted]

6 Skills and Expertise

We have built a consortium that marries the scientific expertise of our internationally renowned research partners with Ricardo's own rich experience managing large, multi-organisation programmes and translating evidence into policy reforms and impact. Below we introduce Ricardo and our research partners – UCL, Tyndall and the NERC Research Centres – followed by the skills and expertise of our core team members.

6.1 Skills and Experience of Our Consortium

6.1.1 Ricardo

Ricardo is an energy and environmental consultancy with over 60 years' experience working with clients across the globe. Employing over 550 people, including many internationally renowned technical experts and consultants, we form part of Ricardo plc. We have extensive experience in the design, management and delivery of government programmes. We are one of BEIS' strategic suppliers and we play a key role in the delivery of several programmes that support BEIS in the delivery of its strategic goals. For example, we have been stewards of the NAEI for over 30 years, leading consortiums of organisations to deliver the cornerstone of evidence on UK GHG and air pollution emissions.

[This information has been redacted]

Previously, we were programme managers for Defra's preparedness, adaptation and risk (PREPARE) research programme which supported the UK Government in developing its strategy on adaptation policy. Also for Defra, we led the SPLiCE research programme, which was a collaborative multi-phase UK research programme that aimed to fill significant gaps in knowledge about the sustainability of different mixes of energy supply and demand options needed to deliver 2050 GHG UK emissions targets. Alongside our work for UK Government, we work extensively with governments internationally to support their climate action planning. We have helped governments to develop and report national GHG inventories; build GHG emissions projections and baselines; and make high-quality submissions to the UNFCCC, such as Biennial Update Reports, Nationally Determined Contributions (NDCs) and long-term low-emission development strategies. At the UK level we work extensively with local authorities to support their climate target setting and development climate actions plans.

6.1.2 University College London (UCL)

UCL is a diverse global community of world-class academics, students, industry links, external partners, and alumni and is ranked 10th in the QS World University Rankings. It has the most world-leading research in its field in the UK, according to the UK Government's Research Excellence Framework. It has 14,300 staff and 43,800 students across 11 academic faculties. The Bartlett is the UK's leading multidisciplinary faculty of the built environment. Three co-located Bartlett institutes will lead sub-WPs in this programme: UCL Energy Institute, UCL Institute for Environmental Design and Engineering and UCL Institute for Sustainable Resources.



The energy systems group is the largest interdisciplinary energy modelling group in the UK and has a 25-year track record of developing and applying UK, European and global energy system models, using TIMES, ESME and OSeMOSYS platforms, and is a leading member of the IEA Energy Technology Systems Analysis Program (ETSAP) programme. UCL has delivered several recent projects for the CCC using the TIAM-UCL integrated assessment model and has capacity to analyse climate change economics by combining several global models. The energy in buildings group is the largest with a focus on energy in the UK. It has led efforts to understand heating and cooling needs in homes, from both technical and social perspectives, and was a lead contributor to the "People & the built environment" chapter of the UK Climate Change Risk Assessment 2017 Evidence Report. UCL has developed 3Dstock models that can be used to understand energy needs of each individual building in a region. UCL's transport group includes world-leading analysts on shipping decarbonisation, who work closely with the UN IMO and the Department for Transport (DfT), and the Air Transportation Systems Lab, which has examined both demand characteristics and technological change for international aviation. Recent work on sustainable resources has included a recent \mathscr{L} 1m project on the impacts of climate change and land degradation on global agriculture output, from biophysical and economic perspectives. UCL is a core member of the FCDO <u>Climate Compatible Growth (CCG)</u> programme.

[This information has been redacted]

6.1.3 Tyndall Centre for Climate Change Research (Tyndall)

The Tyndall Centre brings world-class knowhow for applying climate change research theory to practice, across physical sciences, engineering sciences, and social sciences. It is a partnership of four UK universities founded in 2000, the University of East Anglia, Cardiff, Manchester and Newcastle, and Fudan University in Shanghai. The Tyndall Centre is one of the first research centres to consider practical societal solutions to climate change rather than studying climate change itself. Our vision is to undertake robust and independent research to identify the challenges and opportunities presented by climate change, and inform open and transparent decisions that best serve society. The Tyndall Centre works with leaders from the public and private sectors to promote informed decisions on mitigating and adapting to climate change.

[This information has been redacted]

6.1.4 NERC Research Centres (NERC)

NERC supports six research centres that provide leadership to the UK environmental science community and play significant and influential roles in international science collaborations. UKCEH, NCAS, NOC, BAS and BGS provide national capability research in terrestrial/ freshwater, atmospheric, marine, polar and geological science sectors respectively. NCEO provides national capability in earth observation science and PML is a delivery partner for marine science national capability alongside NOC. Each centre maintains extensive directed and multidisciplinary research programmes within their sector and broadly across interfaces in the earth system. Alongside their programmes the centres maintain research facilities and data centres to support the whole environmental science community. Experts from the research centres will contribute to all WPs, including through the expert pool. In addition, UKCEH will lead on WPD2 and WPF2 and NCAS will lead on WPC3 and WPF1.



UKCEH science has underpinned policy relating to the impacts of climate change on flood risk; its scientists have developed new methods for modelling the impact of climate change on peak river flows in 11 regions covering England, Wales and Scotland. Using the latest projections from the UK Climate Impact Programme, including UKCP09 probabilistic climate projections, UKCEH led the development of the FFGWL dataset. These data provide the first nationally consistent ensemble realisations of 150 years of climate, river flow and groundwater levels that enable users to investigate the role of climate variability on river flow and groundwater nationally and how this may change in the future. UKCEH plays a prominent role in the eFLaG project, developing an enhanced Future Flow dataset, through the use of UKCP18 projections, to provide a climate service that will help the UK water sector manage water resources and plan for future drought events. Internationally, UKCEH led the C3S proof-of-concept project, EDgE, that delivered a hydro-climate service to enable water practitioners from across Europe to access and understand state-of-the-art hydrological predictions.

NCAS is a world leader in atmospheric science. With a staff of over 230 people embedded in 12 of the UKs top universities, NCAS carry out research programmes in the science of climate change, including modelling and predictions; atmospheric composition, including air quality; weather, including hazardous weather; technologies for observing and modelling the atmosphere. NCAS provides national capability in atmospheric science research. The centre performs directed and multidisciplinary research, using state-of-the-art technologies for observing and modelling the atmosphere. Additionally, NCAS provide scientific facilities for scientists and researchers across the UK to enable excellent atmospheric science on a national scale. These include a world-leading research aircraft, ground-based instrumentation, access to computer models and facilities for storing and accessing data.

[This information has been redacted]

6.2 Skills and Expertise of Staff

Successful delivery of BEIS CS-NoW requires a team with a mix of leading scientists across a range of disciplines and public policy professionals who have a proven ability to manage large, complex, multi-organisational programmes and to translate research and evidence into policy and impact.

We have developed a clear project team structure, which is illustrated in Figure 5. Each individual will have a clear understanding of their role/responsibilities and how it fits with other elements of the project. We have produced detailed job descriptions for each of the defined roles, which are summarised below. Team members have been appointed to the roles based on their capabilities, experience and grade of the individuals to cover all areas of expertise and that each role is undertaken by an appropriate grade of staff to provide value for money. The Programme Directorate (in partnership with BEIS) will provide strategic direction for CS-NoW. It will be made up of the PD, PM, Secondees 1 and 2 and one Research Director from Ricardo, UCL, Tyndall and the NERC Centres. Each of these individuals will join monthly and biannual meetings with the Programme Board and Stage Gate meetings chaired by BEIS' Head of Climate and Energy Science

The Programme Directorate will be supported by PIs who are experts in their field, and research teams for each sub-WP, a number of roles covering programme functions, including website design, events and communication, and a pool of leading experts from across all our organisations. Collectively, we cover each of the critical



skills and knowledge highlighted in the ITT, as illustrated below. This section highlights the expertise of each of the core team members. We confirm that the proposed team have the availability and skills to deliver CS-NOW in the required timeframe. Our approach to maintaining staff availability is detailed in Section 6.4.

6.2.1 Programme Director and Programme Manager

Ricardo recognises the importance of strong programme management for the effective delivery of CS-NoW. We have appointed a highly experienced Programme Director and Manager for the task. The Programme Director will hold overall responsibility for successful delivery of the programme. She will be supported by the PM, who will be responsible for day-to-day management.

[This information has been redacted]

6.2.2 Research Directors

One **Research Director** will be designated by each of Ricardo, UCL, Tyndall and the NERC Research Centres to sit on the Programme Directorate. The Research Directors will provide intellectual leadership for the programme, overseeing delivery of world-class research outputs in each of their institutions that satisfy BEIS' overall demand for policy-relevant findings.

[This information has been redacted]

6.2.1 Secondments to BEIS (WPA4)

Our two Secondees will play a central role in the delivery of BEIS CS-NoW. The Secondees will act as the bridge between BEIS and the research projects, communicating BEIS' specific requirements for evidence to the research teams and coordinating knowledge synthesis and translation tasks to ensure that all outputs are in a format that is accessible and usable for BEIS. They will also support the PD and PM with programme management. Their roles in coordinating specific WPs are explained in the respective WP sections above.

[This information has been redacted]

6.2.2 Research Teams and Principal Investigators

The bulk of the research and analysis will be delivered by our partners' dedicated research teams for each sub-WP. Each PI is described below and their CVs are in Appendix 2. They will be supported by research teams and each has a nominated backup (see Section 6.4). CVs of the individuals in the research teams that are not provided in the Appendix can be provided on request.

[This information has been redacted]

6.2.3 Pool of Experts

In addition to the research teams, we have compiled a **Pool of Experts**, which collectively cover all of the research areas identified in the ITT. Table 8 categorises this Pool of Experts according to their expertise in IPCC WG I, II, III and the UN Emissions Gap (EG) Reports. Those in bold are current or previous contributing or



lead authors to the reports. Those in italics or current or previous reviewers. Several of WPC-F team members F are also IPCC contributing authors and reviewers. Individuals from the Pool of Experts will be assigned tasks under WPB, WPF1 and WPF4 once the thematic areas and the requisite skill sets are identified. The pool may also be drawn on for delivery of ad hoc work.

[This information has been redacted]

6.2.4 Programme Functions

Our **Programme Functions Team** comprises relevant experts for programmatic functions that will be critical to delivery of CS-NoW. Each of these roles will be accountable to our PM.

[This information has been redacted]

6.2.5 Supporting Researchers

Delivery of the programme will be supported by a wide pool of supporting researchers. It is not possible to include details of all 100+ researchers within the current proposal. We are happy to provide further details on supporting researchers upon request.

6.3 Allocation of Resources

We have provided a detailed schedule of resources allocated to WPs and Deliverables, by individual, in Appendix 11. The distribution of effort across WPs is shown below.

[This information has been redacted]

6.4 Team Maintenance and Building Resilience

Resourcing and staff availability will be monitored by our PM, using Ricardo's resource management and project forecasting systems. This forward look at staff availability means that we can manage known periods of absence or pinch points in availability to avoid impacts on delivery. [This information has been redacted]

We envision a rolling secondment-arrangement, in which we will substitute the personnel in the roles in order to respond to BEIS' evolving demands.

Throughout the programme, each generation of Secondees will collectively maintain coverage of the required academic and public policy skills. We will share the CVs of proposed new Secondees with BEIS for approval prior to appointment. [This information has been redacted]

One risk to successful delivery of CS-NoW is the potential loss of expertise held by key staff. [This information has been redacted]

Across the wider team, there are experts who are capable of covering work for others within their area. We have proposed a large team made up of experts from several organisations. In addition to the named individuals in this proposal, all of our partners have others who would be able to provide cover or additional support. This will allow flexibility so that priority can be given to this project at key times, particularly around important milestones. Similarly, this breadth of available



resource will give the team resilience for dealing with unexpected events. [This information has been redacted]

All staff involved in CS-NoW will maintain and develop their technical skills. Ricardo is committed to continuous development of its staff. We routinely invest in this development, as well as supporting staff development through on the job training and specific training programmes and courses. Led by team leaders and individuals, we invest in the development of our team to **grow future experts**. We also ensure that our team are involved in other projects across our policy, modelling, monitoring, climate action planning and digital services teams, which provide context to CS-NoW and provide learning opportunities. **Individual development plans** are reviewed annually; training, mentoring, coaching and other development activities are used as tools to enable this. Team members across all organisations have access to all the major journals relevant to atmospheric emissions and climate change mitigation and policy. Staff are encouraged to broaden their knowledge through seminars and conferences.

7 Social Value

CS-NoW and the core missions of each of our consortium partners focus on creating social value by fighting climate change and fostering effective stewardship of the environment. [This information has been redacted]. Ricardo and its subcontracted partners each have a range of equality, diversity and inclusivity (EDI) policies, officers and initiatives. [This information has been redacted].

7.1 Identifying and Tackling Inequality in Our Contract Workforce

We commit to identifying inequality and taking action to address inequality as part of the delivery of the CS-NoW contract. [This information has been redacted]

7.1.1 Team member recruitment

[This information has been redacted]

7.1.2 Understanding employment, skills and pay issues for team members

[This information has been redacted]

7.1.3 Identifying the extent to which each organisation is addressing inequality

[This information has been redacted]

7.1.4 Examples of our social value policies

[This information has been redacted].

7.2 Creating Opportunities for Team Members from Under-represented Backgrounds

[This information has been redacted]