



ANNEX 4

Flexibility Innovation Programme

Title:	Flexibility Innovation Programme: Laboratory testing and demonstration of interoperable DSR applications in settings indicative of the real world
Tender Reference Number:	5532/12/2021
Deadline for Responses:	7 th March 2022 17:00



Date: 04/02/2022

The Department for Business, Energy & Industrial Strategy (referred throughout these documents as “BEIS” or the “Department”) wishes to commission a project for the provision of independent laboratory testing and demonstration for demand side response (DSR) systems, in settings indicative of the real world.

Enclosed are the following sections:

- Privacy Notice
- Section 1 Instructions and information on tendering procedures
- Section 2 Specification of Requirements
- Section 3 Evaluation
- Section 4 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

- Annex 1: Processing, Personal Data and Data Subjects
- Annex 2: Pricing Schedule
- Annex 3: Mandatory Exclusion Grounds
- Annex 4: Discretionary exclusions
- Annex 5: BEIS Standard Terms and Conditions Schedules
- Annex 6: Supplementary Information – Programme Performance Use Cases
- Annex 7: PAS 1878 and 1879 Standards
- Annex 8: Key Performance Indicators
- Annex 9: Net Zero Innovation Portfolio Key Performance Indicators

Please register your interest in submitting a tender for this project by emailing flexibilityinnovation-dsr@beis.gov.uk. This will ensure you receive immediate notification of updates to the Information to Tender (ITT) process. To apply for this tender please also register on the following website www.delta-esourcing.com.

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 7th March 17:00 clearly marked as “TENDER”.

I look forward to receiving your response.

Yours sincerely,

Name: BEIS Flexibility Innovation Team
Email: flexibilityinnovation-dsr@beis.gov.uk



Department for
Business, Energy
& Industrial Strategy



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.



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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 United Kingdom (UK).

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
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.



ACRONYMS

Acronym	Definition	Acronym	Definition
BEIS	Department of Business, Energy and Industrial Strategy	HR	Human Resources
CEM	Customer Energy Manager	HVAC	Heating, Ventilation and Air Conditioning
CPA	Commercial Product Assurance	ILO	International Labour Organization
DCC	Data Communications Company	ITT	Invitation to Tender
DOTAS	Disclosure of Tax Avoidance Scheme	KPI	Key Performance Indicator
DSO	Distribution System Operator	NZIP	Net Zero Innovation Portfolio
DSR	Demand Side Response	PAS	Publicly Available Standard
DSRSP	Demand Side Response Service Provider	PCR	Public Contract Regulations
DUNS	Data Universal Numbering System	PIC	Prior Informed Consent
EIR	Environmental Information Regulations	PPN	Public Procurement Notice
ESA	Energy Smart Appliance	PSC	Persons of Significant Control
ESPD	European Single Procurement Document	RAG	Red Amber Green
EU	European Union	REA	Rapid Evidence Assessment
EV	Electric Vehicle	SAPC	Stan Alone Proportional Controller
FAO	Food and Agriculture Organization	SME	Small Medium Enterprise
FIP	Flexibility Innovation Programme	TOUT	Time of Use Tariff
FOIA	Freedom of Information Act	TSO	Transmission System Operator
GAAR	General Anti – Abuse Rule	UK	United Kingdom
GB	Great Britain	UNEP	United Nation Environment Program
GDPR	General Data Protection Regulation	VAT	Value Added Tax
HMRC	Her Majesty’s Revenue and Customs	VCSE	Voluntary Community and Social Enterprise



Section 1: Instructions and Information on Tendering Procedures

Invitation to tender for: **Flexibility Innovation Programme**: Laboratory testing and demonstration of interoperable DSR applications in settings indicative of the real world

Tender reference number: 5532/12/2021

Deadline for tender responses: 7th March 17:00 BST

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1.1. Indicative Timetable

The anticipated timetable for this tender exercise is as follows, in Table 1. The Department reserves the right to vary this timetable. Any variations will be published on contracts finder or circulated to all organisations who have registered an interest in notifications.

Table 1: Indicative Timetable

Tender Timeline	Date
Advert and full invitation to tender issued	04 th February 2022
Deadline for questions relating to the tender	14 th February 2022 17:00
Responses to questions published	18 th February 2022 17:00
Deadline for receipt of tender	7 th March 2022 17:00
Bid clarification	March 2022
All suppliers alerted of outcome	April 2022
Contract Standstill Period	April 2022
Contract award on signature by both parties	April 2022
Contract start date	April 2022

1.2. Evaluation of Responses and Feedback

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 Section 3: Evaluation.

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

Feedback will be given in the unsuccessful letters or emails.

1.3. Procedure for Submitting Tenders

The maximum page limit for tenders is 30 of A4 size paper, Arial font at a size 11pt with standard margins (excluding declarations, completed Annexes 1-11, and CVs where applicable).

To apply for this tender please register on the following website www.delta-sourcing.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.

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 of 90 calendar days from the date of



submission.

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 of 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 have questions or require further information concerning the tender process, or the nature of the proposed contract, email flexibilityinnovation-dsr@beis.gov.uk

All questions should be submitted by 14th February 17:00; 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 18th February 17:00 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.

1.4. Consortium Bids

In the case of a consortium tender, one tender covering all 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. BEIS requires that separate tenders are submitted for Lot 1 and Lot 2.

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. The contract will be with the lead organisation and as such a consortium agreement will need to be put in place.

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.

If a consortium is not proposing to form a corporate entity, full details of alternative proposed arrangements should be provided in the Declaration 4. 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.

Within 30 Work Days following the Contract Start Date, the Successful Bidder(s) will provide to the Authority the consortium agreement entered into by the consortium partners to deliver the Contract.

1.5. Terms and conditions applying to this Invitation to Tender

The Department's Standard Terms and Conditions of Contract will apply to each of these contracts. These are attached to the ITT with the appropriate schedules.

By submitting a tender, the contractor accepts the terms and conditions in full. The terms and conditions will not be subject to further discussion or negotiation

Please read the Procurement Guidance on GDPR and Cyber-Security. If the Contractor will be a Joint Data Controller, the data protection provisions contained in the Standard Terms and Conditions will be replaced by a Data Sharing Agreement drafted by Government Legal Department. If this applies to your procurement, the change from the standard data protection provisions should be described in this section of the Invitation to Tender.

1.6. Ownership and Publication

BEIS will retain full ownership of all materials and intellectual property created as a result of this contract. Publication of any information associated with, or created as a result of this contract, will require prior written approval from BEIS.

1.7. 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 as 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.

The successful bidders for Lot 1 and Lot 2 of the *Laboratory testing and demonstration of interoperable DSR applications in settings indicative of the real world* ITT will be responsible for testing products¹ provided to them by product developers for this workscope. Due to conflict-of-interest concerns, the contractor(s) for Lot 1 and Lot 2 cannot participate in any anticipated projects which will develop the products to be tested as part of this ITT, unless conflict is declared and satisfactorily mitigated.

¹ The word "product" for this ITT mean all ESAs (including their control system) and DSRSP platforms.



BEIS considers that there is potential for an actual or perceived conflict of interest if companies who bid for Lot 1 or Lot 2 of the *Laboratory testing and demonstration of interoperable DSR applications in settings indicative of the real world work* were to bid for other work in or related to this Programme, including the *Flexibility Innovation Programme (FIP) - Evaluation Contract* which will be responsible for assessing effectiveness and impact of this work. In their tender response, all tenderers (regardless of which Lot they are bidding for) are required to ensure that any actual or perceived conflict is declared and satisfactorily mitigated.

BEIS reserves the right to exclude any proposals where the bidder has an actual or perceived conflict of interest that cannot be mitigated to the satisfaction of BEIS.

All bidders, as part of the procurement process, are required to complete Declaration 3: Conflict of Interest (Section 4)

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 ensure an impartial approach to the project is maintained.

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

- 1. During the bidding process, organisations may contact BEIS to discuss whether or not their proposed arrangement is likely to yield a conflict of interest prior to the deadline for questions relating to Tender.** 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 interested in 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.
- 2. 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.
- 3. 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.



1.8. Ethics

Where applicable, applicants will need to identify and propose arrangements for initial scrutiny and on-going monitoring of ethical issues. The appropriate handling of ethical issues is part of the tender assessment exercise and proposals will be evaluated on this as part of the addressing challenges and risks within the “Project Approach and Delivery” criterion.

We expect contractors to adhere to the following [Government Social Research Principals](#):

1. Clear and defined public benefit
2. Sound application, conduct and interpretation
3. Data protection regulations
4. Specific and informed consent
5. Enabling participation
6. Minimising personal and social harm

1.9. Data Protection

The Contractor must comply with all relevant Data Protection Legislation, as defined in the terms and conditions applying to this Invitation to Tender. A guide to The General Data Protection Regulation published by the Information Commissioner’s Office can be found [here](#).

Section 4 contains “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.

1.10. Cyber Security

In line with [HM Government’s Cyber Essentials Scheme](#), the Contractor will hold valid Cyber Essentials certification by the time of contract award. Evidence of the certification must be provided to the Authority in order for the contract to be awarded.

Evidence of renewal of certification must then be provided to the Authority on each anniversary of the first applicable certificate obtained by the Contractor for the duration of the Contract. In the event the Contractor fails to comply, the Authority reserves the right to terminate the Contract for material breach in line with the Standard Terms and Conditions of Contract.



If the Contractor already holds ISO27001 accreditation, no further Cyber Essentials certification will be necessary, provided that the certification body carrying out this verification is approved to issue a Cyber Essentials certificate by one of the accreditation bodies.

1.11. 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, or 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.

1.12. 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 of 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.

1.13. Invoicing

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.

Any payment conditions applicable to the prime contractor must also be replicated with sub-contractors.



1.14. Reservation of right to amend and withdraw

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 18 February 17:00 BST. 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.

1.15. Checklist of Documents to be Returned for Each Bid

- Proposal (maximum 30 pages)
- Annex 2: 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



Section 2: Specification of Requirements

Invitation to Tender for: **Flexibility Innovation Programme**: Laboratory testing and demonstration of interoperable DSR applications in settings indicative of the real world
Tender Reference Number: 5532/12/2021
Deadline for Tender Responses: 7th March 17:00

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2.1. Introduction and Background

The up to £65m Flexibility Innovation Programme seeks to enable large-scale widespread electricity system flexibility through smart, flexible, secure, and accessible technologies and markets. To achieve this, the programme aims to fund innovation across a range of key smart energy applications, with new activities being launched over the coming year. The Flexibility Innovation Programme is part of the Department of Business, Energy and Industrial Strategy's (BEIS) £1 billion Net Zero Innovation Portfolio (NZIP) and forms a substantial part of the at least £100m funding for energy storage and flexibility challenges as set out in the Prime Minister's ten point plan for a green industrial revolution.

The Flexibility Innovation Programme will run to the 31st March 2025. The details of the programme remain to be finalised but it is anticipated that it will focus on an integrated approach to enabling flexibility on the grid. At the time of writing this ITT, it is anticipated that the workscope of this ITT will support proposed future Flexibility Innovation Programme activity, focusing on interoperable domestic and small-scale non-domestic demand side response (DSR).

The work under this ITT seeks to test and demonstrate how DSR services can be delivered by three different technical frameworks, according to:

- Publicly Available Specification (PAS) 1878 and the principles of PAS 1879
- PAS 1878 specifically using Annex D and the principles of PAS 1879
- GB smart metering system in accordance with the Standalone Auxiliary Proportional Controller (SAPC) specification.

These frameworks will be applied as a means to satisfy the core principles set out in the Transitioning to a Net Zero Energy System - Smart Systems and Flexibility Plan 2021 (herein "the core principles"). The core principles referred to throughout this document are described in Table 2. Further information can be found in the government's consultation on standards for energy smart appliances² and PAS 1878 and 1879, (links to standards are provided in Annex 7).

Table 2: The core principles.

Principle	Description
Interoperability	The ability of an energy smart appliance (ESA) to be operated by any authorised DSR Service Provider (DSRSP) for DSR services.
Data privacy	The secure transmission and storage of data on the device or with any controlling party.
Grid-stability	The prevention and mitigation of negative impacts to the energy system caused by inappropriate operation of ESAs.
Cyber-security	The appropriate protection of an ESA, systems and data from unauthorised access, to reduce the risk of cyber attack

² <https://www.gov.uk/government/consultations/proposals-regarding-setting-standards-for-smart-appliances>



Note: Please refer to PAS 1879 standards³ for details on the functionalities that support the four core principles.

The requirements of this competition will be procured through two lots:

- **Lot 1:** Design and delivery of laboratory testing of DSR systems, including the design of conformance testing and performance testing schemes. Conformance testing will be of individual products (ESAs) and of DSRSP platforms, while performance testing will cover products and platforms in combination.
- **Lot 2:** Design and delivery of demonstration of DSR systems in a setting indicative of the real world. Demonstration will be of multiple products and platforms in combination to produce a meaningful change in demand for grid control purposes.

Bidders are able to apply for either or both lots. If applying for both lots, separate bids are required to be submitted for each lot. In the case that each lot is awarded to a different supplier or consortium, there will be an expectation that the suppliers will work closely together to ensure coordination between the laboratory and real world demonstration phases.

For the purpose of this ITT, a DSR system is a collection of inter-connecting components that together can shift in time, and/or modulate in magnitude, an appliance's electricity consumption and production in response to external signals. Two types of DSR are covered in PAS 1878/9:

- Management of ESA consumption/production/storage according to external signals such as electricity tariffs; and
- Transmission System Operator (TSO)/Distribution System Operator (DSO) requested services with responses called by DSRSPs

The ESA system architecture for DSR-based activities, including communication links and object functionalities and, in particular, the interfaces between the Customer Energy Manager (CEM) and the ESA and between the CEM and the DSRSP are in scope. PAS 1878 does not cover the deployment and functional configuration of the wider DSR environment (e.g., communication between DSRSP and TSO/DSOs), which is out of scope of this competition. For DSR systems built using the GB smart metering system technical framework, the connections between the SAPC, ESA, Data Communication Company (DCC) and DCC User are in scope.

2.2. Purpose

The purpose of this ITT is to invite bids from suppliers or consortia with suitable skills and test facilities for the provision of a conformance and performance testing scheme design, laboratory testing of products and demonstration of these products in settings indicative of the real world.

The types of products we expect to be tested will be:

- energy smart appliances (ESAs) including:
 - electric vehicle (EV) charge points, including V2X products

³ [Download PAS 1879 | BSI \(bsigroup.com\)](https://www.bsigroup.com/standards/pas-1879)



- battery storage
- electric heating, ventilation, and air conditioning (HVAC), including heat pumps
- white goods and other domestic appliances
- DSRSP platforms (which could be cloud based).
- the supporting systems for operating these in low-voltage premises (such as a SAPC for GB Smart metering systems and a CEM for PAS 1878 systems).

It is anticipated the workscope described in this document will support a proposed innovation activity focusing on secure and interoperable DSR. The requirement provided through this ITT must be independent from the products expected to be tested.



2.3. Requirements

The requirements are presented in Table 33. These will be delivered through two lots. The details of which requirements will be delivered through each Lot can be found below and in Section 2.4. Details on the outputs of each requirement are provided in Section 2.8.

The anticipated programme that this will support is still in development, therefore Contractors for both lots will need to be flexible and agile in their approach to meet the needs of this anticipated programme.

Table 3. Summary of requirements

LOT 1	
Requirement	Description
R1	<p>Design and development of a testing scheme for ESAs and DSRSP platforms in a laboratory setting. This consists of:</p> <p>a. Design and development of a conformance testing scheme for specifications in PAS 1878 (including Annex D of the PAS) which identifies necessary test tools (including ‘test stubs’) and appropriate testing processes and conditions for the following compliance situations:</p> <ul style="list-style-type: none"> • ESAs and CEMs with PAS 1878 (not including Annex D of PAS 1878) • ESAs and CEMs with PAS 1878 (including Annex D of PAS 1878) • DSRSP platforms with PAS 1879 and 1878 (not including Annex D of PAS 1878) • DSRSP platforms with PAS 1879 and 1878 (including Annex D of PAS 1878) <p>It is anticipated that this will include regular engagement with the product developers (product indicative numbers provided in Table 5) and BEIS and/or representatives appointed by BEIS prior to finalisation of the scheme. Detail is outlined in Section 2.11.</p> <p><i>For the avoidance of doubt, the development of a conformance testing scheme will not be required for products designed to run using the GB smart metering system in accordance with the SAPC specification, as conformance testing methodologies for GB smart metering specifications already exist.</i></p> <p>b. Design of a laboratory performance testing scheme for:</p> <ul style="list-style-type: none"> • specified programme use cases (Annex 6)



	<ul style="list-style-type: none">• PAS 1878 (including Annex D of the PAS) and the principles of PAS 1879• the GB smart metering system in accordance with the SAPC specification. <p>which sets out the methodology to:</p> <ul style="list-style-type: none">• Test the performance of the DSR systems, each separately according to their design specification.• Test the interoperable performance in demonstration groups (consisting of one DSRSP platform and at least two ESAs) according to their specification (PAS 1878 main body, PAS 1878 Annex D, and GB smart metering system in accordance with the SAPC specification). These demonstration groups should include products from more than one project, in order to test interoperability. <p>It is anticipated that this will include regular engagement with the product developers (product indicative numbers provided in Table 5) and BEIS and/or representatives appointed by BEIS prior to finalisation of the test scheme. Detail is outlined in Section 2.11.</p> <p>c. Delivery of a detailed implementation plan, (to be reviewed and approved by the Authority) for delivery of the above conformance and performance testing of interoperable DSR applications in the laboratory, which details all resources, key deliverables, milestones, pricing and an effective feedback mechanism from the testing to allow for product design improvements, (including detail on how the bidder proposes to address any potential disputes with product manufacturers on the testing methodology).</p> <p><i>Please see Table 5 for an indicative scale of the testing.</i></p> <p>d. Support knowledge sharing and programme-level dissemination events. Detail is outlined in Section 2.11.</p>
R2	<p>Laboratory testing and demonstration</p> <ul style="list-style-type: none">a. Use of existing/modified facilities required for the laboratory testing and demonstration with appropriate liability insurances already in place. Testing facilities must be located within the UK to facilitate testing on a UK network.b. Set-up for the laboratory testing as per the proposed implementation plan in R1c.



	<p>c. Undertake conformance testing for specifications in PAS 1878 (including Annex D of the PAS), as per the conformance testing scheme designed as part of R1.</p> <p>d. Assure the conformance test results, provided in report form, for products using the GB smart metering systems in accordance with the SAPC specification. The assurance will be against the supplier of the product’s conformance methodology. (Note: conformance testing of the product is outside of the scope of this ITT)</p> <p>e. Undertake performance testing of DSR systems in specified programme use cases in a laboratory setting, both in accordance with PAS 1878 (including Annex D of the PAS) and the SAPC specification via the GB smart metering system. (Note: We expect that Commercial Product Assurance (CPA) certification will have been achieved by relevant devices, through projects outside the scope of this ITT.)</p> <p>Please see <i>Table 5 for an indicative scale of the testing.</i></p> <p><i>Note: The projects developing the products for testing are not part of this ITT. However, those projects and supporting systems will provide all the products and the necessary technical support to the successful bidder of Lot 1 of this ITT during the testing and demonstration phases. Therefore, it is anticipated that there will be regular engagement for the successful bidder of Lot 1 with the product developers and BEIS, (and/or representatives appointed by BEIS) during the testing lifetime.</i></p>
LOT 2	
Requirement	Description
R3	<p>Design and development of a testing scheme for ESAs and DSRSP platforms in settings indicative of the real world. This consists of:</p> <p>a. Design of a performance testing scheme, (including a test plan) for measuring and assessing the performance of the following in settings indicative of the real world:</p> <ul style="list-style-type: none"> • DSR systems in accordance with PAS 1878 (not including Annex D of the PAS) • DSR systems in accordance with PAS 1878 (including Annex D of the PAS) • DSR systems (including ESAs and DSRSP platforms) controlled using the GB smart metering system in accordance with the SAPC specification. <p>It is anticipated that this will include regular engagement with the product developers (product indicative numbers provided in Table 5) and BEIS</p>



	<p>and/or representatives appointed by BEIS prior to finalisation of the scheme. Detail is outlined in Section 2.11.</p> <p>b. Delivery of a detailed implementation plan, (to be reviewed and approved by the Authority) for delivery of the above demonstration of interoperable DSR applications in settings indicative of the real world, which details all resources, key deliverables, milestones, pricing and an effective feedback mechanism from the testing to allow for product design improvements, (including detail on how the bidder proposes to address any potential disputes with product manufacturers on the testing methodology).</p> <p>c. Support knowledge sharing and programme-level dissemination events. For additional details, please refer to Section 2.11</p> <p><i>Note: this is expected to include demonstration systems that are indicative of real world premises but that do not necessarily require actual consumer homes. For example, the premises could be actual buildings, actual consumer homes or could be dedicated mock-up areas in a laboratory. Consumers can be part of this testing as long as the project can be delivered within project anticipated timescales. It is therefore anticipated that, where demonstrations include consumers, these will already be part of a pre-recruited pool of participants and that the successful bidder can demonstrate in their bids that all required insurances, consumer protection, data protection and ethical requirements are in place.</i></p> <p><i>Please see Table 5 for an indicative scale of the testing.</i></p>
R4	<p>Testing and Demonstration in settings indicative of the real world. This consists of:</p> <p>a. Use of existing/modified facilities required for testing and demonstrations in settings indicative of the real world with appropriate liability insurances already in place. Testing facilities must be located within the UK to facilitate testing on a UK network.</p> <p>b. Set-up for the demonstration of interoperable DSR applications in settings indicative of the real world as per the proposed implementation plan in R3b.</p>



c. Undertake performance testing of DSR systems in settings indicative of real world, as per the testing scheme designed as part of R3, for the following:

- DSR systems in accordance with PAS 1878 (not including Annex D of the PAS)
- DSR systems in accordance with PAS 1878 (including Annex D of the PAS)
- DSR systems (including ESAs and DSRSP platforms) controlled using the GB smart metering system in accordance with the SAPC specification.

Note: this is expected to include demonstration systems that are indicative of real world premises but that do not necessarily require actual consumer homes or consumers. For example, the premises could be actual buildings, actual consumer homes or could be dedicated mock-up areas in a laboratory. Consumers and consumer homes can be part of this testing as long as the project can be delivered within project anticipated timescales. It is therefore anticipated that, where demonstrations include consumers, these will already be part of a pre-recruited pool of participants and that the successful bidder can demonstrate in their bids that all required insurances, consumer protection, data protection and ethical requirements are in place.

Note: The projects developing the products for testing are not part of this ITT. However, those projects and supporting systems will provide all the products and all the necessary technical support to the successful bidder of Lot 2 of this ITT during the testing and demonstration phases. Therefore, it is anticipated that there will be regular engagement for successful bidder of Lot 2 with the product developers and BEIS, (and/or representatives appointed by BEIS) during the testing lifetime.

Please see Table 5 for an indicative scale of the testing.

2.4. Structure

The provision of these requirements will be undertaken through a phased approach, as shown in Table 4.



Table 4: Structure of requirements within each Lot

	Lot 1 Design and delivery of laboratory testing, including the design of conformance testing and performance testing schemes	Lot 2 Design and delivery of demonstrations of DSR systems in settings indicative of the real world
Phase 1: Design and Development	R1	R3
Phase 2: Laboratory Testing and Demonstration	R2	-
Phase 3: 'Real-world' Setting Demonstration	-	R4

Note that for both Lot 1 and Lot 2 there will be a stage gate decision after Phase 1 outputs are delivered to determine progression to the following phases. Continuation to Phases 2 and 3 will be subject to BEIS approval of Phase 1 outputs and wider programme progress.

2.5. Anticipated Number of Projects and Products

The indicative number of projects and products expected to feed into Phase 2 and Phase 3 of this competition are summarised in Table 5.

Table 5: Indicative numbers of projects and products feeding into Phase 2 and Phase 3 of this scope of work

	Designed to PAS 1878	Designed to PAS 1878 specifically Annex D	Designed to GB Smart Metering System and SAPC Specification	
No. of Projects	3	2	2	
No. of ESA types per project	2-4	2-4	2-4	
Total number of DSRSP platforms for all phases	3	2	2	
Total number of ESAs for Phase 2⁴	6-12	4-8	4-8	} Lot 1 = up to 28
Total ESAs for Phase 3⁵	30-60	20-40	20-40	

⁴ One device of each ESA type per project

⁵ Note the Phase 3 devices will be 5 replications of each of the Phase 2 ESAs, not new designs



2.6. Anticipated Timeframes

The anticipated timescales for each phase under this workscope are outlined in Table 6 below. Bidders are required to outline how their activities will achieve these anticipated timeframes.

The proposed activity that the ITT is supporting is still in development. Therefore, the Contractor will need to be agile and flexible in their resources and their approach to enable anticipated phase timescales to be amended in accordance with business needs and to successfully incorporate all related projects that are not part of Specification of Requirements but which feed into Phases 2 and 3.

Table 6: Anticipated delivery timeframes

Phase	Anticipated Timeframes
Phase 1: Design and Development	Lot 1: April 2022 – December 2022 Lot 2: January 2023 – September 2023
Phase 2: Laboratory Testing and Demonstration	Lot 1: Window of Activity: January 2023 – January 2024
Phase 3: 'Real-world' Setting Demonstration	Lot 2: Window of Activity: September 2023 – completed by end July 2024

Note: The Authority expects the devices for Phase 2 testing to be available between March – June 2023, subject to successful delivery from external product developers.

The Authority anticipates 6 months of Phase 2 testing before the Phase 3 demonstration. The Authority anticipates Phase 3 demonstrations to begin in December 2023.

The Authority expects the Phase 3 demonstration to last for 6 months. Following the demonstrations, the Lot 2 Contractor shall report the outcomes outlined in section 2.8.

2.7. Skills, expertise and facilities

The Contractor shall have the required expertise and relevant skills, provision of suitable facilities and strong teams of individuals with the capability to fulfil the project's objectives and deliver the required outputs to cost, time and quality, including:

Project Management (Lot 1&2)

- Developing project management plans.
- Managing projects and providing quality assurance.
- Managing project risk, issues, dependencies and change control.
- Coordinating and integrating results from different projects and disseminating knowledge and learning.
- Mobilising, establishing and managing multi-disciplined teams.
- Engaging and communicating with a diverse range of stakeholders.
- Strong collaborating and partnering skills.
- Strong written and oral communication skills.
- Experience presenting and leading meetings with varied stakeholder groups.



Technical Expertise (Lot 1)

- Experience, (or relevant expertise,) designing conformance testing schemes for testing and demonstration of products and platforms (relevant to PAS 1878 and SAPC scope).
- Designing, implementing and delivering laboratory testing.
- Provision of existing facilities in the UK for relevant laboratory testing.

Technical Expertise (Lot 2)

- Experience, (or relevant expertise), designing performance testing schemes for demonstration of interoperable DSR systems in settings indicative of the real world (relevant to PAS 1878 and SAPC scope).
- Designing, implementing and delivering indicative real world testing.
- Provision of existing facilities in the UK for relevant indicative real world testing.

Knowledge Dissemination/Showcasing Events (Lot 1&2)

- In-depth knowledge of the Energy Innovation Landscape, specifically of smart energy innovation
- In-depth knowledge of the relevant energy and technology regulatory environments



2.8. Deliverables/Outputs

A summary of outputs for each lot, mapped against each requirement, is shown in Table 7 and Table 8.

Table 7: Summary of outputs for Lot 1 requirements

Lot 1		
Requirement	Phase	Outputs
R1	1	<p>(R1) Design and development of testing scheme for ESAs and DSRSP platforms in a laboratory setting.</p> <p>1a. Design and development of a conformance testing scheme for specifications in PAS 1878.</p> <p>The expected outputs are as follows:</p> <ul style="list-style-type: none">• Delivery of a PAS 1878-based conformance testing scheme (to be approved by Authority), in a report format, including a test plan template. This must identify necessary test tools (including ‘test stubs’) and appropriate testing processes and conditions for the following compliance situations:<ul style="list-style-type: none">○ ESAs and CEMs with PAS 1878 (not including Annex D of PAS 1878)○ ESAs and CEMs with PAS 1878 (including Annex D of PAS 1878)○ DSRSP platforms with PAS 1879 and 1878 (not including Annex D of PAS 1878)○ DSRSP platforms with PAS 1879 and 1878 (including Annex D of PAS 1878)



- A draft report containing the testing scheme to be shared with product developers and BEIS and/or representatives appointed by BEIS for comment and prior to finalisation.
 - It is anticipated that this will include regular engagement with the product developers (product indicative numbers provided in Table 5) and BEIS and/or representatives appointed by BEIS prior to finalisation of the scheme. Detail is outlined in Section 2.11.

1b. Design of a laboratory performance testing scheme for specified programme use cases and for both PAS 1878 (including Annex D of PAS 1878) and the GB smart metering system in accordance with the SAPC specification.

The expected outputs are as follows:

- Draft laboratory performance testing scheme for review by BEIS and/or representatives appointed by BEIS (estimated number of times the testing scheme will be reviewed is 1-2, however, this is to be agreed with Authority).
- Delivery of a final report, (to be approved by Authority) detailing the design of a laboratory performance testing scheme for specified use cases outlined in Annex 6 which will set out the methodology to:
 - Test the performance of the DSR systems, each separately according to their design specification.
 - Test the interoperable performance in demonstration groups (consisting of one DSRSP platform and at least two ESAs) according to their specification (PAS 1878 main body, PAS 1878 Annex D, and GB smart metering system in accordance with the SAPC specification). These demonstration groups should include products from more than one developer's project, in order to test interoperability.



Lot 1		
Requirement	Phase	Outputs
		<p>1c. Detailed implementation plan, (to be reviewed and approved by the Authority) for delivery of conformance and performance testing of interoperable DSR applications in the laboratory, which details all resources, key deliverables, milestones, pricing and an effective feedback mechanism from the testing to allow for product design improvements, (including detail on how the Contractor will address any potential disputes with product manufactures on the testing methodology).</p> <p><i>Indicative scale of products shown in Table 5.</i></p>
R2	2	<p>(R2) Laboratory testing and demonstration</p> <p>2a. Set-up for laboratory testing as per the proposed implementation plan in R1c.</p> <p>2b. Undertake conformance testing for specifications in PAS 1878 (including Annex D of the PAS), as per the testing scheme (R1)</p> <ul style="list-style-type: none">Evidence of compliance testing for PAS 1878 undertaken, (including details of multiple testing conducted for product design improvements where applicable), including results from projects feeding into Lot 1, in a report format (to be approved by Authority). <i>Indicative scale of products shown in Table 5.</i> <p>2c. Assure the conformance test results, provided in report form, for products using the GB smart metering systems in accordance with the SAPC specification. The assurance will be against the supplier of the product's conformance methodology. (Note: conformance testing of the Product is outside of the scope of this ITT.)</p>



Lot 1		
Requirement	Phase	Outputs
		<p><i>Indicative number of projects and products is shown in Table 5.</i></p> <ul style="list-style-type: none">• A review of two projects, to confirm their conformance with GB Smart Metering SAPC specifications, and other relevant regulation, before those products can be included in performance lab testing (to be approved by Authority). The outcomes of this review are to be detailed in a report. <p>2d. Undertake performance testing and demonstration of DSR systems to specified programme use cases, in a laboratory setting both in accordance with PAS 1878 and the SAPC specification via the GB smart metering system. <i>Indicative number of projects and products is shown in Table 5.</i></p> <p>A report which outlines the laboratory performance testing against the programme use cases, including lessons learnt and stakeholder feedback, in a report format (to be approved by Authority) which is to include the results of the demonstrations and details of multiple testing conducted for product design improvements where applicable.</p>



Table 8: Summary of outputs for Lot 2 requirements

Lot 2		
Requirement	Phase	Outputs
R3	1	<p>(R3) Design and development of a testing scheme for ESAs and DSRSP platforms in settings indicative of the real world</p> <p>3a. Design of a performance testing scheme, (including a test plan) for measuring and assessing the performance in settings indicative of the real world</p> <p>The expected outputs are as follows:</p> <ul style="list-style-type: none"> • A testing scheme (including a test plan), in a report format, for measuring and assessing the performance of the following in settings indicative of the real world: <ul style="list-style-type: none"> ○ ESAs in accordance with PAS 1878 (with and without Annex D of the PAS). ○ DSRSP platforms in accordance with PAS 1879 and 1878 (with and without Annex D of the PAS). ○ DSR systems controlled using the GB smart metering system in accordance with the SAPC specification. • A draft of the testing scheme for review by BEIS and or representatives appointed by BEIS, (estimated number of times the testing scheme will be reviewed is 1-2. However, this is to be agreed with the Authority). <p>3b. Detailed implementation plan (to be reviewed and approved by Authority) for delivery of demonstration of interoperable DSR applications in settings indicative of the real world, which details all resources, key deliverables, milestones, pricing and an effective feedback mechanism from the testing to allow for product design improvements, (including detail on how the bidder proposes to address any potential disputes with product manufacturers on the testing methodology).</p> <p><i>Indicative scale of products shown in Table 5.</i></p>



Lot 2		
Requirement	Phase	Outputs
R4	3	<p>(R4) Testing and Demonstration in settings indicative of the real world</p> <p>4a. Set-up for demonstration of interoperable DSR applications in settings indicative of the real world as per the proposed implementation plan in R3b.</p> <p>4b. Undertake performance testing of DSR systems in settings indicative of the real world as per the testing scheme (R3)</p> <p>The expected outputs are as follows:</p> <ul style="list-style-type: none">• Report on performance assessment of installations, carried out in settings indicative of the real world, which includes lessons learnt, stakeholder feedback, and the results of the demonstrations in a report format (to be approved by Authority). <p>The demonstration will include:</p> <ul style="list-style-type: none">• Measuring and assessing the performance of the following in settings indicative of real world conditions, in line with the design from Phase 1 (R3) for:<ul style="list-style-type: none">○ ESAs in accordance with PAS 1878 (with and without Annex D of the PAS)○ DSRSP platforms in accordance with PAS 1878 and 1879 (with and without Annex D of the PAS)○ DSR systems controlled using the GB smart metering system in accordance with the SAPC specification <p><i>Indicative number of projects and products shown in Table 5.</i></p>



2.9. Quality Assurance

The following section on quality assurance is applicable to Lots 1 and 2.

The Contractor shall be responsible for any work they or their consortium partner (if relevant) deliver and shall have robust quality assurance processes in place.

Sign-off for the quality assurance must be done by someone of sufficient seniority within the contractor organisation to be able take responsibility for the work done. Acceptance of the work by BEIS will take this into consideration. BEIS reserves the right to refuse to sign off outputs which do not meet the required standard specified in the contract.

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.
- Quality in Qualitative Evaluation: A Framework for assessing research evidence, provides a Framework for appraising the quality of qualitative evaluations.
- Rapid Evidence Assessment (REA).
<http://www.civilservice.gov.uk/networks/gsr/resources-and-guidance/rapid-evidence-assessment/what-is>. This toolkit will help researchers to identify whether a Rapid Evidence Assessment is best for their needs and help with the process of planning and carrying out a review.

Where relevant, all bids should refer to these pieces of guidance and advice and how they will be used.

2.10. Challenges

The following challenges are applicable to Lots 1 and 2. Due to the complexity of the programme and interdependency of the different projects, there will be challenges during delivery and bidders are required to identify these and explain how they intend to address such challenges and their experience working with similar challenges in the past.

BEIS anticipates that some of the key challenges will include:

- Collaboration between organisations, both within and across projects
- Interfaces between the contractor(s) and the suppliers of the devices to be tested
- Co-ordinating timelines of multiple projects
- Be agile and maintain flexibility in resources and delivery approach to enable anticipated phase timescales to be amended with business needs and to incorporate all related projects that are not part of described in the Specification of Requirements, but which feed into Phases 2 and 3.

2.11. Working Arrangements

The Contractor for each Lot is required to identify one named point of contact through whom all enquiries can be filtered. The Authority will assign a Project Manager to the project who will be the central point of contact. Project governance meetings with the Authority for which the Contractor will need to be present are expected in line with the following indicative schedule:



Table 9: Working Arrangements- Regular Engagement

Regular Engagement Type	Anticipated Frequency/Purpose
Internal BEIS - Project management kick-off meeting	<p>Once</p> <p>The purpose of this meeting is to introduce the team, understand the project background, and lay out what needs to be done from start to finish.</p> <p><i>Anticipated duration: 2-3 hours</i> In person and/or Virtual (COVID dependant).</p>
Internal BEIS - Project status meetings	<p>Weekly</p> <p>The purpose of these meetings is to review the activity tracker, which reports on project progress, project schedule status, discuss issues and complications, risks, and supplier performance (Key Performance Indicators), which will be reviewed on a monthly basis, and keep the pace of the project.</p> <p>The Contractor is responsible for providing the up-to-date activity tracker 1 work day prior to the project status meeting to the Authority's Project Manager.</p> <p><i>Anticipated duration: 1-2 hours</i> Virtual or in person when required (COVID dependent).</p>
Internal BEIS – Project review meetings	<p>Quarterly or end of each Phase (<i>whichever is most frequent</i>)</p> <p>The purpose of these meetings is to report on project progress against requirements and expected outputs. An interim project report is expected prior to these meetings with findings to be presented at the meeting in PowerPoint format.</p> <p>The Contractor is responsible for providing the up-to-date project report 2 work days prior to the project review meeting to the Authority's Project Manager.</p> <p><i>Anticipated duration: 2-3 hours</i> In person and/or Virtual (COVID dependent).</p>
Internal BEIS - Stakeholder meetings	<p>2-4 meetings over the contract lifetime</p> <p>The purpose of these meetings is to showcase outputs to internal stakeholders.</p> <p><i>Anticipated duration: 1-2 hours</i></p>



	In person and/or Virtual (COVID dependent).
External - Flexibility Innovation Programme showcase conferences	<p>Anticipated to be two events.</p> <p>The Contractor may be asked to present at one or both events.</p> <p>The purpose of these events is for knowledge dissemination and showcasing.</p> <p>½ Day In person and/or Virtual (COVID dependent).</p>
Monitoring and evaluation - Flexibility Innovation Programme	<p>NZIP: Report on NZIP KPIs at various intervals for each project, including at the start of the project, during project delivery, at project closure and for three years after project closure. BEIS will supply funded projects with a reporting template to complete at set intervals. The NZIP KPIs are for wider BEIS monitoring purposes and they are not used as a project management tool. The NZIP Key Performance Indicator (KPI) collection process is not designed to have a bearing on project delivery decisions (such as invoice payments). Information on the specific NZIP KPIs and the reporting process applicable for this contract can be found in Annex 9.</p> <p>Evaluation: Participate in and facilitate an evaluation of Flexibility Innovation Programme, which will be delivered by an external contractor commissioned by BEIS. The specific role of the external evaluator and scope of the evaluation is yet to be confirmed, though it is likely to include qualitative and quantitative data collection and analysis in order to assess programme delivery, impact and value for money and identify learnings. Contractor will be required to participate in and contribute to the evaluation activities, both during and after final contract payments, including by providing relevant primary and/or secondary data to the evaluation contractor and by participating in research interviews.</p>

It is expected that most of the regular engagement will be undertaken virtually. The Contractor could, however, be required to attend meetings occasionally at the Authority's offices and project sites around the UK (Covid dependant).

Travel and subsistence expenses, for travel outside of London, incurred by the Contractor will be reimbursed by the Authority in line with Attachment 1: Travel Expenses Policy.



2.11.1. Collaborative working with Flexibility Innovation Programme activities and projects

Due to the interlinking nature of the different contracts within the Flexibility Innovation Programme, the Contractor(s) shall work collaboratively with other anticipated Flexibility Innovation Programme activities and projects to ensure consistency between work scope. The successful suppliers for Lot 1 and Lot 2 are required to:

- a. take responsibility for this engagement with relevant projects;
- b. incorporate information from the other projects into this work as these progress;
- c. work with the anticipated Flexibility Innovation Programme Management Contractor who will be appointed by BEIS to work in collaboration with the in-house BEIS Smart Innovation Team to programme manage the successful delivery of the Flexibility Innovation Programme;
- d. Work with any other potential individual or organisation appointed by BEIS to support the delivery of the Flexibility Innovation Programme; and
- e. work collaboratively to coordinate between the laboratory and real-world demonstration phases, including exchange of necessary data/information to facilitate testing to deliver contract requirements.

The Contractor may work closely with organisations appointed to deliver related and anticipated sub-programmes and projects. In some circumstances the Contractor may be required to sign collaboration agreements covering confidentiality, logistics, responsibilities and intellectual property with such organisations. An example of the detailed collaboration agreement will be shared with the successful bidders. Key stakeholders which the Contractor may be required to enter into a collaboration agreement with may include BEIS, representatives appointed by BEIS, product developers, and Lot 1 and /or Lot 2 Contractor.

2.12. Contract Term and Budget

The Lot 1 Contract shall be for a period of **1 year, 10 months** commencing in April 2022 and ending in January 2024. BEIS, at its sole discretion, may wish to agree with the successful bidder an extension of up to **1 year** before the expiry of the initial term. This contract contains fixed price elements and time and materials elements capped at the budget below. Please refer to Annex 2: Pricing Schedule for further detail.

The Lot 2 Contract shall be for a period of **2 years, 4 months** commencing in April 2022 and ending in July 2024 (phase 1 activity will commence in January 2023). BEIS, at its sole discretion, may wish to agree with the successful bidder an extension of up to **1 year** before the expiry of the initial term. This contract contains fixed price elements and time and materials elements capped at the budget below. Please refer to Annex 2: Pricing Schedule for further detail.

The budget for this tender is £5.2M excluding VAT. This is split between the 2 Lots as follows:

- Lot 1: £ 2.7M
- Lot 2: £ 2.5 M

The pricing model, alongside any assumptions to be used for pricing in each Lot is outlined in



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& Industrial Strategy

Annex 2.

Cost will be a criterion against which bids will be assessed, as described in Section 3.

Payments will be linked to delivery of key milestones and will be agreed with the contractor based on the tender responses. Bidders should advise in their tender response how this breakdown reflects their usual payment processes.

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.



Section 3: Evaluation

Invitation to Tender for: **Flexibility Innovation Programme**: Laboratory testing and demonstration of interoperable DSR applications in settings indicative of the real world
Tender Reference Number: 5532/12/2021
Deadline for Tender Responses: 7th March 17:00

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3.1 Evaluation of Tender Responses

Applicants are invited to submit full tenders of no more than 30 pages, of A4 size paper, Arial font at a size 11pt with standard margins, excluding declarations, pricing submission, Annexes 1-9. Any additional content submitted beyond this will not be considered or scored during the evaluation process.

Each lot will be evaluated separately using the same evaluation criteria. The tender process will be conducted to ensure that bids are evaluated fairly and transparently, in accordance with agreed assessment criteria. Each bid will be evaluated by at least three assessors, which may include external reviewers⁶. A moderation meeting will be held at the end of the assessment process to agree the overall weighted scores.

Pass/fail criteria:

- **Conflict of Interest:** In respect of declaration 3. This is **pass/fail**.
- **Terms and conditions:** BEIS Terms and Conditions apply to this contract. Through receipt of tender, you accept the BEIS Terms and Conditions as set out for this contract. This is **pass/fail**.
- **Standard Selection Questionnaire:** In respect of declaration 4. This is **pass/fail**.

BEIS will select, for each lot, the bidder that scores highest against the criteria and weighting listed in Table 10 below. The assessment for this Competition is broken down into 5 separate criteria. Each criterion will be scored independently and will be given a scoring between 1 and 5. The scoring guidance is summarised in Section 3.1.2 Scoring Method, below.

Bidders are eligible to apply for both Lot 1 and Lot 2. If applying for both lots, separate applications should be submitted for each Lot.

Applications will be assessed individually against the set evaluation criteria for the specified Lot, as detailed in Section 3.

⁶All external reviewers will have adhered to strict conflicts of interest terms and agreed to and signed confidentiality requirements.



3.1.1 Evaluation Criteria

The following evaluation criteria will be used to separately evaluate both Lot 1 and Lot 2.

Table 10: Evaluation Criteria

Criterion	Description	Reference	Weighting
01: Understanding the requirements	<p>Understanding of the competition requirements and description of proposed solution</p> <p>Bidders are required to demonstrate a clear understanding of the project requirements and to describe their proposed testing solution and how this fully meets the requirements set out in the competition guidance.</p> <p>As a minimum, your response should include:</p> <ul style="list-style-type: none"> Demonstration of a clear understanding of the role of ESAs and DSRSP platforms in PAS 1878/79 and GB Smart Metering SAPC technical specification, and how your testing methodology will enable meeting the requirements for reaching the Government's net zero target by 2050. 	Section 2.3 Requirements	10%

Criterion	Description	Reference	Weighting
02: Project Team – skills, expertise, and facilities	<p>Clear demonstration of the appropriate team, skills, and facilities.</p> <p>Bidders are required to demonstrate expertise, relevant skills, and suitable facilities with capability to fulfil the project's objectives and required outputs.</p> <p>As a minimum, your response should include information on:</p> <p><u>Team skills and expertise</u></p> <p>Evidence that the project team members have the appropriate skills and expertise for the roles to which they have been assigned and how these skills will be used to successfully deliver the project.</p> <ul style="list-style-type: none"> Evidence of team members' past experience of delivering similar projects and details of how lessons learned will help ensure a positive outcome for this contract. <p><u>How project team(s) are organised to deliver the requirements</u></p>	Section 0 Skills, expertise and facilities	25%



	<ul style="list-style-type: none"> • A clear and detailed organogram and a high-level resource plan for the lead applicant and its consortium partners (where applicable). • Outline of the key roles and responsibilities within the project team and between consortia members or sub-contractors (if appropriate), and an appropriate allocation of resources for each task. • Outline how the project team will be agile and flexible to handle the uncertainties around numbers of tests to be conducted and to ensure all necessary activity is conducted and concluded within the timescale. • Detail how any skill and/or resource gaps that may emerge as the contract progresses will be addressed. <p><u>Testing facilities</u></p> <ul style="list-style-type: none"> • Evidence of provision of suitable facilities located in the UK for the testing relevant to the bid including a list of any relevant certification and accreditation, with detail explaining their relevance, for the proposed facilities 		
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Criterion	Description	Reference	Weighting
03 – Project Approach and Delivery	<p>Clear demonstration of how the project will be successfully delivered and risks managed.</p> <p>Bidders are required to propose a clear, robust, and demonstrable approach and plan for delivering the requirements. As a minimum, your response should include information on:</p> <p><u>Project plans</u></p> <ul style="list-style-type: none"> • Well thought-out, robust, and credible project plans to deliver the proposed testing solution, including a realistic, robust, and justified Gantt chart/project plan, detailing the key tasks and milestones. • A detailed description of the proposed methodology, for delivering the outputs, including evidence to demonstrate how your solution meets the requirements. 	Section 2	35%



	<ul style="list-style-type: none">• Detail of how the approach will be agile and flexible to handle the uncertainties around numbers of tests to be conducted and to ensure all necessary activity is conducted and concluded within the timescale.• Clearly demonstrate the project team's quality management standards, including a description of how the project team will quality assure the work. Tenderers should include a quality assurance plan that they will apply to the requirements.• Evidence clearly demonstrating effective governance, reporting, change control and monitoring approaches for the project (which includes detail on how you will manage efficient working arrangements within the consortium, where applicable).• Outline the approach to arising matters of Conflict of Interest and the proposed mitigation plan (where applicable). <p><u>Risks</u></p> <ul style="list-style-type: none">• A clear, comprehensive, and realistic plan for the identification, prioritisation, mitigation, management, and communication of project risk.• Outline key risks, assumptions and dependencies and provide suitable and robust mitigation strategies.• Outline anticipated challenges for the delivery of the contract and detail proposed approach for handling these, (including evidence of any expertise from working on similarly challenging projects).• List any third parties responsible for delivering goods or services critical to the project and outline proposed mitigation plans (where applicable).		
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Criterion	Description	Reference	Weighting
04 - Cost	Price will be marked proportionately to the lowest bid. The lowest bid will receive maximum marks (20%) and then all other bids will be marked proportionately to that bid.	Annex 2. Pricing Schedule	20%



	<p>Applicants are required to provide project costs for the following: In bids for Lot 1: Fixed costs, testing, and project governance In bids for Lot 2: Fixed costs, testing, and project governance Annex 2</p>		
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Criterion	Description	Reference	Weighting
<p>05 – Social Value (see PPN 06/20 for more context)</p>	<p>Describe the commitment your organisation will make to ensure that opportunities under the contract demonstrate effective measures to tackle workforce inequality.</p> <p>Applicants will be expected to submit a project plan and process, to deliver the following through the contract.</p> <ul style="list-style-type: none"> i. Demonstrate action to identify and tackle inequality in employment, skills and pay in the contract workforce. ii. Demonstrate how team members from traditionally under-represented backgrounds will be offered opportunities through the project. <p>As a minimum, the response for (i) and (ii) should include:</p> <p>(a.) your ‘Method Statement’, stating how you will achieve this and how your commitment meets the Award Criteria, and</p> <p>(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:</p> <ul style="list-style-type: none"> 1. timed action plan 2. use of metrics 3. tools/processes used to gather data 4. reporting 5. feedback and improvement 		<p>10%</p>



3.1.2 Scoring Method

We will select projects that offer the best overall value for money, based on their assessment against the criteria outlined in Section 3.1.1 Evaluation Criteria. 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 11 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.

Table 11: Scoring Guidance

Score	Description
1	Not Satisfactory: There is no evidence to very little evidence that the question has been satisfactorily answered and major omissions are evident.
2	Partially Satisfactory: There is little evidence that the question has been satisfactorily answered and some omissions are evident. Much more clarification is needed.
3	Satisfactory: There is reasonable evidence that the question has been satisfactorily addressed but some omissions are still evident and further clarification is needed.
4	Good: The question has been well addressed with a good evidence base, with only minor omissions or lack of clarity
5	Excellent: There is clear evidence that the question has been completely addressed in all aspects, with question answered clearly, concisely with a strong evidence base.

3.1.3 Scoring for Pricing Evaluation

A Pricing Schedule is provided in Annex 2 for completion by Bidders.

The total price (bid price) for Lot 1 and Lot 2 will be calculated by adding the submitted costs. This formula is outlined below:

Formula 1:

Lot 1:

Total price (bid price) = (Fixed Costs: Total) + (Testing: Average of Totals) + (Project Governance Total)

Lot 2:

Total price (bid price) = (Fixed Costs: Total) + (Testing: Average of Totals) + (Project Governance Total)

This total price will be the 'bid price' used for the pricing evaluation and will be marked using the below approach.

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



Marking proportionate to the lowest price, price will be scored as set out below. There will be a maximum of e.g. 20 marks

The lowest priced bid will receive the full 20 marks, all other bids will then be marked as set out below.

Proportionate Pricing scoring example (Formula 2):
If 20% = 20 marks

Supplier	Price	Marks
1 (lowest bid)	£50,000	20
2	£60,000	$50/60 * 20 = 16.7$
3	£75,000	$50/75 * 20 = 13.3$

The total price (bid price) for your submission, calculated using Formula 1, should not exceed the maximum budget for Lot 1 and Lot 2. Bidders submitting a total price (bid price) above the maximum budget for this contract may be considered to be submitting a non-compliant bid.

3.3 Key Performance Indicators

Please refer to Annex 8: Project Key Performance Indicators.



Section 4: Declarations to be submitted by the Tenderer

Invitation to Tender for: **Flexibility Innovation Programme**: Laboratory testing and demonstration of interoperable DSR applications in settings indicative of the real world
Tender Reference Number: 5532/12/2021
Deadline for Tender Responses: 7th March 17:00

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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 and 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)

.....
Date



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.

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.

7. We certify that this is a bona fide tender.

.....
Signature (duly authorised on behalf of the tenderer)

.....
Print name

.....
On behalf of (organisation name)

.....
Date



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



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- 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.



Declaration 4: Standard Selection Questionnaire

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.

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 exclusion⁷. 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).

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 [EU ESPD \(Part III\)](#) as a downloaded XML file to the buyer contact point along with the selection information requested in the procurement documentation.

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 sub-contractors, 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.

Consequences of misrepresentation

⁷ For the list of exclusion please see https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/551130/List_of_Mandatory_and_Discretionary_Exclusions.pdf



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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.



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



**Flexibility Innovation Programme: Laboratory testing and demonstration of
interoperable DSR applications in settings indicative of the real world.**

5532/12/2021

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. **Note for Contracting Authorities: The following paragraph is optional for inclusion if a decision has been made to request a self-declaration of the exclusion grounds from sub-contractors. All sub-contractors are required to complete Part 1 and Part 2⁸.**
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

⁸ See PCR 2015 regulations 71 (8)-(9)



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.

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(c)	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 <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
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 <input type="checkbox"/> No <input type="checkbox"/>
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) ⁹ ?	Yes <input type="checkbox"/> No <input type="checkbox"/>
1.1(n)	Details of Persons of Significant Control (PSC), where appropriate: ¹⁰ - 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. ¹¹ (Please enter N/A if not applicable)	
1.1(o)	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)	

⁹ See EU definition of SME: <http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/>

¹⁰ 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.](#)

¹¹ Central Government contracting authorities should use this information to have the PSC information for the preferred supplier checked before award.



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	(Please enter N/A if not applicable)	
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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.



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 <input type="checkbox"/> No <input type="checkbox"/> 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 <input type="checkbox"/> No <input type="checkbox"/>				
1.2(b) - (ii)	If you responded yes to 1.2(b)-(i) please provide additional details for each sub-contractor in the following table: we may ask them to complete this form as well.					
Name						
Registered address						
Trading status						
Company registration number						
Head Office DUNS number (if applicable)						
Registered VAT number						
Type of organisation						
SME (Yes/No)						
The role each sub-contractor will take in providing the works and /or supplies e.g. key deliverables						
The approximate % of contractual obligations						



	assigned to each sub-contractor					
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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 misrepresentation.

Section 1	Contact details and declaration	
Question number	Question	Response
1.3(a)	Contact name	
1.3(b)	Name of organisation	
1.3(c)	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 you, your organisation or any other person who has powers of representation, decision or control in the organisation been convicted anywhere in the world of any of the offences within the summary below and listed on the webpage .	
	Participation in a criminal organisation.	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 2.1(b)
	Corruption.	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 2.1(b)
	Fraud.	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 2.1(b)
	Terrorist offences or offences linked to terrorist activities	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 2.1(b)
	Money laundering or terrorist financing	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 2.1(b)
	Child labour and other forms of trafficking in human beings	Yes <input type="checkbox"/> No <input type="checkbox"/> 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 <input type="checkbox"/> No <input type="checkbox"/>
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 <input type="checkbox"/> No <input type="checkbox"/>
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.



Section 3		Grounds for discretionary exclusion
	Question	Response
3.1	Regulation 57 (8) The detailed grounds for discretionary 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 three years, anywhere in the world any of the following situations have applied to you, your organisation or any other person who has powers of representation, decision or control in the organisation.	
3.1(a)	Breach of environmental obligations?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1 (b)	Breach of social obligations?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1 (c)	Breach of labour law obligations?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(d)	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 <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(e)	Guilty of grave professional misconduct?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(f)	Entered into agreements with other economic operators aimed at distorting competition?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(g)	Aware of any conflict of interest within the meaning of regulation 24 due to the participation in the procurement procedure?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(h)	Been involved in the preparation of the procurement procedure?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(i)	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 <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2



3.1(j)	Please answer the following statements	
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.	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 3.2
3.1(j) - (ii)	The organisation has withheld such information.	Yes <input type="checkbox"/> No <input type="checkbox"/> 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 <input type="checkbox"/> No <input type="checkbox"/> 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 <input type="checkbox"/> No <input type="checkbox"/> 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)	
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Part 3: Selection Questions¹²

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 <input type="checkbox"/> No <input type="checkbox"/>
	(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 <input type="checkbox"/> No <input type="checkbox"/>
	(b) A statement of the cash flow forecast for the current year and a bank letter outlining the current cash and credit position.	Yes <input type="checkbox"/> No <input type="checkbox"/>
	(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 <input type="checkbox"/> No <input type="checkbox"/>
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 <input type="checkbox"/> No <input type="checkbox"/>

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 organisation	
	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 <input type="checkbox"/> No <input type="checkbox"/>
5.2	If yes, would the parent company be willing to provide a guarantee if necessary?	Yes <input type="checkbox"/> No <input type="checkbox"/>

¹² [See Action Note 8/16 Updated Standard Selection Questionnaire](#)



5.3	If no, would you be able to obtain a guarantee elsewhere (e.g. from a bank)?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Section 6	Technical and Professional Ability	
6.1	<p>Relevant experience and contract examples</p> <p>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.</p> <p>The named contact provided should be able to provide written evidence to confirm the accuracy of the information provided below.</p> <p>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).</p> <p>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 sub-contractor(s) who will deliver the contract.</p> <p>If you cannot provide examples see question 6.3</p>	

	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	<p>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)</p> <p>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)</p>

6.3	<p>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.</p>

Section 7 Modern Slavery Act 2015: Requirements under Modern Slavery Act 2015 ¹³	
7.1	<p>Are you a relevant commercial organisation as defined by section 54 ("Transparency in supply chains etc.") of the Modern Slavery Act 2015 ("the Act")?</p> <p>Yes <input type="checkbox"/> N/A <input type="checkbox"/></p>
7.2	<p>If you have answered yes to question 1 are you compliant with the annual reporting requirements contained within Section 54 of the Act 2015?</p> <p>Yes <input type="checkbox"/> Please provide relevant the url ...</p> <p>No <input type="checkbox"/> Please provide an explanation</p>

¹³ [Procurement Policy Note 9/16 Modern Slavery Act 2015](#)



Section 8	The General Data Protection Regulation (GDPR) ¹⁴	
8.1	<p>Compliance with the GDPR is a mandatory requirement for all contracts or agreements that involve the transfer and processing of personal data from 25th 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) regarding the processing required under this contract by the time of contract award?</p> <p>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.</p>	Yes <input type="checkbox"/> No <input type="checkbox"/>

¹⁴ [Procurement Policy Note 02/18 Changes to Data Protection Legislation & General Data Protection Regulation](#)



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.	<p>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</p> <p>Employer’s (Compulsory) Liability Insurance = £5,000,000</p> <p>Public Liability Insurance = £5,000,000 Professional Indemnity Insurance = £2,000,000</p> <p>*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.</p>

9.2	Skills and Apprentices ¹⁵ – (please refer to supplier selection guidance)	
a.	<p>Public procurement of contracts with a full life value of £10 million and above and duration of 12 months and above should be used to support skills development and delivery of the apprenticeship commitment. This policy is set out in detail in Procurement Policy Note 14/15.</p> <p>Please confirm if you will be supporting apprenticeships and skills development through this contract.</p>	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>
b.	<p>If yes, can you provide at a later stage documentary evidence to support your commitment to developing and investing in skills, development and apprenticeships to build a more skilled and productive workforce and reducing the risks of supply constraints and increasing labour cost inflation?</p>	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>
c.	<p>Do you have a process in place to ensure that your supply chain supports skills, development and apprenticeships in line with PPN 14/15 (see guidance) and can provide evidence if requested?</p>	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>

¹⁵ [Procurement Policy Note 14/15– Supporting Apprenticeships and Skills Through Public Procurement](#)



9.3 Steel¹⁶ – (please refer to supplier selection guidance)	
a.	Please describe the supply chain management systems, policies, standards and procedures you currently have in place to ensure robust supply chain management
b.	Please provide details of previous similar projects where you have demonstrated a high level of competency and effectiveness in managing of all supply chain members involved in steel supply or production so that there was a sustainable and safe supply of steel.
c.	Please provide all the relevant details of previous breaches of health and safety legislation in the last 5 years, applicable to the country in which you operate, on comparable projects, for both: (i) Your company (ii) All your supply chain members involved in the production or supply of steel.

9.4 Suppliers' Past Performance¹⁷ - (please refer to supplier selection guidance - this question should only be included by central government 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 <input type="checkbox"/> No <input type="checkbox"/>
b.	On request can you provide a certificate from those customers on the list?	Yes <input type="checkbox"/> No <input type="checkbox"/>
c.	If you cannot obtain a certificate from a customer can you explain the reasons why?	Yes <input type="checkbox"/> No <input type="checkbox"/>
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 <input type="checkbox"/> No <input type="checkbox"/>
e.	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 <input type="checkbox"/> No <input type="checkbox"/>

¹⁶ [Procurement Policy Note 16/15– Procuring steel in major projects](#)

¹⁷ [Procurement Policy Note 04/15 Taking Account of Suppliers' Past Performance](#)



Department for
Business, Energy
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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
Subject matter of the processing	<p>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.</p> <p>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.</p>
Duration of the processing	<p>Lot 1: Processing will take place from the date of start of Contract for the duration of the Contract. The Contract will end on 31 January 2024 but may be extended until 31 January 2025.</p> <p>Lot 2: Processing will take place from the date of start of Contract for the duration of the Contract. The Contract will end on 31 July 2024 but may be extended until 31 July 2025.</p>



Nature and purposes of the processing	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 the Contractor involved in managing the Contract.
Type of Personal Data	Names, business telephone numbers and email 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 involved in managing the Contract.
Categories of Data Subject	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 European Union or European member state law to preserve that type of data	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.



Annex 2. Pricing Schedule

Bidders are required to complete the pricing tables for Lot 1 if they are applying to Lot 1 and the pricing tables for Lot 2 if they are applying to Lot 2. Bidders applying to both Lots must submit separate bids for each Lot.

If applying for both Lots, please include an attachment titled '*Lot 1 and Lot 2 – Total Price*' which highlights the overlap of costs for Lot 1 and Lot 2 and details the total cost of Lot 1 and Lot 2 should the bidder be awarded both contracts.

For Lot 1, Phase 1 invoicing and payment cycles shall be on a milestone basis and Phase 2 and project governance invoicing and payment cycles BEIS anticipate it to be on a monthly basis. Invoicing and payment will be agreed with the successful supplier.

For Lot 2, Phase 1 invoicing and payment cycles shall be on a milestone basis and Phase 3 and project governance invoicing and payment cycles BEIS anticipate it to be on a monthly basis. Invoicing and payment will be agreed with the successful supplier.



LOT 1 PRICING SCHEDULE

Pricing for Lot 1: Design and delivery of laboratory testing, including the design of conformance testing and performance testing scheme

Please refer to Section 2, 2.8 Deliverables / Outputs Table 7. Summary of outputs for Lot 1 requirements when completing tables.

Annex 2: Table 1.1: Fixed Costs

IMPLEMENTATION (FIXED)					DELIVERABLE
Section 2, 2.8 Deliverables / Outputs Table 7. Deliverable/Output Reference					
	R1 1a.	R1 1b.	R1 1c.	R2 2a.	R2 2c.
Direct Costs					
Labour	£	£	£	£	£
Equipment	£	£	£	£	£
Subcontract Costs	£	£	£	£	£
Travel & Subsistence	£	£	£	£	£
Other (add detail here)	£	£	£	£	£
Sub-Total	£	£	£	£	£
Indirect Costs					
Indirect costs, e.g. HR and Admin Costs, leasehold or rent costs (%)	%	%	%	£	£
Sub-Total	£	£	£	£	£
Total Cost	£	£	£	£	£
Profit (%)	%	%	%	£	£
Total for each activity	£	£	£	£	£



Total	£
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Annex 2: Table 1.2: Testing Costs

		TESTING (VOLUME BASED)	
		Range of ESAs and DSRSP platforms	
Section 2, 2.8 Deliverables / Outputs Table 7. Deliverable/Output Reference		Bottom end of range	Top end of range
R2 2b.		10 ESAs and 5 DSRSP platforms (x2) <i>to facilitate multiple testing to allow design improvements</i>	20 ESAs and 5 DSRSP platforms (x2) <i>to facilitate multiple testing to allow design improvements</i>
Sub-total	£	£	£
R2 2d.		14 ESAs and 7 DSRSP platforms (x2) <i>to facilitate multiple testing to allow design improvements.</i>	28 ESAs and 7 DSRSP platforms (x2) <i>to facilitate multiple testing to allow design improvements</i>
Sub-total	£	£	£
Total	£	£	£
Average of Totals	£		



Annex 2: Table 1.3: Project Governance Costs

PROJECT GOVERNANCE				
For activities detailed under Section 2, 2.11 Working Arrangements Table 9: Working Arrangements – Regular Engagement Please refer to Section 2, 2.6 Anticipated Timeframes and 2.7 Skills, expertise and facilities				
Role Title	Summary of Role	Daily Rate	No. of days on Contract	Total Price Offered per Resource
		£		£
		£		£
		£		£
		£		£
		£		£
Total				£

Annex 2: Table 1.4: Project Governance Non-staff Charges

Item	No. of items	Price per item	Total Price Offered
		£	£
		£	£
		£	£
		£	£
		£	£
Total			£

Annex 2: Table 1.5: Total Bid Price for Lot 1

Table 1.1 Total	£
Table 1.2 Average of Totals	£
Table 1.3 and 1.4 Total	£
Sub-total	£
VAT	£
TOTAL (Sub-total + VAT)	£



LOT 2 PRICING SCHEDULE

Pricing for Lot 2: Design and delivery of demonstration of DSR systems in settings indicative of the real world

Please refer to Section 2, 2.8 Deliverables / Outputs Table 8. Summary of outputs for Lot 2 requirements when completing tables.

Annex 2: Table 2.1: Fixed Costs

IMPLEMENTATION (FIXED)			
Section 2, 2.8 Deliverables / Outputs Table 8. Deliverable/Output Reference			
	R3 3a.	R3 3b.	R4 4a.
Direct Costs			
Labour	£	£	£
Equipment	£	£	£
Subcontract Costs	£	£	£
Travel & Subsistence	£	£	£
Sub-Total	£	£	£
Indirect Costs			
Indirect costs, e.g. HR and Admin Costs, leasehold or rent costs (%)	%	%	%
Sub-total	£	£	£
Total Cost	£	£	£
Profit (%)	%	%	%
Total for each activity	£	£	£
Total	£		

Annex 2: Table 2.2: Testing Costs

PERFORMANCE TESTING (VOLUME BASED)		
Section 2, 2.8 Deliverables / Outputs Table 8. Deliverable/Output Reference	Bottom end of range	Top end of range



R4 4b.	70 ESAs and 7 DSRSP platforms (x2) <i>to facilitate multiple testing to allow design improvements</i>	140 ESAs and 7 DSRSP platforms (x2) <i>to facilitate multiple testing to allow design improvements</i>
Totals	£	£
Average of Totals	£	

Annex 2: Table 2.3: Project Governance Rate Card

PROJECT GOVERNANCE				
For activities detailed under Section 2, 2.11 Working Arrangements Table 9: Working Arrangements – Regular Engagement Please refer to Section 2, 2.6 Anticipated Timeframes and 2.7 Skills, expertise and facilities				
Role Title	Summary of Role	Daily Rate (excluding VAT)	Number of days on Contract	Total
		£		£
		£		£
		£		£
		£		£
		£		£
Total				£

Annex 2: Table 2.4: Project Governance Non-staff Charges

Item	No. of items	Price per item (incl VAT - breakdown)	Total price
		£	£
		£	£
		£	£
		£	£
		£	£
Total			£



Department for
Business, Energy
& Industrial Strategy

Annex 2: Table 2.5: Total Bid Price for Lot 2

Table 2.1 Total	£	
Table 2.2 Average of Totals	£	
Table 2.3 and 2.4 Total	£	
Sub-total	£	
VAT	£	
TOTAL (Sub-total + VAT)	£	



Annex 3. Mandatory Exclusion Grounds

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



Annex 4. 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 5. BEIS Standard Terms and Conditions Schedules

BEIS STANDARD TERMS AND CONDITIONS OF CONTRACT FOR SERVICES will apply to this contract. For this contract, the following core terms and schedules will apply:

- Offer Letter
- Standard Terms
- Invitation to Tender
- Successful bidder's Proposal



Annex 6. Supplementary Information – Programme Performance Use Cases

Use Case	Event Simulated
A	Consumer registering DSR appliance with CEM (where not integrated)
B	Consumer registering with the appointed DSRSP
C	Consumer defining DSR preferences
D	Routine DSR mode of operation based on consumer's preferences and time-of-use tariff (TOU)
E	Response DSR mode of operation based on authenticated and validated Flexibility offers ²² from DSRSP
F	Consumer over-ride of DSR mode
G	DSRSP maintaining DSR service delivery despite availability changes
H	Consumer changing DSRSP (de-registration)



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Annex 7. PAS 1878 and 1879 Standards and SAPC Technical Specification

PAS 1878 Standard: <https://www.bsigroup.com/en-GB/about-bsi/uk-national-standards-body/about-standards/Innovation/energy-smart-appliances-programme/pas-1878/>

PAS 1879 Standard: <https://www.bsigroup.com/en-GB/about-bsi/uk-national-standards-body/about-standards/Innovation/energy-smart-appliances-programme/pas-1879/>

SAPC Technical Specification: [Document Download Centre »](#)
(smartenergycodecompany.co.uk)



Annex 8. Key Performance Indicators

1. Project Key Performance Indicators

Information on the specific KPIs and scoring methodology can be found in the table in section 2 below. The approach to performance management KPIs is outlined below.

The RAG (Red/Amber/Green) status will be used to measure progress and monitor general performance of suppliers achieving KPIs. We intend the tracking of KPIs and quality to be in partnership with BEIS and the Contractor.

KPIs will be used to align the Contractor's performance with the requirements of the Authority. KPIs will be realistic and achievable. The Authority reserves the right to amend the existing KPIs detailed below or add new KPIs throughout delivery with agreement of the Contractor. Any such changes will be confirmed in writing.

Performance against KPIs will need to be monitored by the Contractor and reported to the Authority on a quarterly basis. The Authority reserves 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 quarterly along with the invoice for each invoicing period and will be discussed along with quarterly progress reports at the quarterly project review meetings. KPIs must maintain a green rating in order to demonstrate that the service is being delivered to an adequate quality. In the instance when KPIs are scoring 'red', service credits will apply.

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 Contractor, 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 on each quarterly review, service credits will apply. This approach is listed below. If 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 (as in Amber), 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.

2. Key Performance Indicators and Service Credits

In alignment with the KPIs and related RAG status, there will be a Service Credit scheme which will be initiated after the implementation of services. This is outlined in the table below. The Service Credits will be measured and applied quarterly, with the RAG reporting on KPIs to occur quarterly, ensuring KPIs are consistently monitored and tracked in line with the required quarterly metrics.

KPI Ref	KPI Criteria	KPI measure	KPI Rating		
1	Co-ordination of project management and technical resource	Delivery of the appropriate level of resource (detailed in section 2.7) as agreed with Authority. Resource is in place and/or any gaps in resource are filled within 5 Work Days of identified business need (unless both Parties agreed otherwise).	4 or more occasions where resource is not in place and or gaps are not filled within 5 Work Days of identification of business need.	1-3 occasion where resource is not in place and or gaps are not filled within 5 Work Days of identification of business need	Meets expectations - appropriate level of resource delivered, resource in place and any gaps filled within 5 Work Days of identification of business need.
			0.5% Service Credit gained for each occasion the resource is not in place		
2	100% of testing completed adheres to contract standards	Testing completed under this contract delivered to agreed standards with the Authority with zero inconsistencies	85% or less testing delivered to the standards agreed by the Authority.	86-99% of testing delivered to the standards agreed by the Authority.	Meets expectations - All testing delivered to the agreed standards.
			0.5% Service Credit gained for each percentage under 85% or unless agreed with the Authority otherwise		
3.	100% of the governance reports were up-to-date and delivered on time to the Authority's Project Manager.	Project reports and activity trackers were up-to-date and delivered in the timelines referenced in section 2.11 Working Arrangements.	85% or less delivered to the standards or timelines agreed by the Authority	86-99% delivered to the standards or timelines agreed by the Authority.	Meets expectations - Reports are delivered to the standards and timelines agreed with the Authority.
			0.5% Service Credit gained for each percentage under 85% or unless agreed with the Authority otherwise		



4.	100% of the conformance and performance assessment reports were delivered to the agreed standards and timelines.	Conformance and performance assessment reports (detailed in section 2.8 Deliverable/Outputs) were delivered to the quality standard and timelines agreed with the Authority.	85% or less reports delivered to the standards or timelines agreed by the Authority	86-99% delivered to the standards or timelines agreed by the Authority.	Meets expectations - Reports are delivered to the standards and timelines agreed with the Authority.
			0.5% Service Credit gained for each percentage under 85% or unless agreed with the Authority otherwise		

The table above indicates the relevant KPIs which are applicable to the service credit scheme and the associated performance measure on a **quarterly basis**, applicable if the KPI rating is red. The RAG status of each KPI will be monitored monthly in collaboration with suppliers before the applicability of quarterly service credits.

It is expected that all KPIs will be achieved 95% of the time and ongoing discussion with suppliers will reflect this. However, service credits will only be applicable if the KPI performance falls below 85%. If the supplier does not achieve 85% success as outlined in the KPIs, there will be a penalty clause of 0.5% Service Credit gained for each percentage under the specified performance measure.

Worked Example:

Over the course of the quarter, the Contractor achieved KPI 2 (Testing completed adheres to contract standards) 79% of the time.

As the service credits scheme is applicable for 85% or under, there will be service credits applied on (85% - 79%) 6%.

The service credit will be 0.5% for every percentage. Therefore, $0.5\% \times 6 = 3\%$ service credits will be applied to the monthly invoice.



Annex 9. Net Zero Innovation Portfolio Key Performance Indicators

BEIS requires all funded projects under the Net Zero Innovation Portfolio (NZIP) to report on key performance indicators (referred to as NZIP KPIs) to provide a consistent approach to reporting evidence, and to track and measure key outputs, outcomes and impacts. The evidence collected is used to demonstrate the impact of the NZIP on achieving the government's Net Zero ambitions and is necessary to be able to run future competitions.

Contractor will be required to report on KPIs at various intervals for each project, including at the start of the project, during project delivery, at project closure and for three years after project closure. BEIS will supply funded projects with a reporting template to complete at set intervals, and recipients are expected to return the template to their Monitoring Officer upon completion, who will review and quality assure it. At project start, your BEIS Monitoring Officer will provide further details about the calculation of these KPIs and assist with the initial completion and measurement.

Please note that it may at times be necessary to make changes to the NZIP KPIs, data collection modes or frequencies. We will endeavour to keep all changes to a minimum and communicate any implications to you via the Monitoring Officers in advance of collection.

Please also note that beyond these NZIP KPIs, BEIS conducts independent evaluations of many of its programmes. The Contract Recipient will be required to collaborate in reasonable evaluation activities, including, but not limited to, providing programme-specific KPIs, completing questionnaires or surveys, participating in interviews and workshops, communicating the learnings from the project, providing costs/sales data and elaboration of any of the measures covered in the NZIP KPIs.

For this contract BEIS will be collecting information on KPI 1-4, with data provided by Monitoring Officers marked in *italics*. Not all data will be collected annually.

KPI	KPI description	Metrics
<i>KPI 1</i>	<i>Number of NZIP projects supported</i>	<ul style="list-style-type: none"> • <i>Project start and completion.</i>
<i>KPI 2</i>	<i>Number of NZIP projects that have met objectives</i>	<ul style="list-style-type: none"> • <i>Extent to which project objectives have been met to date</i> • <i>Change in objectives and reasons for change</i>
<i>KPI 3</i>	<i>Number of organisations supported to deliver the project</i>	<ul style="list-style-type: none"> • <i>Lead partner delivering the project: name, organisation size and number of jobs supported within the organisation to deliver the project.</i> • <i>Other partner organisations involved in delivering the project as named on the Contract or Grant: name, organisation size and number of jobs supported within the organisation(s) to deliver the project.</i>



KPI 4	Number of active contractual and non-contractual business relationships supported	<ul style="list-style-type: none">• Number of contractual relationships: name and type of contractual relationship.• Number of formal non-contractual business relationships: name and type of non-contractual relationship• Extent to which your organisation expanded its network of business relationships as a result of the project
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