

Net Zero Innovation Portfolio

# Interoperable Demand Side Response Programme

Stream 3: Feasibility Study - Interoperable Energy Management Systems

SBRI COMPETITION GUIDANCE NOTES



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# INTEROPERABLE DEMAND SIDE RESPONSE – Stream 3

Glossary of terms and definitions
Supporting Documents
Interoperable Demand Side Response Programme – Guidance for Applicants
1. Competition Overview
1.1 Background
1.2 Competition Context
1.3 Competition Aims and Objectives
1.4 Context
1.5 Competition Scope
1.6 Competition Specification
2. Competition Deliverables
3. Competition Timetable, Application and Assessment Process
3.1 Competition Timetable
3.2 Application
3.3 Assessment
3.4 Award
4. Contract Size and Restrictions on Funding
4.1 Competition budget and availability
4.2 Eligible Costs
5. Eligibility for Funding
5.1 Competition Eligibility Criteria
5.2 General BEIS Conditions
6. Assessment Process and Criteria
6.1 Assessment Criteria
6.2 Scoring Guidance
6.3 Selection Approach
7. Financial Eligibility and Viability
7.1 Financial Eligibility
7.2 Financial viability checks
8. Notifications and Publications of Results
8.1 Notification
8.2 Publication of results

# INTEROPERABLE DEMAND SIDE RESPONSE – Stream 3

9. Reporting	39
9.1 Reporting, Knowledge Sharing and Evaluation Requirements	39
9.2 Key Performance Indicators	39
9.3 Evaluation Requirements	41
10. Intellectual Property	42
11. Feedback, Re-application and Right of Appeal	43
12. Confidentiality and Freedom of Information	44
13. Terms and Conditions	45
14. Further Instructions to Applicants	46
14.1 Application checklist	46
14.2 Data Protection and Security	47
15. Non-Collusion	48
Appendix 1 - Eligible and Ineligible Costs	49
Appendix 2 - Exclusion Grounds	51
Appendix 3 – Completion of Project Cost Breakdown Form	56

# Glossary of terms and definitions

Authority / Contracting Authority	The Department for Business, Energy and Industrial Strategy (BEIS), 1 Victoria Street, London S1 0ET
BEIS	Department for Business, Energy and Industrial Strategy
Applicant	A company, organisation or consortia of companies and/or organisations that submits a tender in response to the competition
CEM	Customer Energy Manager – logical entity providing functionality used to manage one or more ESAs, specific to a supply point, to provide DSR services
Competition	Means the process used to establish awarding of contracts for the provision of feasibility studies relating to interoperable energy management systems
DCC	Data Communications Company
DSR	Demand Side Response
DSRSP	Demand Side Response Service Provider
EMS	Energy Management System –used to mean domestic HEMS (home energy management system) and smaller non-domestic settings energy management systems
ESA	Energy Smart Appliance
FAQs	frequently asked questions
Feasibility Report	The key Contract deliverable
Final Project Plan	The document to be agreed by successful Applicants and the Authority used to track monthly progress against key milestones over the Contract period. The outline project plan submitted by Applicants as part of the Assessment process will form the basis of this Final Project Plan.
FOIA	Freedom of Information Act (2000)
GDPR	General Data Protection Regulations
HEMS	Home Energy Management System

# INTEROPERABLE DEMAND SIDE RESPONSE - Stream 3

HMG	Her Majesty's Government				
IDSR	Interoperable Demand Side Response				
IPR	Intellectual property rights				
KPI	Key Performance Indicator				
М	Million				
Minimum Threshold Scores	Means the minimum scores that Applicants must achieve against the Assessment Criteria to be considered for funding, as detailed at Section 6.3				
NZIP	Net Zero Innovation Portfolio				
OpenADR	Open Automated Demand Response				
PAS	Publicly Available Specification				
Project Cost Breakdown Form ('the')	Means the 'BEIS Project cost breakdown form provided as an Electronic Appendix to this Competition pack, and which Applicants must complete as their pricing proposal.				
RTO	Means Research and Technology Organisation. RTOs are (mainly) private non-profit research performers or commercial research enterprises providing R&D services, both to government and business <sup>1</sup> .				
SAPC	Standalone Auxiliary Proportional Controller				
SMHAN	Smart metering home area network				
SMWAN	Smart metering wide area network				
SME	Small and medium enterprise				
T&C	Terms and conditions				
UK	United Kingdom				
VAT	Value-Added Tax				

 $<sup>\</sup>frac{1}{\text{https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment}} \\ \frac{1}{\text{bis-15-321-research-and-innovation-organisations-in-the-UK-innovation-functions-and-policy-issues.pdf}}$ 

#### INTEROPERABLE DEMAND SIDE RESPONSE - Stream 3

Please note that references to the "Department" or "Authority" 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 and Industrial Strategy (BEIS).

Any reference to "Programme" is a reference to the Net Zero Innovation Portfolio: Interoperable Demand Side Response (IDSR) Programme, run by the Department for Business Energy and Industrial Strategy (BEIS).

Any reference to "portfolio" is a reference to the Net Zero Innovation Portfolio (NZIP)2.

<sup>&</sup>lt;sup>2</sup>https://www.gov.uk/government/collections/net-zero-innovation-portfolio

# **Supporting Documents**

The following documents support this Competition Guidance and are available within the application form.

- Annex 1: Contract Terms and Conditions
- Annex 2: Declarations
  - Declaration 1: Statement of non-collusion
  - o Declaration 2: Form of Bid
  - Declaration 3: Conflict of Interest
  - Declaration 4: Code of Practice for Research
  - Declaration 5: The UK General Data Protection Regulation Assurance Questionnaire for Contractors
  - o Declaration 6: Standard Selection Questionnaire
- Annex 3: Project Cost Breakdown Form



# Interoperable Demand Side Response Programme – Guidance for Applicants

The purpose of this Guidance is to give a comprehensive overview of the Interoperable Demand Side Response (IDSR) Stream 3 SBRI Competition (the Competition) and associated procedures for participation in the Competition. For competition guidance on other Streams, please visit the <a href="Competition website">Competition website</a>.

# 1. Competition Overview

# 1.1 Background

This Competition forms Stream 3 of the Interoperable Demand-Side Response (IDSR) programme. A maximum of £150,000 will be available for the feasibility studies, with a maximum value of £30,000 per project. The IDSR programme consists of three Streams of work, to support the innovation, design, and demonstration of interoperable demand side response (DSR) systems.

Stream 1 Stream 2 Stream 3 Phase 1: Phase 1: Feasibility studies for interoperable energy Design and Design and management systems development of development of DSR systems to DSR systems via PAS 1878 the GB smart metering system Testing and facilities delivered by the **Independent Laboratory Testing** Phase 2: Partner appointed by BEIS Laboratory Testing and Demonstration Demonstration and facilities delivered Phase 3: by the Independent Real World **Demonstrator Partner** appointed by Demonstration in Settings Indicative of the BEIS Real World

Figure 1.1: Schematic overview of the IDSR programme

# 1.2 Competition Context

As electricity demand rises due to the electrification of transport, heat and industrial processes, flexibility from consumers will become increasingly important.

The '<u>Transitioning to a net zero energy system - Smart Systems and Flexibility Plan 2021</u>' set out a suite of policies to enable flexibility from consumers, known as "demand side response". Consumers will need access to "energy smart" appliances that make it easier to change their consumption patterns, alongside tariffs and services that incentivise this change.

As part of this, the government has committed to taking powers to set regulatory requirements for "energy smart" appliances, guided by the core principles of interoperability, data privacy, cyber security and grid stability, herein the 'core principles'.

The government also commissioned the British Standards Institute (BSI) to develop two standards (PAS 1878<sup>4</sup> and 1879<sup>5</sup>) with industry. These standards were published last year and set out a technical framework for small-scale DSR, guided by the same core principles, and compatible with the GB Smart Metering system.

As stated in the Smart Systems and Flexibility Plan 2021, the government is aiming to consult later this year on an appropriate regulatory approach for flexibility service providers and other organisations controlling load.

The descriptions for the core principles referred to throughout this document are based on descriptions outlined in the PAS 1878 and 1879 and can be found below. Further information can be found in the government's consultation on standards for energy smart appliances<sup>6</sup> and PAS 1878 and 1879.

Principle	Description <sup>7</sup>
Interoperability	The ability of an energy smart appliance (ESA) to be operated by any authorised DSR Service Provider for DSR services.
Data privacy	The secure transmission and storage of data on the device or with any controlling party.

<sup>&</sup>lt;sup>3</sup>https://www.gov.uk/government/publications/transitioning-to-a-net-zero-energy-system-smart-systems-and-flexibility-plan-2021

<sup>4</sup>https://www.bsigroup.com/en-GB/about-bsi/uk-national-standards-body/about-standards/Innovation/energy-smart-appliances-programme/pas-1878/

<sup>&</sup>lt;sup>5</sup>https://www.bsigroup.com/en-GB/about-bsi/uk-national-standards-body/about-standards/Innovation/energy-smart-appliances-programme/pas-1879/

<sup>6</sup>https://www.gov.uk/government/consultations/proposals-regarding-setting-standards-for-smart-appliances

<sup>&</sup>lt;sup>7</sup>Please refer to PAS 1879 standards for details on the functionalities that support the four core principles.

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

This programme is part of the up to £65 million overarching Flexibility Innovation Programme which seeks to enable large-scale widespread electricity system flexibility through smart, flexible, secure, and accessible technologies and markets. The Flexibility Innovation Programme will fund innovation across a range of key smart energy applications and sits within the £1 billion NZIP.

# 1.3 Competition Aims and Objectives

The Competition aims to improve and develop understanding of how energy management systems (EMS) can act together with energy smart appliances (ESAs) to meet the core principles as set out in the 'Transitioning to a net zero energy system - Smart Systems and Flexibility Plan 2021'. Specifically, with reference to ESAs controlled using interoperable control methods.

The key objectives of this Competition are to:

- Explore the feasibility of developing an EMS with an interface to:
  - PAS 1878 compliant Customer Energy Managers (CEM), and
  - GB smart metering system and standalone auxiliary proportional controller (SAPC) (building on Annex D and Annex F in PAS 1878)
- Provide key information to aid the standardisation of Interface C for interoperability, ensuring that the proposed interface is compliant with the requirements set out in PAS 1878.

# 1.4 Context

As set out at **Figure 1.2** below, 'EMS' is used to mean HEMS (Home Energy Management System) in low voltage (LV) domestic and small non-domestic settings. An EMS is a system that, through control and coordination of devices, optimises a building's energy consumption/generation to minimise cost and/or production of carbon dioxide (CO2) emissions or other external factors, whilst maintaining user comfort.

#### 1.4.1 PAS 1878

Currently PAS 1878, although seeking to standardise automated demand side response, allows for energy management systems (referred to as HEMS in the standard but this could include non-domestic applications). PAS 1878 states:

"The optional home energy management system might provide energy management functionality additional to that provided by the CEM, provide additional information or requests for use by the CEM, or coordinate the operation of two or more CEMs associated with a premises.

Connection of multiple CEMs with a single HEMS over a standardized interface might allow the energy management (including DSR) coordination of multiple ESAs within a single premises."



PAS 1878 defines the interface between the EMS and one or more CEMs as "Interface C" as outlined in Figure 1.28 below

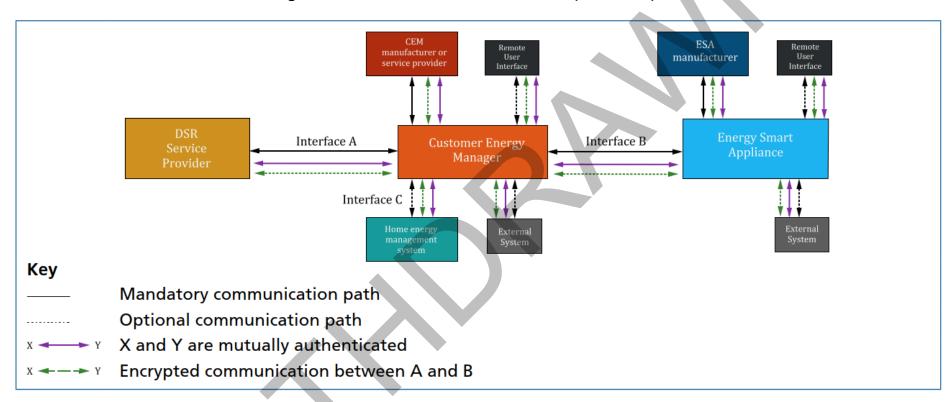


Figure 1.2: Communications Interfaces (PAS 1878)

<sup>8</sup>https://www.bsigroup.com/en-GB/about-bsi/uk-national-standards-body/about-standards/Innovation/energy-smart-appliances-programme/pas-1878/

#### INTEROPERABLE DEMAND SIDE RESPONSE – Stream 3

Presently Interface C is required to comply with the cyber security requirements of PAS 1878 but there is no further standardisation of Interface C defined in PAS 1878. As part of the feasibility study, we expect Applicants to provide views on how to define this interface to ensure interoperability.

When the ESA is operating according to Routine mode, and not responding to a flexibility offer request from the DSRSP, its intended operation shall include expected behaviour according to consumer preference and, optionally, the local energy environment. For example, time of use tariff, local generation, minimum carbon, including operation as part of a wider EMS, under the control of the CEM (out of scope of PAS 1878).

An EMS optimizes Routine mode across more than one ESA/device (which could mean, for example, an ESA and a generation/storage device in the premises). PAS 1878 suggests that this could be done via the same CEM, if you were to define Interface C for interoperability.

# 1.4.2 GB Smart Metering System

In **Figure 1.2** for a SAPC that is connected to the ESA, DSRSP messages are sent to the SAPC via two possible routes:

- the internet and a CEM as per Figure 1.2; and
- the smart metering SMWAN and SMHAN, in which case the CEM interface for the SAPC/ESA in Figure 1.2 is Data Communications Company (DCC).

# 1.5 Competition Scope

This Competition scope is for feasibility studies focused on low voltage (LV) systems used in domestic and LV connected non-domestic systems.

These feasibility studies shall consider how the EMS could operate and integrate with **both of** the following:

- Systems dispatching DSR, using CEM, in compliance with PAS 1878. The CEM, DSRSP, ESA interfaces are compliant with PAS 1878 and the principles of PAS 1879
- 2. Systems dispatching DSR using a SAPC and OpenADR via the GB smart metering system (building on Annex D and Annex F in PAS 1878)<sup>9</sup>

### **Out of Scope**

Funding will not be provided for

- Projects considering EMS for non-domestic systems connected at high voltage (>1000V)
- Projects considering EMS for the coordination of ESAs where ESA are not engaging with PAS 1878 and 1879 or the GB smart metering system in accordance with the SAPC specification for DSR.
- Projects considering an EMS-CEM interface using a standard that is not open (as defined in the Open Standards principles – see Section 1.6)

<sup>&</sup>lt;sup>9</sup>Applicants should refer to the latest version of the specification where possible.

# 1.6 Competition Specification

This competition requires projects to deliver feasibility studies which meet the following specifications:

# **Table 1.1: Competition Specification**

#### **Specification Description**

- 1. For the systems dispatching DSR using a CEM in compliance with PAS 1878, the feasibility study shall provide plans for how to coordinate control of EMS with CEM to assist in developing the interface such that:
  - Plans comply with the core principles (interoperability, data privacy, grid stability and cyber security)
  - o Plans comply with system level architecture as defined in PAS 1878.
  - The interface complies with Section 6 of the PAS 1878 (Cyber Security).
  - Standards used are open as defined in the Open Standards principles<sup>10</sup> and internationally compatible where possible.
- 2. For the systems dispatching DSR using SAPC and OpenADR via the GB smart metering system (building on Annex D and Annex F in PAS 1878), the feasibility study shall provide plans for how to coordinate control of EMS with SAPC to assist in developing the interface such that:
  - Plans comply with the core principles (interoperability, data privacy, grid stability and cyber security)
  - Plans comply with the GB smart metering system
  - Standards used are open as defined in the Open Standards principles and internationally compatible where possible.

PAS 1878 Annex D is a starting point, systems will build on this by using OpenADR and PAS 1878 Annex F in addition.

- 3. For both systems outlined in points 1 and 2 above, the feasibility study shall, as a minimum, describe the functionality of the EMS and provide descriptions on how the project considers:
  - EMS should connect and communicate with ESA/CEMs or ESA/SAPC
  - EMS should connect and communicate with DSRSP (only if consortia consider this advantageous)
  - EMS should connect and communicate with energy supplier and/or gain tariff information (only if consortia consider this advantageous)
  - Consumer defines operational preferences

<sup>10</sup> https://www.gov.uk/government/publications/open-standards-principles/open-standards-principles

- Role of EMS service provider (if any)
- Consumer defines DSR preferences (if consortia consider the EMS should have a role in this)
- Consumer disconnects EMS from ESA/CEMs or ESA/SAPC
- 4. Appointed Suppliers will support knowledge sharing and programme level dissemination.
- 5. Feasibility studies will benefit from reports from Streams 1 and 2 of the IDSR Programme. These reports will outline the Stream 1 and 2 projects views on how ESAs can interact with EMS. This report will also include details of what information exchanges will be required for interaction with their ESA. Where reasonably practicable, projects receiving funding will be required to incorporate relevant findings and benefits from Stream 1 and 2 projects into their workflow and final feasibility report.
- 6. Due to the interlinking nature of the different Streams within the IDSR Programme the successful Applicants shall work collaboratively with other anticipated Flexibility Innovation Programme activities and projects to ensure consistency between work scope. The successful Applicant will be required to access information from the IDSR Stream 1 and 2 projects and incorporate this information into their work as they progress. As a result, projects within IDSR Stream 3 will be required to enter into a collaboration agreement with the organisation(s) appointed in Streams 1 and 2. An example of the detailed collaboration agreement will be shared with successful Applicants.
- 7. Successful Applicants will also be expected to work with, and where relevant enter into a collaboration agreement with:
  - Other relevant organisations or stakeholders involved in delivery of the Flexibility Innovation Programme

BEIS anticipates supporting Projects in overcoming the first of a kind barrier via provision of a process for clarifications and/or issue resolution and will capture and coordinate the assumptions on which systems are developed.

# 2. Competition Deliverables

This section sets out the deliverables required as part of this project to meet the objectives of this Competition. It should be noted that knowledge dissemination and sharing activities are a key part of the projects supported in this Competition, as discussed in **Section 9.** The Competition deliverables are as follows:

**Table 2.1: Competition Deliverables** 

Deliverable	Description				
Feasibility Report	Projects are expected to produce a <b>Feasibility Report</b> to BEIS detailing the following:				
	Description of the EMS interfaces including:				
	Required data exchanges				
	Communications protocol used				
	Cyber security				
	Functionality				
	Expected interfaces with DSRSP				
	<ul> <li>Potential operating strategies for EMS, including a description of its role and its hierarchy with respect to other DSR operations in the system</li> </ul>				
	Including any details of technical limitations				
	Commentary on the differences in coordinating control with the different DSR dispatch approaches				
	Methodology for incorporating user preferences				
	Technical capabilities				
	Costs				
	Ease of application				
	Barriers to implementation, and how these might be navigated.				
	The Feasibility Report will be required to incorporate relevant findings and benefits from Stream 1 and 2 projects on how ESAs can interact from EMS.				
	Within its 'Conclusions' section, the Feasibility Report should comment as to the deemed probability of success for the relevant system approaches.				
	Projects shall also provide a version of the feasibility study report suitable for publication.				

# INTEROPERABLE DEMAND SIDE RESPONSE – Stream 3

Presentation	Summary of the conclusions of the Feasibility Study	
Knowledge Sharing Events	Participation in a maximum of <b>two</b> events where the results of the feasibility study will be presented to BEIS and the participants in Stream 1 and 2 of the IDSR programme. This should include:	
	Summary of Feasibility Study and key findings.	
	<ul> <li>Commentary on Stream 1 and 2 projects views (based on external inputs, see Section 1.6.), particularly highlighting any differences with the consortia's views.</li> </ul>	
Knowledge Dissemination	The Authority may publish the Feasibility Studies on GOV.UK having f consulted with Suppliers around the need to maintain confidentiality of commercially sensitive information.	



# Competition Timetable, Application and Assessment Process

The Competition funding will be awarded using the Small Business Research Initiative (SBRI) approach<sup>11</sup>. SBRIs are a well-established pre-commercial procurement process that enables the development of innovative products and services in response to specific challenges faced by government departments and public sector bodies. Successful business partners receive the finance to develop their innovative ideas, generating new business opportunities and routes to market.

# 3.1 Competition Timetable

Successful projects are expected to run from January 2023 until June 2023. Indicative key dates applicable to the Competition are shown in Figure 3.1 below. Please note BEIS reserves the right to vary these dates.

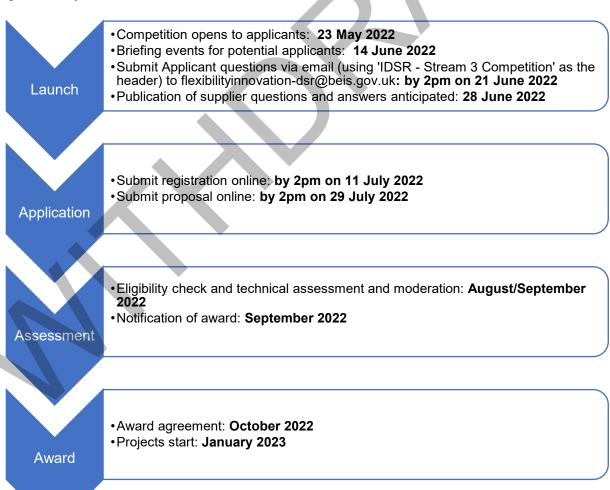


Figure 3.1: Competition timetable

<sup>11</sup>https://www.gov.uk/government/collections/sbri-the-small-business-research-initiative

# 3.2 Application

The Application process is as follows:

#### Stage 1 - Accessing application documentation

- Applicants will be asked to complete an <u>online Registration Form</u>, following which a
  unique password will be generated. This will be required to access and complete the
  online Competition application form. Applicants are encouraged to submit Registration
  forms by 2pm on 11 July 2022.
- Within a week of receipt of the Registration Form, BEIS will issue a confirmation email to the Applicant, with a password to log into the online application system and submit a subsequent application.
- Potential Applicants can also find further information at a programme wide information event, which will take place on 14 June 2022. Documentation from the event will be published on the <u>Competition website</u> and is also available on Contracts Finder.

## Stage 2 - Completion of online application including clarification stage

- On receipt of the unique password, Applicants can then complete the online application form and submit supporting information outlining their proposal.
- To inform their application, Applicants are able to submit clarification questions to <u>flexibilityinnovation-dsr@beis.gov.uk.</u> Applicants should state in the email header that the clarification question(s) relate to the 'IDSR Stream 3 Competition'. The deadline for submitting clarification questions is 2pm on 21 June 2022. Questions submitted after this deadline may not be answered.
- The Authority will publish replies to any questions which, in its' judgement, are of
  material significance through an online anonymised FAQ sheet on or before 28 June
  2022. All Applicants should consider the answers to the clarification questions and this
  Competition Guidance when preparing their own bids. The Authority will evaluate bids
  on the assumption that they have done so.
- Applicants should ensure they have read this Competition Guidance document before starting to complete the application form.
- Applicants can save their application at any time by selecting "Save and Continue
  Later." You will then be emailed a link which you can use to return to your application
  and complete it, logging in with the same password.
- Any queries with the online application should be emailed to <u>flexibilityinnovation-dsr@beis.gov.uk</u>. Applicants should state in the email header that the clarification question(s) relate to the 'IDSR Stream 3 Competition'.
- You may also find it useful to review the offline application form. This is a Word
  document copy of the questions that will be asked of you in the online application form,
  which you can use to view the sequence of all the questions and to plan your time

- allocation for submitting your application. It is for reference only and you should not complete the Word document to submit your application. All applications will need to be completed and submitted through the online platform.
- Alongside the offline application form, you will find offline examples of the forms and
  declarations you need to complete and return with your application (see Submission
  Content below). These examples are also for reference only. In your online application,
  you will be provided with links to download these forms and declarations. You then need
  to sign them (please note you cannot do this directly in the application platform) and reupload them to your application.

#### Stage 3 - Submission of Proposal

- The full proposal including uploads of all required supporting documents (see 'Submission Content' bullet below) must be submitted online by 2pm on 29 July 2022.
   Please note that each supporting document cannot exceed the size limit as set out within the application form.
- Any applications or supporting documentation received after the application deadline will not be considered.
- Submission Content. Each proposal must include the following:
  - Completed application form (online) including responses to relevant Assessment
     Criteria as set out at **Section 6** to this document.
  - The following signed declaration forms. Applicants must download through the online application form, sign, and re-upload to their application:
    - Declaration 1: Statement of non-collusion
    - Declaration 2: Form of Bid agreeing to the terms of the Competition application process
    - Declaration 3: Conflict of Interest
    - Declaration 4: Code of Practice for Research
    - Declaration 5: The UK General Data Protection Regulation Assurance
       Questionnaire for Contractors
    - Declaration 6: Standard Selection Questionnaire
- Completed Cost Breakdown Form, [downloadable through the online application form; Applicants must sign and re-upload to their application].
- Completed project plan, for example, detailed project Gantt chart and description of work packages, **[to be attached by applicant to their online application].**
- You should answer all questions on the application form in full. Incomplete applications
  will likely be rejected, although BEIS may, at its discretion, request clarification or
  additional data before making a final decision.

- **Submission Costs:** You will not be entitled to claim from BEIS any costs or expenses that you incur in preparing your bid, whether or not your proposal is successful.
- **Consortium Bids**: Bids may be submitted by project teams (consortia). Only one application should be submitted for each bid, but all consortium partners are required to sign the completed declaration form for their bid (Form of Tender).
- If a consortium is not proposing to form a separate legal entity, the project partners will need to complete a Consortium Agreement and funding will not be provided by BEIS until a signed consortium agreement has been finalised between all the members of the project consortium. A satisfactory consortium agreement must be signed within one (1) month of Grant Funding Agreement signature. Please note that BEIS reserves the right to require a successful consortium to form a single legal entity in accordance with Regulation 19 of the Public Contracts Regulations 2015 (as amended by the Public Procurement (Amendment etc.) (EU Exit) Regulations 2020).
- BEIS recognises that arrangements in relation to consortia and sub-contractors may (within limits) be subject to future change. Applicants should therefore respond in the light of the arrangements as currently envisaged and are reminded that any future proposed changes in relation to the consortium must be submitted to BEIS for approval.
- Multiple Bids. Applicants may put in multiple bids or be part of multiple consortia. Any
  Applicant involved in multiple bids will have to demonstrate ability to deliver multiple
  projects simultaneously. For the avoidance of doubt no consortia member can claim for
  funding for duplicate activities performed on more than one Project.
- Tender Validity. Tenders shall be valid for a minimum of 90 calendar days from the submission deadline.
- **Information Sharing**. BEIS may share information from applications with other UK government departments, UKRI or with Ofgem for evaluation of the programme against broader decarbonisation efforts.

# 3.3 Assessment

Applications will initially be assessed against the Eligibility Criteria in Section 5 below.

Applications which fail to satisfy the Eligibility Criteria will not be assessed further, so it is essential to ensure that your project meets these criteria before you submit your application. Ineligible applications will receive brief feedback on the reason for their ineligibility. The assessment process is described in Section 6.

# 3.4 Award

The Competition contract agreements are expected to be signed in October 2022. Please note that BEIS reserves its right to not award any Contract agreements under this Competition.

**Contract terms:** The Contract Agreement will be based on the BEIS pre-commercial procurement contract. The terms and conditions for this agreement are provided in Annex 1. These terms and conditions are final and non-negotiable: by applying to the Competition, you are agreeing to these terms and conditions.

Whilst no changes to the Contract will be permitted, there will be an opportunity for successful Applicants, prior to contracts being signed, to discuss the Contract at a meeting with official(s) from BEIS. The BEIS official(s) will explain the contractual terms and conditions and respond to any queries which the Applicant may have at this stage. It is crucial that all Applicants review the terms and conditions prior the submission of their application and ask any questions prior to submitting the bid. BEIS officials will also discuss any risks raised through the assessment process and finalise the formal project milestones with the project team before issue of the Contract.

**Consortium bids**: For consortium bids, the lead company (project co-ordinator) will be the recipient of the Contract (the Supplier) and will be responsible for managing payment to the other project partners as well as sub-contractors.

# 4. Contract Size and Restrictions on Funding

# 4.1 Competition budget and availability

The total budget available for the Competition is up to £150,000 (excluding VAT) although BEIS may, at its discretion, choose not to make an award, increase the available budget, or allocate an award that is less than the total budget depending on the quality of applications.

A maximum of £150,000 will be available for the feasibility studies, with a maximum value of £30,000 per project. We anticipate funding approximately **five** projects. If budget is available after the initial award, additional projects may be funded in line with the process described in **Section 6.3.** 

Should further budget become available, BEIS may, at its discretion, choose to award funding to additional projects in order of total scores achieved.

When bidding, all costs should be provided excluding VAT. Your total costs excluding VAT should not exceed the maximum allowable budget per project of £30,000<sup>12</sup>.

## **IMPORTANT INFORMATION - No Reliance**

Nothing in this funding call requires BEIS to award any Applicant a contract of any particular amount or on any particular terms. BEIS reserves the right not to award any contracts.

Applicants apply for funding in this Competition at their own risk and expense. BEIS will not, under any circumstances, be liable or nor make any contribution to the costs of participation, preparing proposals and taking any professional or specialist advice. Applicants accept the risk that they may not be awarded a contract. BEIS gives no guarantee or warranty as to the nature, or number of projects funded.

# 4.2 Eligible Costs

Applicants are instructed that the project costs quoted must reflect actual costs at a 'fair market value' and for this Competition, suppliers' profit must not be included. Your application must have at least 50% of the contract value attributed directly and exclusively to research and development services.

<sup>&</sup>lt;sup>12</sup>SBRI funding is within the scope of VAT, so you can charge output VAT on top of your submitted costs (maximum £30,000). If you incur non-recoverable input VAT costs, you can pass this on to BEIS, but these non-recoverable VAT costs will be included within the maximum £30,000 cost. BEIS cannot offer tax planning advice and Applicants should seek their own advice on tax status and recoverability.

#### INTEROPERABLE DEMAND SIDE RESPONSE - Stream 3

Applicants are required to complete the Project Cost Breakdown Form (attached to the online application form) to provide the necessary cost information for the assessment process.

With the Competition requiring production of desktop reports, BEIS anticipates that Applicants costs are likely to relate to people costs and linked overheads. Project costs quoted must meet the requirements linked to eligible and ineligible costs as set out in **Appendix 1**. Further itemisation of costs and methods of calculation may be requested to support the application.



# 5. Eligibility for Funding

# 5.1 Competition Eligibility Criteria

To be eligible for funding, proposed projects must meet all the following eligibility criteria. These will be listed in the online application form as the Yes/No questions exemplified below.

## 1. Project Location

Over 50% of the project's activities (as measured by eligible project costs) must be conducted in the UK.

#### 2.Technology Scope

The Competition is interested in how the developing framework(s) for providing DSR (PAS 1878 and 1879 and SAPC in accordance with the GB smart metering system) can interact with EMS. Specifically, for domestic and low voltage connected non-domestic consumers.

Exclusions: Funding will not be provided for

- Projects considering EMS for non-domestic systems connected at high voltage (>1000V)
- Projects considering EMS for the coordination of ESAs where no ESA is engaging with PAS 1878 and 1879 or the GB smart metering system in accordance with the SAPC specification for DSR.
- Projects considering an EMS-CEM interface using a standard that is not open (as defined here: Open Standards principles - GOV.UK)

#### 3. Project Status

BEIS cannot provide funding for retrospective work on projects or provide funding to projects which have already begun.

## 4. Project Timescales

Target dates for key project milestones will be agreed between the successful Applicant and BEIS prior to awarding the contract.

Feasibility studies must be completed and approved by BEIS by 30 June 2023.

#### 5. Additionality

Projects can only be funded where evidence can be provided that innovation would not be taken forwards (or would progress at a much slower rate) without public sector funding.

#### 6. Terms and Conditions

Applicants must agree to the published Terms and Conditions.

#### 7.Contract size

Funding will be awarded for up to five, single phase feasibility studies.

As detailed at **Section 4.1**, the indicative maximum contract size per project is £30,000 (this must cover 100% of project costs).

## 8. Eligible project costs

BEIS will fund 100% of eligible project costs through this competition, no match or in-kind funding is allowed.

SBRI is aimed at organisations working on research and development (R&D) of an innovative process, material, device, product, or service prior to commercialisation. Projects requesting funding for commercialisation activities are not eligible. Project teams are not permitted to include profit or contingency costs in the eligible project costs.

Further information on eligible project costs is set out in **Appendix 1.** 

#### 9.Risk-Benefit Sharing

The sharing of risks and benefits is an important aspect to the SBRI approach. Projects receive financial support and retain any intellectual property generated, with certain rights of use retained by BEIS (see **Section 10**). Project outputs are also expected to be shared widely and publicly and project teams are not permitted to include profit in the eligible project costs.

#### 10.Applicants and project team composition

The work is expected to be delivered by a single organisation or by a consortium.

To lead a project consortium or work alone your organisation must:

- be a business of any size, a research organisation or a research and technology organisation (RTO) with a base in the UK
- intend to exploit the results commercially to deliver EMS functionality from or in the UK

Special Purpose Vehicles are permitted to lead consortia only if they are constituted as legal entities.

Members of the project team can be:

- Private sector companies: both SMEs and large enterprises can apply as sole
   Applicants or as part of a consortium with other private sector companies, or in a
   consortium with academic, research or public sector organisations.
- Academic, research (including RTOs), public, third sector or community organisations

Applicants (sole Applicants and lead project members of consortium bids) must be able to demonstrate that they are financially viable.

Applicants based in Northern Ireland, or with significant interests or subsidiaries in Northern Ireland, will also be subject to scrutiny from the European Commission in accordance with Article 10 of the Northern Ireland Protocol to the UK/EU Withdrawal Agreement.

#### 11. Multiple Applications

If project consortium members or subcontractors are part of multiple successful bids, they must be able to deliver on them and they must not have applied for funding for the same piece of work more than once.

# 5.2 General BFIS Conditions

Applicants must not meet any of the BEIS grounds for mandatory rejection, and as a general rule they should not meet any of the BEIS grounds for discretionary rejection (**see Appendix 2**). Applicants will be required to declare this as part of completing the Standard Selection Questionnaire.

#### Conflicts of interest

The BEIS standard terms and conditions of contract include reference to conflict of interest and require Suppliers 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 Supplier, subcontractor (or consortium member) which could affect the actual or perceived impartiality of the research or analysis.

Where there may be a potential conflict of interest, it is suggested that the consortium or organisation designs working arrangements 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.

This process by which conflict of interest is managed in the funding application is as follows:

 During the bidding process, Applicants may contact BEIS to discuss whether or not their proposed arrangement is likely to yield a conflict of interest.

- Suppliers are asked to sign and return Declaration 3 (this is embedded in the online application form and is included for reference in Annex 2) to indicate whether or not any conflict of interest may be, or be perceived to be, an issue. If this is the case, the contractor or consortium should give a full account of the actions or processes that it will use to ensure that conflict of interest is avoided. In any statement of mitigating actions, contractors are expected to outline how they propose to achieve a robust, impartial and credible approach to the research.
- When tenders are scored, this declaration will be subject to a pass/fail score, according to whether, on the basis of the information in the proposal and declaration, there remains a conflict of interest which may affect the impartiality of the research.
- Failure to declare or avoid conflict of interest at this or a later stage may result in exclusion from the procurement competition, or in BEIS exercising its right to terminate any contract awarded.

Applicants will be subject to financial viability checks, as described in **Section 7**. BEIS will make a decision as to the eligibility of projects based on the results of these checks.



# 6. Assessment Process and Criteria

The Assessment process will be conducted as follows:

**Stage 1**: Applications will be considered initially against the Competition eligibility criteria as set out in **Section 5**.

**Stage 2**: Applications which meet all relevant eligibility criteria as detailed at Stages 1 will be further assessed against a number of Assessment Criteria by a minimum of three assessors (BEIS or BEIS appointed assessors). The Assessment Criteria and linked scoring approach are set out at **Sections 6.1** and **6.2** respectively.

**Stage 3**: Project scores will then be moderated to determine a ranking list that will be used to allocate the funding in line with guidance at **Section 6.3**.

# 6.1 Assessment Criteria

Applicants will be assessed against their response to the Assessment Criteria as set out below. Each criterion will be scored independently and will be given a score between 1 and 5 consistent with the guidance at **Section 6.2** below. Applicants should ensure that their responses specifically address the requirements as set out in the 'Guidance' section linked to each Assessment Criteria.

Assessment Criterion 1 - Description of proposed feasibility study				
Weighting	30%	Maximum Word Count	3,000	

#### Guidance

Applicants should use their responses to clearly detail how the proposed feasibility study will meet the key requirements of the Competition as set out at **Section 1.6** and **Section 2.** The application will be evaluated for:

- Demonstration of understanding of the requirements specified in PAS 1878 and 1879
- Demonstration of understanding of the operation of SAPC, in accordance with the GB smart metering system
- Feasibility of the data exchanges and communications protocol to be investigated in the study
- Describing how the interfaces between EMS and CEM may be designed.
- Describing how the interfaces between EMS and SAPC/GB smart metering system may be designed (noting PAS 1878 Annex D and Annex F).

- Describing how their proposed study will support interoperability (as described in Clause 5 of PAS 1878).
- Describing how their proposed study will ensure a high degree of cyber security (as described in Clause 6 of PAS 1878)
- Explanation of how the project intends to exploit the results commercially to deliver EMS functionality in the UK assuming the Feasibility Study concludes that there is scope for commercial applicability.

# Assessment Criterion 2 - Project Team and Experience Weighting 20% Maximum Word Count – not including CVs and organograms 2,000

#### Guidance

Applicants should use their responses to detail how their organisation(s) and proposed project team can offer the relevant skills, capabilities and experience required to meet the Competition Specification as set out at **Section 1.6**. Responses will be evaluated for:

- An organogram and high-level resource plan clearly detailing the roles of all personnel from the lead Applicant – and consortium partners as relevant – in delivery of the Project. You will be able to attach these to the online application form.
- The relevant skills, qualifications, and experience of main project team members
  mapped against key requirements as set out at Section 1.6 and Section 2. Brief CVs
  of lead individuals within the Project team (CVs should be no longer than 1 page
  each). You will be able to attach these to the online application form.
- Details of projects completed in the last 5 years that you consider of relevance to this Competition including key lessons learnt.
- A description of the project team's quality management standards, including a description of how the project team will quality assure the work.

Assessment Criterion 3 – Project Plan and Management				
Weighting	15%	Maximum Word Count	1,000 – not including separate Project Plan	

#### Guidance

Applications will be evaluated for the potential to deliver the work successfully. Applicants should use their responses to:

 Provide a realistic, robust, and justified Gantt chart or outline project plan detailing the key monthly tasks and milestones including delivering on monitoring and reporting requirements. For Applicants awarded funding, this project plan will then be formally reviewed, updated where relevant and agreed by both parties. This 'Final Project Plan' will then be used to track project progress.

 Set out how efficient working arrangements will be achieved in the project team, and your approach to dealing with any unanticipated changes.

Assessment Criterion 4 – Project Risks					
Weighting	5%	Maximum Word Count	n/a – Completion of Risk Proforma – Max 3 pages Arial font 11		

#### Guidance

Applicants should use their responses to:

- Detail in the provided Risk Proforma what they regard as the three (3) key risks to successful delivery of the requirements as set out at **Section 1.6** and **Section 2**.
- Your response should include:
  - A summary of the risk including dependencies
  - The potential risk impact
  - Proposed approach to risk mitigation

Assessment Criterion 5 - Social Value				
Weighting	10%	Maximum Word Count	1,500	

#### Guidance

Applicants should use their responses to:

- Describe the extent to which projects will contribute to Theme 3 Fighting Climate
   Change as defined by the government's <u>Social Value Model</u> by effective stewardship
   of the environment:
- Deliver additional environmental benefits in the performance of the contract including working towards net zero greenhouse gas emissions.
- Influence staff, suppliers, customers and communities through the delivery of the contract to support environmental protection and improvement.

#### Please include:

 Your 'Method Statement,' stating how you will achieve this and how your commitment meets the Award Criteria, and

- 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:
  - Timed action plan
  - Use of metrics
  - o Tools/processes used to gather data
  - Reporting
  - o Feedback and improvement
  - Transparency

# Weighting 20% Maximum Word Count Not applicable. Applicants will be scored on submitted price.

#### Guidance

Applicants will be assessed based on their Total Project Costs figure as calculated at cell E31 on the 'Summary' tab of their Project Cost Breakdown Form, subject to a maximum price cap of £30,000 (excluding VAT) and to all costs and overheads submitted on the Project Cost Breakdown Form meeting relevant eligibility requirements as set out at **Appendix 1**. Summary guidance on completing relevant sections of the Project Cost Breakdown Form is provide at **Appendix 3**.

Scores will be awarded as follows:

The Applicant(s) submitting the lowest price will receive a maximum score of 5. All other Applicants will then be scored on a proportionate basis as set out in the example below.

Applicant	Price (net VAT)	Score – maximum of 5
1 (lowest price)	£25,000	5
2	£27,500	£25,000/£27,500 * 5 = 4.55 (2 d.p.)
3	£30,000	£25,000/£30,000 * 5 = 4.17 (2 d.p)

# 6.2 Scoring Guidance

Applicants' Assessment Criteria 1 – 6 responses will be scored system outlined below.

**Table 6.1: Scoring Guidance** 

Score	Description		
1	<b>Not Satisfactory:</b> 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 detail is needed.		
3	<b>Satisfactory:</b> There is reasonable evidence that the question has been satisfactorily addressed but some omissions are still evident and further detail is needed.		
4	Good: The question has been well addressed with a good evidence base, with only minor omissions or lack of detail.		
5	<b>Excellent:</b> There is clear evidence that the question has been completely addressed in all aspects, with questions answered clearly, concisely with a strong evidence base.		

# 6.3 Selection Approach

We will select those applications that offer the best overall value for money, based on their assessment against the criteria outlined in **Section 6.1**. Applications will be assessed by a minimum of three assessors, which could include BEIS assessors and independent assessors (technical and commercial experts). A moderation meeting will be held at the end of the assessment process to agree the overall weighted scores for each of the projects.

Applications responses to Assessment Criteria 1-6 will be scored using the scoring system outlined at Table 6.1. To be eligible to receive funding, a Project application must achieve the following Minimum Threshold Scores:

- Achieve a score of at least 2 out of 5 for Assessment Criteria 1-5.
- Achieve an overall minimum weighted score across all 6 Assessment Criteria of 50%.

Applicants will be ranked in order of merit based on overall weighted score achieved. We anticipate funding the 5 highest-scoring eligible proposals which satisfy the relevant Minimum Threshold Scores. In the event that two or more eligible Applications receive the same fifth ranking overall weighted score, then the assessors will reconvene for a further moderation session to re-assess Applications against the Assessment criterion and agree a consensus position around who should receive funding.

# 7. Financial Eligibility and Viability

# 7.1 Financial Eligibility

Applicants are required to complete the relevant tabs of the BEIS Project costs breakdown form contracts (the 'Project Cost Breakdown Form') which is provided as **Annex 3** to the competition pack setting out their fixed funding requirement to carry out the project. Applicants should only input in the specified light blue input cells and should consult guidance on completion which is embedded within the Form and can be accessed by selecting the relevant cell.

BEIS reserves the right to exclude Applicants from the Competition where they cannot satisfactorily evidence the eligibility of costs and overheads in line with guidance provided at **Appendix 1.** Financial information should include costs for the entire project, detailing labour (including personnel day rates), material and capital equipment costs, and any travel and subsistence requirements.

BEIS can only provide funding for eligible costs and overheads incurred up to the end of the Contract currently estimated as 30 June 2023.

# 7.2 Financial viability checks

#### **Economic and Financial Assessment of Applicants**

As part of the application Applicants will be asked to provide either:

- A copy of last two years accounts as filed with Companies House; or
- A copy of last two years accounts if not obliged to file with Companies House; or
- 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 company or organisation
- Alternative means of demonstrating financial status if any of the above are not available (for example, 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).

Where there is more than one Applicant, the above information should be provided for any entity who is forecast to deliver at least 25% of the Contract by value.

The Department will undertake an economic and financial assessment of all provisionally successful Applicants, and these will be reviewed by BEIS ahead of any Contract award. Applicants may be asked to respond to clarification questions linked to this assessment and, where relevant asked to provide satisfactory evidence of how identified financial risks are being

actively managed and mitigated. Acceptable mitigations may include, but are not limited to those set out in Section 3 to the Government and Commercial Function's 'Assessing and monitoring the economic and financial standing of suppliers guidance note May 2021.pdf (publishing.service.gov.uk). This may involve requesting a Parent Company Guarantee (PCG) or equivalent security.

Where Applicants are unable to provide satisfactory mitigating evidence after the clarification process they may be excluded from the competition.

#### **Contractual payments**

BEIS will not make payments in advance of need and typically makes Contract payments in arrears on satisfactory completion of agreed milestones and deliverables. BEIS therefore anticipates making payment after delivery of Feasibility Report that meets all relevant quality content and format requirements as detailed at **Sections 1.5 and 2** of this document.

BEIS understands, however, the difficulties which small businesses may face when financing this type of project. BEIS will explore cash flow issues with the Applicant as part of developing the financial and milestone profile during the Contract Award process. BEIS will offer flexibility in terms of profiles and payments, within the confines of the requirements for use of public money within which it operate.

# 8. Notifications and Publications of Results

### 8.1 Notification

Applicants will be informed by email whether their application has been successful.

BEIS may wish to publicise the results of the scheme which may involve engagement with the media. At the end of the application and assessment process, BEIS may issue a press release or publish a notice on its website. These public documents may, for example, outline the overall results of competitions and describe some of the projects to be funded.

**Confidentiality request:** Some organisations may want their activities to remain confidential and you will be given a chance to opt out of any involvement in media relations activity and further case study coverage of projects, should you see this as being absolutely necessary. However, the public description of the project you provide in your application will be made available in the public domain if your application is successful, and you are not able to opt out of the project description being published. As such, you must provide a short description (maximum 400 words) of your proposed project.

In addition, all funded projects must include reporting and dissemination milestones – agreed with BEIS - as part of their project deliverables, determined after the award of the contract (see

**Section 2** for further information on deliverables). Information about all contract awards will also be published on Contracts Finder.

Any organisation that wishes to publicise its project, at any stage, must contact their Project Monitoring Officer at BEIS and obtain written permission before doing so.

### 8.2 Publication of results

SBRI involves a high degree of risk-benefit sharing. In return for provision of funding and non-financial support during project activities, BEIS expects to be able to use and share the results and outputs of the project activities with other government departments, industry and other stakeholders to further understanding and progress technology development and deployment.

BEIS also wishes to publicise details of the award recipients. Therefore, on or after issuing the SBRI contract agreement, BEIS will publish the following information:

- Identity of the participant and its partners.
- Project summary information including aims and expected outcomes of the project and technology area.
- Total award value.

Following completion of the funded projects, BEIS will publish on its website a summary of the funded activities and the outcomes achieved. This will include a final summary report from each project.

BEIS may also revisit projects at a later date and publish an evaluation report for the scheme as a whole.

BEIS however recognise the need to maintain confidentiality of commercially sensitive information. BEIS will consult Applicants regarding the nature of information to be published, in order to protect commercially sensitive information. The notice of the award on Contracts Finder will also include the value of the contract.

## 9. Reporting

# 9.1 Reporting, Knowledge Sharing and Evaluation Requirements

Project monitoring and reporting is required to track project progress and ensure payments are made according to a schedule of milestones to be agreed with selected projects. This reporting will be in confidence to BEIS and its technical advisers and will not be published. Any proposed changes to schedules or project plans will need to be discussed with BEIS and Applicants should expect significant interaction with the team during the project.

- Project teams will be required to meet with their Monitoring Officer at least once per month to discuss Project progress, finance updates and highlight successes, issues, and risks.
- Projects will be required to submit an interim project progress report. This should cover as a minimum:
  - Project progress
  - Upcoming work over the next quarter
  - Financial information (including budget spend so far and budget forecast)
  - Any key project risks which might have an adverse impact on delivery of Feasibility Reports to agreed deadlines and in line with requirements as set out at Section 1.6.
  - Any key lessons learnt during delivery
  - Work carried out over the last month
  - Upcoming work over the next month
  - Highlight, by exception, any known issues that might prevent deliverability of the Feasibility Study to agreed deadlines.

## 9.2 Key Performance Indicators

BEIS requires all funded projects under the 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.

Project lead organisations 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.

Beyond these NZIP KPIs, BEIS conducts independent evaluations of many of its programmes. The funded project organisation 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.

BEIS will be collecting the following KPIs, with data provided by Monitoring Officers marked in italics. Not all data will be collected annually.

Table 9.1: NZIP KPIs

KPI	KPI description	Metrics
KPI 1	Number of NZIP projects supported	Project start and completion.
KPI 2	Number of NZIP projects that have met objectives	Extent to which project objectives have been met to date Change in objectives and reasons for change
KPI3	Number of organisations supported to deliver the project	Lead partner delivering the project: name, organisation size and number and type of jobs supported within the organisation to deliver the project.  Other partner organisations involved in delivering the project as named on the Contract or Grant: name, organisation size and number and type of jobs supported within the organisation(s) to deliver the project.
KPI 4	Number of active contractual and non-contractual business relationships	Number of contractual relationships: name and type of contractual relationship.  Number of informal 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

## 9.3 Evaluation Requirements

**Evaluation:** Successful Applicants will also be required to participate in and facilitate an evaluation of this 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. Projects 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 secondary data to the evaluation contractor and by participating in research interviews.



# 10. Intellectual Property

The proposed arrangements for intellectual property rights (IPR) and exploitation of IPR are set out in the contract terms and conditions for this competition, in **Annex 1** 

Subject to the requirements of **Conditions 27 and 28** of the standard terms and conditions (Annex 1) Applicants will retain ownership of the intellectual property generated from the project. Applicants are required to identify and record any such intellectual property and to protect patentable knowledge in accordance with **Condition 28** of the standard terms and conditions. If within five years of its creation Applicants have not commercially exploited intellectual property generated from the work, then in line with **clause 28 (5)** of the standard terms and conditions, BEIS may request the intellectual property be assigned to BEIS.



# 11. Feedback, Re-application and Right of Appeal

A short summary of key feedback regarding the applications will be provided to all Applicants. This feedback will be based on the comments of technical assessors. BEIS provide comments where an Applicant in considered ineligible in light of financial viability checks. No additional feedback will be provided and there will be no further discussion on the application.

The feedback from the assessors is intended to be constructive. Comments are not a checklist of points which must be answered or argued in a resubmitted application as the assessors/requirements may be different and it is your decision as to whether you act on the suggestions made.

BEIS' decision regarding any application is final and no appeal process is in place, so it is important that you make any points you wish to make clearly and concisely in the Application Form.

# 12. Confidentiality and Freedom of Information

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 through 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. Where any request is made to BEIS under the FOIA for the release of information relating to any project or Applicant, which would otherwise be reasonably regarded as confidential information, BEIS will notify you of the request as soon as we become aware of it.

If you wish to designate information supplied as part of your tender as confidential, of if you believe that its disclosure would be prejudicial to any person's commercial interests, you must provide clear and specific detail as to the precise information involved and explain (in broad terms) what harm may result from disclosure if a request is received, and the time period applicable to that sensitivity. Such designation alone may not prevent disclosure if in the Department's reasonable opinion publication is required by applicable legislation or government policy or where disclosure is required by the Information Commissioner or the First-tier Tribunal (Information Rights).

As part of the application process all Applicants are asked to submit a public description of the project. This should be a public facing form of words that adequately describes the project but that does not disclose any information that may impact on Intellectual Property (IP), is confidential or commercially sensitive. The titles of successful projects, names of organisations, amounts awarded, and the description of the project may be published once the award is confirmed as final.

Additionally, the government's transparency agenda requires that tender documents (including competition guidance 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(s) once the procurement is complete. By submitting a tender, you agree that your participation in this procurement may be made public. Aside from the public description of your project (see above), 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.

# 13. Terms and Conditions

The Department's Standard Terms and Conditions of Contract as amended for the purposes of this Competition will apply to this contract (**see Annex 1**).



## 14. Further Instructions to Applicants

The Department reserves the right to amend the enclosed Competition documents at any time prior to the publication of supplier questions and answers (28 June 2022). Any changes are most likely to include editorial errors and include FAQs from questions asked from stakeholders/applications before 2pm on 21 June 2022. Any such amendment will be numbered, dated and issued on the <a href="Competition website">Competition website</a> as well as on the <a href="Contracts Finder">Contracts Finder</a> <a href="Website">Website</a>. 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 proposal is considered to be fundamentally unacceptable on a key issue, regardless of its other merits, that proposal may be rejected. By issuing this Competition document, the Department is not bound in any way and does not have to accept the lowest, or any, proposal and reserves the right to accept a portion of any proposal unless the tenderer expressly stipulates otherwise.

## 14.1 Application checklist

To submit a tender application for this Competition, you must complete the online registration form, available here, and use the resulting password to complete your online application form.

Please answer all questions on the application form fully.

Please download from your application form, complete and upload to your application form the following documents. All these documents are also available on the <u>Competition website</u>.

- Project Cost Breakdown Form
- Signed Declarations:
  - Declaration 1: Signed Statement of Non-Collusion
  - Declaration 2: Signed Form of Bid
  - Declaration 3: Signed Conflict of Interests statement
  - Declaration 4: Signed Code of Practice for Research
  - Declaration 5: The General Data Protection Regulation (GDPR) Assurance Questionnaire for Contractors
  - Declaration 6: Signed Standard Selection Questionnaire, including addressing the BEIS Exclusion Grounds

Please complete and **upload to your application form the following documents**. These can be based on your own template (other than the risk proforma) but must include sufficient detail so that your application can be assessed against the relevant assessment criteria.

- Project plan (robust and detailed Project Gantt chart, or equivalent)
- Risk Template (template provided)
- CVs, Organogram

## 14.2 Data Protection and Security

The successful tenderer must comply with all relevant Data Protection Legislation, as defined in the terms and conditions applying to this Invitation to Tender. A guide to the UK General Data Protection Regulation published by the Information Commissioner's Office, can be found here.

Annex 2 contains a "The General Data Protection Regulation Assurance Questionnaire for Contractors" (Declaration 5) to evidence the extent of readiness. The Authority may ask the Contractor to provide evidence to support the position stated in the questionnaire. The Authority may require the successful Contractor to increase their preparedness where the Authority is not satisfied that the Contractor will be in a position to meet its obligations under the terms and conditions. If the Contractor fails to satisfy the Authority that it will be in a position to meet its obligations under the terms and conditions in the event that the Contractor is successful, the Authority reserves the right to exclude the Applicant from this procurement.

# 15. 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. Annex 2 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 Authority to terminate the contract and claim 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.

# Appendix 1 - Eligible and Ineligible Costs

#### **General Requirements**

**Timing**: BEIS will only provide the funding to cover eligible costs incurred and defrayed in the period between the project start date specified in the contract, and the deadline specified in the contract for completion of the project.

Who can incur eligible costs: The definition of eligible costs includes the Applicant's own costs, eligible costs incurred by consortium members and eligible costs incurred by companies sub-contracted to the Applicant or consortium members as defined in the application or subsequent agreements between the successful Applicant and BEIS.

**Non-sterling costs**: Costs must be denominated in GB pounds. If relevant, Applicants should indicate where conversion has been made to GB pounds from other currencies and indicate the conversion rate and assumptions used.

Research and development costs Your application must have at least 50% of the Contract value attributed directly and exclusively to research and development services.

#### **Eligible Costs**

Directly incurred costs:

These are costs that are specific to the project that will be charged to the project as the amount spent, fully supported by an audit record justification of a claim. They comprise:

- Labour costs for all those contributing to the project, broken down by individual
- Material costs (including consumables specific to the project)
- Capital equipment costs\*
- Sub-contract costs
- Travel and subsistence

\*Under SBRI rules, BEIS will only pay full capital equipment costs for equipment that is specialised and bespoke enough that it only has a value for the duration of the project. For capital equipment that has a value at the end of the contract, BEIS will only pay depreciation costs for the duration of the project, in line with your accounting policy for depreciation. For example, if a project budget includes the cost of purchasing six new laptops, it is highly likely that these will still have value at the end of the project. As such, BEIS would only pay depreciation costs on these laptops across the duration of the project.

Indirect costs:

#### INTEROPERABLE DEMAND SIDE RESPONSE - Stream 3

Indirect costs should be charged in proportion to the amount of effort deployed on the project. Applicants should calculate them, using their own cost rates. They may include:

- General office and basic laboratory consumables
- Library services / learning resources
- Typing / secretarial
- Finance, personnel, public relations and departmental services
- Central and distributed computing
- Overheads

BEIS will not normally pay overheads of over 50%, and any overheads above this amount will need to be fully justified.

#### **Ineligible Costs**

Under no circumstances can costs for the following items be claimed:

- Commercialisation activities
- Profit (i.e. Applicants should not include profit for themselves or the other project team members within indirect costs or include it as a separate project cost)
- Contingency / Contingent costs
- Profit on contractors (i.e., where contractors are used in key posts, these contractors should be paid at the standard market rate)
- Protection of IPR (including patent costs)
- For activities of a political or exclusively religious nature
- In respect of costs reimbursed or to be reimbursed by funding from other public authorities or from the private sector
- In connection with the receipt of contributions in kind (a contribution in goods or services as opposed to money)
- To cover interest payments (including service charge payments for finance leases)
- For the giving of gifts to individuals, other than promotional items with a value no more than £10 a year to any one individual
- For entertaining (entertaining for this purpose means anything that would be a taxable benefit to the person being entertained, according to current UK tax regulations)
- To pay statutory fines, criminal fines or penalties

In respect of VAT that you are able to claim from HM Revenue and Customs.

## Appendix 2 - 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;

#### INTEROPERABLE DEMAND SIDE RESPONSE – Stream 3

- an offence in connection with taxation in the European Union within the meaning of section 71 of the Criminal Justice Act 1993;
- destroying, defacing or concealing of documents or procuring the execution of a valuable security within the meaning of section 20 of the Theft Act 1968 or section 19 of the Theft Act (Northern Ireland) 1969;
- fraud within the meaning of section 2, 3 or 4 of the Fraud Act 2006;
- the possession of articles for use in frauds within the meaning of section 6 of the Fraud Act 2006, or the making, adapting, supplying or offering to supply articles for use in frauds within the meaning of section 7 of that Act;

#### Terrorist offences or offences linked to terrorist activities

#### Any offence:

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

#### Money laundering or terrorist financing

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

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

Child labour and other forms of trafficking human beings

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

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

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

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

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

Non-payment of tax and social security contributions

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

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

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

#### Other offences

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

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

#### Discretionary exclusions

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

Where an organisation has violated applicable obligations in the fields of environmental, social and labour law established by EU law (as retained in UK law in accordance with Section 4 Section 4 of the EU Withdrawal Act 2018 (as amended by the EU (Withdrawal Agreement) Act 2020)), 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:

#### INTEROPERABLE DEMAND SIDE RESPONSE - Stream 3

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) —

#### INTEROPERABLE DEMAND SIDE RESPONSE – Stream 3

- 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).

# Appendix 3 – Completion of Project Cost Breakdown Form

#### Overview

The BEIS Project Cost Breakdown Form is a standard template used to capture costs and overheads to inform multiple procurement competitions of varying size and scope. As a result, whilst it contains multiple green input tabs, not all will require completing, particularly for lower value or less complex procurements.

#### **IDSR Stream 3 Competition – Mandatory input tabs for all Applicants**

Based on project requirements as detailed at **Section 1.6**, Applicants must **as a minimum**, complete the following tabs:

#### Labour & Overhead Costs tab

For all project team members for whom the Applicant wishes to recover costs or overheads they must complete all light blue input cells (columns C,E,G,I,O and M) following the example format provided at Row 18.

#### **Project Quarterly Breakdown tab.**

At columns J and N Applicants should provide a quarterly profile for each Cost or Overhead category where £ amounts have been entered. Please note the FY22-23 + FY23-24 totals at columns L and S respectively, must equal the equivalent total on the 'Summary' tab – Thus the 'Total Labour costs' figures at cells L10 and L12 of the Project Quarterly Breakdown tab must equal the 'Total Labour Costs, exc Overheads' figure at cell E 17 of the 'Summary' tab.

### IDSR Stream 3 Competition - Other potential input tabs

Applicants intending to claim eligible Travel and Subsistence Costs must complete the relevant blue input fields in the **Travel & Subsistence tab**.

Applicants intending to utilise one or more Sub-Contractors must complete the relevant blue input fields in the **Sub-Contract Costs tab**.

For consortia bids, each Partner must complete the relevant light blue input cells in the **Partner Breakdown tab.** 

Applicants intending to claim for other costs should complete the relevant light blue input cells in either the **Material Costs, Capital Equipment or Other Costs tab.** light blue. Given the anticipated desktop nature of work associated with production of the Feasibility Reports, this should include full justification for costs being claimed.



This publication is available from: Flexibility Innovation Programme website.

### INTEROPERABLE DEMAND SIDE RESPONSE - Stream 3

If you need a version of this document in a more accessible format, please email <a href="mailto:enquiries@beis.gov.uk">enquiries@beis.gov.uk</a>. Please tell us what format you need. It will help us if you say what assistive technology you use.



