Mini Competition

Mini Competition against an existing Framework Agreement (MC) on behalf of UK Research and Innovation (UKRI)

Subject UK SBS Evaluation of the Industrial Strategy Challenge Fund – Prospering from the Energy Revolution Challenge Programme – Lot 3

Sourcing reference number CR18113

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Section 1 – About UK Shared Business Services

Putting the business into shared services

UK Shared Business Services Ltd (UK SBS) brings a commercial attitude to the public sector; helping our customers improve efficiency, generate savings and modernise.

It is our vision to become the leading provider for our customers of shared business services in the UK public sector, continuously reducing cost and improving quality of business services for Government and the public sector.

Our broad range of expert services is shared by our customers. This allows our customers the freedom to focus resources on core activities; innovating and transforming their own organisations.

Core services include Procurement, Finance, Grants Admissions, Human Resources, Payroll, ISS, and Property Asset Management all underpinned by our Service Delivery and Contact Centre teams.

UK SBS is a people rather than task focused business. It's what makes us different to the traditional transactional shared services centre. What is more, being a not-for-profit organisation owned by its customers, UK SBS' goals are aligned with the public sector and delivering best value for the UK taxpayer.

UK Shared Business Services Ltd changed its name from RCUK Shared Services Centre Ltd in March 2013.

Our Customers

Growing from a foundation of supporting the Research Councils, 2012/13 saw Business Innovation and Skills (BIS) transition their procurement to UK SBS and Crown Commercial Service (CCS – previously Government Procurement Service) agree a Memorandum of Understanding with UK SBS to deliver two major procurement categories (construction and research) across Government.

UK SBS currently manages £700m expenditure for its Customers.

Our Customers who have access to our services and Contracts are detailed here.

Section 2 – About Our Customer

UK Research and Innovation

Operating across the whole of the UK and with a combined budget of more than £6 billion, UK Research and Innovation represents the largest reform of the research and innovation funding landscape in the last 50 years.

As an independent non-departmental public body UK Research and Innovation brings together the seven Research Councils (AHRC, BBSRC, EPSRC, ESRC, MRC, NERC, STFC) plus Innovate UK and a new organisation, Research England.

UK Research and Innovation ensures the UK maintains its world-leading position in research and innovation. This is done by creating the best environment for research and innovation to flourish.

For more information, please visit: www.ukri.org

Section 3 - Working with UK Shared Business Services Ltd.

In this section you will find details of your Procurement contact point and the timescales relating to this opportunity.

Section 3 – Contact details		
3.1	Customer Name and address	UK Research and Innovation Polaris House North Star Avenue Swindon SN2 1FL
3.2	Buyer name	Victoria Clewer
3.3	Buyer contact details	Research@uksbs.co.uk
3.4	Estimated value of the Opportunity	£266,500.00 excluding VAT
3.5	Process for the submission of clarifications and Bids	**All correspondence shall be submitted within the Emptoris e-sourcing tool. Guidance Notes to support the use of Emptoris is available here.** **Please note submission of a Bid to any email address including the Buyer will result in the Bid not being considered.**

Section 3 - Timescales		
3.6	Date of Issue of Mini Competition to all Bidders	Wednesday,17th October 2018
3.7	Latest date/time Mini Competition clarification questions should be received through Emptoris messaging system	Monday, 5th November 2018 14:00 (GMT)
3.8	Latest date/time Mini Competition clarification answers should be sent to all potential Bidders by the Buyer through Emptoris	Tuesday, 6th November 2018
3.9	Latest date/time Mini Competition Bid shall be submitted through Emptoris	Tuesday, 13th November 2018 14:00 (GMT)
3.10	Anticipated rejection of unsuccessful Bids date	Friday, 30th November 2018
3.11	Anticipated Award Date	Friday, 30th November 2018
3.12	Anticipated Call Off Contract Start Date	Monday, 3rd December 2018

3.13	Anticipated Call Off Contract End Date	31st July 2022
3.14	Bid Validity Period	60 Working Days
3.15	Framework and Lot the procurement should be based on	BIS Research & Evaluation Framework CR150025 LOT 3

Section 4 – Specification

The UKRI board through Innovate UK and EPSRC are committed to collecting evidence to understand the impacts and effectiveness of the Prospering from the Energy Revolution (PFER) Industrial Strategy Challenge Fund (ISCF). Bids are invited for evaluation of the inputs, activities, outputs, outcomes and impacts against the Programme's approved Business Case and Delivery Plan.

1.0 Introduction

1.1 Background to Industrial Strategy Challenge Fund

The Industrial Strategy Challenge Fund is a new, highly directed approach to achieving technological outcomes that have the potential to be of major economic and social benefits to the UK. Delivered primarily through UK Research and Innovation, it will combine the UK's research strength funded through Research Councils with the business focussed, competitive approach of Innovate UK. The aim is to accelerate the application of UK industry-led solutions in technological challenges in which specific programmes will look to develop technologies where the global market is potentially large and the UK has the scientific and business capability to become a world-leader.

The ISCF aims to improve the performance of our whole science and innovation system and is essential to realise the R&D ambitions of the Industrial Strategy. The industry-led approach of the ISCF will facilitate and accelerate the commercialisation of new technologies, increase productivity, create new export opportunities, and enable Challenge business models to flourish. It will enhance and capitalise on our world-class research base, supporting businesses to apply cutting-edge research in new, commercialised applications in global markets of the future*.*

1.2 UK Research & Innovation (UKRI)

Operating across the whole of the UK with a combined budget of more than £6 billion, UK Research and Innovation brings together the seven Research Councils, Innovate UK and a new organisation, Research England. Research England will work closely with its partner organisations in the devolved administrations.

UK Research and Innovation intends to be an outstanding organisation that ensures the UK maintains its world leading position in research and innovation. We will ensure that the UK maintains our world-leading research and innovation position by creating a system that maximises the contribution of each of the component parts and creates the best environment for research and innovation to flourish.

2.0 Prospering from the Energy Revolution ISCF

The Prospering from the Energy Revolution Industrial Strategy Challenge Fund was announced in HM Government's Industrial Strategy (please refer to annex E).

Challenge: Prove by 2022 that local, investable, consumer-centric energy approaches can create prosperous clean energy communities across the UK.

The world is embarking on a revolution in how energy is supplied, driven by societal needs and technical opportunities. Over the coming decades, at least $2 trillion per year will be invested in the transition to low carbon power, transport, heat and more localised energy systems. The adoption of digital technologies, smart energy systems and cheap, clean technologies will drive the development of new consumer services and the ability to dynamically manage a 'smart' distributed infrastructure. If put together intelligently, this can deliver the cheaper cleaner energy that underpins a more prosperous society. This change represents both an economic opportunity and a threat for the UK. The UK is currently at the forefront of parts of this revolution and will reap dividends from timely

investment in the development of products and services. We risk losing out if we don't prove benefits in our own energy system, or don't replace declining mature energy sector jobs with new high value employment. Infrastructure innovation requires significant commitment and investment, aligned with policy and regulatory changes. Unlocking infrastructure investment at scale requires proof that novel approaches will deliver the desired outcomes. This challenge will deliver this proof through a series of local, real world demonstrators ensuring that the UK will command a leading position and maximise UK economic, societal and environmental impacts.

The energy revolution will combine new localised clean technologies (e.g. cheap renewables, batteries, fuel cells, electric vehicles and efficiency measures) with new digital capabilities to control these assets dynamically and open up new local market arrangements to trade their outputs. Together these will put the consumer in control, at the heart of the system, create new high value local jobs in installation, maintenance and servicing, and allow innovation to commercialise more readily in a more open market. The UK has world-class research, innovation, policy, and regulatory capabilities coupled with new finance and market concepts that are ready to scale to meet challenging policy targets. The UK has expertise in integration of complex services and smart technologies, and is a world leader in energy and digital technologies. UK businesses (established utilities and innovative SMEs), local actors, and academics are designing and testing some of the underlying principles and technologies in projects in the UK and internationally. However innovators face multiple barriers to the disruptive energy system changes that would maximise societal benefits. Investable, scalable and replicable solutions are essential to pave the way for £billions in follow-on private finance in the 2020s which will ensure wider societal, environmental and economic benefits for everyone.

There are four key objectives to this challenge programme:

1. By 2022, prove investable, scalable local business models using integrated approaches to deliver cleaner, cheaper energy services in more prosperous and resilient communities that also serve to benefit the energy system as a whole.
2. Unlock 10x future-investment in local integrated energy systems versus business as usual in 2020s.
3. Create real world proving grounds to accelerate new products and services to full commercialisation.
4. To build UK leadership in integrated energy provision

There is increasing evidence that meeting this challenge needs demonstration activity at a local scale to design, develop and prove business models that integrate technologies, exploit new market arrangement opportunities, and put the consumer need at the heart of the system design. These demonstrators need public intervention to overcome clear market failures of complexity, underinvestment from private sector, system coordination failures, and finally to ensure positive externalities such as emissions reductions and air quality are captured. The alternative to intervention will result in a highly fragmented approach locked into over investment via siloed operation typical of incumbent industries.

The programme will be unique in scale and ambition, and builds on the existing funding across UKRI, BEIS and Ofgem which largely focus on component parts of the system rather than integration.

The energy system is changing rapidly and unpredictably, driven by;

- Changing consumer future needs for flexible cheaper power, heat, mobility, and efficiency.
- The need to decarbonise energy, but especially heat

- Rapid cost decreases in decentralised small-scale technologies (e.g. renewables, batteries, fuel cells and micro-CHP)
- Digital technologies which enable highly disruptive business models (e.g. aggregation of dispersed supply and demand assets, new trading arrangements like peer to peer)

Many previous energy interventions have relied on technology proving, in the assumption that proven technologies would become commercial. It is clear now that this has not worked well enough and that instead, a whole system approach is needed that is focussed on providing services consumers want via novel business models and market arrangements, and that integrates and pulls through the optimal technology set to do so.

The PFER programme will invest £102.5m over 4 years, with expected matched funding by industry of £95m, to accelerate the growth of the smart local energy systems industry in the UK. Funding will be deployed between April 2018 and 31 March 2022.

3.0 Scope of Evaluation

The scope of the evaluation is to assess the extent to which the Prospering from the Energy Revolution programme is on track to make, or has made, impacts taking into account its original aims, and the outcome and impact logic chain indicators as shown in Annex B. It will assess the extent to which the programme is on track to create, or has created, the stimulus required to design and prove integrative local system business models at adequate scale in the real world without risking lock-in to unpredictable pathways. It will also evaluate how local effects also benefit nationally, and that learnings are harnessed into effective investments, policies and regulations over time. The major interventions planned are:

Activity 1: Whole system demonstrators (1a) and designs (1b) (£70m)

Activity 2: Innovation Accelerator. CR&D programmes to fill gaps in required technology sets (£10m)

Activity 3: Energy Revolution Research & Integration Network. Pulling together the best research and expertise to coordinate & advise projects, provide testing assets and coordinate evaluation and learning. (£22m)

Most of the activities in the programme will involve funding through established competitive mechanisms that are recognised by the community, state-aid compliant, independently assessed/peer reviewed, and all grants and contracts will be in line with the spending requirements for ISCF. The Challenge Director will have accountability for overseeing project selection from those projects above the quality threshold that reflect criteria and needs of the overall programme. The expected governance of PFER and the reporting lines for the Challenge Director within the wider ISCF programme are shown below:

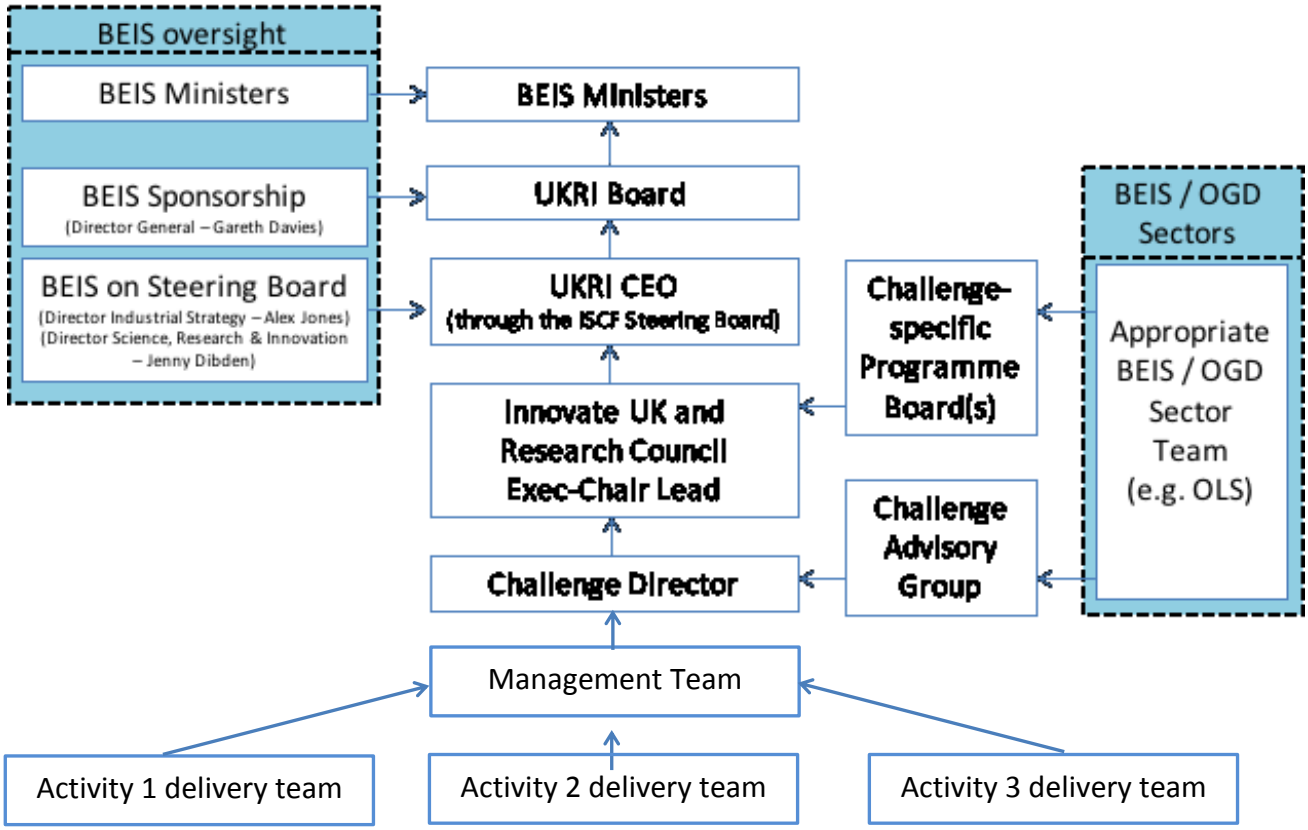

Figure 1 PFER ISCF Governance

Throughout the course of the programme, projects within each activity will be monitored in line with UKRI's standard processes, for example:

- Activity 1:
  - 1-3 local authority- or business-led consortium-based practical fast-track demonstrators will be monitored monthly by Innovate UK.
  - 10-20+ consortia based smart local energy system design projects which will be monitored quarterly by Innovate UK.
- Activity 2: approximately 20 business led Collaborative R&D projects, in the UK and internationally which will be monitored quarterly by Innovate UK and Research Councils as appropriate.
- Activity 3: The delivery of the Energy Revolution Integration Service by the Energy Systems Catapult will be monitored at least quarterly by Innovate UK. The Energy Revolution Research Consortium will be monitored by EPSRC in line with standard Research Council approaches.

All three Activities, and their programme management, are interlinked. This is a key feature of PFER that distinguishes this from previous initiatives, and is considered essential to maximise complex and multi-disciplinary energy system benefits. For example, the Energy Revolution Research & Integration Network will advise and assess projects in Activity 1, although it may also engage with energy system projects funded outside ISCF. They will facilitate rapid feedback between designs, demonstrators, and parallel UK and international activities. The research consortium will develop new knowledge based on the outputs of the projects and wider whole systems thinking to generate new insight into policy and business models of the future. Finally, a complex stakeholder environment including business, investors, policymakers, regulators and diverse representatives of wider society in the programme will require inclusion to ensure a legacy of learning and sustainability well beyond the lifetime of the programme. The mapping of objectives to activities to outcomes is therefore non-linear and complex.

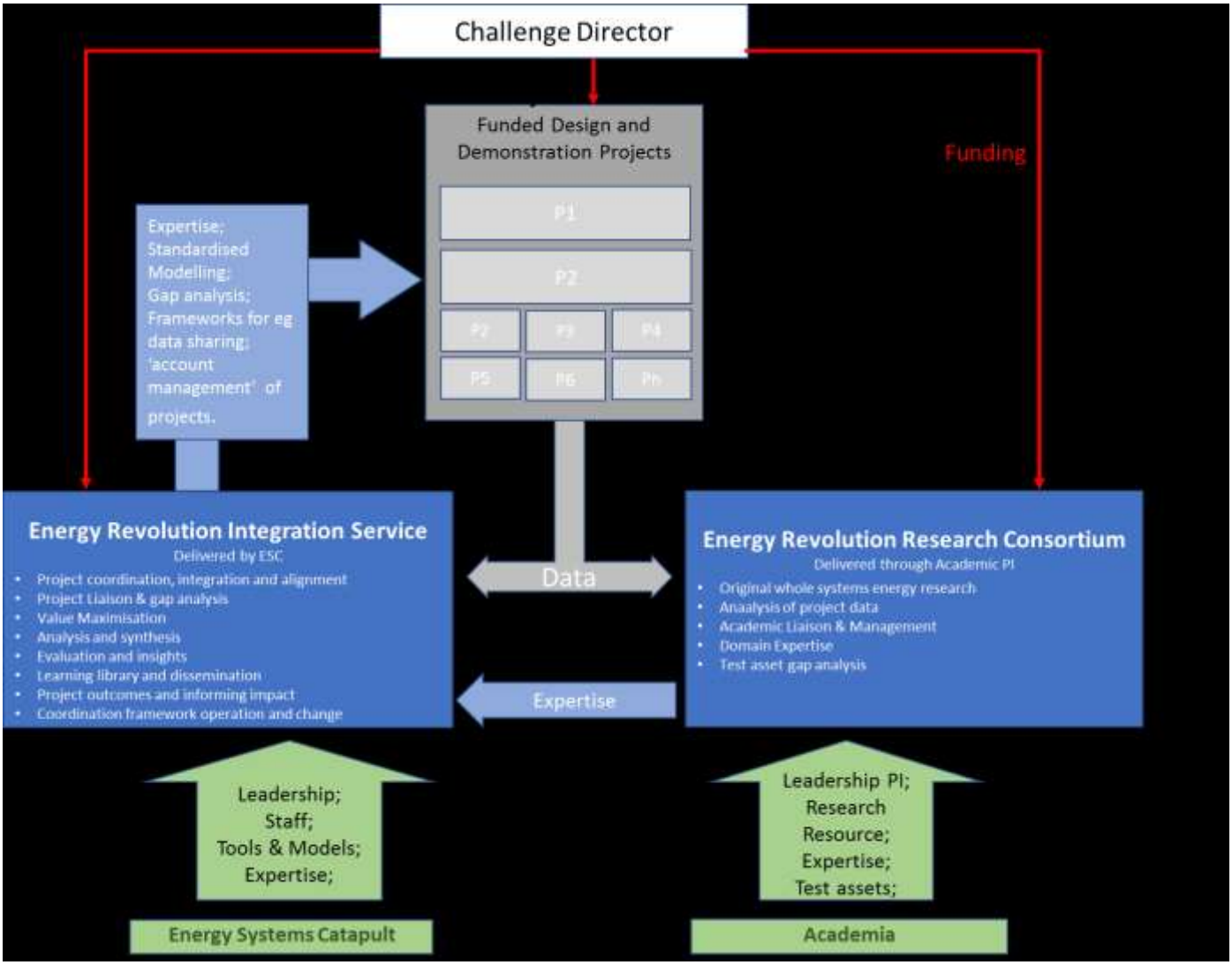

Figure 2 Energy Revolution Research and Integration Network - comprising the Energy Revolution Integration Service, delivered by the Energy Systems Catapult, and the Energy Revolution Research Consortium delivered through an academic Principal Investigator

The table at Annex B sets out these inter-relationships, the proposed KPIs against each objective and the expected impacts from the programme in the longer term.

3.1 Evaluation research questions

3.1.1 Impact Evaluation

It is expected that the evaluation plan will consist of three phases over 5 years:

- Phase 1: will run for six months to validate and refine the programme's logic model (please see annex C) and key success criteria, and to define a complete set of data collection requirements to enable comprehensive monitoring and evaluation. This phase will help construct a baseline for the programme, using new (primary) and existing (secondary) data (both qualitative and quantitative), at sector level and project level. Phase 1 will provide initial feedback on whether the design and delivery of the PFER ISCF programme are in line with best practices in the UK and internationally, assess whether inputs and activities are on track, provide recommendations for improvements to meet desired objectives.
- Phase 2: will conduct the evaluation during the programme duration and implement the evaluation framework developed in phase 1, including any ongoing survey data collection and analysis to assess inputs, activities, outputs, outcomes, and impacts.
- Phase 3: will be a longer-term continuation of the evaluation, beyond the end of the programme, and will be commissioned separately.

The impact evaluation will identify, and where appropriate use, data collected by projects and the Research and Integration Network, including insights from the Energy Systems Catapult and Energy Revolution Research Consortium, which will be key inputs to the overall evaluation.

The evaluation will run throughout the duration of the fund and for a number of years beyond any formal end of the ISCF in order to allow time for impacts to fully materialise, and to allow for policy learning for any future programmes in a similar vein.

Based upon the objectives above, the key research questions for the evaluation are:

Was the programme able to demonstrate cleaner, cheaper energy models?
Aspects include:

- **End user cost reductions vs business as usual (BAU)**
  - >10% reduction for demo programme
  - >25% reduction for designs
- **Reductions in local system upgrade requirements vs BAU (£)**
  - 25% reduction in upgrades required
- **Reductions in emissions vs BAU**
  - At least meeting Carbon Budget 5 levels
- Demonstration of improved resilience to system shocks (qualitative)
- Ability for local energy systems to provide wider energy system benefits

To what extent did the programme demonstrate positive business engagement in the programme?
Aspects include:

- **Private £ leverage through programme compared to Business case**
  - 3:1 for large business participants / 1.2:1 for SMEs
- Level of applications to programme
- Diversity of business mix in applications.

To what extent did the programme contribute to prosperity improvements in local communities?
Aspects include:

- **Number and quality of local jobs created in demonstrators and planned in design studies.**
- **Improvement in consumer engagement in energy system (qualitative measure vs BAU)**
  - Pro-rata rate as for Plumbing and heating industry (150,000 jobs nationally)

To what extent did the programme demonstrate UK Business growth from proof of new products?
Aspects include:

- **Number of new UK products or services proven and ready to scale as a result of this programme**
- **Number and quality of jobs created from new product or service provision resulting from programme.**
  - **>20 new products and services.**
- Number of patents, licenses and start-ups created during programme
- Number of overseas partnerships created.

To what extent did the programme lead to replicability of new models created?
Aspects include:

- Number of UK regions seeking to replicate new models by end of programme

To what extent can the programme demonstrate finance community engagement?
Aspects include:

- Number of projects integrating finance community
- **£ follow-on investment prepared by end of programme**
  - **10x vs 2017 levels**

To what extent did the programme contribute to UK leadership in integrated energy systems?
Aspects include:

- UK standing in energy systems research (incl. quantity and quality of research outputs)
- Foreign Direct Investment £ in UK projects
- Number of overseas researchers attracted to UK
- £ increased R&D investment in UK by multinationals in integrated/smart energy.

3.1.2 Process Evaluation

At a high level the evaluation will cover what difference the challenge has made to date, how it was designed and delivered, lessons for the future, and whether the PFER challenge is on track to deliver the medium and longer term benefits that were originally envisaged. It will also test the assumptions and links set out in the logic model (please refer to annex C), and whether the funding and activities led to the anticipated outcomes and impacts (as part of the phase 2 and 3 evaluations)

While individual project-level assessments will consider the impact of project funding and its delivery, the PFER challenge-level process evaluation will go beyond this to consider factors such as whether the identification of projects was done in the best way.
The process evaluation will also examine to what extent the PFER approach, including participation of UKRI, Government and other public sector organisations and RTOs, has increased or reduced the benefits, costs, complexity, timescales, or risks, for participants, and wider stakeholders, relative to business as usual support.

To what extent has the programme's governance and processes enabled it to meet its objectives?

- How effectively do the different strands of the programme align to add value? Is the value of the whole greater than the sum of its parts?
- Is the governance structure appropriate to maximise impact?
- Are the mechanisms used the most effective for delivering the programme's objectives?
- How does the programme align with other government initiatives in this area?
- What are the main positive and negative impacts of the processes used on project participants and wider stakeholders?

Additional Aspects include:

- How effectively does each aspect of programme delivery achieve its intended outcomes?
  - Whether the programme activities are implemented as planned? Are the resources appropriate to run application, selection and other activities?
  - Are the current processes efficient and effective (from customer and delivery orgs perspectives)? Are there any ways in which they could be improved?
- What expectations the project participants, programme managers and implementation staff have and how this aligns with the overall programme objectives?
- Is data being captured reliably and robustly? Indicators and KPI reflect/capture the programme progress and activities appropriately; do they need updating?
- Have there been any unexpected barriers or facilitators to desired impact related to the delivery of the programme?
- To what extent does the programme make use of best practices in its processes?
- Are there any lessons for delivery of policy for future challenges in this area?

3.2 Evaluation phasing

The evaluation will be split into three phases:

- Phase 1: will run for six months. This phase will help construct a baseline for the programme, using new (primary) and existing (secondary) data (both qualitative and quantitative), at sector level and project level. Phase 1 will provide initial feedback on the design and delivery of the PFER ISCF programme, assess whether inputs and activities are on track, and provide recommendations for improvements to meet desired objectives, including management of risks and opportunities. In particular, it will:
  - Validate and refine as necessary the programme's logic model (please refer to annex C) and key success criteria; Verify with the relevant stakeholders the quality and robustness of the available material. Provide initial feedback on assumptions, inputs, activities, and processes, risks, and use of best practices in design and delivery. Suggest improvements.

- Define a complete set of data collection requirements to enable comprehensive, efficient and effective monitoring and evaluation.
  Based on this, fully develop the evaluation framework for the programme. This should include a complete set of input, activity, output, outcome, and impact indicators to be measured by the evaluation, and a description of how such measures link to the programme objectives. This set must be agreed with all stakeholders, and must align with the evaluation framework for the ISCF as a whole. There will be a core set of key indicators to be captured across every programme, to be determined by UK Research and Innovation. The framework will include an assessment of counterfactual options (more than one counterfactual should be outlined in order to observe the best way to capture programme impacts).
- Based on the evaluation framework, define a complete set of data collection requirements to enable comprehensive monitoring and evaluation, identifying any gaps in existing data collection processes, taking into consideration the practical aspects of data collection. Building on the existing minimum data requirements and project level indicators that have already been developed, where applicable.
- Highlight synergies for efficient and timely evaluation data collection, analysis and use within the PFER programme by projects and the Energy Revolution Integration Network, supported by the Energy Systems Catapult and the Energy Revolution Research Consortium.
- Construct a baseline for the programme, using new (primary) and existing (secondary) data (both qualitative and quantitative). It is expected that the successful bidder will actively work with the Energy Systems Catapult to understand their Energy Revolution Integration Service (ERIS) (to help understanding of the ERIS programme, a copy of the bid pack is attached (Annex F) , and use this understanding of the project work in progress to assist in, for example, baselining of energy outcomes. It will not be possible to rely on programme administrative data to construct a baseline. Proposals should set out how they will further define the population for this aspect of the work.
- Construct the process evaluation aspect of the evaluation including all the previously stated aspects.

During Phase 1, the successful bidder will be required to engage with relevant stakeholders and subject experts (for example through one or more workshops) to develop appropriate approaches to monitoring and evaluation within the context of the objectives of the programme. However, given the aim of the programme is sector-wide transformation, a control group may be difficult to identify. UK Businesses and locations that don't adopt this approach may provide a useful comparator for evaluation. Comparison with interventions in other countries is also welcome, recognising key similarities and differences.

- Phase 2: This phase will conduct the evaluation during the programme duration and implement the evaluation framework developed in phase 1, including any ongoing survey data collection and analysis to assess inputs, activities, outputs, outcomes, and impacts. Phase 2 will only commence upon the satisfactory completion of phase 1, and so this represents a break clause in the contract. Bidders are therefore expected to cost each stage separately. After completion of Phase 1, outputs will be put to internal and external, independent peer review. Phase 2 will;
  - Implement the evaluation framework developed in phase 1, including any ongoing survey data collection and analysis to enable a robust assessment of the additional impact of the programme on inputs, activities, outputs, outcomes, and impacts and the effectiveness of the structures and processes used by the programme.
  - Update the evaluation framework if required.

- Phase 3: This phase will be a longer-term continuation of the evaluation, beyond the end of the programme. The third phase will be commissioned separately.
    - The evaluation framework for the programme should fit with wider plans for ISCF evaluation, for example through taking advantage of opportunities to collect data in a consistent way across different challenges. The evaluation framework should also be designed to fit in with the wider governance arrangements for the ISCF, for example the requirements of the ISCF Evaluation Board for challenges to produce regular monitoring and evaluation reports. We will provide further details of these processes to the successful bidder, including details of indicators and common data collection that will take place across all ISCF challenges.
    - All data collected during the course of phase 1 and 2 of the evaluation must be made available, on request, to contracting organisations or third-parties under contract to them, for the purposes of additional research and evaluation. Data from programme participants must be collected in such a way to enable this to happen. Proposals must clearly state how this will be achieved and any limitations to data sharing which may exist.
    - This invitation to tender covers phase 1 and 2 of the evaluation. Although it does not include phase 3 of the evaluation, proposals must clearly set out how the evaluation will be completed at the end of phase 2 to allow continuation by any potential deliverer of phase 3, including through the provision of all data and contact lists to any potential alternative evaluators.
    - Proposals should include a strategy to merge the methodology used in phases 1 and 2 into phase 3 as there will be on-going impacts that should be addressed at those later evaluation stages.

The sections below set out the requirements for the evaluation in more detail.

3.3 Evaluation

Proposals should clearly set out how a full impact evaluation of the Prospering from the Energy Revolution Programme will be delivered up to the end of phase 2 of the evaluation; including scientific/technological, economic (as outlined in the Green Book), environmental, political, market, and societal impacts. UKRI places great weight on the robustness of the evaluation methodology, and the ability of the proposed evaluation team to deliver high quality insights.

Proposals should clearly define the methodological approach to achieve the objectives of the evaluation and address any analytical challenges. They should clearly set out why the proposed methodology is deemed to be the most robust option, given these objectives and challenges.

It is expected that the extent of challenges will differ across the strands of the programme, and over time. Proposals should use the most robust methods practical in each of the strands, and explain how evidence across them will be aggregated to inform on the impact of the entire programme.

Proposals should clearly set out where reliable, quantified impact estimates are expected to be achieved, and where a more qualitative or descriptive approach might be expected. Any significant assumptions, risks, uncertainties, or other issues should be flagged.

It is anticipated that this project will require a combination of analytical techniques. These could include case studies, surveys of stakeholders or beneficiaries, in-depth interviews, data linking, econometric analysis, primary or secondary data, and industry consultations.

Proposals should specify how the different analytical techniques employed will be chosen and how these addresses each of the evaluation objectives. It may be that not all are appropriate, but it is unlikely that any one alone will be sufficient. Where theory-based techniques, such as contribution analysis, proposals must clearly set out how different analytical approaches will be combined to produce the final findings. Proposals are also expected to include a practical description of how they will liaise with the key stakeholder in the energy industry. Bidders should describe how they will provide a flexible approach and flexible resources to meet evolving evaluation needs and opportunities[1].

For survey activity, proposals should indicate the type of survey to be implemented, an indication and comment of the required or expected sample size, as well as their strategies to achieve this and steps which will be taken if it is not achieved. This includes methods and approaches used in order to capture and ensure the maximum response rate and statistical relevance possible. Proposals should give an overview of the number of case studies to be conducted and what methods (i.e. random selection, willingness to participate approach) and tools (i.e. face to face, phone interview, online surveys, social media analysis etc.) are going to be implemented, taking into consideration the time and costs of the different tools implemented. Proposals should also set out how case study findings will be analysed and presented.

Proposals should give consideration to relevant external factors, such as global demand/global economic conditions, as well as links to and implications of the various global UK R&D collaboration programmes and trade agreements covering the energy industry.

To the extent that the results permit, the study should draw out any conclusions about differences in impact, as well as addressing the effectiveness of delivery of the programme, depending on factors such as project leadership structure (e.g. academic-led or business-led), sector or technology area, or company size. Proposals should conduct sample size calculations for sub-group analysis (e.g. for company size) if they are expecting to address them through surveys or econometric analyses.

All proposals should follow best practice guidance in designing evaluations as set out in HM Treasury's Magenta Book (please refer to annex D). Proposals should clearly outline their plan for measuring deadweight, displacement, leakages and spill overs, in this context. Each of these factors must be individually addressed in proposals. It will not be considered sufficient for bidders to rely on general estimates drawn from the wider literature. In regard to measurement of GVA in the challenge area and the UK economy, proposals should highlight to what degree this is plausible and what are the challenges they might encounter on trying to do so, and how these measures build up to have a wider understanding of the impact of ISCF funding.

It is anticipated that the successful proposal will make use of at least one or more appropriate control groups. Proposals should set out the population any proposed control group will be drawn from, why this represents the most appropriate control group(s), what characteristics (e.g. sector, location, R&D intensity) will be used from the dataset for matching, and how data will be collected from the sample (both treatment and control groups), including how any issues around engagement will be addressed if primary data collection is to take place.

Given the scale and complexity of the programme and the evaluation, the funding partners are interested in examining the potential of using multiple control groups to help verify

[1] As an example, the Energy Revolution Integration Network, comprising the Energy Systems Catapult and Energy Revolution Research Consortium, will be expected to carry out analysis leading to a number of energy system technical insights, which should be relevant for evaluation.

findings. For example, for Collaborative R&D projects, proposals could consider deploying a control group of unsuccessful applicants and one from business databases, drawn from the general population.

Tenderers are encouraged to think innovatively in terms of how they propose to address the evaluation objectives, although innovation should not be to the detriment of robustness. The funding partners are keen to push boundaries in their evaluations, in order to improve the quality of their evidence base.

Proposals should clearly set out how the evaluation approach will change depending on the technology readiness level of the work in question.

The proposals will be put to an external, independent peer review group of evaluation experts. The successful bidders will be expected to consider and, if appropriate, respond to any comments from peer reviewers and update the proposed methodology where needed. As well as attending an interview stage where the proposals should be presented to a panel. This process will be repeated with draft reports throughout the project and any published reports will have peer review comments published alongside them. The successful bidder will be expected to present the findings and make amendments or respond to comments before publication.

In all instances of primary data collection, the burden on respondents must be minimised as far as possible. Primary data collection must build on what is already collected through existing processes, either of funding organisations or third-parties, with any new data collection designed to fill in the gaps. The evaluation is expected to utilise data-linking, potentially including to proprietary third-party datasets. Access to these datasets should be considered and costed into proposals.

The successful bidder will be required to work and communicate with other contractors that are working with similar evaluations, as it will ensure best practice and consistency between evaluations and create a link to the wider ISCF-wide evaluation.

4.0 Available Resources

Innovate UK & EPSRC hold contact data for all individuals or organisations who have submitted an application for funding to the PFER ISCF, both successful and unsuccessful.

Innovate UK collects management information on each applicant to the competitions. This includes;

- Company name, address, Companies House number
- Contact details for project lead
- Total project cost, requested grant size, project overview
- Current turnover, employment, profits, R&D expenditure. Note that this data may not be complete as it depends on information shared by applicants.

EPSRC holds management information on all grants: this is mainly provided on research proposals or as applicant-reported research outcomes gathered during and after the life time of the award. The information includes:

- Holding organisation and department
- Principal and co-investigators
- Project funded value
- Project partners (collaborating organisations contributing to the grant)
- Start and End dates

- Project summary/abstract

Further details of the information available from EPSRC is provided at Annex G

Projects in scope will complete Innovate UK's project completion questionnaire at the end of the grant-funded project. This collects data on collaboration activities, the type of innovation the grant funded project outputs and expected outcomes. Innovate UK will be delivering this form to all business participants in projects. Bidders may wish to consider whether taking control of the project completion monitoring system which may enable a more robust evaluation, although bidders should note that Innovate UK values the ability to link such monitoring data to specific businesses (i.e. having not anonymised data for the use of the data within IUK).

The majority of data will be collected through standard monitoring processes of Innovate UK and EPSRC. The ISCF minimum data requirements will be adhered to for this and included in all grant funding agreements. Where standard processes don't cover the required data collection, new processes will be implemented.

The successful bidder will have access to:

- ISCF Baseline Monitoring
- Periodic monitoring & claims
- Project Completion forms
- Management Information listed above
- Innovate UK Evaluation Framework
- ISCF Evaluation Framework
- Energy Systems Catapult

We will also provide the successful bidder with details of the ISCF-wide evaluation framework. In addition to the management information set out above, there are various indicators and data categories for which information will be collected across all ISCF challenges, in order to enable the monitoring of the performance of the ISCF as a whole, for example against its aims to increase UK private R&D investment and capability, and to increase academia / business collaboration.

As such, the successful bidder will work closely with the Programme Management Office for the ISCF, who will play an important role in collecting data across challenges and holding this centrally. Common indicators are likely to include:

- Additional £ spent on R&D due to the funded project(s) by firms involved in project
- Number of researchers working in different research areas and levels
- Number of publications in peer reviewed journals and citation impact
- Number of patents, prototypes, new products and services compared to baseline
- Number and type of collaborations before, during and after project funding
- Number of researchers employed in relevant business areas before, during and after
- Number of high quality publications with business co-authorship.
- Value / share of turnover based on innovations arising from collaborative projects

Bidders should consider how their evaluation methodology will link to and build off these indictors, in line with the 'collect once, use often' principle of the ISCF evaluation framework.

Successful and unsuccessful applicants are encouraged to participate in follow up surveys for the purpose of project results exploitation, but they are not legally obliged to do so.

However, it is possible to showcase the willingness of participants to comply with survey and interview requests by observing the response rates to previous evaluations. The Biomedical Catalyst Evaluation obtained response rates of 75% from successful and 67% from unsuccessful applicants; for the evaluation of SMART from a target of 300 successful and 200 unsuccessful responses it was possible to obtain a response of 293 and 189 participants respectively; for the Innovation Platforms evaluation the response rate was on average of 61% from all contacted applicants.

5.0 Deliverables

It is envisioned that evaluation will be delivered through phases acting as a gateway for future work, as set out above.

- Phase 1: An initial framework for the evaluation, clearly setting out deliverables, and time lines. It should provide details of the remaining deliverables below. This should be agreed with the project team following the inception meeting.
- A final phase 1 report setting out the refined logic model, data collection framework, and methodology and implementation plan. In combination with the **Process Evaluation** aspect as stated above. This will be delivered by May 2019.
- Phase 2: Interim evaluation reports setting out findings to date and an implementation plan for the remainder of phase 2. Annual written updates on progress will also be required, with an added presentation with the key findings and key messages of the report and/or progress updates.
- A final evaluation report setting out findings to date, including a plan for handing over for whoever may deliver phase 3. This will be delivered by March 2022.

At the end of this phase of the evaluation, all datasets provided, compiled, or used, along with all analysis and reporting relating to them, must be provided to UKRI with unique business identifier for further matching at stage three in a convenient format, such that it will be possible to hand over, in full, either to UKRI and/or another contractor, as appropriate. The bidders will also need to make all the code available to use econometric and survey data analysis. Proposals must state how this will be achieved, including how any data protection issues will be resolved.

6.0 Management

Management of the Evaluation will be through the individual challenge teams and an ISCF Evaluation sub-board which reports directly to the ISCF Steering Board. The successful contractor may need to attend periodic meetings to update the sub-board, and/or the challenge team, present results, and agree outputs as fit for purpose. The project will also require close working with the evaluation lead (to be appointed) in the ISCF Portfolio Management Office (PMO).

Section 5 – Evaluation of Bids

The evaluation model below shall be used for this Mini Competition, which will be determined to two decimal places.

Where a question is 'for information only' it will not be scored.

To maintain a high degree of rigour in the evaluation of your bid, a process of moderation will be undertaken to ensure consistency by all evaluators.

After moderation the scores will be finalised by performing a calculation to identify (at question level) the mean average of all evaluators (Example – a question is scored by three evaluators and judged as scoring 5, 5 and 6. These scores will be added together and divided by the number of evaluators to produce the final score of 5.33 (5+5+6 =16÷3 = 5.33)

Pass / fail criteria

Questionnaire	Q No.	Question subject
Commercial	SEL3.12	Cyber Essentials
Commercial	SEL3.13	General Data Protection Regulations (GDPR)
Commercial	FOI1.1	Freedom of Information Exemptions
Commercial	AW1.1	Form of Bid
Commercial	AW1.3	Certificate of Bona Fide Bid
Commercial	AW4.1	Contracts Terms
Quality	AW6.1	Compliance to the Specification
Commercial	AW6.2	Non-Disclosure Agreement
-	-	Invitation to Quote – received on time within e-sourcing tool

Scoring criteria

Evaluation Justification Statement
In consideration of this particular requirement UK SBS has decided to evaluate Potential Providers by adopting the weightings/scoring mechanism detailed within this Mini Competition. UK SBS considers these weightings to be in line with existing best practice for a requirement of this type.

Questionnaire	Q No.	Question subject	Maximum Marks
Price	AW5.2	Price	20%
Quality	PROJ1.1	Approach	20%

Quality	PROJ1.2	Staff to Deliver	15%
Quality	PROJ1.3	Understanding the Environment	20%
Quality	PROJ1.5	Risk Management	25%

Evaluation of criteria

Non-Price elements

Each question will be judged on a score from 0 to 100, which shall be subjected to a multiplier to reflect the percentage of the evaluation criteria allocated to that question.

Where an evaluation criterion is worth 20% then the 0-100 score achieved will be multiplied by 20.

Example if a Bidder scores 60 from the available 100 points this will equate to 12% by using the following calculation: Score/Total Points available multiplied by 20 (60/100 x 20 = 12)

Where an evaluation criterion is worth 10% then the 0-100 score achieved will be multiplied by 10.

Example if a Bidder scores 60 from the available 100 points this will equate to 6% by using the following calculation: Score/Total Points available multiplied by 10 (60/100 x 10 = 6)

The same logic will be applied to groups of questions which equate to a single evaluation criterion.

The 0-100 score shall be based on (unless otherwise stated within the question):

0	The Question is not answered or the response is completely unacceptable.
10	Extremely poor response – they have completely missed the point of the question.
20	Very poor response and not wholly acceptable. Requires major revision to the response to make it acceptable. Only partially answers the requirement, with major deficiencies and little relevant detail proposed.
40	Poor response only partially satisfying the selection question requirements with deficiencies apparent. Some useful evidence provided but response falls well short of expectations. Low probability of being a capable supplier.
60	Response is acceptable but remains basic and could have been expanded upon. Response is sufficient but does not inspire.
80	Good response which describes their capabilities in detail which provides high levels of assurance consistent with a quality provider. The response includes a full description of techniques and measurements currently employed.
100	Response is exceptional and clearly demonstrates they are capable of meeting the requirement. No significant weaknesses noted. The response is compelling in its description of techniques and measurements currently employed, providing full assurance consistent with a quality provider.

All questions will be scored based on the above mechanism. Please be aware that the final score returned may be different as there will be multiple evaluators and their individual scores after a moderation process will be averaged (mean) to determine your final score.

Example

Evaluator 1 scored your bid as 60

Evaluator 2 scored your bid as 60

Evaluator 3 scored your bid as 50

Evaluator 4 scored your bid as 50

Your final score will (60+60+50+50) ÷ 4 = 55

Price elements will be judged on the following criteria.

The lowest price for a response which meets the pass criteria shall score 100.
All other bids shall be scored on a pro rata basis in relation to the lowest price. The score is then subject to a multiplier to reflect the percentage value of the price criterion.

For example - Bid 1 £100,000 scores 100,
Bid 2 £120,000 differential of £20,000 or 20% remove 20% from price scores 80
Bid 3 £150,000 differential £50,000 remove 50% from price scores 50.
Bid 4 £175,000 differential £75,000 remove 75% from price scores 25.
Bid 5 £200,000 differential £100,000 remove 100% from price scores 0.
Bid 6 £300,000 differential £200,000 remove 100% from price scores 0.

Where the scoring criterion is worth 50% then the 0-100 score achieved will be multiplied by 50

In the example if a supplier scores 80 from the available 100 points this will equate to 40% by using the following calculation: Score/Total Points multiplied by 50 (80/100 x 50 = 40)

The lowest score possible is 0 even if the price submitted is more than 100% greater than the lowest price.

Section 6 – Evaluation questionnaire

Bidders should note that the evaluation questionnaire is located within the e**-sourcing questionnaire.**

Guidance on completion of the questionnaire is available at http://www.uksbs.co.uk/services/procure/Pages/supplier.aspx

PLEASE NOTE THE QUESTIONS ARE NOT NUMBERED SEQUENTIALLY

Section 7 – General Information

What makes a good bid – some simple do's ☺

DO:

7.1 Do comply with Procurement document instructions. Failure to do so may lead to disqualification.

7.2 Do provide the Bid on time, and in the required format. Remember that the date/time given for a response is the last date that it can be accepted; we are legally bound to disqualify late submissions.

7.3 Do ensure you have read all the training materials to utilise e-sourcing tool prior to responding to this Bid. If you send your Bid by email or post it will be rejected.

7.4 Do use Microsoft Word, PowerPoint Excel 97-03 or compatible formats, or PDF unless agreed in writing by the Buyer. If you use another file format without our written permission we may reject your Bid.

7.5 Do ensure you utilise the Emptoris messaging system to raise any clarifications to our Mini Competition. You should note that typically we will release the answer to the question to all bidders and where we suspect the question contains confidential information we may modify the content of the question to protect the anonymity of the Bidder or their proposed solution

7.6 Do answer the question, it is not enough simply to cross-reference to a 'policy', web page or another part of your Bid, the evaluation team have limited time to assess bids and if they can't find the answer, they can't score it.

7.7 Do consider who your customer is and what they want – a generic answer does not necessarily meet every customer's needs.

7.8 Do reference your documents correctly, specifically where supporting documentation is requested e.g. referencing the question/s they apply to.

7.9 Do provide clear and concise contact details; telephone numbers, e-mails and fax details.

7.10 Do complete all questions in the questionnaire or we may reject your Bid.

7.11 Do check and recheck your Bid before dispatch.

What makes a good bid – some simple do not's ☹

DO NOT

7.12 Do not cut and paste from a previous document and forget to change the previous details such as the previous buyer's name.

7.13 Do not attach 'glossy' brochures that have not been requested, they will not be read unless we have asked for them. Only send what has been requested and only send supplementary information if we have offered the opportunity so to do.

7.14 Do not share the Procurement documents, they are confidential and should not be shared with anyone without the Buyers written permission.

7.15 Do not seek to influence the procurement process by requesting meetings or contacting UK SBS or the Customer to discuss your Bid. If your Bid requires clarification the Buyer will contact you.

7.16 Do not contact any UK SBS staff or Customer staff without the Buyers written permission or we may reject your Bid.

7.17 Do not collude to fix or adjust the price or withdraw your Bid with another Party as we will reject your Bid.

7.18 Do not offer UK SBS or Customer staff any inducement or we will reject your Bid.

7.19 Do not seek changes to the Bid after responses have been submitted and the deadline for Bids to be submitted has passed.

7.20 Do not cross reference answers to external websites or other parts of your Bid, the cross references and website links will not be considered.

7.21 Do not exceed word counts, the additional words will not be considered.

7.22 Do not make your Bid conditional on acceptance of your own Terms of Contract, as your Bid will be rejected.

Some additional guidance notes

7.23 All enquiries with respect to access to the e-sourcing tool and problems with functionality within the tool may be submitted to Crown Commercial Service (CCS – previously Government Procurement Service), Telephone 0345 010 3503.

7.24 Bidders will be specifically advised where attachments are permissible to support a question response within the e-sourcing tool. Where they are not permissible any attachments submitted will not be considered.

7.25 Question numbering is not sequential and all questions which require submission are included in the Section 6 Evaluation Questionnaire.

7.26 Any Contract offered may not guarantee any volume of work or any exclusivity of supply.

7.27 We do not guarantee to award any Contract as a result of this procurement

7.28 All documents issued or received in relation to this procurement shall be the property of UK SBS.

7.29 We can amend any part of the procurement documents at any time prior to the latest date / time Bids shall be submitted through Emptoris.

7.30 If you are a Consortium you must provide details of the Consortiums structure.

7.31 Bidders will be expected to comply with the Freedom of Information Act 2000 or your Bid will be rejected.

7.32 Bidders should note the Government's transparency agenda requires your Bid and any Contract entered into to be published on a designated, publicly searchable web site. By submitting a response to this Mini Competition Bidders are agreeing that their Bid and Contract may be made public

7.33 Your bid will be valid for 60 days or your Bid will be rejected.

7.34 Bidders may only amend the Special terms if you can demonstrate there is a legal or statutory reason why you cannot accept them. If you request changes to the Contract and UK SBS fail to accept your legal or statutory reason is reasonably justified we may reject your Bid.

7.35 We will let you know the outcome of your Bid evaluation and where requested will provide a written debrief of the relative strengths and weaknesses of your Bid.

7.36 If you fail mandatory pass / fail criteria we will reject your Bid.

7.37 Bidders are required to use IE8, IE9, Chrome or Firefox in order to access the functionality of the Emptoris e-sourcing tool.

7.38 Bidders should note that if they are successful with their proposal UK SBS reserves the right to ask additional compliancy checks prior to the award of any Call Off Contract. In the event of a Bidder failing to meet one of the compliancy checks UK SBS may decline to proceed with the award of the Call Off Contract to the successful Bidder.

7.39 All timescales are set using a 24 hour clock and are based on British Summer Time or Greenwich Mean Time, depending on which applies at the point when Date and Time Bids shall be submitted through Emptoris

7.40 All Central Government Departments and their Executive Agencies and Non Departmental Public Bodies are subject to control and reporting within Government. In particular, they report to the Cabinet Office and HM Treasury for all expenditure. Further, the Cabinet Office has a cross-Government role delivering overall Government policy on public procurement - including ensuring value for money and related aspects of good procurement practice.

For these purposes, UK SBS may disclose within Government any of the Bidders documentation/information (including any that the Bidder considers to be confidential and/or commercially sensitive such as specific bid information) submitted by the Bidder to UK SBS during this Procurement. The information will not be disclosed outside Government. Bidders taking part in this Mini Competition consent to these terms as part of the competition process.

7.41 From 2nd April 2014 the Government is introducing its new Government Security Classifications (GSC) classification scheme to replace the current Government Protective Marking System (GPMS). A key aspect of this is the reduction in the number of security classifications used. All Bidders are encouraged to make themselves aware of the changes and identify any potential impacts in their Bid, as the protective marking and applicable protection of any material passed to, or generated by, you during the procurement process or pursuant to any Contract awarded to you as a result of this tender process will be subject to the new GSC from 2nd April 2014. The link below to the Gov.uk website provides information on the new GSC:

https://www.gov.uk/government/publications/government-security-classifications

UK SBS reserves the right to amend any security related term or condition of the draft contract accompanying this Mini Competition to reflect any changes introduced by the GSC. In particular where this Mini Competition is accompanied by any instructions on safeguarding classified information (e.g. a Security Aspects Letter) as a result of any changes stemming from the new GSC, whether in respect of the applicable protective marking scheme, specific protective markings given, the aspects to which any protective marking applies or otherwise. This may relate to the instructions on safeguarding classified information (e.g. a Security Aspects Letter) as they apply to the procurement as they apply to the procurement process and/or any contracts awarded to you as a result of the procurement process.

USEFUL INFORMATION LINKS

- Emptoris Training Guide
- Emptoris e-sourcing tool
- Equalities Act introduction
- Bribery Act introduction

- Freedom of information Act


Annex B - Key Success Factors.doc


Annex C - Logic model for the Prosp


Annex D - HM Treasury Magenta B


Annex E - HM Government's Indus


Annex F - ERIS direct services scope


Annex G -EPSRC grant information.d

EPSRC – Grant Information

EPSRC holds management information on all grants: this is mainly provided on research proposals or as applicant-reported research outcomes gathered during and after the life time of the award.

This information is publically available for funded applications from Gateway to Research: http://gtr.rcuk.ac.uk/ which contains information on all research council funding as well from InnovateUK since 2006. Some additional information is also available through EPSRC's Grants on the Web portal (Additional Classification information) http://gow.epsrc.ac.uk/

Application Data

Application/Grant	
Holding Organisation and Department	Research organisation which has been awarded the grant
Principal and Co-Investigators	Names, Departments, Organisations
Project funded value	Value of funding awarded by EPSRC
Project Partner (Collaborating organisations contributing to the grant)	Organisation Name, Contact details
Start and End Date	
Project Summary/Abstract	Lay summary – see example here
Impact Summary	A summary of the expected impact of the award – see example here

Classifications

In addition all awards are classified by EPSRC staff against a number of identifiers to describe the scientific research to be carried out by the award and indications to note relevance to industry & business sectors.

Classifier	
Research Areas	See EPSRC Research Areas: https://www.epsrc.ac.uk/research/ourportfolio/researchareas/
Research Topics	Science research topic descriptors agreed across the research councils
Sectors	Industrial Sectors, definitions can be found here: http://gow.epsrc.ac.uk/Sectors_Def.htm

Research Outcomes

Data on research outcomes is routinely gathered from Principal Investigators (PI) annually, for awards that have been running for at least 6 months. Information can be gathered more frequently if required.

Research Outcome	
Key Findings	(Mandatory) Key findings description
Narrative Impact	(Mandatory) An overall narrative summary of the impact an award has had to date.
Publications	Publication list attributed to the grant (DOI link included where available)
Collaboration, Further Funding, Engagement activities, Products, IP, Policy Impacts, Spin outs	Researchers report outputs and outcomes under these categories

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