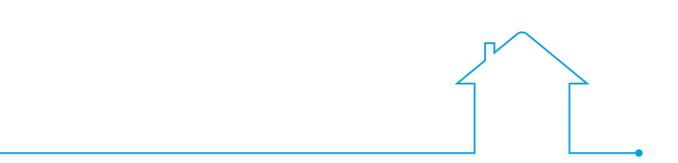


Smart Meter Enabled Thermal Efficiency Ratings (SMETER) Innovation Competition

(An SBRI Competition: TRN 1611/09/2018)

Competition Application Guidance Notes



SMART METER ENABLED THERMAL EFFICIENCY RATINGS (SMETER) INNOVATION COMPETITION

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1 Introduction

This Call for Proposals and Guidance document sets out the context, scope, application process and assessment criteria for the Smart Meter Enabled Thermal Efficiency Ratings (SMETER) Innovation Competition.

This Competition focuses on the development of new tools to measure the thermal efficiency of homes. Its aim is to help consumers, energy suppliers, providers of energy efficiency products and services, and policy-makers to save energy, reducing bills and carbon emissions, by providing a better understanding of the energy efficiency of homes. The competition will fund the development, testing and demonstration of tools that can measure the heat transfer coefficient of a home using its energy consumption data, primarily through smart meters, plus other data.

The total potential value of the Competition is up to £5m (up to £4.1m of funds to be awarded for development of SMETERs through the Competition and up to £900,000 for a technical assessment contractor), although BEIS may allocate less than this depending on the quality of the applications. The Competition will be delivered in two main phases:

Phase 1 – Feasibility studies consisting of software and hardware development (if relevant), pilot deployment, and initial testing of algorithms.

Phase 2 – Field trials and final testing of SMETER products, supported by the technical assessment contractor.

Technical Assessment Contractor (TAC) – A Technical Assessment Contractor will be procured by BEIS to oversee the testing of SMETERs throughout the competition, working hand-in-hand with Competition Participants.

Note: All applications must be received electronically by BEIS by 12 noon on the 19th October 2018. See Section 7 (application process) of this document for details of how to apply.

1.1 Context

The Department for Business, Energy and Industrial Strategy (BEIS) works to ensure that the country has secure energy supplies that are reliable, affordable and clean; ensuring that the UK remains at the leading edge of science, research and innovation; and tackling climate change.

1.1.1 The Clean Growth Strategy

The overarching driver for this programme of work is the Clean Growth Strategy¹. It sets out the Government's plans to grow the economy while reducing greenhouse gas emissions in the UK. Of the total UK emissions, 13% comes from energy consumed in our homes. A key part of this strategy is how to further reduce emissions from homes while ensuring that everyone has a home that is comfortable, heathy and affordable to run.

In the Clean Growth Strategy, the Government committed to the following proposals:

- Support around £3.6 billion of investment to upgrade around a million homes through the Energy Company Obligation (ECO), and extend support for home energy efficiency improvements until 2028 at the current level of ECO funding
- Help to upgrade all fuel poor homes to Energy Performance Certificate (EPC) Band C by 2030 and our aspiration is for as many homes as possible to be EPC Band C by 2035 where practical, cost-effective and affordable
- Develop a long-term trajectory to improve the energy performance standards of privately rented homes, with the aim of upgrading as many as possible to EPC Band C by 2030 where practical, cost-effective and affordable
- Consult on how social housing can meet similar standards over this period
- Following the outcome of the independent review of Building Regulations and fire safety, consult on strengthening energy performance standards for new and existing homes under Building Regulations
- Offer all households the opportunity to have a smart meter to help them save energy by the end of 2020

¹ https://www.gov.uk/government/publications/clean-growth-strategy

In addition to these commitments, as part of the Clean Growth Grand Challenge the Prime Minister announced the Buildings Mission which aims to at least halve the energy use of new buildings by 2030².

By making our buildings more energy efficient and embracing smart technologies, we can cut household energy bills, reduce demand for energy, and boost economic growth while meeting our targets for carbon reduction.

1.1.2 The Standard Assessment Procedure

Many of the policies to reduce future emissions and energy consumption in homes, and help deliver the Clean Growth Strategy and Buildings Mission, are based on having an understanding of the energy performance of homes.

The Standard Assessment Procedure (SAP) is the principal methodology used by the Government to compare and assess the energy performance of dwellings. For existing homes, the required inputs for SAP are not always readily available so a reduced data version, RdSAP, has been developed that infers inputs that are hard to obtain (e.g. thermal properties) based on a site survey of the property.

The primary purpose of SAP³ is to assess compliance with Part L of the Building Regulations⁴, but many other policies are now dependent on SAP. In recent years, BEIS and the Ministry for Housing, Communities and Local Government (MHCLG) have extended the use of SAP to serve other purposes, in particular to calculate the Energy Efficiency Rating presented on home Energy Performance Certificates (EPCs) and to calculate annual energy and bill savings for efficiency measures on EPCs themselves, for the Energy Company Obligation (ECO 'deemed scores'), and in Green Deal Assessment Reports. In turn, EPCs support the operation of the Energy Savings Advice Service (ESAS), and EPC ratings underpin Private Rented Sector regulations and are made available to inform the decision-making of homebuyers, renters, and the financial services sector (which has a stake in home energy efficiency metrics as the basis for designing and

² https://www.gov.uk/government/speeches/ pm-speech-on-science-and-modern-industrialstrategy-21-may-2018

³ In general, references to SAP include the use of RdSAP. Once dwelling characteristics have been inferred from the RdSAP inputs, the process for calculating the energy performance is identical for SAP and RdSAP. RdSAP is only referred to in the text where it is relevant to specify the method of data input for the SAP calculation.

⁴ https://www.gov.uk/government/publications/conservation-of-fuel-and-power-approved-document-l

informing lending decisions on 'green' financial products such as mortgages and home improvement loans).

SAP calculations start by calculating the heat transfer coefficient (HTC) of a home based on its physical and thermal characteristics. This intermediate calculation result – HTC – is a fundamental measure of the thermal performance of the building envelope covering all forms of heat transfer between the inside and outside of the home. Given the HTC, SAP then calculates annual electricity and heating fuel demands based on the efficiency of building services, and standardised assumptions about climate, the number of occupants, and how they use energy in the home⁵.

In practice, evidence shows that there are frequently differences between the SAP inputs and the actual construction of a home. For new homes, there are multiple causes for such difference across the housebuilding process - the most comprehensive review has been undertaken by the Zero Carbon Hub⁶. For existing homes, RdSAP infers thermal properties from inputs such as dwelling type and age collected by way of a survey and, for example, BEIS research⁷ has demonstrated variability in the survey data collected through repeat surveys of the same property. The quality of the inputs impacts on the accuracy of the HTC calculation and further calculations.

1.1.3 Moving from a Modelled to a Measured Approach

An improvement to SAP would be to more accurately measure and input the HTC rather than calculating it within SAP. The best currently available and proven measurement option, the co-heating test⁸, is costly and requires homes to be unoccupied for around two weeks meaning this cannot be used as a widespread method for assessing the thermal performance of homes. As such there is great interest in alternative options for measuring the thermal performance of homes in situ while they are occupied. One such option is to use smart meter data plus other data such as temperature to calculate the HTC.

⁵ https://www.bre.co.uk/filelibrary/SAP/2012/SAP-2012 9-92.pdf

⁶ Zero Carbon Hub. 2014. Performance Gap

⁷ DECC 2014. Green Deal Assessment Mystery Shopping Research.

⁸ The co-heating test is an experimental method of determining a building's overall heat transfer coefficient (HTC) due to conductive and ventilation heat losses.

1.1.4 The Smart Metering Implementation Programme

The Government is committed to ensuring that every home and business in the country is offered a smart meter by the end of 2020. At the end of March 2018, there were over 11 million smart and advanced meters operating across homes and businesses in Great Britain.

The smart meter roll-out provides an opportunity to develop new technologies using household specific consumption data from smart meters, combined with other data, for assessing the thermal performance of homes. The smart meter ecosystem, with data available via the Data Communications Company (DCC) or a Consumer Access Device CADs, means that for the first time businesses, with the consumer's consent, can access recent household energy data to provide related services and products. More information on options for accessing smart meter data is outlined in 'Smart Meters, Smart Data, Smart Growth'9.

Recognising this potential, BEIS made a commitment in the Clean Growth Strategy to "explore measuring actual building performance using data from smart meters" which is a key driver for this programme. A second accompanying Clean Growth Strategy (CGS) commitment is to "explore how the data available through the national smart metering platform can, with customers' consent, support personalised recommendations for saving energy, more targeted policy interventions and help businesses develop energy saving offers".

1.2 Smart Meter Enabled Thermal Efficiency Rating (SMETER) Products

BEIS undertook a significant review to understand the market potential to develop and commercially deploy methods for measuring the thermal performance of homes using smart meter data. The review highlighted a significant market potential to develop such methods which could use smart meter and weather data, and potentially other measurements (e.g. indoor temperature and home survey data). These products have

9 Smart Meters, Smart Data, Smart Growth. https://www.gov.uk/government/publications/smart-meters-smart-data-smart-growth been collectively termed 'Smart Meter Enabled Thermal Efficiency Rating' (SMETER) products. The thermal performance measurement provided by a SMETER (i.e. the HTC) could be fed back into SAP to enable a more accurate assessment of annual building energy performance for policy use.

BEIS has subsequently seen the need to provide funding to develop, test and demonstrate SMETER technologies to accelerate the improvement the assessment of the thermal performance of homes. This funding is part of the £90m allocated to innovation in the built environment (energy efficiency and heating) as part of BEIS's £505m Energy Innovation Programme. The Energy Innovation Programme aims to accelerate the commercialisation of innovative clean energy technologies and processes into the 2020s and 2030s.

1.2.1 Expected Benefits of SMETER Products

Providing a better assessment of the thermal performance of homes using SMETER products could benefit a wide range of stakeholders, from consumers, to policy-makers. Ultimately these could lead to the reduction of energy used in homes and reduce carbon emissions.

SMETER could deliver the following benefits:

- More accurate and reliable energy efficiency ratings, and advice better tailored to specific properties. This leads to more trust/confidence in energy efficiency metrics and related policies.
- Increased uptake of energy efficiency products
- Larger bill savings for the consumer
- Larger carbon savings
- Drive innovation to improve performance of building fabric energy efficiency measures.

These benefits could help improve the execution of or inform the improvement of key energy efficiency policies and services, including ¹⁰:

¹⁰ BEIS and MHCLG are currently considering ways in which the use of Energy Performance Certificates could be improved. In July the two departments launched a Call for Evidence on EPCs which closes on 19 October. One possibility described in the Call for Evidence is that smart meter and other building data could be used to improve the accuracy of the EPC rating which is an output of the SAP calculation e.g. through the HTC generated by a SMETER.

- Energy Company Obligation (ECO)
- Private Rental Sector Regulations
- Social Rental Sector improvements
- Fuel Poverty
- Energy Savings Advice Service (ESAS)
- Smart Meter Implementation Programme (SMIP)
- Part L of the Building Regulations

SMETER products could also deliver benefits to the following non-government stakeholders:

Homeowners and occupants: Having a better understanding of the thermal performance of their homes will make them more informed customers for energy efficiency products, leading to greater energy bill savings and improved thermal comfort.

Green Mortgage / Finance Providers: An increase in energy efficiency metrics will boost confidence to invest in energy efficiency related financial products

Commercial businesses: Businesses could better demonstrate performance and provide guarantees for energy efficiency products or provide new commercial offerings e.g. energy advice services, and green financing.

Learning from the outcomes of this competition can also inform options for measuring the performance of non-domestic buildings for which there is currently a significant information gap.

SMETER products could also help Government to achieve some of its ambitions set out in the recently announced Construction Sector Deal¹¹ between industry and Government:

- Digital techniques deployed at all phases of design will deliver better, more certain results during the construction and operation of buildings. This will contribute to the improvement of safety, quality and productivity during construction, optimising performance during the life of the building.
- Whole life asset performance will shift focus from the costs of construction to the costs of a building across its life cycle, particularly its use of energy.

¹¹ https://www.gov.uk/government/publications/construction-sector-deal

1.3 Aims and Objectives of the SMETER Programme

The overall aim of the SMETER programme is to develop and demonstrate methods to robustly assess the thermal performance of dwellings that are suitable for policy applications. It is focussed on methods to measure the heat transfer coefficient (HTC) of homes, and therefore integrate with SAP (including RdSAP) which underpins many existing policies. The programme objectives are discussed below.

1.3.1 Objectives of the SMETER Programme are:

The objectives of the SMETER programme are to:

- Accelerate development of SMETERs to the point that they are close to market readiness
- 2. Develop SMETERs that:
 - Have an improved accuracy compared to the current application of SAP and RdSAP
 - b. Are value-for-money for policy application
 - c. Are acceptable to households
- Test and demonstrate SMETERs to provide BEIS with the confidence that they meet these objectives

These objectives will be delivered through two main components:

- Development of SMETERs by the Innovation Competition Participants
- Testing and demonstration of SMETERs by a Technical Assessment Contractor to be procured alongside the Innovation Competition.

The Technical Assessment Contractor will be procured separately to the innovation competition, but their objectives and activities are outlined in this document to provide Applicants with the context needed to support their proposal.

1.3.2 Objectives of the Competition Participants

The Competition Participants will be developing, testing and demonstrating their SMETER to ensure it meets the programme objectives.

To meet these objectives, we expect Competition Participants to:

- 1. Develop SMETERs that:
 - a. Have an improved accuracy of assessing the thermal performance of homes compared to current application of SAP and RdSAP
 - b. Provide value-for-money to implement for policy application

- c. Are acceptable to households
- 2. Develop SMETERs that are ready to be trialled in real homes during the SMETER programme.
- 3. Work with the Technical Assessment Contractor to support development and testing of their SMETER.

1.3.3 Objectives of the Technical Assessment Contractor (TAC)

The Competition provides an opportunity for BEIS to assess the performance of SMETERs and to understand how they can be deployed and scaled-up through commercialisation. BEIS will be procuring a Technical Assessment Contractor alongside the competition to assess the performance of SMETERs.

The Technical Assessment Contractor (TAC) will support the testing and demonstration of SMETERs to provide BEIS with the confidence that they meet the programme objectives.

The primary objectives of the TAC are to:

- 1. Independently test and validate SMETERs at key points in the programme and report back to BEIS on their performance.
- 2. Assess and report on the user acceptability of SMETERs related to the impacts of deployment (installation, any ongoing maintenance, fault resolution, and uninstallation).
- 3. Support Competition Participants to improve the development and deployment of SMETERs by working with Competition Participants, and providing feedback at key points such as:
 - a. defining the methodology for calculating the accuracy¹² of SMETERs for real world applications;
 - b. establishing appropriate test processes for determining the accuracy and user acceptability of SMETERs in agreement with BEIS;
 - c. supplying appropriate datasets for development and testing of SMETERs;
 - d. recruiting an appropriate mix of homes to take part in field trials;
 - e. ensuring adequate and safe deployment of SMETERs, and their effective operation through a field trial, respecting the privacy and practical needs of participating households and the intellectual property-related confidentiality expectations of Competition Participants; and

¹² covering 'trueness' and 'precision' as defined in ISO 3534 Statistics – Vocabulary and Symbols

- f. providing testing feedback and expert advice to Competition Participants based on the TAC's previous experience.
- 4. Provide a robust evaluation of to what extent, and how, the programme has achieved its objectives and longer term desired outcomes. This will be achieved by collecting independent evidence from Competition Participants and stakeholders.
- 5. Make recommendations to BEIS at the end of the competition on the suitability of SMETERs for future policy use.

These objectives are to be achieved through working collaboratively with the Competition Participants while maintaining objectivity. Details of this are described in section 3.

The activities of the testing programme will be proposed by the Technical Assessment Contractor, however we have provided an indicative programme of testing activities in section 3: Activities and Timescales. Competition Applicants should set out their plan to develop and test their SMETER around this indicative testing programme for the purpose of the tender applications, but should be aware that the details of this testing programme may change depending on what the Technical Assessment Contractor proposes.

Further details of this testing programme and how Competition Participants and the Technical Assessment Contractor are proposed to work together will be developed prior to Competition Participants entering into contract.

2 Call Scope

This call will support proposals that can develop, test and demonstrate the performance of SMETER products in real homes within the scope set out in the sections below.

2.1 Technical Scope

BEIS plans to support a variety of projects to develop, test and demonstrate SMETER methods. It is expected that each project will adopt, to some degree, a different approach to determine the thermal performance of a home although we expect a majority of methods to use smart meter data. We appreciate that alternative approaches may have different merits which can be evaluated during this project and the Competition is intended to have a relatively broad scope to encourage innovative ideas. The scope of the competition is therefore divided into 'essential' and 'desirable' outcomes.

'Essential' outcomes include:

- Measure the whole-house heat transfer coefficient (HTC) of homes with gas as their primary heating fuel
- Provide a more accurate (true and precise) calculation of HTC than from using the Standard Assessment Procedure (SAP)

'Desirable' outcomes include:

- Use smart meter data
- Be sufficiently accurate to measure the effect of installed fabric energy efficiency measures
- Measure the whole-house heat transfer coefficient (HTC) of homes that use other main heating fuels (e.g. electricity).
- Additional capability to robustly measure other aspects of home energy performance, and produce other performance metrics of value.

SMETER products may include additional measurement equipment to be installed in households and make use of additional data that is currently (or is expected to become) legally accessible ('big data'). Competition Participants may make use of proprietary data for SMETER development but must be able to demonstrate their product in test homes as part of the programme.

2.2 Technology Readiness Levels

BEIS would expect to fund projects at Technology Readiness Levels (TRLs) between 6 and 9, although projects at an earlier stage of development will be considered if they demonstrate particularly strong innovation or benefit and a clear route to demonstration within the programme timetable. Evidence must be provided in the application for how this will be achieved. Further information on TRLs can be found at Annex 1 – Technology Readiness Levels (TRLs).

2.3 Funding Scope

Funding is available for pre-commercial development activities, including:

- solution exploration design, including development of hardware, software, and installation techniques
- prototyping
- pilot deployment
- field trials

Funding is not available for activities beyond TRL Level 9 (see Annex 9). Hence, it is not available for commercial development activities such as:

- quantity production and distribution
- selling of products to purchasers

Note that BEIS requires details of Competition Participants marketing and roll-out planning activities. However, this is not funded as part of this programme. See Section 3.4.1 for further details.

2.4 Geographic Scope

The geographic scope of the Competition covers energy users within Great Britain, in line with the scope of the smart meter roll-out.

3 Activities and timescales

Details of the activities and timescales for both competition phases are described below. Issues that Applicants should give particular consideration to in their tender responses are flagged throughout this section.

3.1 Summary of Activities

To deliver the SMETER programme, Competition Participants will develop their SMETERs towards market readiness. A Technical Assessment Contractor will work alongside the Competition Participants to establish a testing and trialling process, provide some development and testing support, and independently assess the performance of Participant's SMETERs to ensure they meet BEIS's objectives. The Competition Participants and the TAC will have the following complementary roles:

- Innovation Competition Participants Each Competition Participant will undertake: technical development of calculation algorithms and any measurement and communications equipment required for their SMETER, development of their deployment (installation, communications, etc.) protocols, desk- and lab-based testing, piloting of their SMETER (including recruitment of pilot homes), supporting field trials, undertaking final testing, and marketing and roll-out preparation.
- Technical Assessment Contractor The TAC will define the accuracy of SMETERs, draw up test protocols and agree these with BEIS (with input from Competition Participants), produce simulated datasets and assemble real-world datasets for testing, and administer accuracy tests and assess the all-round performance of SMETERs. The TAC will also define the number and mix of homes required for field trials, recruit sufficient homes, and carry out all on site activities (including installation, any troubleshooting, etc.) for field trials to run from Q4 2019 to Q4 2020.

The innovation competition will be divided into two phases which are summarised below:

1. Phase 1 – Feasibility: Competition Participants will focus on advancing the development of their SMETERs, arrange and undertake piloting, and engage in initial testing. The TAC will finalise testing protocols (for both phases of the competition) and the design of the field trial, agree these with BEIS taking account of input from the Competition Participants, observe the piloting of Competition Participants' SMETERs and administer initial testing.

At the end of Phase 1 the TAC will support BEIS to perform a gateway assessment to review the current performance (based on initial testing and piloting) and potential performance (by the end of the competition) of Competition Participants' SMETERs.

Any that are judged not to be on track to meet the competition objectives by the end of the competition would not progress to Phase 2.

2. Phase 2 – Field Trials: Competition Participants will support the TAC to ensure the effective deployment and operation of their SMETERs in the field trial and continue with SMETER development, including plans for roll-out, and engage in final testing. The TAC will deliver all on-site activities to enable the field trialling of Competition Participants' SMETERs including recruiting the field trial homes, installing SMETERs and maintaining them as and where required, undertaking co-heating tests of a subset of homes, surveying homes and householder experience, and will administer final testing of SMETER accuracy.

An outline design for the testing and assessment of SMETERs is presented below. This outline has been developed as a basis for competition Applicants to prepare their proposals. The TAC is being procured in parallel with this ITT and may propose an alternative or modified methodology that better meets the programme objectives. Applicants selected by BEIS to participate in the competition will have the opportunity at contract negotiation stage to consider the implications of any changes to the testing procedure on their proposals. Further refinement of the testing design may be possible post-contract to account for particular characteristics of the SMETER methods proposed by selected Competition Participants.

In the outline testing design, there are six testing steps to be undertaken over the two phases. The respective roles of Competition Participants and the Technical Assessment Contractor at each step of the outline testing programme described above are summarised in the table below.

			Roles		
Step	Activity	Time- table	TAC	Competition Participants	
Phase	Phase 1 – Feasibility				
1	Assessment methodology	Nov '18 – Jan '19	(From Nov '18) Develop accuracy definition, test protocols & field trial design; start field trial recruitment	(In Jan '19) Engage in developing methodology	
2	Simulated datasets	Jan – Aug '19	Produce & provide development & test datasets; administer & evaluate test	Develop & test SMETER; provide results to TAC	
3	Pilot deployment	By end Aug '19	Observe SMETER deployments and assess installation impact	Recruit pilot home(s) & deploy SMETERs – demonstrate to TAC	
Gateway		Sep '19	Report; advise BEIS on Competition Participants for Phase 2	Report to BEIS	
Phase	2 – Field Trials	1			
4	Field trial	Oct '19 – Nov '20	Physical survey (to produce RdSAP HTC) & user survey, install SMETERs, run household helpdesk and resolve on-site issues	Remotely monitor SMETERs and support TAC on-site activities; continue technical and business case development	
5	Controlled, in situ accuracy test	By end Dec '20	Measure reference input data; co- heating test (to produce reference HTC); evaluate SMETER inputs & results vs. reference inputs & HTC	Produce SMETER-measured HTCs & provide results plus measured input data to TAC	
6	Accuracy test with real data	By end Dec '20	Measure reference input data; co- heating test (to produce reference HTC); provide reference input dataset; evaluate SMETER results vs. reference HTC	Calculate SMETER HTCs from reference input data for unseen homes & provide results to TAC	
Final reporting Ja		Jan '21	Report to BEIS	Report to BEIS	

The TAC and Competition Participants will be expected to develop a strong collaborative approach. In particular, the TAC's experience and global oversight of trial and testing results means they can support Competition Participants in interpreting trial and test results so that calculation and hardware problems can be diagnosed and fixed, helping each SMETER to reach its full potential.

The procurement process for the TAC is running in parallel with this Competition ITT and as part of their bids TAC tenderers may propose modifications or alternatives to the testing and trialling approach presented here. Applicants should base their proposals on the testing and trialling approach presented in this ITT and the following information about the indicative scale of test and trial sample sets:

Maximum number of SMETERs included in the competition	10
Number of dwelling types* in simulated datasets & field trial	6
Minimum number of homes in which a given SMETER is deployed	20
Number of homes in which a given SMETER is deployed and a coheating test is carried out	10
* see indicative dwelling types in Phase 1, step 1	

Selected competition Applicants will have the opportunity to revise their proposals based on the final testing and trialling design prior to the agreement of contracts. Progression to Phase 2 of the competition would be conditional on SMETERs passing the gateway assessment which is described in section 3.3.

Outlines of the activities and timescales for each of the two Competition phases are described in more detail below.

3.2 Phase 1 – Feasibility

The focus of Phase 1 is for Competition Participants to develop their SMETER algorithms and other necessary elements needed to deploy their SMETERs in field trials in Phase 2. Phase 1 also includes some basic development testing to ensure that Competition Participants are on track to deliver agreed outcomes by the end of the competition. Precommercial marketing to understand the intended customer groups and development of roll-out plans for SMETERs should also start in Phase 1 and continue throughout the project.

Applicants should set out in their tenders a general description of their SMETER and the development activities proposed over Phase 1, to the end of August 2019. Applicants should also set out their plans for pre-commercial marketing over Phase 1 (see Section 3.4.1 regarding funding of this activity).

In addition to SMETER design and development, Competition Participants must also engage in the testing programme developed for BEIS by the TAC to ensure that

SMETERs meet the programme objectives. An indicative outline testing programme is set out below as the basis for Applicants to prepare proposals in response to the ITT. The TAC, who will prepare the final testing methodology that will apply to the competition, is being procured in parallel with this ITT. As such, Applicants should be aware that the final testing methodology may change and should consider the impacts of changes on their proposals, particularly where prompted below.

1. Develop testing methodology

Aims: The final accuracy of SMETERs is expected to be established in Phase 2 relative to reference values for heat transfer coefficients measured by carrying out co-heating tests of homes. Clear definitions for the accuracy of SMETERs (i.e. how it will be calculated from test data), and related project protocols for calculations and reporting, need to be established at the start of the project to be clear about how this critical performance metric will be calculated and reported throughout the project. It is important to know what types of dwellings will be represented in test datasets and the field trial, to allow consideration of any effects of dwelling type on the accuracy of SMETER results. Some elements of the standard testing procedures may not be suitable for some SMETERs. In those cases, the TAC will also need to develop alternative testing procedures for those SMETERs that enable equivalent assessment of performance.

Tasks and roles: Development of the testing methodology is primarily a task for the TAC. Competition Participants will be expected to feed into development through discussions with the TAC and by responding to a draft of the methodology. The TAC will draw up a definition for the accuracy of SMETERs and agree this with BEIS accounting for input from the Competition Participants. The accuracy definition will address what accuracy means – e.g. trueness and precision – and how it will be calculated from test and field trial results. This is distinct from establishing performance targets for accuracy, which will be determined elsewhere. The TAC will also establish a set of dwelling typologies that will be represented in all test datasets used in the competition and which should, as far as is practical, cover the archetypes most commonly found in the UK housing stock. It is expected that as a minimum the dwelling types covered will include detached, mid-terrace, and semi-detached / end terrace houses and combinations with solid and cavity wall construction. It is expected that the TAC would start recruiting homes for the field trial as soon as the target size and composition of the field trial pool is established.

Tender considerations: Applicants should allow time for up to two meetings in London with the TAC to feed into the proposed definition of accuracy for SMETERs and required content of datasets for initial development and testing of their SMETER. Competition Participants will also need to work with the TAC to establish the final details of an appropriate testing plan for Phases 1 and 2. Applicants should set out their assumptions

about the meter types and any communication devices they expect to be present in the field trial homes and the related implications for deployment and testing for their SMETERs. Final decisions on proposed dwelling typologies are subject to discussions between the TAC and BEIS. Applicants should make proposals on the basis of there being 6 dwelling types in test datasets (a combination of built form and construction type), set out any known or likely limitations of their SMETER in terms of the types of homes in which it is expected to produce accurate results.

2. Develop and test SMETER algorithms using simulated datasets

Aims: SMETER developers will require datasets for algorithm development, and providing these to Competition Participants should save time, duplication of effort and cost. BEIS also wants to assess the potential performance of Competition Participants' SMETERs early in the project to ensure that funding is only provided for field trials of SMETERs that show a realistic prospect of achieving target levels of accuracy and other programme objectives by the end of the competition. Producing thermal simulation models of dwellings, where both the input data that would be measured by any given SMETER and the corresponding heat transfer coefficient (HTC) are known based on model inputs, enables the production of datasets for both development and initial testing of SMETERs.

Tasks and roles: Competition Participants will be encouraged to develop and test their SMETER using any and all resources to which they have access. The TAC will produce simulated data sets based on thermal models of dwelling archetypes and provide them to Competition Participants for both development and testing of their SMETERs. It is assumed that datasets would be produced using dynamic building thermal modelling software. The software and any pre- and post-processing used should be capable of generating the items of input data (e.g. gas and electricity meter readings, internal temperature, external weather conditions, etc.) at the temporal resolution (e.g. at least half hourly) required by the SMETERs to be tested. Simulated datasets would be used for:

- (a) Initial development both the input data and the HTC results would be shared with the project teams.
- (b) Initial testing just the calculation inputs that each SMETER is capable of measuring itself will be provided to the project teams. The Competition Participants will return their HTC results to the TAC to compare their estimates with the values calculated by the modelling software based on the known characteristics of the thermal envelope of each dwelling archetype. As part of the testing methodology (developed in Step 1) the TAC will establish the procedure for feeding back test results and the arrangements for re-testing.

Progression to Phase 2 of the competition would be conditional on SMETERs achieving an acceptable level of accuracy, which would be considered alongside the deployment cost, intrusiveness and any additional desirable outcomes provided by each SMETER.

Tender considerations: Applicants should set out their approach to initial SMETER development and testing and allow time for a screening test on simulation data of 6 dwelling types at the end of Phase 1.

3. Pilot deployment and data collection

Aims: Competition Participants need to be confident that they can successfully deploy their SMETER in the field and collect the data required to enable an HTC calculation. BEIS needs some assurance that Competition Participants' SMETERs will be deployable by the start of the field trial period and that the impacts on trial households are acceptable. The TAC needs to understand the levels of any household participation required in the installation process and the intrusiveness of each SMETER to inform the mix of SMETERs installed in each household in the field trial.

Tasks and roles: Competition Participants will be expected to pilot the process of deploying their SMETER, particularly the installation of any additional measurement equipment beyond the smart meters already in place, and the collection of data from the home, which is likely to be transmitted to a remote location for processing via a communications network. Competition Participants are expected to find their own pilot homes and to take primary responsibility for related data privacy and protection. The TAC will observe a representative pilot deployment to understand the level of intrusiveness and householder participation involved in installing (and if relevant removing) each participant's SMETER.

Tender considerations: Applicants should set out their approach to piloting their SMETER and allow time to engage with the TAC to arrange observation of a representative pilot deployment.

3.2.1 Phase 1 outputs

Information to and engagement with the Technical Assessment Contractor

- 1. Feed into the definition of the accuracy of SMETERs and the selection of home typologies to be represented by the simulated datasets and in the field trial sample
- 2. Comment on testing protocols, including any bespoke protocols for the participant's SMETER if it needs additional / alternative arrangements
- 3. Enable TAC observation of pilot SMETER deployment.
- 4. Return test results based on simulated datasets
- 5. Comment on field trial design.

Reporting to BEIS

- 6. A project kick-off meeting with BEIS
- 7. Quarterly reports and meetings to discuss project progress against milestones

- 8. A final report and presentation to BEIS, which also form the application for the subsequent phase of funding. It is envisaged this Phase 1 report will include:
 - a. General description of SMETER development activities covering software (algorithms), any hardware, data collection infrastructure, etc.
 - b. Testing results
 - c. Description of piloting and associated learning.

Further details on expected report content and the process for BEIS to provide comments and agree changes to reports would be agreed prior to commencement of Phase 1 work and included in the milestone schedule of the contract.

3.3 Gateway assessment for progression to Phase 2

BEIS will assess progress of the projects based on evidence from the initial testing and piloting, including feedback from the TAC, to ensure projects are still on track to deliver against the programme objectives. Quantitative assessment criteria for progression to Phase 2 will be agreed with Competition Participants during contract negotiations but are likely to cover:

- 1. Accuracy Trueness and precision based on the results of initial testing;
- 2. Speed Time period required to measure HTC; and
- 3. Cost Indicative cost per home to deploy SMETERs.

Performance assessment is also expected to consider:

- 4. Intrusiveness and user experience at deployment; and
- Desirable outcomes the additional capabilities of SMETERs, beyond calculating HTC.

The overall assessment will consider Accuracy and Speed against Cost, with Intrusiveness and Desirable outcomes considered on a qualitative basis. Further details on Phase 1 assessment criteria and the information required by BEIS for the gateway assessment will be made available to selected competition Applicants as part of contract negotiations.

BEIS expects to undertake the gateway assessment in a two-week period before the start of Phase 2, and a common deadline for Competition Participants to submit the required information will be set.

If the gateway assessment provides results that indicate Competition Participants are no longer on track to meet programme objectives by the end of the competition then BEIS reserves the right to withdraw the Participant's funding for Phase 2, as allowed for under section 21 of the competition terms and conditions. (Note: BEIS's planned approach to allocation of funding for the competition is intended to support all Competition Participants

through both Phases and does not require the removal of Competition Participants prior to the Phase 2 Field trials.)

3.4 Phase 2 – Field trials

The focus of phase 2 is to trial Competition Participants' SMETERs in a reasonable number and range of homes in the field, and to establish the accuracy achieved by SMETER by the end of the competition, using the results of co-heating tests as a reference. Phase 2 should also include ongoing development and testing to optimise SMETERs and ongoing pre-commercial marketing and development of plans for rolling out SMETERs.

Applicants should set out in their tenders the development activities proposed over Phase 2, to the end of December 2020. Applicants should also set out their proposals for precommercial marketing and development of roll-out plans over this period.

In addition to ongoing technical and commercial development of their SMETER, it is envisaged that Competition Participants will undertake the following field trial and testing activities:

4. Field trial

Aims: The field trial with a long period of data collection serves three purposes. It should enable: assessment of the repeatability of each SMETER (using data from different time periods and accounting for the variability of HTC with outdoor conditions, particularly wind); comparison of results between different SMETERs applied to the same home; and feedback from households on the impacts of installation and any ongoing intrusiveness of SMETERs.

It is assumed that multiple SMETERs could be deployed in each home in the field trial, with a regard to the overall burden on householders in terms of intrusiveness and any participation required for installation. It is expected that not all SMETERs would be fitted in each field trial home.

There is a need to ensure that any on-site equipment required as part of Competition Participants' SMETER deployments is safely and adequately installed, that any problems with on-site equipment are fixed quickly, that the privacy of households is respected and disruption minimised, in particular that there is strict compliance with applicable data privacy legislation and the smart meter Data Access and Privacy Framework, and that the intellectual property interests of Competition Participants are protected. Experience from other field trials suggests that the best way to ensure these outcomes is to centralise responsibility for on-site activities and for a single party to undertake activities at any given site. As such the TAC will undertake all on-site activities for the field trial, Participants will

not visit field trial homes, and the TAC will anonymise data before sharing it with Participants.

Tasks and roles: Homes will have been identified and recruited by the TAC to encompass a sufficiently diverse sample to capture common dwelling types and characteristics (see Step 1). The TAC is expected to take primary responsibility for data privacy and protection in relation to field trial households. The TAC will undertake a site survey of each home in the field trial to establish the physical characteristics of each dwelling, as a minimum recording the data required for an RdSAP assessment and establishing the corresponding SAP HTC for comparison with SMETER results (and where relevant co-heating test measurements). It is assumed that the TAC would deliver all on-site activities required to deploy Competition Participants' SMETERs during the field trial, including any installation, troubleshooting and uninstallation of measurement and communication equipment required. The innovation Competition Participants would train the TAC to install and uninstall on-site equipment and support any troubleshooting required, and should prepare and provide supporting documentation as required. The TAC must ensure that an appropriate level of installation training is received for each SMETER in good time prior to the start of the field trial. The expectation is that multiple SMETERs would be tested in each home over a period of at least one year. During the field trial, the TAC will survey households to obtain feedback on the impact (intrusiveness and experience) of the SMETER installation (and where relevant uninstallation) process.

Tender considerations: Applicants should set out their approach to field trialling of their SMETER including training the TAC to install any on-site equipment required and support to the TAC for any on-site troubleshooting required. Applicants should make proposals on the basis of the TAC trialling their SMETER in 20 homes. Applicants should outline what would be required to deploy their SMETER in homes, covering installation / activation, data communication, ongoing data analysis, fault identification and resolution, handling of householder queries and complaints (assuming these would be received via the TAC), and uninstalling / deactivation at the end of the trial period. Applicants should estimate the time required from the start of Phase 2 to get their SMETERs deployed in field trial homes (i.e. time for TAC training plus installation of SMETERs by the TAC, stating assumptions about installation time). Applicants should also consider and comment on any effect of geographic spread of homes in the field trial on their ability to support deployment and maintenance of SMETERs during a trial, and are invited to provide any additional relevant commentary or suggestions for the field trial.

5. Controlled test for accuracy on 'seen' homes (own in situ measurement)

Aims: SMETERs have two components: (i) the calculation algorithm and (ii) the deployment (including installation, measurement equipment, and communications) which provides the data required by the algorithm. Deficiencies in either component could make SMETERs insufficiently accurate and repeatable, so it is important to test both of these

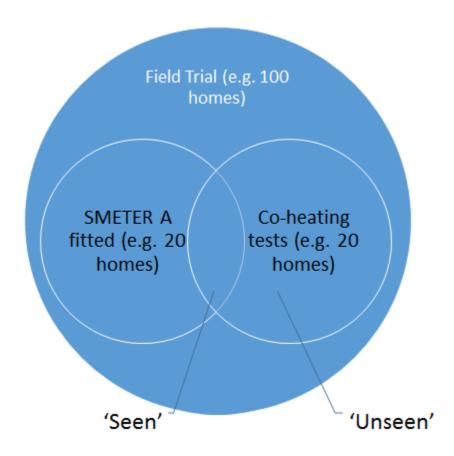
components in a controlled way to ensure that the overall SMETER implementation works as expected. SMETER accuracy will be defined relative to a reference HTC from a coheating test. So the ideal test is to compare the HTC result(s) from a SMETER deployed in a real occupied home with the co-heating test result(s) for the same home (which must be undertaken while the home is unoccupied for the period of the co-heating test).

Tasks and roles: The carrying out of co-heating tests and administering the final SMETER accuracy test is primarily a role for the TAC. Competition Participants will need to send the measured HTCs for the field trial homes where their SMETERs were installed, plus any other data specified in the final testing procedure established in step 1, to the TAC. During the field trials the TAC will carry out co-heating tests in a subset of homes where SMETERs are deployed and it is expected the TAC will also independently measure the key input data for SMETER calculations throughout the field trial in those homes to check against Competition Participants' measurements of the same data. If independent measurement is not possible, the TAC may specify alternative methods to assure data quality such as independent calibration of measurement equipment.

Tender considerations: Applicants should consider the possible additional cost implications of consulting with the TAC on the setup of independent monitoring equipment, co-heating tests, and related assessment of the HTC results of the Applicant's SMETER against those from the co-heating tests. Applicants should work on the basis that 10 of their field trial homes will also undergo a co-heating test.

6. Test for accuracy using data from 'unseen' homes (third party data)

Aims: An assumption in this outline field trial and testing design is that it will be impractical to install all of the Competition Participants' SMETERs in a single home. Therefore each home subject to a co-heating test will only contain (be 'seen' by) some of the Competition Participants' SMETERs. Using the datasets from homes subject to co-heating tests but not containing ('unseen' by) a particular SMETER increases the number of accuracy tests that can be produced for each SMETER. The downside is that the input data will not have been collected with the SMETER's own measurement equipment or approach (see figure below).



Tasks and roles: The TAC will assemble and provide Competition Participants with a dataset to test their SMETER calculation method / algorithm. As a minimum, this will consist of data from the field trials for homes 'unseen' by the Competition Participant's SMETER, but could also include other suitable datasets to which the TAC can obtain access. Competition Participants will be provided with just the calculation inputs required, that will correspond with the data they are able to collect with their demonstrated deployment (data measurement and communication). The TAC will compare the results produced by the Competition Participants against corresponding HTC values from coheating tests. The TAC will feed the accuracy results back to the Competition Participants. Once the accuracy results for SMETERs have been validated and as far as possible agreed with Competition Participants, the TAC will report final findings on the accuracy and usability of Competition Participants' SMETERs to BEIS.

Tender considerations: Applicants should allow time for final testing on datasets for homes where their SMETER has not been installed and collected data in situ. Competition Participants are invited to comment on this test process noting any foreseeable problems and potential resolutions to enable fair and appropriate testing of their SMETER on the greatest possible number and range of homes, within the scope of the Competition.

3.4.1 Phase 2 outputs

Information to and engagement with the Technical Assessment Contractor

- 1. Supply equipment for field trials, update installation protocols and conduct training.
- 2. Provide data collected from SMETERs deployed in the field trial.
- 3. Return SMETER HTC results for 'seen' in situ test homes and for 'unseen' datasets.

Reporting to BEIS

- 4. Quarterly reports and meetings to discuss project progress against milestones
- 5. A final report and presentation to BEIS. It is envisaged this phase 2 report will include:
 - a. Final testing results;
 - b. Field trial summary and associated learning; and
 - c. Conclusions from customer marketing and plans for SMETER roll-out.

Further details on expected report content and the process for BEIS to provide comments and agree changes to reports would be agreed prior to commencement of Phase 1 work and included in the milestone schedule of the contract.

<u>Funding scope</u>: Applicants should note that BEIS will not fund Participants' time for marketing and roll-out planning activities. BEIS wishes to understand the intended customer market and roll-out plans as this impacts on the potential use of SMETERs for policy applications. In turn, BEIS is providing significant benefit to Competition Participants through enabling SMETER testing and performance feedback through funding of the TAC (and the market credibility this process will afford).

3.5 Key challenges

There are a number of challenges that the Applicant needs to consider in their submission. We highlight those below that we consider to be the main ones.

1. Technical. Measuring the thermal performance (in terms of heat transfer coefficient) in situ of a wide range of homes in use and to a reasonable level of accuracy is a difficult technical challenge with many confounding factors. A balance may be needed in developing the SMETER method between its accuracy, the intrusiveness of deployment (particularly any installation of on-site equipment) and the cost of implementation. In particular, additional accuracy may be at the expense of additional data collection.

- 2. Wide range of expertise and skills required. BEIS welcomes consortium bids and/or the use of subcontractors to secure the range of skills necessary for the Competition.
- 3. Data protection and privacy. Competition Participants must be able to meet all applicable legislation and regulations including the Data Protection Act, General Data Protection Regulation, and, where applicable, the Smart Meter Data Access and Privacy Framework. Competition Participants will have primary responsibility for these issues in relation to developing and piloting their SMETER; the TAC is expected to take primary responsibility in relation to field trial households.
- 4. Timetable. The final assessment programme will be agreed between BEIS, the Technical Assessment Contractor and the Innovation Competition Participants. The intention is to look to maximise the time for SMETER development whilst allowing sufficient time for robust assessment of the SMETER methods within the timetable available. Careful consideration is needed of how to efficiently and effectively develop the SMETER method within the timetable available, using the timeline in this tender as a good indicator.

3.6 Summary of key dates

Milestone	Planned Completion Date
Phase 1	January 2019 – September 2019
Projects provided with test data by TAC contractor	January 2019
Technical development and marketing	January 2019 – August 2019
Piloting	By end August 2019
Testing on simulated data	By end August 2019
Gateway assessment	September 2019
Phase 2	mid-September 2019 – January 2021
Field trials in homes and further technical development	October 2019 – November 2020

Final tests based on 'seen' and 'unseen' homes with measured HTCs from co-heating tests	November / December 2020
Marketing and roll-out planning	End by January 2021
Final reporting and competition end date	January 2021

4 Deliverables

Phase 1

At the end of Phase 1 projects will be required to deliver a feasibility report containing a detailed description of outputs detailed in section 3.2.1.

The Phase 1 report will be used to help assess which projects will go forward to Phase 2. As such, the report should contain sufficient information to enable assessment and we reserve the right to request any further details beyond those provided to aid us in our assessment.

Additional information: Alongside the report, Competition Participants will need to deliver fully accessible copies of any other relevant documentation or outputs used in delivery of Phase 1, with appropriate explanations of the analysis undertaken and raw data used.

Phase 2

Projects will be required to deliver a summary report containing a detailed description of outputs detailed in section 3.4.1 and any learning from the project.

Additional information: Alongside the report, Competition Participants will need to deliver fully accessible copies of any other relevant documentation or outputs used in delivery of Phase 2, with appropriate explanations of the analysis undertaken and raw data used.

General (Phases 1 and 2)

BEIS will supply guidance for report writing prior to the commencement of each phase.

It should be noted that SBRI contracts require that project outputs are shared publicly. See 'further information' in section 10

5 Support available

The total value of the Competition is £4.1m, although BEIS may allocate less than the total budget depending on the quality of the applications.

BEIS intends to award multiple contracts, to successful Applicants to develop, test and demonstrate their SMETER methods therefore funding for an individual will be limited to £1,000,000. The number of projects funded depends on the range of solutions proposed and the quality of the proposals.

Applicants are encouraged to develop relationships and partner with other parties with relevant expertise to form consortia according to their perceived needs to deliver the objectives of the Competition.

Funding under this Competition will only be **available until January 2021**. All payments need to be completed by this date. All costs should be provided exclusive of VAT in the first instance, and inclusive of VAT where applicable.

Note: 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, in particular if BEIS is not satisfied by the proposals received or if the funding assigned to the scheme is required for other, unforeseen, purposes. BEIS will not, under any circumstances, make any contribution to the costs of preparing proposals and applicants accept the risk that they may not be awarded a contract.

6 Competition process

Contracts will be awarded on a competitive basis to the highest quality proposals that address the challenges set out in this guidance.

The Competition will proceed along the following timelines.

Milestone	Planned Completion Date
Competition Process	September – December 2018
Suppliers information day	2 nd August 2018
Competition launch	7 th September 2018
Deadline for Expressions of Interest	28 th September 2018
Deadline for submission of proposals	19 th October 2018
TAC commences work	December 2018
Project selection and contracts awarded	December 2018
Competition Participants commence work	January 2019

Project applications will be subject to eligibility checks prior to assessment, as set out in section 8.

Projects will be assessed against defined criteria as set out in section 9.

Projects will run for a total of 2 years, from Jan 2019 – Jan 2021 and all development, data collection and reporting must be completed within this timeframe.

7 Application Process

The call for applications opened on 7th September 2018. Applicants are asked to complete a standard application form detailing their proposed technologies. **Applications must include details of Phase 1 and 2 and both will be assessed together.**

The deadline for applications is 12 noon on 19th October 2018.

Applications will be assessed against the eligibility and evaluation criteria detailed in sections 8 and 9. Projects will be selected for funding based on their position in a ranked list and with a minimum threshold of 60% of marks against the evaluation criteria.

As part of the assessment process BEIS may request Applicants to attend interviews in London in the week commencing November 2018. Applicants will be informed of the outcome of the assessment by December 2018.

Contracts are expected to be awarded by 21st December 2018. Feedback to Applicants will be provided on request after contracts have been awarded. BEIS's decision on project funding is final.

The application form can be found alongside this document at www.delta-esourcing.com

Completed application forms should be submitted electronically in pdf format and emailed to <u>builtenvironmentinnovation@beis.gov.uk</u> with 'SMETER Innovation Competition Application' in the subject line. If your application is larger than the file size limit on the email, please break the submission down into smaller sizes and ensure the subject line of each additional email takes the following format 'SMETER Innovation Competition Application' (name of lead applicant) – email x of y'. HYPERLINK "mailto:"

You should endeavour to answer all of the questions on the application in full. Incomplete applications and any containing incorrect or false information will very likely be rejected although BEIS may, at its discretion, request clarification or additional data before making a final decision.

All answers should be contained within the application form. Any appendices that support the answers in the application form must be appended to the end of the form. The application form must list all appendices and supporting documents.

Any applications or supporting documentation received after the application deadline will not be considered.

8 Eligibility criteria

BEIS expects to deliver the proposed Competition as an SBRI competition: a form of precommercial procurement which is aimed at organisations working on research and development (R&D) of an innovative process, material, device, product or service *prior to commercialisation*. Funding is available for pre-commercial R&D activities only. Projects requesting funding for commercialisation activities are not eligible.

SBRI competitions are **open to all organisations** that can demonstrate a route to market for their solution. More detail on the SBRI can be found here¹³

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. Project outputs are expected to be shared publicly. Applicants should clearly state in their application where cost savings are being provided compared to exclusive development contracts¹⁴.

Proposals will be assessed for eligibility prior to proceeding to full evaluation. Eligible proposals must:

- 1. Address the call scope (see section 2);
- 2. Be at a pre-commercial stage of development (see section 2, Call Scope);
- 3. Describe all phases of the project (see 'Competition Process', section 6 and 'Activities and Timescales, section 3);
- 4. Clearly indicate the cost savings provided to BEIS in line with SBRI requirements (see financial information section 10.1);
- 5. Be led by a single organisation with evidence of strong collaboration across consortia (if a consortium bid is proposed)

¹³https://www.gov.uk/government/collections/sbri-the-small-business-research-initiative.

¹⁴ Exclusive development means that the public purchaser reserves all the results and benefits of the development (including Intellectual Property Rights or IPRs) exclusively for its own use.

9 Tender Evaluation - Phases 1 & 2

Eligible proposals will be assessed against the following criteria described in section 9.1. Both phases will be assessed together. Answers to the questions set out in the application form must be clear and provide sufficient evidence of how the Applicant will meet the required criteria. A total of 5 points is available (the scoring method is described in section 9.2) against each sub-criterion (a, b, c, etc.), and the weighting to be applied to each sub-criterion is given in brackets.

9.1 Scoring Criteria

- 1. Technical approach / Innovation (Total score 35)
 - a. The proposed solution meets the programme objectives set out in section 1.3.1, the activity plan set out in sections 3.2 to 3.4 and addresses the challenges set out in section 3.5 (weighting x 2);
 - b. Robust justification for SMETER development activities and ability to reach TRL level 8 or 9 by the end of the competition (see Annex 1) (weighting x 2);
 - c. Potential to serve policy applications considering broad estimates of deployment cost, HTC accuracy, time required to measure HTC, and intrusiveness of the SMETER (weighting x 2).
 - d. The ability to robustly measure the HTC of homes that use main heating fuels other than gas and/or the capability to robustly measure aspects of home energy performance, other than HTC, and produce other performance metrics of value. (weighting x 1).
- 2. Market Potential and Marketing Plan (Total score 10)
 - Market potential, including consideration of estimated deployment costs (equipment, installation, communications infrastructure, customer acquisition), and potential for scaling-up in homes across Great Britain (weighting x 1);
 - b. Outline plan to demonstrate how the tenderer will roll out and commercialise their SMETER and what policy environment might be required to support such a roll out) (weighting x 1);
- 3. Project Plan (Total score 15)
 - a. Clear demonstration of the Applicant's ability to meet the deadlines for the various activities and milestones identified. As part of this, the Applicant should provide a description of work packages and associated timelines (include a Gantt chart); list of milestones and deliverables with associated dates and invoice values (weighting x 1);
 - b. Provision of a Resource management plan to meet the Competition and Programme objectives (weighting x 1).
 The Applicant should provide: a team structure including roles and responsibilities for this Contract and the management procedures that would to apply to this Contract; this should include managing quality, management

- of any sub-contractors, and communications between the TAC and BEIS, the Competition Participants, and other stakeholders, and also communication within the team itself
- c. Key risks and dependencies of the project are identified and sufficient mitigation plans are proposed. Risks should be presented in the table provided in the application form (weighting x 1).
- 4. Skills and Expertise (Total score 25)
 - Understanding of smart meter technologies, data-tools development, use of data to inform data tools (either smart meter data, or other data) (weighing x 2);
 - Relevant technical development skills and expertise to undertake the project, including understanding of building physics and occupant behaviour (weighting x 1);
 - c. Relevant skills and expertise on data protection and privacy including the Data Protection Act, General Data Protection Regulations, and where relevant, the Smart Meter Data Access and Privacy Framework (weighting x 1).
 - d. Relevant skills and expertise in marketing and business case development (weighting x 1).
- 5. Cost (Total score 15)
 - a. Total cost will be used to assess value for money. The method for scoring cost is described below (weighting x 3).

Cost will be scored as followed:

There will be a maximum of 15 marks. The lowest priced bid will receive the full 15 marks, all other bids will then be marked as set out below:

- Lowest priced bid receives 15 marks
- 2nd lowest priced bid receives 12 marks
- 3rd lowest priced bid receives 9 marks
- 4th lowest priced bid receives 6 marks
- 5th lowest priced bid receives 3 marks
- All other bids receive 0 marks

A full cost breakdown should be provided using the table provided in the application form.

9.2 Scoring Method

Each sub-criterion will be scored from 1 to 5. The following illustrates the meaning of each score:

Score	Description
1	Not Satisfactory: Proposal contains significant shortcomings and does not meet the required standard

2	Partially Satisfactory: Proposal partially meets the required standard, with one or more moderate weaknesses or gaps
3	Satisfactory: Proposal mostly meets the required standard, with one or more minor weaknesses or gaps.
4	Good: Proposal meets the required standard, with moderate levels of assurance
5	Excellent: Proposal fully meets the required standard with high levels of assurance

9.3 Selection of Successful Applications

Contracts are awarded to the highest-ranking proposals, which achieve a minimum pass mark of 60%, in order of ranking (based on the total score), subject to the following considerations.

BEIS wishes to fund a mixed portfolio of projects in this competition to ensure a spread of different SMETER approaches are developed, tested and demonstrated. Once applications have been scored against the criteria set out in section 9.1 using the method described in section 9.2, BEIS will assign proposals to different technology families which are described below in section 9.3.1. As a consequence BEIS may choose to fund projects in one family with a lower score than projects we choose not to fund in another family.

9.3.1 Technology Families

The different technology families to which each proposal will be assigned are described below:

Family 1: SMETER inputs required are universally available (i.e. the SMETER supplier does not need to install equipment into the home as part of their commercial roll-out). This will include smart meter and external weather data alongside other 'big data' (must not be subject to access restrictions);

Family 2: SMETER inputs required are those from Family 1, a communications device AND 1 additional measurement device, which may measure either a single data item (e.g. internal temperature) or integrate multiple data measurements (e.g. temperature, humidity, occupancy etc.);

Family 3: SMETER input data and measurement equipment are in excess of Family 2.

Family 4: The proposed SMETER involves any of the following (OVERRIDES Families 1 – 3): does not propose to use data from smart meters or related infrastructure; has limits on applicability in the housing stock in addition to those set out in the scope of the SMETER programme in section 2 (e.g. application planned exclusively for particular heating system type (e.g. only electric main heating), dwelling tenure (e.g. social housing), etc.)

BEIS will select the highest-ranking proposal from each technology family, starting from Family 1, moving towards Family 4. This process will be repeated until available funding runs out.

10 Further information

10.1 Financial information

Applicants are requested to provide a fixed price quotation for the work. A detailed cost breakdown is required to enable assessment of value for money.

Financial information should include costs for all phases of the project, detailing labour (including manpower rates), material and capital equipment costs, and any travel and subsistence requirements. Financial information should clearly indicate the cost savings / discount applied compared to an exclusive development contract¹⁵.

10.2 Publication of results

SBRI involves a degree of risk and benefit sharing. In return for provision of funding and non-financial support during demonstration activities, BEIS expects to be able to use and share the results and outputs of the demonstration 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 a SBRI contract, 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 for each project.

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 detailing technical approach, key achievements and recommendations. BEIS may also revisit projects at a later date and publish research and/or evaluation reports for the scheme as a whole.

¹⁵ Exclusive development means that the public purchaser reserves all the results and benefits of the development (including Intellectual Property Rights or IPRs) exclusively for its own use.

BEIS however recognises 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.

10.3 Reporting, evaluation and knowledge sharing requirements

There will be a number of requirements on contractors during the course of the project, including after the final payment milestone. These are described in more detail in section 3, but for clarity, these will at a minimum include:

Reporting: 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 will not be published. Any 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;

Research and evaluation of the scheme: Successful Applicants will be expected to participate in research and evaluation activities of the scheme during and after final contract payments, to assess the impact of the scheme including value for money. Evaluation activities will led by the Technical Assessment Contractor and Competition Participants are expected to work collaboratively with them to provide the necessary information for this.

Knowledge sharing: to improve understanding of this technology and share lessons learned there will be an obligation on successful Applicants to undertake knowledge sharing activities. We will expect Applicants to share useful data and experience through relevant industry forums and with relevant BEIS policy teams.

10.4 Intellectual Property

Suppliers will retain the intellectual property generated from the project, and will be expected to identify and protect patentable knowledge within 5 years of its creation. Costs associated with securing intellectual property arising from or associated with this project are not eligible for reimbursement and cannot be included within the contract price.

BEIS requires a UK wide, irrevocable, royalty-free, non-exclusive licence to use or publish information, data, results, outcomes or conclusions which are created in performing the project, for its internal non-commercial purposes.

The detailed arrangements for intellectual property rights and exploitation of IPR are set out in the T&Cs for this Competition attached to this guidance at Annex 3.

10.5 Ownership of Demonstration Devices

Chosen Competition Participants will retain responsibility and ownership for the technologies and related equipment developed and used during the delivery of the contracts.

The TAC will install and maintain equipment that is installed in field trial homes, and subsequently remove the equipment at the end of the field trials and return it to the Competition Participant. However, it is the responsibility of the Competition Participants to instruct the TAC how to do this and to provide any required replacement equipment.

Annex 1 – Technology Readiness Levels (TRLs)

Technology readiness levels are an indication of the maturity stage of development of particular technology on its way to being developed for a particular application or product. Below are some broad definitions of the TRLs Research.

TDL 4 Danis Danasusk		
TRL 1 – Basic Research	Scientific research begins to be translated into applied research and development.	
TRL 2 – Applied Research	Basic physical principles are observed, practical applications of those characteristics can be 'invented' or identified. At this level, the application is still speculative: there is not experimental proof or detailed analysis to support the conjecture	
Applied research and development		
TRL 3 – Critical Function or Proof of Concept Established	Active research and development is initiated. This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.	
TRL 4 – Laboratory Testing/Validation of Component(s)/Process(es)	Basic technological components are integrated - Basic technological components are integrated to establish that the pieces will work together.	
TRL 5 – Laboratory Testing of Integrated/Semi-Integrated System	The basic technological components are integrated with reasonably realistic supporting elements so it can be tested in a simulated environment.	
Demonstration		
TRL 6 – Prototype System Verified	Representative model or prototype system, is tested in a relevant environment.	
TRL 7 – Integrated Pilot System Demonstrated	Prototype near or at planned operational system, requiring demonstration of an actual system prototype in an operational environment.	
Pre-commercial deployment		
TRL 8 – System Incorporated in Commercial Design	Technology is proven to work - Actual technology completed and qualified through test and demonstration.	
TRL 9 – System Proven and Ready for Full Commercial Deployment	Actual application of technology is in its final form - Technology proven through successful operations.	

11 Annex 2 - Eligible and Ineligible Costs

11.1 Eligible Costs

Directly incurred costs:

These are costs that are specific to the project that will be charged to the project as the amount actually 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

Indirect costs

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
- Cost of capital employed
- Overheads

11.2 Ineligible Costs

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

- Commercialisation activities
- Protection of IPR
- 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; or
- In respect of VAT that you able to claim from HM Revenue and Customs.

12 Annex 3 – Contract Terms & Conditions

BEIS proposes to use its Short Form Contract as the basis of the contract for this competition; the Terms and Conditions are attached below for information.

BEIS TERMS AND CONDITIONS OF CONTRACT FOR SERVICES

TRN: 1611/09/2018

TITLE: Smart Meter Enabled Thermal Efficiency Ratings (SMETER) SBRI Innovation Competition

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BEIS TERMS AND CONDITIONS OF CONTRACT FOR SERVICES

TRN: 1611/09/2018

TITLE: Smart Meter Enabled Thermal Efficiency Ratings (SMETER) SBRI Innovation

Competition

1. Definitions and Interpretation

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

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

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

"Confidential Information":

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

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

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

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

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

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

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

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

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

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

"Data Protection Legislation" means (i) the General Data Protection Regulation (GDPR)(Regulation (EU) 2016/679), the Law Enforcement Directive (LED) (Directive (EU) 2016/680) and any applicable national implementing Laws as amended from time to time; (ii) the Data Protection Act 2018 [subject to Royal Assent] to the extent that it relates to processing of personal data and privacy; (iii) all applicable Law about the processing of personal data and privacy;

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

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

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

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

"Data Subject Request" means a request made by, or on behalf of, a Data Subject in accordance with rights granted pursuant to the Data Protection Legislation to access their Personal Data

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

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

"Arising Intellectual Property" means the Intellectual Property Rights which are created as a result of the Contractor's performance of the Services:

"Background Intellectual Property" means Intellectual Property Rights owned, controlled or used by either of the Parties at the date of this Contract or which shall at any time thereafter become so owned, controlled or used otherwise than as a result of the performance of the Services under this Contract;

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

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

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

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

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

"Protective Measures" means any appropriate technical and organisational measures which may include: pseudonymising and encrypting Personal Data, ensuring confidentiality, integrity, availability and resilience of systems and services, ensuring that availability of and access to Personal Data can be restored in a timely manner after an incident, and regularly assessing and evaluating the effectiveness of the such measures adopted by it;

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

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

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

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

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

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

2. Acts by the Authority

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

3. Service of Notices and Communications

Any notice or other communication that either party gives under the Contract shall be made in writing and given either by hand, first class recorded postal delivery or facsimile

transmission. Notice given by hand shall be effective immediately, notice given by recorded postal delivery shall be effective two working days after the date of posting, notice given by facsimile transmission shall be effective the working day after receipt by the notifying party of a transmission slip showing that the transmission has succeeded.

4. Assignment and Sub-contracting

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

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

5. Entire Agreement

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

6. Waiver

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

7. Severability

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

8. Confidentiality

- (1) The Contractor agrees not to disclose any Confidential Information to any third party without the prior written consent of the Authority. To the extent that it is necessary for the Contractor to disclose Confidential Information to its staff, agents and sub-contractors, the Contractor shall ensure that such staff, agents and sub-contractors are subject to the same obligations as the Contractor in respect of all Confidential Information.
- (2) Condition 8(1) shall not apply to information which:
- (a) is or becomes public knowledge (otherwise than by breach of these Conditions or a breach of an obligation of confidentiality);

- (b) is in the possession of the Contractor, without restriction as to its disclosure, before receiving it from the Authority or any other department or office of Her Majesty's Government;
 - (c) is required by law to be disclosed;
 - (d) was independently developed by the Contractor without access to the Confidential Information.
- (3) The obligations contained in this Condition shall continue to apply after the expiry or termination of the Contract.
- (4) The Contractor shall not handle or examine any document or thing bearing a Government security classification of "Confidential", "Secret" or "Top Secret" other than in a Government establishment and the Contractor shall not remove any such document or thing from such Government establishment without the prior written consent of the Authority.
- (5) The Contractor shall not communicate with representatives of the general or technical press, radio, television or other communications media, with regard to the Contract, unless previously agreed in writing with the Authority.
- (6) Except with the prior consent in writing of the Authority, the Contractor shall not make use of the Contract or any Confidential Information otherwise than for the purposes of carrying out the Services.

9 Freedom of Information

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

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

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

- (3) The Contractor shall (and shall procure that its subcontractors shall):-
- (a) Transfer any Request for Information to the Authority as soon as practicable after receipt and in any event within two working days;
- (b) Provide the Authority with a copy of all Information in its possession or power in the form that the Authority requires within five working days (or such other period as the Authority may specify) of the Authority requesting that Information;
- (c) Provide all necessary assistance as reasonably requested by the Authority to enable it to respond to a Request for Information within the time for compliance set out in section 10 of the FOIA or regulation 5 of the EIR.

- (4) The Authority shall be responsible for determining, at its absolute discretion, whether any Information:-
- (a) is exempt from disclosure in accordance with the provisions of the FOIA or the EIR;
- (b) is to be disclosed in response to a Request for Information.

In no event shall the Contractor respond directly to a Request of Information unless expressly authorised to do so in writing by the Authority.

- (5) The Contractor acknowledges that the Authority may, acting in accordance with the Secretary of State for Constitutional Affairs' Code of Practice on the discharge of public authorities' functions under Part 1 of the FOIA (issued under section 45 of the FOIA in November 2004), be obliged under the FOIA or the EIR to disclose Information unless an exemption applies. The Authority may at its discretion consult the Contractor with regard to whether the FOIA applies to the Information and whether an exemption applies.
- (6) The Contractor shall ensure that all Information produced in the course of the Contract or relating to the Contract is retained for disclosure and shall permit the Authority to inspect such records as requested from time to time.
- (7) The Contractor acknowledges that any lists or schedules provided by it outlining information it deems confidential or commercially sensitive are of indicative value only and that the Authority may nevertheless be obliged to disclose information which the Contractor considers confidential in accordance with Conditions 9(4) and (5).

10. Amendments and Variations

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

11. Invoices and Payment

- (1) The Contractor shall submit invoices at times or intervals agreed by the Authority in the Contract or otherwise. The Contractor shall ensure that any invoice it submits sets out the Authority's Purchase Order or contract number, the Charges and, where not all of the Services have been completed, the relevant part of the Charges with an appropriate breakdown of time worked, the part of the Services (if all the Services have not been completed) and period to which the invoice relates, and its confirmation that the Services (or relevant part of the Services referred to on the invoice) have been fully performed.
- (2) In consideration of the provision of the Services by the Contractor, the Authority shall pay the Charges after receiving a correctly submitted invoice as set out in Condition 11(1). Such payment shall normally be made within 30 days of receipt of the correctly submitted invoice.
- (3) The Contractor shall not be entitled to charge for the provision of any services that are not part of the Services agreed within the Contract, unless the Contract has been properly varied in advance in accordance with Condition 10.

- (4) The Authority may reduce payment in respect of any Services that the Contractor has either failed to provide or has provided inadequately, without prejudice to any other rights or remedies of the Authority.
- (5) If the Contractor believes that payment for a correctly submitted invoice is overdue, he should, in the first instance, speak to the named contact on the face of the Contract. In the event that the problem is not resolved to his satisfaction, he should write to the Head of Procurement at the Department for Business, Energy and Industrial Strategy setting out his case. The Head of Procurement shall ensure that the complaint is dealt with by an official who is independent of the main contact and that the Contractor is not treated adversely in future for having made a complaint.
- (6) For the purpose of calculating any statutory interest under the Late Payment of Commercial Debts (Interest) Act 1998, the relevant date for the payment of the debt shall be deemed to be the last day of a period of 30 days commencing on the day when the Authority received the invoice, or, if the Contractor had not completed the Services (or the part of the Services to which the invoice relates) before submitting the invoice, the last day of a period of 30 days commencing on the day when the Contractor completed the Services, (or the part of the Services to which the invoice relates).

12. Accounts

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

13. Recovery of Sums Due

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

14. Value Added Tax

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

15. Provision of Services

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

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

- (4) If the performance of the Contract by the Contractor is delayed by reason of any act on the part of the Authority or by industrial dispute (other than by an industrial dispute occurring within the Contractor's or its sub-contractor's organisation) or any other cause which the Contractor could not have prevented then the Contractor shall be allowed a reasonable extension of time for completion. For the purposes of this Condition, the Contractor shall be deemed to have been able to prevent causes of delay that are within the reasonable control of the Contractor's staff, agents and sub-contractors.
- (5) Timely provision of the Services shall be of the essence of the Contract, including in relation to commencing the provision of the Services within the time agreed or on a specified date.
- (6) The Contractor warrants that it shall provide the Services with all due skill, care and diligence, and in accordance with good industry practice and legal requirements.
- (7) Without prejudice to the provision of Condition 13(1), the Contractor shall reimburse the Authority for all reasonable costs incurred by the Authority which have arisen as a direct consequence of the Contractor's delay in the performance of the Contract which the Contractor had failed to remedy after being given reasonable notice by the Authority.

16. Progress Report

- (1) Where formal progress reports are required by the Contract, the Contractor shall render such reports at such time and in such form as may be specified by the Authority, or as otherwise agreed between the Contractor and the Authority.
- (2) The submission and acceptance of progress reports shall not prejudice any rights of the Authority under the Contract.

17. Contractor's Personnel

- (1) The Authority reserves the right to refuse to admit to the Authority's Premises any person employed by the Contractor or its sub-contractors, whose admission would be undesirable in the opinion of the Authority.
- (2) If and when requested by the Authority, the Contractor shall provide a list of the names and addresses of all persons who may at any time require admission in connection with the performance of the Services to the Authority's Premises, specifying the role in which each such person is concerned with the Contractor and giving such other particulars as the Authority may require.
- (3) If and when requested by the Authority, the Contractor shall procure from each person identified by the request, a signed statement that he understands that the Official Secrets Acts 1911 to 1989 applies to him both during the carrying out and after expiry or termination of the Contract and that he will comply with the provisions of those Acts in so far as they apply to the work he is performing under the Contract.
- (4) If and when requested by the Authority the Contractor agrees that it will submit any person employed by the Contractor or its sub contractors to the Authority's security vetting

procedure. The Contractor further agrees that any individual who refuses to submit to such vetting procedure or does not attain the clearance it affords will not carry out any work on the Contract which the Authority certifies as suitable only for people who have passed its security vetting procedure.

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

18. Indemnities and Insurance

- (1) The Contractor shall hold harmless and indemnify the Authority on demand from and against all claims, demands, proceedings, actions, damages, costs (including legal costs), expenses and any other liabilities arising from claims made by the Authority's staff or agents, or by third parties, in respect of any death or personal injury, or loss or destruction of or damage to property, or any other loss, destruction or damage, including but not limited to financial losses which are caused, whether directly or indirectly, by the breach of contract or breach of duty (whether in negligence, tort, statute or otherwise) of the Contractor, its employees, agents or sub-contractors.
- (2) The Contractor shall be liable to the Authority for any loss, damage, destruction, injury or expense, whether direct or indirect, (and including but not limited to loss or destruction of or damage to the Authority's property, which includes data) arising from the Contractor's breach of contract or duty (whether arising in negligence, tort, statute or otherwise).
- (3) The Contractor shall effect with a reputable insurance company a policy or policies of insurance providing an adequate level of cover in respect of all risks which may be incurred by the Contractor in respect of the indemnities provided under the Contract, which in any event shall not be less than £1,000,000, and shall at the request of the Authority produce the relevant policy or policies together with receipt or other evidence of payment of the latest premium due there under.
- (4) Nothing in these Conditions nor in any part of the Contract shall impose any liability on any member of the staff of the Authority or its representatives in their personal capacity.
- (5) The Contractor shall indemnify the Authority against all proceedings, actions, claims, demands, costs (including legal costs), charges, expenses and any other liabilities arising from or incurred by reason of any infringement or alleged infringement of any third party's Intellectual Property Rights used by or on behalf of the Contractor for the purpose of the Contract, providing that any such infringement or alleged infringement is not knowingly caused by, or contributed to, by any act of the Authority.
- (6) The Authority shall indemnify the Contractor against all proceedings, actions, claims, demands, costs (including legal costs), charges, expenses and any other liabilities arising from or incurred by reason of any infringement or alleged infringement of any third party's Intellectual Property Rights used at the request of the Authority by the Contractor in

the course of providing the Services, providing that any such infringement or alleged infringement is not knowingly caused by, or contributed to by, any act of the Contractor.

(7) Except in relation to death or personal injury as referred to in Condition 18(1), and subject to Conditions 18(5) and 30(6) the amount of liability under this clause shall be limited to a sum of £4,000,000 or twice the contract value, whichever is the greater, or such other sum as may be agreed in writing between the Head of Procurement on behalf of the Authority and the Contractor.

19 Termination for Insolvency or Change of Control

- (1) The Contractor shall notify the Authority in writing immediately upon the occurrence of any of the following events:
- a) where the Contractor is an individual, if a petition is presented for his bankruptcy, or he makes any composition or arrangement with or for the benefit of creditors, or makes any conveyance or assignment for the benefit of creditors, or if an administrator is appointed to manage his affairs; or
- b) where the Contractor is not an individual but is a firm or a number of persons acting together, if any event in Condition 19(1)(a) or (c) occurs in respect of any partner in the firm or any of those persons, or if a petition is presented for the Contractor to be wound up as an unregistered company; or
- c) where the Contractor is a company or limited liability partnership, if the company or limited liability partnership enters administration or passes a resolution to wind up or the court makes an administration order or a winding-up order, or the company makes a composition or arrangement with its creditors, or an administrative receiver, receiver or manager is appointed by a creditor or by the court, or possession is taken of any of its property under the terms of a floating charge; or
- d) the Contractor undergoes a change of control, where "control" is interpreted in accordance with Section 1124 of the Corporation Tax Act 2010.
- (2) After receipt of the notice under paragraph (1) above or earlier discovery by the Authority of the occurrence of any of the events described in that paragraph, the Authority may, by notice in writing to the Contractor, terminate the Contract with immediate effect without compensation to the Contractor and without prejudice to any right or action or remedy which may accrue to the Authority thereafter. The Authority's right to terminate the Contract under Condition 19(1)(d) will exist until the end of a period of three months starting from receipt of the notice provided by the Contractor pursuant to Condition 19(1), or such other period as is agreed by the parties.

20. Termination for Breach of Contract

If either party commits a material breach of the Contract which is either not capable of remedy, or, if it is capable of remedy, he fails to remedy such breach within 28 days of being notified by the other party in writing to do so, that other party shall be entitled to terminate the Contract with immediate effect by notice in writing to the party that

committed the material breach and without prejudice to any other rights or remedies of either party in respect of the breach concerned or any other breach of the Contract.

21. Cancellation

The Authority shall be entitled to terminate the Contract, or to terminate the provision of any part of the Services, by giving to the Contractor not less than 28 days' notice in writing to that effect. Once it has given such notice, the Authority may extend the period of notice at any time before it expires, subject to agreement on the level of Services to be provided by the Contractor during the period of extension.

22. Dispute Resolution

- (1) The parties shall attempt in good faith to negotiate a settlement to any dispute between them arising out of or in connection with the Contract.
- (2) If the parties cannot resolve the dispute pursuant to paragraph (1) of this Condition, the dispute may, by agreement between the parties, be referred to mediation pursuant to paragraph (4) of this Condition.
- (3) The performance of the Services shall not cease or be delayed by the reference of a dispute to mediation pursuant to paragraph (2) of this Condition.
- (4) If the parties agree to refer the dispute to mediation:
- (a) in order to determine the person who shall mediate the dispute (the "Mediator") the parties shall by agreement choose a neutral adviser or mediator from one of the dispute resolution providers listed by the Government Procurement Service on its website or in its printed guidance on dispute resolution within 30 days after agreeing to refer the dispute to mediation;
- (b) the parties shall within 14 days of the appointment of the Mediator meet with him in order to agree a programme for the exchange of all relevant information and the structure to be adopted for negotiations to be held. If considered appropriate, the parties may at any stage seek assistance from the Government Procurement Service to provide guidance on a suitable procedure;
- (c) unless otherwise agreed, all negotiations connected with the dispute and any settlement agreement relating to it shall be conducted in confidence and without prejudice to the rights of the parties in any future proceedings;
- (d) if the parties reach agreement on the resolution of the dispute within 60 days of the Mediator being appointed, or such longer period as may be agreed between the parties, the agreement shall be reduced to writing and shall be binding on the parties once it is signed by both the Authority and the Contractor;
- (e) failing agreement within 60 days of the Mediator being appointed, or such longer period as may be agreed between the parties, either of the parties may invite the Mediator to provide a non-binding but informative opinion in writing. Such an opinion shall be

provided on a without prejudice basis and shall not be used in evidence in any proceedings relating to the Contract without the prior written consent of both parties.

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

23. Bribery and corruption

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

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

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

- a) the interpretation of this Condition (except so far as the same may relate to the amount recoverable from the Contractor under paragraph (2) of this Condition in respect of any loss resulting from such determination of the Contract); or
- b) the right of the Authority to determine the Contract; or
- c) the amount or value of any gift, consideration or commission,

the decision of the Authority shall be final and conclusive.

24. Official Secrets

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

25. Special Provisions

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

26. Conflict of Interest

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

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

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

the Contract immediately for breach of a fundamental condition and, without prejudice to any other rights, recover from the Contractor the amount of any loss resulting from such termination.

27. Intellectual Property Rights

- (1) Subject to Condition 27(4), all Background Intellectual Property used or supplied under this Contract in connection with the Services shall remain the property of the Party introducing the same and nothing contained in this Contract or any licence agreement pertaining or pursuant to the Contractor's performance of the Services shall affect the rights of either Party in its Background Intellectual Property.
- (2) Subject to Conditions 27(3) and 28(5), any Arising Intellectual Property shall belong to the Contractor.
- (3) The Contractor hereby grants to the Authority a worldwide, irrevocable, royalty-free, non-exclusive licence at no cost to the Authority to use or publish any Arising Intellectual Property, Data, results, outcomes or conclusions which are created in performing the Services, for such purposes as the Authority in its absolute discretion deem fit.
- (4) The Contractor hereby grants to the Authority a worldwide, irrevocable, royalty-free, non-exclusive licence at no cost to the Authority, to use any Background Intellectual Property used in the performance of the Services, that is essential to the functioning and use of the Arising Intellectual Property.
- (5) The Contractor shall procure for the Authority any worldwide, irrevocable, royalty-free licence, at no cost to the Authority, from any third party, to use any Intellectual Property Rights that are essential to the functioning and use of the Arising Intellectual Property.

28. Exploitation of Intellectual Property

- (1) The Contractor shall inform the Authority of any Arising Intellectual Property, Data, results, outcomes or conclusions which are created in performing the Services and which are capable of exploitation whether patentable or not.
- (2) The Contractor shall, as appropriate, devise, publish, implement and maintain procedures for the management of Arising Intellectual Property and in particular, but without limitation, shall use its best endeavours to ensure that:

the Data which constitutes Arising Intellectual Property is identified, recorded and carefully distinguished from the outputs of other research;

prior to any publication of materials created in the course of performing the Services, patentable inventions comprised within the Arising Intellectual Property are identified, duly considered for patentability and, where it is reasonable so to do, patent applications in respect thereof are filed at the British or European Patent Office; and

all such patent applications are diligently executed having regard to all relevant circumstances.

- (3) The Contractor shall permit the Authority to monitor the operation and effectiveness of the Contractor's procedures for the management of Intellectual Property Rights in such a way as the Authority considers reasonably necessary.
- (4) Consistent with the good management of Intellectual Property Rights and the continued agreement of the Authority, the Contractor shall use its best endeavours to:
 - a) promote the dissemination of the Arising Intellectual Property; and
 - b) once the Contractor has performed the Services to the satisfaction of the Authority, commercially exploit any Arising Intellectual Property to generate either capital or revenue or both.
- (5) If, within three five years of its creation, any Arising Intellectual Property has not been commercially exploited by the Contractor the Contractor shall if requested by the Authority assign the Arising Intellectual Property to the Authority.
- (6) The Contractor shall not transfer ownership of the Arising Intellectual Property without the consent of the Authority.
- (7) If, within three years of its creation, any Arising Intellectual Property has not been commercially exploited by the Contractor or the Contractor has established a monopoly position, the Authority may require the Contractor to licence the Arising Intellectual Property to third parties nominated by the Authority. Should the Authority choose to exercise its discretion under this clause, it will notify the Contractor in accordance with clause 3.

29. Rights of Third Parties

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

30. Government Property

- (1) All Government Property shall remain the property of the Authority and shall be used in the execution of the Contract and for no other purpose whatsoever except with the prior agreement in writing of the Authority.
- (2) All Government Property shall be deemed to be in good condition when received by or on behalf of the Contractor unless he notifies the Authority to the contrary within 14 days or such other time as is specified in the Contract.
- (3) The Contractor undertakes to return any and all Government Property on completion of the Contract or on any earlier request by the Authority.
- (4) The Contractor shall, except as otherwise provided for in the Contract, repair or replace or, at the option of the Authority, pay compensation for all loss, destruction or damage occurring to any Government Property caused or sustained by the Contractor, or by his servants, agents or sub-contractors, whether or not arising from his or their

performance of the Contract and wherever occurring, provided that if the loss, destruction or damage occurs at the Authority's Premises or any other Government premises, this Condition shall not apply to the extent that the Contractor is able to show that any such loss, destruction or damage was not caused or contributed to by his negligence or default or the neglect or default of his servants, agents, or sub-contractors.

- (5) Where the Government Property comprises data issued in electronic form to the Contractor (including personal data as defined in Condition 1) the Contractor shall not store, copy, disclose or use such electronic data except as necessary for the performance by the Contractor of its obligations under the Contract (including its obligation to back up electronic data as provided in Condition 29(6) below) or as otherwise expressly authorised in writing by the Authority.
- (6) The Contractor shall perform secure back ups of all such electronic data in its possession and shall ensure that an up to date back up copy is securely stored at a site other than that where any original copies of such electronic data are being stored.
- (7) The Contractor shall, and shall procure that its sub-contractors, agents and personnel, shall observe best practice when handling or in possession of any such electronic data. By way of example if the Contractor removes any such data or information from a Government establishment, or is sent such data or information by the Authority it shall ensure that the data and any equipment on which it is stored or is otherwise being processed is kept secure at all times. The Contractor shall impress on any of its sub-contractors, agents and personnel who are required to handle or have possession of such electronic data that they must safeguard it all times, and shall not place it in jeopardy for example by leaving it unattended in a vehicle or on public transport or by transmitting or posting it by insecure means.
- (8) If at any time the Contractor suspects or has reason to believe that such electronic data has or may become corrupted, lost, destroyed, altered (other than to the extent that the Contractor alters it by lawful processing in accordance with its obligations under this contract) or so degraded as a result of the Contractor's default so as to be unusable then the Contractor shall notify the Authority immediately and inform the Authority of the remedial action the Contractor proposes to take.
- (9) The Contractor shall indemnify the Authority against all claims and proceedings, and all costs and expenses incurred in connection therewith arising from the corruption, loss, destruction, alteration (other than by lawful processing permitted by this Contract) or degradation of electronic data which claims would not have arisen but for some act, omission, misrepresentation or negligence on the part of the Contractor or subcontractors, agents and personnel and hold it harmless against all costs, losses and liability whatsoever incurred by it arising out of any action or inaction on its part in relation to any of its obligations as set out in this Contract which results in such corruption, loss or degradation.

31. Data Protection

- (1) The Parties acknowledge that for the purposes of the Data Protection Legislation, the Authority is the Data Controller and the Contractor is the Data Processor. The only processing that the Contractor is authorised to do is listed in Annex 1 by the Authority and may not be determined by the Contractor.
- (2) The Contractor shall notify the Authority immediately if it considers that any of the Authority's instructions infringe the Data Protection Legislation.
- (3) The Contractor shall provide all reasonable assistance to the Authority in the preparation of any Data Protection Impact Assessment prior to commencing any processing. Such assistance may, at the discretion of the Authority, include:
 - (a) a systematic description of the envisaged processing operations and the purpose of the processing;
 - (b) an assessment of the necessity and proportionality of the processing operations in relation to the Services;
 - (c) an assessment of the risks to the rights and freedoms of Data Subjects; and
 - (d) the measures envisaged to address the risks, including safeguards, security measures and mechanisms to ensure the protection of Personal Data.
- (4) The Contractor shall, in relation to any Personal Data processed in connection with its obligations under this Contract:
 - (a) process that Personal Data only in accordance with Annex 1, unless the Contractor is required to do otherwise by Law. If it is so required the Contractor shall promptly notify the Authority before processing the Personal Data unless prohibited by Law;
 - (b) ensure that it has in place Protective Measures, which have been reviewed and approved by the Authority as appropriate to protect against a Data Loss Event having taken account of the:
 - (i) nature of the data to be protected;
 - (ii) harm that might result from a Data Loss Event;
 - (iii) state of technological development; and
 - (iv) cost of implementing any measures;

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

- (c) ensure that:
 - (i) the Contractor Personnel do not process Personal Data except in accordance with this Contract and in particular Annex 1;

- (ii) it takes all reasonable steps to ensure the reliability and integrity of any Contractor Personnel who have access to the Personal Data and ensure that they:
- (A) are aware of and comply with the Contractor's duties under this clause;
 - (B) are subject to appropriate confidentiality undertakings with the Contractor or any Sub-Processor;
 - (C) are informed of the confidential nature of the Personal Data and do not publish, disclose or divulge any of the Personal Data to any third Party unless directed in writing to do so by the Authority or as otherwise permitted by this Contract; and
 - (D) have undergone adequate training in the use, care, protection and handling of Personal Data.
- (d) do not transfer Personal Data outside of the European Union unless the prior written consent of the Authority has been obtained and provided the following conditions are fulfilled:-
 - (i) the Authority or the Contractor has provided appropriate safeguards in relation to the transfer (whether in accordance with GDPR Article 46 or LED Article 37) as determined by the Authority;
 - (ii) the Data Subject has enforceable rights and effective legal remedies;
 - (iii) the Contractor complies with its obligations under the Data Protection Legislation by providing an adequate level of protection to any Personal Data that is transferred (or, if it is not so bound, uses its best endeavours to assist the Authority in meeting its obligations); and
 - (iv) the Contractor complies with any reasonable instructions notified to it in advance by the Authority with respect to the processing of the Personal Data.
- (5) Subject to clause (6), the Contractor shall notify the Authority immediately if it:
 - (a) receives a Data Subject Request (or purported Data Subject Request);
 - (b) receives a request to rectify, block or erase any Personal Data;
 - (c) receives any other request, complaint or communication relating to either Party's obligations under the Data Protection Legislation;
 - (d) receives any communication from the Information Commissioner or any other regulatory authority in connection with Personal Data processed under this Contract;
 - (e) receives a request from any third Party for disclosure of Personal Data where compliance with such request is required or purported to be required by Law; or
 - (f) becomes aware of a Data Loss Event.

- (6) The Contractor's obligation to notify under clause (5) shall include the provision of further information to the Authority in phases, as details become available.
- (7) Taking into account the nature of the processing, the Contractor shall provide the Authority with full assistance in relation to either Party's obligations under Data Protection Legislation and any complaint, communication or request made under clause (5) (and insofar as possible within the timescales reasonably required by the Authority) including by promptly providing:
- (a) the Authority with full details and copies of the complaint, communication or request;
 - (b) such assistance as is reasonably requested by the Authority to enable the Authority to comply with a Data Subject Request within the relevant timescales set out in the Data Protection Legislation;
 - (c) the Authority, at its request, with any Personal Data it holds in relation to a Data Subject;
 - (d) assistance as requested by the Authority following any Data Loss Event;
 - (e) assistance as requested by the Authority with respect to any request from the Information Commissioner's Office, or any consultation by the Authority with the Information Commissioner's Office.
- (8) The Contractor shall maintain complete and accurate records and information to demonstrate its compliance with this clause. This requirement does not apply where the Contractor employs fewer than 250 staff, unless:
 - (a) the Authority determines that the processing is not occasional;
 - (b) the Authority determines the processing includes special categories of data as referred to in Article 9(1) of the GDPR or Personal Data relating to criminal convictions and offences referred to in Article 10 of the GDPR; and
 - (c) the Authority determines that the processing is likely to result in a risk to the rights and freedoms of Data Subjects.
- (9) The Contractor shall allow for audits of its Data Processing activity by the Authority or the Authority's designated auditor.
- (10) The Contractor shall designate a Data Protection Officer if required by the Data Protection Legislation.
- (11) Before allowing any Sub-Processor to process any Personal Data related to this Contract, the Contractor must:
 - (a) notify the Authority in writing of the intended Sub-Processor;
 - (b) obtain the written consent of the Authority;
 - c) enter into a written Contract with the Sub-Processor which give effect to the terms set out in this Condition 30 such that they apply to the Sub-Processor; and

- (d) provide the Authority with such information regarding the Sub-Processor as the Authority may reasonably require.
- (12) The Contractor shall remain fully liable for all acts or omissions of any Sub-Processor.
- (13) The Authority may, at any time on not less than 30 Working Days' notice, revise this clause by replacing it with any applicable controller to processor standard clauses or similar terms forming part of an applicable certification scheme (which shall apply when incorporated by attachment to this Contract).
- (14) The Parties agree to take account of any guidance issued by the Information Commissioner's Office. The Authority may, on not less than 30 Working Days' notice to the Contractor, amend this Contract to ensure that it complies with any guidance issued by the Information Commissioner's Office.
- (15) If the Contractor fails to comply with any provision of this Condition 30, the Authority may terminate the Contract immediately in which event the provisions of Condition 20 shall apply.
- (16) The Contractor shall indemnify the Authority against all claims and proceedings, and all costs and expenses incurred in connection therewith, made or brought against the Authority by any person in respect of the Data Protection Legislation or equivalent applicable legislation in any other country which claims would not have arisen but for some act, omission, misrepresentation or negligence on the part of the Contractor, its subcontractors and Sub-Processors and hold it harmless against all costs, losses and liability whatsoever incurred by it arising out of any action or inaction on its part in relation to any of its obligations as set out in this Contract which results in the Authority being in breach of its obligations under the Data Protection Legislation or equivalent applicable legislation in any other country.
- (17) Upon expiry of this Contract or termination of this Contract for whatever reason, the Contractor shall, unless specified in Annex 1, notified otherwise by the Authority or required by law, immediately cease any processing of the Personal Data on the Authority's behalf and provide the Authority with a complete and uncorrupted version of the Personal Data in electronic form (or such other format as reasonably required by the Authority) and erase from any computers, storage devices and storage media that are to be retained by the Contractor after the expiry of the Contract. The Contractor will certify to the Authority that it has completed such deletion.
- (18) Where processing of the Personal Data continues after the expiry or termination of this Contract as specified in Annex 1 notified otherwise by the Authority or required by law, the Contractor shall comply with the provisions of this Condition 30 for as long as the Contractor continues to process the Personal Data and such provisions shall survive the expiry or termination of this Contract.
- (19) Where the Contractor is required to collect any Personal Data on behalf of the Authority, it shall ensure that it provides the data subjects from whom the Personal Data are collected with a privacy notice in a form to be agreed with the Authority.

32. Payment of taxes: income tax and NICs

- (1) Where the Contractor is liable to be taxed in the UK in respect of consideration received under the Contract, the Contractor shall at all times comply with the Income Tax (Earnings and Pensions) Act 2003 and all other statutes and regulations relating to income tax in respect of that consideration.
- (2) Where the Contractor is liable to National Insurance Contributions (NICs) in respect of consideration received under the Contract, the Contractor shall at all times comply with the Social Security Contributions and Benefits Act 1992 and all other statutes and regulations relating to NICs in respect of that consideration.
- (3) The Authority may, at any time during the term of the Contract, require the Contractor to provide information to demonstrate that:
 - a) the Contractor has complied with paragraphs (1) and (2) above; or
 - b) the Contractor or its staff are not liable to the relevant taxes.
- (4) A request under paragraph (3) above may specify the information which the Contractor must provide and a reasonable deadline for response.
- (5) The Authority may supply any information which it receives under paragraph (3) to the Commissioners of Her Majesty's Revenue and Customs for the purpose of the collection and management of revenue for which they are responsible.
- (6) The Contractor shall ensure that any sub-contractors (including consultants) and agents engaged by the Contractor for the purpose of the Services are engaged on, and comply with, conditions equivalent to those in paragraphs (1) to (5) above and this paragraph (6), and the Contractor shall, on request, provide the Authority with evidence to satisfy the Authority that the Contractor has done so. Those conditions shall provide both the Contractor and the Authority with the right to require the sub-contractor or agent to provide information to them equivalent to paragraph (3), and the Contractor shall obtain that information where requested by the Authority.
- (7) The Authority may terminate the Contract with immediate effect by notice in writing where:
 - a) the Contractor does not comply with any requirement of this Condition 31; or
 - b) the Contractor's sub-contractors or agents do not comply with the conditions imposed on them under paragraph (6) above.
- (8) In particular (but without limitation), the Authority may terminate the Contract under paragraph (7) above:
 - a) in the case of a request under paragraph (3):
 - i. the Contractor fails to provide information in response to the request within the deadline specified; or
 - ii. the Contractor provides information which is inadequate to demonstrate how the Contractor or (where relevant) its sub-

contractors and agents have complied with the conditions set out or referred to in paragraphs (1) to (6);

or

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

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

- (1) This Condition 32 applies where the consideration payable by the Contractor under the Contract equals or exceeds £5,000,000 (five million pounds).
- (2) The Contractor represents and warrants that it has notified the Authority in writing of any Occasions of Tax Non-Compliance or any litigation that it is involved in that is in connection with any Occasions of Tax Non Compliance.
- (3) If, at any point during the term of the Contract, an Occasion of Tax Non-Compliance occurs, the Contractor shall:
 - a) notify the Authority in writing of such fact within 5 working days of its occurrence; and
 - b) promptly provide to the Authority:
 - details of the steps which the Contractor is taking to address the Occasion of Tax Non-Compliance and to prevent the same from recurring, together with any mitigating factors that it considers relevant: and
 - ii) such other information in relation to the Occasion of Tax Non-Compliance as the Authority may reasonably require.

(4) In the event that:

- a) the warranty given by the Contractor pursuant to paragraph (2) of this Condition is materially untrue;
- b) the Contractor commits a material breach of its obligation to notify the Authority of any Occasion of Tax Non-Compliance as required by paragraph (3) of this Condition; or
- c) the Contractor fails to provide details of proposed mitigating factors which, in the reasonable opinion of the Authority, are acceptable,

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

- (5) In this condition 32, "Occasion of Tax Non-Compliance" means:
 - a) any tax return of the Contractor submitted to a Relevant Tax Authority on or after 1 October 2012 is found on or after 1 April 2013 to be incorrect as a result of:

- (i) a Relevant Tax Authority successfully challenging the Contractor under the General Anti-Abuse Rule or the Halifax Abuse Principle or under any tax rules or legislation that have an effect equivalent or similar to the General Anti-Abuse Rule or the Halifax Abuse Principle;
- (ii) the failure of an avoidance scheme which the Contractor was involved in, and which was, or should have been, notified to a Relevant Tax Authority under the DOTAS or any equivalent or similar regime;

and/or

- b) any tax return of the Contractor submitted to a Relevant Tax Authority on or after 1 October 2012 gives rise, on or after 1 April 2013, to a criminal conviction in any jurisdiction for tax related offences which is not spent at the commencement of the Contract or to a penalty for civil fraud or evasion.
- (6) For the purpose of paragraph (5):
 - a) "DOTAS" means the Disclosure of Tax Avoidance Schemes rules which require a promoter of tax schemes to tell HM Revenue & Customs of any specified notifiable arrangements or proposals and to provide prescribed information on those arrangements or proposals within set time limits as contained in Part 7 of the Finance Act 2004 and in secondary legislation made under vires contained in Part 7 of the Finance Act 2004 and as extended to National Insurance Contributions by the National Insurance Contributions (Application of Part 7 of the Finance Act 2004) Regulations 2012, SI 2012/1868 made under s.132A Social Security Administration Act 1992;
 - b) "General Anti-Abuse Rule" means:
 - (i) the legislation in Part 5 of the Finance Act 2013; and
 - (ii) any future legislation introduced into Parliament to counteract tax advantages arising from abusive arrangements to avoid national insurance contributions;
 - c) "Halifax Abuse Principle" means the principle explained in the CJEU Case C-255/02 Halifax and others; and
 - d) "Relevant Tax Authority" means HM Revenue & Customs, or, if applicable, a tax authority in the jurisdiction in which the Contractor is established.

34. Equality and non-discrimination

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

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

35. Welsh Language Act

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

36. Sustainable Procurement

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

37. Other Legislation

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

38. Contractor Status

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

39. Transfer of Services

(1) Where the Authority intends to continue with services equivalent to any or all of the Services after termination or expiry of the Contract, either by performing them itself or by the appointment of a replacement contractor, the Contractor shall (both during the term of the Contract and, where relevant, after its expiry or termination):

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

40. Law and Jurisdiction

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

41. Transparency

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

42. Monitoring and Management Information

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

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

43. Information confidential to the Contractor

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

Annex 1: Processing, Personal Data and Data Subjects

The following table will be filled out following discussions between BEIS and the successful applicant to agree how the data being processed in the contract will be handled under GDPR. This will form part of the contract.

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

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

Email: dataprotection@beis.gov.uk

- (2) The contact details of the Contractor's Data Protection Officer are: [To be completed]
- (3) The Contractor shall comply with any further written instructions with respect to processing by the Authority.
- (4) Any such further instructions shall be incorporated into this Annex 1.

Description	Details
Subject matter of the processing	This box should contain a high level, short description of what the processing is about i.e. its subject matter. For example: <i>The processing is needed in order to ensure that the</i> Contractor can effectively deliver the contract to provide x service.
	All Contracts should also include the following text in this box. It may be that this is the only processing involved in the Contract:

	The processing of names and business contact details of staff of both the Authority and the Contractor will be necessary to deliver the Services exchanged during the course of the Contract, and to undertake Contract and performance management.
	The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.
Duration of the processing	Processing will take place from [insert date of start of Contract] for the duration of the Contract [if applicable, insert duration of Contractor retention period e.g. twelve month retention period]. The Contract will end on [insert date of end of contract] but may be extended until [date of end of final extension period].
	Guidance Note: The Contractor retention period is the amount of time the Contractor will be contracted to store the data after the expiry of the contract. This will not apply to most Contracts. In most cases, data will be either securely destroyed or transferred back to BEIS at the end of the contract and stored within BEIS.
Nature and purposes of the processing	This box should include all intended actions the Contractor will take with the Personal Data. The following are examples which you should select from. Only if all the verbs apply should you leave all in.
	The nature of the processing will include (select from the following) collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction of data (and confirm whether the

erasure or destruction will be by automated means) etc. Processing takes place for the purposes of (include the purposes of processing e.g. employment processing, statutory obligation, recruitment assessments, research etc.) All Contracts should also include the following text in this box. It may be that this is the only processing involved in the Contract: The nature of processing will include the storage and use of names and business contact details of staff of both the Authority and the Contractor as necessary to deliver the Services and to undertake Contract and performance management. The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract. Type of Personal Data This box should include all types of Personal Data the Contractor will process e.g. name, address, date of birth, NI number, telephone number, pay, images, biometric data etc. All Contracts should also include the following text in this box. It may be that this is the only type of Personal **Data involved in the Contract:** Names, business telephone numbers and email addresses, office location and position of staff of both the Authority and the Contractor as necessary to deliver the Services and to undertake Contract and performance management. The

	Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.
Categories of Data Subject	This box should include all types of categories of Data Subject (the individuals whose Personal Data is being processed). This could include staff of the Authority or the Contractor (including volunteers, agents, and temporary workers), customers/clients, patients, students/pupils, members of the public, users of a particular website e.g. gov.uk, workers in a particular industry, applicants or users of a particular service etc.
	All Contracts should also include the following text in this box. It may be that these are the only Data Subjects involved in the Contract:
	Staff of the Authority and the Contractor, including where those employees are named within the Contract itself or involved within contract management.
Plan for return and destruction of the data once the processing is complete	This box should read and be formatted as one continuous paragraph. Please remove all square brackets and spaces when you have finished amending.
UNLESS requirement under European Union or European member state law to preserve that type of data	If the Contractor will retain the Personal Data after the Contract end, please include and edit the following sentence:
	[The Personal Data will be retained by the Contractor for a [insert duration of Contractor retention period e.g. twelve month] retention period, following which]
	(the 'T' in 'The Contractor' below, should be changed to lower case where the above sentence for retention applies)

The Contractor will

- a) to be used where BEIS wishes to retain the data: provide the Authority with a complete and uncorrupted version of the Personal Data in electronic form (or such other format as reasonably required by the Authority) and erase from any computers, storage devices and storage media that are to be retained by the Contractor after the expiry of the Contract. The Contractor will certify to the Authority that it has completed such deletion.
- b) to be used where BEIS wishes to have the data deleted all together:

delete the Personal Data and erase the Personal Data from any computers, storage devices and storage media that are to be retained by the Contractor after the expiry of the Contract. The Contractor will certify to the Authority that it has completed such deletion.

All Contracts should also include the following text in this box:

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

Information on the latest innovation calls can be found here:
https://www.gov.uk/guidance/energy-innovation

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