



Department for
Business, Energy
& Industrial Strategy

**Invitation to Tender for Contractors to Carry Out
Safety Assessments for the Suitability of Hydrogen
in Existing Buildings
(Hy4Heat Work Package 7)**

Tender Reference Number: TRN: 1819/02/2019

Deadline for Tender Responses: 12 April 2019 12 noon

Department for Business, Energy & Industrial Strategy

Date: 13th March 2019

The Department for Business, Energy & Industrial Strategy (“BEIS”) wishes to appoint contractors to carry out safety assessments for the suitability of hydrogen in existing buildings.

Enclosed are the following sections:

- Section 1 (page 5) Instructions and Information on Tendering Procedures
- Section 2 (page 10) Introduction and Background Information
- Section 3-1 (page 16) Specification of Requirements - Lot 1
- Section 3-2 (page 21) Specification of Requirements - Lot 2
- Section 3-3 (page 26) Specification of Requirements - Lot 3
- Section 3-4 (page 30) Specification of Requirements - Lot 4
- Section 4 (page 34) Tender Requirements (all lots)
- Section 5 (page 44) Other Information for Tenderers
- Section 6 (page 53) Further Information on Tender Procedure
- Section 7 (page 56) Declarations to be submitted by the Tenderer;
 - Statement of Non-Collusion
 - Form of Tender
 - Conflict of Interest
 - Standard Selection Questionnaire
 - The General Data Protection Regulation Assurance Questionnaire for Contractors
 - Code of Practice for Research
- Annex A: Pricing Schedule - *see separate document*
- Annex B: Code of Practice for Research
- Annex C: Exclusion Grounds

To apply for this tender please register on the following website www.delta-sourcing.com. This will ensure you receive immediate notification of updates to the ITT process and answers to questions raised by potential bidders which will be published on the Delta portal.

Please read the instructions on the tendering procedures carefully since failure to comply with them may invalidate your tender. Your tender must be received by uploading to the Delta portal by **12 noon (UK time) on Friday 12th April 2019** clearly marked as “TENDER”.

I look forward to receiving your response.

Yours sincerely,

Steve Loades

E:mail: hy4heat@arup.com

Privacy Notice

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

YOUR DATA

We will process the following personal data:

Names and contact details of employees involved in preparing and submitting the bid;
Names and contact details of employees proposed to be involved in delivery of the contract;
Names, contact details, age, qualifications and experience of employees whose CVs are submitted as part of the bid.

Purpose

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

Legal basis of processing

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

Recipients

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

Retention

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

YOUR RIGHTS

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

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

You have the right to request that any incomplete personal data are completed, including by means of a supplementary statement.

You have the right to request that your personal data are erased if there is no longer a justification for them to be processed.

You have the right in certain circumstances (for example, where accuracy is contested) to request that the processing of your personal data is restricted.

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

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

INTERNATIONAL TRANSFERS

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

COMPLAINTS

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

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF
0303 123 1113
casework@ico.org.uk

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

CONTACT DETAILS

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

You can contact the BEIS Data Protection Officer at: BEIS Data Protection Officer, Department for Business, Energy and Industrial Strategy, 1 Victoria Street, London SW1H 0ET. Email: dataprotection@beis.gov.uk.

Section 1

Instructions and Information on Tendering Procedures

Invitation to Tender for Contractors to Carry Out Safety Assessments for the Suitability of Hydrogen in Existing Buildings

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A. Indicative Timetable

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

Tender Timeline	Date
Advert (Contract Notice) and full invitation to tender issued	Wednesday 13 March 2019
Deadline for questions relating to the tender	Friday 22 March 2019
Responses to questions published	Friday 29 March 2019
Deadline for receipt of tender	Friday 12 April 2019 12:00 (UK time)
Invite suppliers for bid clarification (if needed)	w/c 23 April 2019
All suppliers alerted of outcome	Friday 3 May 2019
10-day standstill period	3 - 14 May 2019
Contract award on signature by both parties	w/c 20 May 2019
Contract start date	Tuesday 28 May 2019

The contract for each Lot is to be for a period of 6 months unless terminated or extended by the Department in accordance with the terms of the contract. **In the event that related and unexpected works arise as a result of delivering the tests within each lot then the contract will be extended by up to a further 3 months where applicable to deliver this additional works under the relevant lot.**

B. Procedure for Submitting Tenders

The maximum page limit for tenders is 20 A4 (excluding declarations, pricing schedule and CVs) **per lot**. The font type should be in Arial, minimum size 12 pt with single line spacing and minimum 2.5cm margins.

To apply for this tender please register on the following website www.delta-esourcing.com. Please contact the Delta Helpdesk on 0845 270 7050 for any registration queries. Please upload your proposal before the deadline via BIP Solutions Delta Website No hard copies of your submission are required.

For questions regarding the procurement process please contact hy4heat@arup.com.

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

The Department shall have the right to disqualify you from the procurement if you fail to fully complete your response, or do not return all of the fully completed documentation and declarations requested in this ITT. The Department shall also have the right to disqualify you if it later becomes aware of any omission or misrepresentation in your response to any question within this invitation to tender. If you require further information concerning the tender process, or the nature of the proposed contract, these should be uploaded onto the Delta portal. All questions should be submitted by 17:00 on 22 March 2019; questions submitted after this date may not be answered. Should questions arise during the tendering period, which in our judgement are of material significance, we will publish these questions with our formal reply by 17:00 on 29 March 2019 and circulate – unnamed - to all organisations that have expressed an interest in bidding. All contractors should then take that reply into consideration when preparing their own bids, and we will evaluate bids on the assumption that they have done so.

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

C. Conflict of Interest

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

For research and analysis, conflict of interest is defined the presence of an interest or involvement of the contractor, subcontractor (or consortium member) which could affect the actual or perceived impartiality of the research or analysis.

Where there may be a potential conflict of interest, it is suggested that the consortia or organisation designs a working arrangements such that the findings cannot be influenced (or perceived to be influenced) by the organisation which is the owner of a potential conflict of interest. For example, consideration should be given to the different roles which organisations play in the research or analysis, and how these can be structured to ensure maintain an impartial approach to the project is maintained.

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

- 1. During the bidding process, organisations may contact BEIS to discuss whether or not their proposed arrangement is likely to yield a conflict of interest.** Any responses given to individual organisations or consortia will be published on the Delta portal (in a form which does not reveal the questioner's identity). Any organisation thinking of submitting a bid, should share their contact details with the staff member responsible for this procurement, to ensure they receive an update when any responses to questions are published.
- 2. Contractors are asked to sign and return Declaration 3 (page 59) to indicate whether or not any conflict of interest may be, or be perceived to be, an issue.** If this is the case, the contractor or consortium should give a full account of the actions or processes that it will use to ensure that conflict of

interest is avoided. In any statement of mitigating actions, contractors are expected to outline how they propose to achieve a robust, impartial and credible approach to the research.

- 3. When tenders are scored, this declaration will be subject to a pass/fail score**, according to whether, on the basis of the information in the proposal and declaration, there remains a conflict of interest which may affect the impartiality of the research.

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

BEIS has appointed Arup+ as the programme management contractor (PMC), who are responsible for delivering work packages 1 and 9 as part of their contract. Arup+ will also be managing the delivery of Work Packages 2 – 8 & 10 and, as part of the conditions for the PMC role, have agreed not to bid for the remaining work packages. These work packages will be delivered by other suppliers.

The Arup+ team is a consortium of the following companies: Arup, Kiwa Gastec, Progressive Energy, Embers and YoEnergy.

D. Evaluation of Responses

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

E. Terms and conditions applying to this Invitation to Tender

The Department's Standard Terms and Conditions of Contract will apply to this contract. These are available to download on BiP Solutions Delta website.

F. Further Instructions to Contractors

The Department reserves the right to amend the enclosed tender documents at any time prior to the deadline for receipt of tenders. Any such amendment will be numbered, dated and issued by 17:00 on 29 March 2019. Where amendments are significant, the Department may at its discretion extend the deadline for receipt of tenders.

The Department reserves the right to withdraw this contract opportunity without notice and will not be liable for any costs incurred by contractors during any stage of the process. Contractors should also note that, in the event a tender is considered to be fundamentally unacceptable on a key issue, regardless of its other merits, that tender may be rejected. By issuing this invitation the Department is not bound in any way and

does not have to accept the lowest or any tender and reserves the right to accept a portion of any tender unless the tenderer expressly stipulates otherwise in their tender.

G. Checklist of Documents to be Returned

- Proposal (maximum 20 pages) per lot
- Annex A: Pricing Schedule - *see separate document*
- Declaration 1: Statement of non-collusion
- Declaration 2: Form of Tender
- Declaration 3: Conflict of Interest
- Declaration 4: Standard Selection Questionnaire
- Declaration 5: The General Data Protection Regulation Assurance Questionnaire for Contractors
- Declaration 6: Code of Practice for Research

Section 2

Introduction and Background Information

Invitation to Tender for Contractors to Carry Out Safety Assessments for the Suitability of Hydrogen in Existing Buildings

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1. Background

The Climate Change Act 2008 (the Act) established a legally binding target to reduce the UK's greenhouse gas emissions by at least 80% below 1990 levels by 2050.

Heating and cooling in the UK accounts for nearly one half of primary energy consumption and one third of carbon emissions. Over 80% of homes and business are currently supplied by gas and the UK has one of the most comprehensive gas networks in the world with 282,000km of gas pipes feeding 22.7 million homes and businesses.

Achieving the UK's legally binding 2050 climate change targets is likely to require the almost complete decarbonisation of heat in domestic and non-domestic buildings. The most cost-effective way to decarbonise buildings on the gas grid on the scale required to meet our 2050 targets has yet to be determined.

At this stage, it is not clear which technologies are likely to work best at scale and offer the most cost-effective, long term answer. Crucially, the costs and the barriers to the development of all the heat decarbonisation options are uncertain. For all options, further work on evidence, cost reduction, policy development and innovation is required to help de-risk them.

The hydrogen approach

To be able to inform any future assessment of the feasibility of the costs and benefits of undertaking a hydrogen conversion, a full understanding of issues from end-to-end (production to use) of the gas chain will be required.

The hydrogen gas chain can be split into the following stages:

- Production (including plant and CO₂ off-take, CO₂ sequestration and hydrogen storage)
- Transmission network (involving the pipework that transports the gas under a pressure of between 7 and 85 bar)
- Distribution network down to the end user's gas meter (involving pipework that transports the gas under a pressure of up to 7 bar)
- End-use (i.e. downstream of the emergency control valve (ECV))

This innovation programme seeks to demonstrate and de-risk the technologies downstream of the ECV.

2. Hy4Heat programme

The Department for Business, Energy and Industrial Strategy (BEIS) has appointed Arup+, a group of companies led by Ove Arup Ltd, as the Programme Management Contractor (PMC) to manage and deliver Hy4Heat, a programme which is seeking to prove the safety case for hydrogen and demonstrate the use of hydrogen for heating in GB homes and businesses

The Hy4Heat programme's aim is:

- To establish if it is technically possible and safe to replace methane with hydrogen in commercial and residential buildings and gas appliances. This will enable the Government to determine whether to proceed to a community trial

The Hy4Heat programme's overall objective is:

- To provide the technical, performance, usability and safety evidence to de-risk the use of hydrogen for heat in buildings whilst working with others to prepare for a future occupied trial

The programme's focus is on researching, developing, testing and demonstrating within the end-use stage of the gas chain. This will involve the gas appliance and equipment sectors as well as consumer research.

The programme is aiming to demonstrate:

- That safe, reliable, efficient and affordable end-use appliances and equipment can be developed for the domestic sector (Depending on the outcome of a market research study for both the commercial and industrial sectors, a decision will be made on appliance development in these sectors)
- That hydrogen can be safely distributed to the end user appliances in existing buildings' pipework, downstream of the meter
- Initial findings around what the consumer experience of a hydrogen fuelled home will be. This includes demonstration trials of appliances as well as developing detailed plans and preparations to progress to a potential community trial, if the government decides to do so

Successful demonstration will lay the groundwork for a potential follow-on project to undertake a potential community trial.

The Hy4Heat programme will be completed by the end of March 2021. It consists of ten work packages:

1. Programme management
2. Definition of a hydrogen quality standard
3. Establishing an appliance and equipment testing capability
4. Development of domestic hydrogen appliances
5. Understanding commercial appliances
6. Understanding industrial appliances
7. **Assessment of suitability of hydrogen in existing buildings (this Invitation to Tender (ITT))**
8. Hydrogen demonstration trials in an unoccupied building
9. Preparations for an occupied consumer community trial
10. Smart hydrogen meter development and manufacture

This ITT directly supports the delivery of Work Package 7, assessment of suitability of hydrogen in existing buildings.

3. Summary of tender requirements

The overall requirement for this Hy4Heat work packages is to conduct a range of comparative experimental tests using both natural gas and hydrogen to simulate scenarios commonly found in a domestic environment which will quantify the relative risk of using hydrogen vs. natural gas. This will also support with determining what further levels of protection are required when using hydrogen within the home (if any) for maintaining a safe gas system.

The work will be delivered through four separate lots and the following tender sections set out the requirements for each lot as below:

Lot	Project Title	Section Number
1	Research and evidence gathering to compare the fitness for purpose of fittings and general pipework within a typical domestic property for both hydrogen and natural gas.	3-1 (Page 16)
2	Research and evidence gathering to compare the movement and accumulation within different confined spaces within a typical domestic property for both hydrogen and natural gas.	3-2 (Page 21)
3	Research and evidence gathering to compare the movement and accumulation of leaked gas within a typical domestic two storey property for both hydrogen and natural gas.	3-3 (Page 26)
4	Research and evidence gathering to compare the ignition risk from different gas concentrations for both hydrogen and natural gas.	3-4 (Page 30)

Note: Tenderers can bid for more than one lot and should complete a separate submission for each lot that they wish to bid for which includes information requested in the applicable section 3 for each lot and section 4 for all lot submissions.

Note: However, in the interests of ensuring as diverse a supplier base as possible, BEIS reserves the right not to award all of the lots to a single tenderer. In any scenario, all tenders will be scored, however, in the event that a single tenderer scores the highest mark in all lots, then BEIS may discount the tenderer from the lot in which they scored their lowest mark AND there is a second bidder who has submitted a satisfactory bid.

Background information

Work carried out at Hyhouse, US data and test work for H100 indicates that the repurposing of the existing gas network to hydrogen demonstrates the same order of magnitude of risk as natural gas. However, the use of hydrogen in the existing gas network may require the incorporation of further levels of protection (risk mitigation) to reflect the fact that the relative risk of using hydrogen varies depending on the gas concentrations compared. Further protection measures may also be required to support public acceptance of the use of hydrogen.

This ITT includes a number of experiments and tests required to quantify the relative risks of hydrogen and hence determine what further levels of protection (risk mitigation) may be required.

The following information is provided as background information on the current knowledge of hydrogen fires in a domestic situation, which is mostly derived from experimental data gathered by SGN's H100;

- Leakage tests into appliances including delayed ignition, show safe appliances should be designed.
- H₂ is non- poisonous, biologically inert, so the risks are asphyxiation (above concentration 20-30%v/v) and fire/explosion (above 4%, but more realistically above 8%).
- Due to its relatively low density (hydrogen 0.084kg/m³ cf natural gas 0.67kg/m³ cf air 1.28kg/m³), hydrogen creates convective forces which assist in ventilating spaces. The data indicates it would be rare for the hydrogen concentration in a habitable room to exceed X1.6 of that of methane from the equivalent orifice at equivalent pressure. Laminar flows (typically along screwed fittings or through soil) are only X1.2 those of natural gas, so concentrations of hydrogen (again in a habitable room) should be even lower than methane for the same mechanical defect.
- Hydrogen has much higher flame speed than natural gas, when ignited. This can create significantly more local shock damage (i.e. to the room in which the leak occurred and adjacent rooms and to the speed of debris thrown). Such local damage may extend further than with natural gas (especially with hydrogen concentrations above ~18% as the effect of igniting the hydrogen cloud moves from deflagration to detonation). However, the fundamental energy content and consequent heat damage caused by the ignition of such a hydrogen filled room is unlikely to significantly exceed that of natural gas.
- Peak overpressures from hydrogen at high concentrations (>18%) in obstructed locations can be much higher than with natural gas, but the literature suggests that any transition to detonation is very dependent upon the precise layout and nature of obstructions, in the combustion zone.

- Because of this complexity and the difficulty in understanding the relief of the deflagration (or partial detonation) of hydrogen, this ITT concentrates upon understanding and eliminating the build-up of gas rather than extensive investigations of actual explosions.

Section 3-1

Specification of Requirements (Lot 1 - Research and evidence gathering to compare the fitness for purpose of fittings and general pipework within a typical domestic property for both hydrogen and natural gas)

Invitation to Tender for Contractors to Carry Out Safety Assessments for the Suitability of Hydrogen in Existing Buildings

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1. Project Aims and Objectives

The aim of this work is to compare the fitness for purpose of fittings and general pipework within a typical domestic property for hydrogen gas (ISO14687 Type A) vs. natural gas (G20). Experimental results will be used to quantify the relative risk of using hydrogen and to determine what further levels of protection are required (if any) for maintaining a safe gas system within the home.

The objectives of this work package are to test and compare the gas tightness of existing pipework and fittings downstream of the Emergency Control Valve (ECV) for Hydrogen gas (ISO14687 Type A) and Natural Gas/Methane (G20). The test method should consider the use of a mock-up of a typical domestic pipe system (downstream of the ECV).

The supplier for this lot will be required to share the output data (including emerging findings) with the suppliers of other lots setout within this ITT.

2. Scope of Work

Lot 1

The following requirements are within the scope of this work package:

- 1.1. Complete a literature review of existing hydrogen testing work already completed to gain a baseline understanding prior to commencing these works.
- 1.2. Pipes consisting of the following materials:
 - a) Lead, including sweated transitions to copper and to steel/iron barrel.
 - b) Low carbon/malleable iron
 - c) Copper (all grades)
 - d) Stainless steel (smooth or corrugated)
 - e) Polyethylene (PE)
- 1.3. For the pipe materials listed above, test a minimum of three different brands of each of the following types of fittings/valves as appropriate to the pipe material:
 - a) Flexible connectors 15/22mm nominal
 - b) Semi-rigid coupling
 - c) Compression fittings
 - d) Welded/screwed flange
 - e) Soldered
 - f) Brazed
 - g) Cold crimped/pressed joint (inc those especially made for both Natural Gas and Hydrogen)
 - h) Screwed fitting, both tapered with both PTFE and hemp/putty and parallel
 - i) Butt fusion
 - j) Disk on seat valves (restrictor elbow/cooker bayonet)
 - k) Emergency Control Valves (Taper Plug and Ball valves)
 - l) Self-lubricating taper plug
 - m) Butterfly valves
 - n) Conventional ball valves and taper plugs (non ECV)
 - o) Gate valves
- 1.4. Test a variety of leak scenarios from pipework and fittings at 20mbarg and 100mbarg which generate a range of flow types from laminar flow (small leaks with a typical hydrogen: natural gas leak ratio of 1.2) to turbulent flow (significant leaks with a typical hydrogen: natural gas flow ratio of 2.8). Experiments should demonstrate the conditions necessary to cause both types of flow and focus on the scenarios which illustrate the transition from laminar flow to turbulent flow. For guidance we would expect this to occur between 0.01 and 6.4m³/h of G20 (Natural Gas) and Hydrogen (ISO14687 Type A). We would expect at least 4 leak rates to be tested and the total number of tests to be at least 1000.

1.5. Examples of leak creation must be characteristics of both the joint and the material. They should include:-

- a) So-called flux joints where the gas is held back by either sealing compound (e.g. Hawke White), or genuine flux not by solder.
- b) Mechanical abuse of a compression fitting with a hammer or oversize spanner
- c) Mechanical abuse of screwed iron/steel joints particularly when subject to repeated lateral forces
- d) Mechanical abuse of length of iron barrel, copper and lead pipes (including joints) with lateral and longitudinal forces.
- e) Mechanical damage to compression fitting olive and subsequent endeavour to repair leak by overtightening enough to crack back nut
- f) Corrosion of metallic pipe. This can be simulated by local spotting with strong acid
- g) Corrosion of steel pipe in concrete. Simulate by means of internal acid attack.
- h) Gasket failure of flange joint (2inch) both by lateral force and/or by loosening one bolt.

An indicative table is show below:

Pipe Material	Fitting Type	Flow rate m3/hr	Gas & pressure			
			H2 @20mbarg	H2 @100mbarg	G20 @20mbarg	G20 @ 100mbarg
Stainless steel	Screwed flange joint (Brand A, B & C)	0.01				
		a				
		b				
		c				
		d				
		6.4				
	Welded flange joint (Brand A,B & C)					
	Screwed joint (Brand A,B & C)					
	Pressed joint (Brand A,B & C)					
	Semi-rigid coupling (Brand A,B & C)					
	Compression joint (Brand A,B & C)					
Polyethylene (PE)	Butt fusion Joint (Brand A,B & C)					
	Electro-fusion saddle (Brand A,B & C)					
	Electro-fusion socket (Brand A,B & C)					
	Compression joint (Brand A,B & C)					
Copper	Compression joint (Brand A,B & C)					
	Solder joint (Brand A,B & C)					
	Brazed joint (Brand A,B & C)					
	Pressed joint (Brand A,B & C)					
Lead	Sweated transition to copper					
	Sweated transition to iron barrel					
	Sweated transition to stainless steel					
	Sweated transition to lead					
Iron barrel	Screwed joint - tapered (joint compound A, B & C)					
	Screwed joint - parallel (joint compound A, B & C)					

Complete any addition works that may arise from the above experimental work which are unforeseen at the time of writing. This would be under an agreed variation using the resource day rates provided. This could include any materials testing on certain materials that are yet to proven suitable for long term use with hydrogen.

Out of Scope:

- No ignition is required or expected during this work.

The success of this work package will be measured against the quality and delivery of the specified outputs set out in section 4 and 9.

Lot 1 Specific Deliverables

Deliverable Name	Type	Content
Lot 1 Report	Document	A detailed report describing the test method, experiment setup, analysis, results and conclusion. The report should also include any references/links as appropriate.
Lot 1 Data (Raw & Processed Data Sets)	Data (MS Excel or equivalent)	A set of raw data, and a set of analysed /processed data from the experiments and tests.

3. Budget, Pricing and Commercial Valuation

The budget for this project is up to **£150,000** (excluding VAT).

The budget has been set based on the approach and deliverables required.

Tenderers should provide fixed prices for the deliverables described above and in Section **Error! Reference source not found.**. The format for providing the fixed price is provided in Annex A with some indicative examples of tasks.

Total fixed fee for delivering the scope of works set out in this tender will be the commercial criterion against which bids which will be assessed. Tenderers should provide a full and detailed breakdown of costs. This should include staff (and day rate) allocated to specific tasks.

Resources and day rates should also be proposed to allow for additional tasks (within or outside the above specified budget), which may reasonably be required in the Department's opinion, but have not been included within the scope of this ITT. This must be priced separately to the scope of the lot stated above or at a future point within the contract to allow for additional unexpected tests to be delivered as part of this lot. These will not form part of the commercial evaluation. This work could include re-running an experiment or undertaking additional testing based on results obtained for the original experiments. These additional tests will be undertaken through an approved variation to the existing contract.

In submitting full tenders, tenderers confirm in writing that the price offered will be held for a minimum of 13 weeks from the date of submission. Any payment conditions applicable to the prime contractor must also be replicated with sub-contractors.

BEIS will retain 10% of the total budget for final payment upon completion and sign-off to the project board's satisfaction of the final programme report.

Section 3-2

Specification of Requirements (Lot 2 - Research and evidence gathering to compare the movement and accumulation within different enclosed spaces within a typical domestic property for both hydrogen and natural gas)

Invitation to Tender for Contractors to Carry Out Safety Assessments for the Suitability of Hydrogen in Existing Buildings

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1. Project Aims and Objectives

The aim of this work is to compare the movement and accumulation within different enclosed spaces within a typical domestic property for both hydrogen and natural gas. Experimental results will be used to quantify the relative risk of using hydrogen and to determine what further levels of protection are required (if any) for maintaining a safe gas system within the home.

The objective of this work package is to test and compare the movement and accumulation of gas in different enclosed spaces in a typical domestic house (e.g. in kitchens and behind kitchen furniture) for a range of gas leaks from Hydrogen gas (ISO14687 Type A) and Natural Gas/Methane (G20).

The supplier for this lot will be required to share the output data (including emerging findings) with the suppliers of other lots setout within this ITT.

2. Scope of Work

Lot 2

The following requirements are within the scope of this work package:

The test method should consider the use of a mock-up of a typical kitchen and include the following:

- 2.1. Complete a literature review of existing hydrogen testing work already completed to gain a baseline understanding prior to commencing these works.
- 2.2. Create a kitchen run consisting of
 - a) Wall
 - b) Full height cupboard
 - c) Cooker
 - d) Sink unit (with waste disposal unit)
 - e) Dishwasher, with drainer over.
 - f) 1.2m run of work top with cupboard under and wall mounted combi- boiler (not connected) above.
 - g) Full height fridge freezer
- 2.3. Test using 4 different brands of kitchen cupboards including BOTH freestanding AND so-called built in designs, e.g. B&Q, Ikea and Howdens, which (by visual inspection) would appear to have different air leakage rates. Nothing is to be electrically connected. It is to be expected that the built-in designs create higher concentrations.
- 2.4. Carefully remove electric switches (and other realistic spark creating zones) from each electrical device and package. This is assumed to be 10 off.
- 2.5. Measure the gas movement and accumulation for gas releases ranging from 0.01, 0.04, 0.1, 0.4, 0.8, 1.6, 3.2 to 6.4 m³/h (or equivalent energy release in kW) for G20 (Natural Gas) and Hydrogen gas (ISO14687 Type A) from a typical pipework or fittings (tested in Lot 1) at 20mbar into a variety of enclosed spaces within a typical kitchen. Enclosed spaces should include, and are not limited to; e.g. cupboards, behind kitchen appliance units such as cookers / fridge freezer and units under the sink. The test should only consider gas releases above around 100mm from the floor of a typical kitchen. Morning and evening spanning of gas concentration analytical equipment is required for calibration purpose.
- 2.6. Measure gas concentrations around realistic potential spark creating zones for every appliance e.g. waste disposal unit. This may require drilling into white goods cases and take small samples down sealed lines.

- 2.7. Repeat the above experiments for hydrogen gas with 2 sets/brands of cupboards continuing the tests until the hydrogen gas concentration reaches 18% in the room.
- 2.8. Investigate the potential of retrofitting visually aesthetically acceptable vents to the side of built in units and quantify the mitigating effects these have for both natural gas and hydrogen.
- 2.9. Complete any additional works that may arise from the above experimental work which are unforeseen at the time of writing. This would be under an agreed variation using the resource day rates provided.

Out of Scope:

- No ignition is required or expected during this work.

Lot 2 Specific Deliverables

Deliverable Name	Type	Content
Lot 2 Report	Document	Write a comprehensive report on the test method, experiment setup, analysis, results and conclusion on the changes in the pattern of leaks and accumulations (especially for the different relative gas release rates) between Natural Gas/Methane (G20) and hydrogen (ISO14687 Type A), and proximate to potentially realistic sources of ignition.
Lot 2 Data (Raw & Processed Data Sets)	Data (MS Excel or equivalent)	All data sets – both raw data and analysed data from the tests and experiments.

3. Budget, Pricing and Commercial Valuation

The budget for this project is up to **£150,000** (excluding VAT).

The budget has been set based on the approach and deliverables required.

Tenderers should provide fixed prices for the deliverables described above and in Section **Error! Reference source not found.**. The format for providing the fixed price is provided in Annex A with some indicative examples of tasks.

Total fixed fee for delivering the scope of works set out in this tender will be the commercial criterion against which bids which will be assessed.

Tenderers should provide a full and detailed breakdown of costs. This should include staff (and day rate) allocated to specific tasks.

Resources and day rates should also be proposed to allow for additional tasks (within or outside the above specified budget), which may reasonably be required in the Department's opinion, but have not been included within the scope of this ITT. This must be priced separately to the scope of the lot stated above or at a future point within the contract to allow for additional unexpected tests to be delivered as part of this lot. These will not form part of the commercial evaluation. This work could include re-running an experiment or undertaking additional testing based on results obtained for the original experiments. These additional tests will be undertaken through an approved variation to the existing contract.

In submitting full tenders, tenderers confirm in writing that the price offered will be held for a minimum of 13 weeks from the date of submission. Any payment conditions applicable to the prime contractor must also be replicated with sub-contractors.

BEIS will retain 10% of the total budget for final payment upon completion and sign-off to the project board's satisfaction of the final programme report.

Section 3-3

Specification of Requirements (Lot 3 - Research and evidence gathering to compare the movement and accumulation of leaked gas within a typical domestic two storey property for both hydrogen and natural gas)

Invitation to Tender for Contractors to Carry Out Safety Assessments for the Suitability of Hydrogen in Existing Buildings

Tender Reference Number: 1819/02/2019

Deadline for Tender Responses: 12 April 2019 at 12:00 noon

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1. Project Aims and Objectives

The aim of this work is to measure the movement and accumulation within a typical domestic property for both hydrogen and natural gas. Experimental results will be used to quantify the relative risk of using hydrogen and to determine what further levels of protection are required (if any) for maintaining a safe gas system within the home.

The objectives of this work package are to test and compare the movement of gases in a typical 2-storey domestic property for a range of gas leaks from Hydrogen gas (ISO 14687 Type A) and Natural Gas/Methane (G20).

The supplier for this lot will be required to share the output data (including emerging findings) with the suppliers of other lots setout within this ITT.

2. Scope of Work

Lot 3

The following requirements are within the scope of this work package:

The test method should include the following:

- 2.10. Complete a literature review of existing hydrogen testing work already completed to gain a baseline understanding prior to commencing these works.
- 2.11. A typical storey town house/terrace type domestic property into which flammable gas can be injected at 3 points typical of where internal gas pipework might leak. The property should;
 - 2.11.1. Have a minimum of 2 storeys
 - 2.11.2. Have a basement (not included as the second story)
 - 2.11.3. Have a minimum of 2 bedrooms.
- 2.12. Flammable gas concentration shall be measured at 18 locations within the property, typically low, middle and ceiling of any room. The house shall be sealed to between 4 and 5m³/hr/m² air 50Pa (Standard SAP /Building control conditions). Morning and evening spanning of gas concentration analytical equipment is required for calibration purpose.
- 2.13. Flammable gas shall be released at energy 0.01, 0.04, 0.1, 0.4 ,0.8, 1.6, 3.2 to 6.4 m³/h (or equivalent energy release in kW) for G20 (Natural Gas) and Hydrogen gas (ISO14687 Type A) leaks with internal doors both OPEN and CLOSED.
- 2.14. The test should consider the implications on gas movement from different ventilation rates. This should be controlled to represent the typical ventilation rates seen across the UK housing stock, including the latest building regulation standards.
- 2.15. The test should identify and consider other variables, such as air movement external to the property (e.g. windy days /non-windy days) and its effects on the gas movements within the property.
- 2.16. Complete any addition works that may arise from the above experimental work which are unforeseen at the time of writing. This would be under an agreed variation using the resource day rates provided.

Out of Scope:

- No ignition is required or expected during this work.

Lot 3 Specific Deliverables

Deliverable Name	Type	Content
Lot 3 Report	Document	Write a comprehensive report on test method, experiment setup and details, analysis and conclusion of results on the changes in the pattern of accumulations (especially relative gas release rate) between Natural Gas/Methane (G20) and hydrogen (ISO14687 Type A) and proximate to potentially realistic sources of ignition.
Lot 3 Data (Raw & Processed Data Sets)	Data (MS Excel or equivalent)	All data sets – both raw data and analysed data from the tests and experiments.

3. Budget, Pricing and Commercial Valuation

The budget for this project is up to **£250,000** (excluding VAT).

The budget has been set based on the approach and deliverables required.

Tenderers should provide fixed prices for the deliverables described above and in Section **Error! Reference source not found.**. The format for providing the fixed price is provided in Annex A with some indicative examples of tasks.

Total fixed fee for delivering the scope of works set out in this tender will be the commercial criterion against which bids which will be assessed

Tenderers should provide a full and detailed breakdown of costs. This should include staff (and day rate) allocated to specific tasks.

Resources and day rates should also be proposed to allow for additional tasks (within or outside the above specified budget), which may reasonably be required in the Department's opinion, but have not been included within the scope of this ITT. This must be priced separately to the scope of the lot stated above or at a future point within the contract to allow for additional unexpected tests to be delivered as part of this lot. These will not form part of the commercial evaluation. This work could include re-running an experiment or undertaking additional testing based on results obtained for the original experiments. These additional tests will be undertaken through an approved variation to the existing contract.

In submitting full tenders, tenderers confirm in writing that the price offered will be held for a minimum of 13 weeks from the date of submission. Any payment conditions applicable to the prime contractor must also be replicated with sub-contractors.

BEIS will retain 10% of the total budget for final payment upon completion and sign-off to the project board's satisfaction of the final programme report.

Section 3-4

Specification of Requirements (Lot 4 - Research and evidence gathering to compare the ignition risk from different gas concentrations for both hydrogen and natural gas)

Invitation to Tender for Contractors to Carry Out Safety Assessments for the Suitability of Hydrogen in Existing Buildings

Tender Reference Number: 1819/02/2019

Deadline for Tender Responses: 12 April 2019 at 12:00 noon

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1. Project Aims and Objectives

The aim of this work is to compare the ignition risk from different gas concentrations for both hydrogen and natural gas.

The objective of this work package is to test and compare the ignition risk for a range of gas leak concentrations from Hydrogen gas (ISO 14687 Type A) and Natural Gas/Methane (G20).

The supplier for this lot will be required to share the output data (including emerging findings) with the suppliers of other lots setout within this ITT.

2. Scope of Work

Lot 4

The following requirements are within the scope of this work package:

The test method should include the following

- 2.17. Complete a literature review of existing hydrogen testing work already completed to gain a baseline understanding prior to commencing these works.
- 2.18. Retrieve the 10 off switches identified as ignition sources in Lot 2, Section 3b, paragraph 2.3; mount each in an explosion box and arrange mechanical and/or temperature actuators to cause the switches to operate. Switches must be connected to a live electricity source similar to that found in a typical domestic setting.
- 2.19. Test each box with slowly rising flammable gas concentration at a rate and to a max concentration that reflects those found in Lot 2 above.
- 2.20. Mount examples of small extractor fans (3 off), incandescent light fittings (3 off), LED light fittings(3 off) and fluorescent light fittings(3 off) in an explosion box and frequently cycle on/off (circa 55secs on/ 5secs off)
- 2.21. Test each item of equipment (ref 1.17) with a slowly rising flammable gas concentration until the concentration of hydrogen reaches 30%, or the G20 11%. Note the concentration at which ignition occurs (if at all).
- 2.22. Note if any ignitions occur. As necessary a second appliance may need to be purchased to acquire another switch unit.
- 2.23. Consider any other potential ignition sources commonly found in a domestic property and perform similar tests to determine the gas concentration at which the gases will ignite, for example, electrical plinth heaters.
- 2.24. Complete any addition works that may arise from the above experimental work which are unforeseen at the time of writing. This would be under an agreed variation using the resource day rates provided.

Ignition is expected during these experiments.

Lot 4 Specific Deliverables

Deliverable Name	Type	Content
Lot 4 Report	Document	Write a comprehensive report on test method, experiment setup and details, analysis and conclusion of results on the ignition risk for a range of gas concentration from both Natural Gas/Methane (G20) and hydrogen (ISO14687 Type A).
Lot 4 Data (Raw & Processed Data Sets)	Data (MS Excel or equivalent)	All data sets – both raw data and analysed data from the tests and experiments.

3. Budget, Pricing and Commercial Valuation

The budget for this project is up to **£100,000** (excluding VAT).

The budget has been set based on the approach and deliverables required.

Tenderers should provide fixed prices for the deliverables described above and in Section **Error! Reference source not found.**. The format for providing the fixed price is provided in Annex A with some indicative examples of tasks.

Total fixed fee for delivering the scope of works set out in this tender will be the commercial criterion against which bids which will be assessed

Tenderers should provide a full and detailed breakdown of costs. This should include staff (and day rate) allocated to specific tasks.

Resources and day rates should also be proposed to allow for additional tasks (within or outside the above specified budget), which may reasonably be required in the Department's opinion, but have not been included within the scope of this ITT. This must be priced separately to the scope of the lot stated above or at a future point within the contract to allow for additional unexpected tests to be delivered as part of this lot. These will not form part of the commercial evaluation. This work could include re-running an experiment or undertaking additional testing based on results obtained for the original experiments. These additional tests will be undertaken through an approved variation to the existing contract.

In submitting full tenders, tenderers confirm in writing that the price offered will be held for a minimum of 13 weeks from the date of submission. Any payment conditions applicable to the prime contractor must also be replicated with sub-contractors.

BEIS will retain 10% of the total budget for final payment upon completion and sign-off to the project board's satisfaction of the final programme report.

Section 4

Tender Requirements (All lots)

Invitation to Tender for Contractors to Carry Out Safety Assessments for the Suitability of Hydrogen in Existing Buildings

Tender Reference Number: 1819/02/2019

Deadline for Tender Responses: 12 April 2019 at 12:00 noon

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Please note that the following sections are required for each lot for which tenderers submit proposals.

1. Methodology / Approach

Tenderers should set out in their proposals the details of their proposed methodology for delivering this scope of works set out above.

This should cover, but should not be limited to the following items;

- How the tenderer proposes to obtain the required information necessary to enable them to answer the research questions being asked in a manner that quantifies the relative risks of using hydrogen and natural gas
- The methodology proposed should make clear how contractors will deliver new robust evidence and add value to the Hy4Heat programme. In particular, the results should be presented in such a way as to directly inform the probabilities and consequences needed for the quantified risk assessment
- Where applicable, relevant existing evidence should be interrogated, critically analysed, evaluated and as appropriate used as a basis to build on.
- How the contractor will ensure accurate and reliable data is gathered that stands up to industry scrutiny
- How contractors will liaise and integrate with the Hy4Heat team
- How the contractor will ensure that adequate safety and test procedures are in place for delivering this work
- The proposed team who will be working on delivering this work and how their past relevant experience will be used to benefit this work
- The risks that have been identified and how these will be mitigated
- How the contract will deliver the required outputs on time

2. Deliverables

During the study, BEIS (and Hy4Heat as the PMC) will expect to review and comment on a range of outputs which relate to the project plan, methodology and other associated project documents described in each lot and in the table below.

In addition, there are a number of specific deliverables that are expected from the successful contractor, which merit identification in the table below.

Please note that a full set of the deliverables set out below are required for each of the four lots

Deliverable	Description
Presentation at project inception meeting	The contractor will be expected to present their proposed approach to the study at a meeting of the Hy4Heat and BEIS project team
Final project plan	The contractor will need to provide a final project plan to be signed off by BEIS. This should detail key phases of work, a weekly activity plan and delivery dates
Progress updates	Regular telephone updates between the contractor and Hy4Heat Project Manager. These should be held fortnightly at a minimum. The contractor will produce monthly reports containing: A general overview of progress including: <ul style="list-style-type: none"> ○ General update supported by the relevant reports as required. ○ Progress against timetable- where delays are anticipated or reported, an explanation for these and a proposed plan for resolving the causes ○ Challenges and risks ○ Requests to the Hy4Heat team for additional input from other parts of the Hy4Heat, H100, H21 and other GB hydrogen projects
Interim meeting presentation	The contractor will be expected to present a progress update at a meeting of the Hy4Heat and BEIS project team
Interim project report	This report should follow the interim presentation. Both the presentation and report should be scheduled for when the works are at least 50% complete.
Final presentation	The contractor will be expected to present the draft findings from the study at a meeting of the Hy4Heat and BEIS project team
Written report	A detailed report describing the test method, experiment setup, analysis, results and conclusion. The report should also include any references/links as appropriate.

<p>(Lot specific, please see section 3-1 to 3-4)</p>	<p>This will be a quality assured written report. In addition, full technical appendices should include (but not be limited to):</p> <p>Draft and Final Reports will be required for submission to BEIS.</p> <p>The contractor will submit a draft for review by the PMC prior to submitting the final version</p>
<p>All supporting analysis and data used from the completed tests.</p>	<p>A set of raw data, and a set of analysed /processed data from the experiments and tests.</p> <p>This will allow the evidence to be used with confidence by BEIS officials to support policy-making and by the Hy4Heat as input data for the quantitative risk assessment (QRA). The analysis files should be intuitive to use, with all assumptions recorded in notes sections with links to primary data sources along with uncertainty ranges (where possible). As a general guide, the BEIS assumptions log template and wider quality assurance guidance is available at: https://www.gov.uk/government/collections/quality-assurance-tools-and-guidance-in-decc</p>

3. Skills and Experience

BEIS would like you to demonstrate that you have the experience and capabilities to undertake the project.

Tender responses should include a summary of each proposed team member's experience and capabilities in the main bid response, as well as CVs for the proposed team as annexes (CVs should be limited to two pages each).

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

Tenderers should identify the individual(s) who will be responsible for managing the project and those who will carry out QA.

The appropriateness of the skills and expertise of the team should match the proposed tasks being undertaken. For instance, this may include a team with expertise in the fields of mechanical or chemical engineering with specific knowledge of natural gas and hydrogen applications, as well as expertise in conducting research and report writing.

The following skills are considered particularly important for this work:

- Technical experience within the gas industry
- Previous practical research and development (R&D) in the gas industry
- Excellent understanding of the principles of combustion of hydrogen and natural gas.
- Excellent understanding of the principles of gas movement and behaviours
- Proven track record for delivering experimental work in a controlled environment to provide quantified comparative assessments of risk
- Suitable facilities to conduct the research and experimental work required
- Excellent track record of delivering work of this nature safely.
- Reporting writing and recommendations.

Demonstrable knowledge of;

- Leaks from gas pipes arising from corrosion and interference at different pressures and diameters with a variety of materials of construction.
- Movement of gas in domestic properties.
- Ignition risks and academic knowledge of ATEX to support the practical experience is sought.
- Understanding of natural gas fires and explosions since 2012 and in particular, their causes, scale and effects on people and infrastructure. Evidence of practical experience is essential.

4. Timetable / Work Plan

As part of the submission, the tenderer is expected to submit a delivery plan including, as a minimum:

- An organisation chart and list of key people within the successful tenderer's delivery team with an outline description of how they will be managed in order to ensure that delivery will be completed on time
- A detailed schedule of works showing when the scope will be delivered
- The methodology that will be used to produce the deliverables and to ensure the quality of the deliverable
- An outline description of the risks to delivery and your proposed mitigation measures
- Outline description of how the time schedule and resources will be managed, in order to ensure that delivery will be completed on time.

Aligned with the deliverables presented in Section **Error! Reference source not found.** and the Milestone Payments in Section **Error! Reference source not found.**, an indicative, outline time schedule is presented below;

Reporting points/deliverables	Proposed date
Contract commences	28 May 2019
Project Inception Meeting	w/c 3 June 2019
Interim Project Meeting / Presentation and report	w/c 5 August 2019
Submission of Interim Report (at least 50% complete)	w/c 2 September 2019
Submission of Draft Report	w/c 23 September 2019
Submission of Final Report	w/c 28 October 2019
BEIS sign-off	w/c 18 November 2019

The contract duration will be 6 months.

In the event that related and unexpected works arise as a result of delivering the tests within each lot then the contract could be extended by up to a further 3 months to deliver the additional works.

5. Payment

Payments will be linked to the completion of key deliverables, as outlined in Sections **Error! Reference source not found.** and **Error! Reference source not found.**

The proposed fee percentage for completion of these deliverables can be found in the table below.

Other costs incurred for attending meetings, etc. should be itemised and included within the fixed fee.

Ref.	Expected Milestone	Date	Percentage paid
1	BEIS acceptance of the project delivery plan	w/c 10 June 2019	0%
2	Interim presentation and report of progress (to be held and submitted once at least 50% of the work can be presented)	w/c 12 August 2019	30%
3	BEIS acceptance of the draft report	w/c 7 October 2019	40%
4	Receipt of final report	w/c 28 October 2019	20%
5	BEIS acceptance of the final report	w/c 18 November 2019	10%

Contractors may invoice, subject to the successful delivery of agreed milestones. This can be adjusted and agreed with the contractor based on the tender response. Please advise in your tender response how this breakdown reflects your usual payment processes.

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

6. Evaluation Criteria

Tenderers are invited to submit full tenders of no more than 20 A4 pages, (in Arial 12pt), excluding declarations and a maximum of five CVs. Tenders will be evaluated by at least three BEIS/Arup+ staff. The cost criterion will be marked by BEIS staff only.

- **Conflict of interest:** pass/fail. See page 8 of the ITT for further information.

Criterion		Description	Weighting
0	Conflict of interest		Pass/Fail
1	Skills and expertise	Experience/demonstration of relevant skills and supply a strong team of individuals with the capability to fulfil this project's objectives and required outputs [As set out in section 4.3 (Skills and Experience) above]	15%
		Demonstrate any relevant capability on previous project(s)	15%
2	Understanding of requirements	Demonstrate clear understanding of the tender requirements [As set out in sections 3 (Scope) and Error! Reference source not found..2 (Deliverables) above]	10%
3	Methodology	Effective proposed approach to deliver the project's objectives. Clear demonstration of the methodology to be used and demonstration of an ability to deliver valid, reliable and robust evidence within each of the lots safely [As set out in section 4.1 (Methodology) above]	20%
4	Management of delivery	Effective quality, relevance and breadth of management oversight including, planning, risk management / identification, effective working arrangements, information handling and quality assurance. [As set out in section 4 of the tender]	15%
5	Price	Price: To be marked proportionately to the lowest tender [Please see example in item 7 below]	25%
TOTAL			100%

Structure of Tenders

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

Bid Clarification

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

Feedback

Feedback will be given to unsuccessful bidders via letters or emails.

7. Scoring Methodology

Tenders will be scored against each of the criteria above, according to the extent to which they meet the requirements of the tender. The meaning of each score is outlined in the table below.

The total score will be calculated by applying the weighting set against each criterion, outlined above; the maximum number of marks possible will be 100. Should any tenderer score 1 in any of the criteria, they will be excluded from the tender competition.

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

Scoring for Pricing Evaluation

Price will be marked using proportionate marking with a maximum of 25 marks. Please see the example below.

The lowest priced bid will receive the full 25 marks, all other bids will then be marked as set out below.

Proportionate Pricing scoring example

If 25% = 25 marks

Supplier	Price	Marks
1 (lowest bid)	£180,000	25
2	£200,000	$180/200 * 25 = 22.5$
3	£215,000	$180/215 * 25 = 20.9$

Section 5

Other Information for Tenderers

Invitation to Tender for Contractors to Carry Out Safety Assessments for the Suitability of Hydrogen in Existing Buildings

Tender Reference Number: 1819/02/2019

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1. Ownership and Publication

BEIS is committed to openness and transparency. All outputs listed in section 3 (with the exception of project updates and reports) should be accessible, non-disclosive and suitable for publication and further use.

The exceptions to this are where:

- 1) the intellectual property rights to an output (or part of an output) are owned by someone other than the contractor. Tenderers should state in their tender if this is the case and indicate whether the third party copyrighted materials can be redacted;
- 2) data is commercial in confidence; and
- 3) a non-anonymised dataset is required for the project.

If these exceptions apply to any part of the outputs, tenderers should indicate this in their proposal alongside any approaches to resolving these.

Unless the above exceptions have been stated in a proposal, all outputs from a project will be assumed to be owned by BEIS. The outputs, raw data and tools developed in the research cannot therefore be used by contractors for purposes other than our work.

BEIS standard terms and conditions require that BEIS retain the Intellectual Property (IP) from all models and software paid for by BEIS:

- Where the contractor is using or building on top of existing IP, such as modules that interface with the model, or proprietary datasets, this must be explicitly stated in the tender response.
- Where open source code or models are to be used within this model, please make clear under which licence this open source software is released.
- The Open Government Licence should be used wherever possible:

<http://www.nationalarchives.gov.uk/doc/open-government-licence/version/2/>

Non-Disclosure

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

Storage and Transfer

The contractor will need to ensure that all appropriate regulations are adhered to regarding safe storage and transfer, compliant with BEIS requirements for the data processing and storage of restricted data.

2. Quality Assurance

This project must comply with the BEIS Code of Practice for Research (Annex B) and bidders must set out their approach to quality assurance in their response to this ITT.

Tenderers should include a quality assurance plan that they will apply to all of the Work Packages.

To demonstrate relevant experience in producing high quality reporting, the tenderer must:

- Specify who will be responsible for quality assurance. This must be undertaken before information is issued to Hy4Heat for review and onward circulation to BEIS. More information can be found in the working arrangements in section 5 below.
- Specify the specific responsibilities of the contractor's project manager / director.

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

The successful bidder will be responsible for any work they or subsequent Work Package contractors supply and should therefore provide assurance that all work in the contract is undertaken in accordance with the Code of Practice.

BEIS reserves the right to request an audit of projects against the BEIS Code of Practice for Research and the commitments made in the tender documents and subsequent contract. Your response could be automatically rejected if the project will not be performed under quality assurance measures that fully meet the Code's requirements.

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

- The Government Social Research Code, in particular those that relate to GSR Products: <http://www.civilservice.gov.uk/networks/gsr/gsr-code>
- The Green Book: appraisal and evaluation in central government. <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>

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

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

The Contractor will be expected to produce high quality reports that meet the following criteria:

General:

- They answer the research questions clearly, in plain English
- They are clearly structured so that information presented in each section of each report is clear
- Connections between sections are clear
- Executive summaries are no more than two sides and set out the findings clearly and their relevance to BEIS policies
- All sections have clear introductions and conclusions (including findings being written concisely upfront)

Use of good quality English:

- They are thoroughly peer reviewed for writing quality
- No jargon is used and all terms are defined and referenced clearly
- All acronyms are written out in full the first time that they are mentioned in each section of each report
- No grammar and phrasing errors are present
- No typos / typographical errors are present
- They contain concise and non-wordy sentences and paragraphs
- They are concise reports that are not too long and do not have vast annexes

Visualisations:

- All visualisations are labelled
- All axes are labelled, including with appropriate units
- Clear and appropriate use of visualisations (large enough size, data can be read clearly without reference to the raw data, and there are not too many visualisations presented at once)
- All visualisations are clearly explained and discussed
- A range of different types of visualisations are used to provide more interesting and innovative ways of presenting the results

Data quality:

- Any limitations in the research approach need to be clearly stated and justified
- Further research should be stated to build upon the limitations that cannot be addressed in the research
- Where the findings are stronger and more robust and where they are not needs to be stated clearly
- They must use appropriate and consistent units
- All numerical units should include the range of uncertainty / error margin

3. Ethics

All applicants will need to identify and propose arrangements for initial scrutiny and on-going monitoring of ethical issues. The appropriate handling of ethical issues is part of the tender assessment exercise and proposals will be evaluated on this as part of the 'Management of delivery criterion.

We expect contractors to adhere to the following GSR Principals:

1. Sound application and conduct of social research methods and appropriate dissemination and utilisation of findings
2. Participation based on valid consent
3. Enabling participation
4. Avoidance of personal harm
5. Non-disclosure of identity and personal information

4. Consortium Bids

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

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

If a consortium is not proposing to form a corporate entity, full details of alternative proposed arrangements should be provided in the Annex. However, please note the Department reserves the right to require a successful consortium to form a single legal entity in accordance with Regulation 28 of the Public Contracts Regulations 2006.

The Department recognises that arrangements in relation to consortia may (within limits) be subject to future change. Potential Providers should therefore respond in the light of the arrangements as currently envisaged. Potential Providers are reminded that any future proposed change in relation to consortia must be notified to the

Department so that it can make a further assessment by applying the selection criteria to the new information provided.

5. Working Arrangements

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

6. Data Protection

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

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

Annex 1: Processing, Personal Data and Data Subjects

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

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

Email: dataprotection@beis.gov.uk

(2) The contact details of the Contractor's Data Protection Officer (or if not applicable, details of the person responsible for data protection in the organisation) are: [To be completed by the Contractor]

(3) The Contractor shall comply with any further written instructions with respect to processing by the Authority.

(4) Any such further instructions shall be incorporated into this Annex 1.

Description	Details
Subject matter of the processing	<p>It is not expected that any processing of personal data will be required under this contract this includes 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.</p> <p>It is expected that the processing of names and business contact details of staff of both the Authority and the Contractor will be necessary to deliver the services exchanged during the course of the Contract, and to undertake contract and performance management.</p> <p>The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.</p>
Duration of the processing	Processing will take place from <i>13 May 2019</i> for the duration of the Contract. The Contract will be for 6 months ending on the 13 th November but may be extended until <i>February 2020</i> .
Nature and purposes of the processing	The nature of processing will include the storage and use of names and business contact details of staff of both the Authority and the Contractor as necessary to deliver the services and to undertake contract and performance management. The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.
Type of Personal Data	Names, business telephone numbers and email addresses, office location and position of staff of both the Authority and the Contractor as necessary to deliver the services and to undertake contract and performance management. The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.

Categories of Data Subject	Staff of the Authority and the Contractor, including where those employees are named within the Contract itself or involved within contract management.
Plan for return and destruction of the data once the processing is complete UNLESS requirement under European Union or European member state law to preserve that type of data	Delete the Personal Data and erase the Personal Data from any computers, storage devices and storage media that are retained by the Contractor after the expiry of the Contract. The Contractor will certify to the Authority that it has completed such deletion. Where Personal Data is contained within the Contract documentation, this will be retained in line with the Department's privacy notice found within the Invitation to Tender.

Section 6

Further Information on Tender Procedure

Invitation to Tender for Contractors to Carry Out Safety Assessments for the Suitability of Hydrogen in Existing Buildings

Tender Reference Number: 1819/02/2019

Deadline for Tender Responses: 12 April 2019 at 12:00 noon

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A. Definitions

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

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

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

B. Data security

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

Section 7 contains "The General Data Protection Regulation Assurance Questionnaire for Contractors" (Declaration 5) to evidence the extent of readiness. The Authority may ask the Contractor to provide evidence to support the position stated in the questionnaire. The Authority may require the successful Contractor to increase their preparedness where the Authority is not satisfied that the Contractor will be in a position to meet its obligations under the terms and conditions. If the Contractor fails to satisfy the Authority that it will be in a position to meet its obligations under the terms and conditions in the event that the Contractor is successful, the Authority reserves the right to exclude the bidder from this procurement.

C. Non-Collusion

No tender will be considered for acceptance if the contractor has indulged or attempted to indulge in any corrupt practice or canvassed the tender with an officer of the Department. Section 7 contains a "Statement of non-collusion" (Declaration 1); any breach of the undertakings covered under items 1 - 3 inclusive will invalidate your tender. If a contractor has indulged or attempted to indulge in such practices and the tender is accepted, then grounds shall exist for the termination of the contract and the claiming damages from the successful contractors. You must not:

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

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

Section 7

Declarations to be submitted by the Tenderer

Invitation to Tender for Contractors to Carry Out Safety Assessments for the Suitability of Hydrogen in Existing Buildings

Tender Reference Number: 1819/02/2019

Deadline for Tender Responses: 12 April 2019 at 12:00 noon

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Declaration 1: Statement of non-collusion

To: The Department for Business, Energy & Industrial Strategy

1. We recognise that the essence of competitive tendering is that the Department will receive a bona fide competitive tender from all persons tendering. We therefore certify that this is a bona fide tender and that we have not fixed or adjusted the amount of the tender or our rates and prices included therein by or in accordance with any agreement or arrangement with any other person.

2. We also certify that we have not done and undertake not to do at any time before the hour and date specified for the return of this tender any of the following acts:

- (a) communicate to any person other than the Department the amount or approximate amount of our proposed tender, except where the disclosure, in confidence, of the approximate amount is necessary to obtain any insurance premium quotation required for the preparation of the tender;
- (b) enter into any agreement or arrangement with any other person that he shall refrain for submitting a tender or as to the amount included in the tender;
- (c) offer or pay or give or agree to pay or give any sum of money, inducement or valuable consideration directly or indirectly to any person doing or having done or causing or having caused to be done, in relation to any other actual or proposed tender for the contract any act, omission or thing of the kind described above.

3. In this certificate, the word “person” shall include any person, body or association, corporate or unincorporated; and “any agreement or arrangement” includes any such information, formal or informal, whether legally binding or not.

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

.....
Print name

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

.....
Date

Declaration 2: Form of Tender

To: The Department for Business, Energy & Industrial Strategy

1. Having considered the invitation to tender and all accompanying documents (including without limitation, the terms and conditions of contract and the Specification) we confirm that we are fully satisfied as to our experience and ability to deliver the goods/services in all respects in accordance with the requirements of this invitation to tender.
2. We hereby tender and undertake to provide and complete all the services required to be performed in accordance with the terms and conditions of contract and the Specification for the amount set out in the Pricing Schedule.
3. We agree that any insertion by us of any conditions qualifying this tender or any unauthorised alteration to any of the terms and conditions of contract made by us may result in the rejection of this tender.
4. We agree that this tender shall remain open to be accepted by the Department for 8 weeks from the date below.
5. We understand that if we are a subsidiary (within the meaning of section 1159 of (and schedule 6 to) the Companies Act 2006) if requested by the Department we may be required to secure a Deed of Guarantee in favour of the Department from our holding company or ultimate holding company, as determined by the Department in their discretion.
6. We understand that the Department is not bound to accept the lowest or any tender it may receive.
7. We certify that this is a bona fide tender.

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

.....
Print name

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

.....
Date

Declaration 3: Conflict of Interest

I have nothing to declare with respect to any current or potential interest or conflict in relation to this research (or any potential providers who may be subcontracted to deliver this work, their advisers or other related parties). By conflict of interest, I mean, anything which could be reasonably perceived to affect the impartiality of this research, or to indicate a professional or personal interest in the outcomes from this research.

Signed

Name

Position

OR

I wish to declare the following with respect to personal or professional interests related to relevant organisations*;

- X
- X

Where a potential conflict of interest has been declared for an individual or organisation within a consortium, please clearly outline the role which this individual or organisation will play in the proposed project and how any conflict of interest has or will be mitigated.

- X
- X

Signed

Name

Position

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

* These may include (but are not restricted to);

- A professional or personal interest in the outcome of this research
- For evaluation projects, a close working, governance, or commercial involvement in the project under evaluation
- Current or past employment with relevant organisations

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

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

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

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

Declaration 4: Standard Selection Questionnaire

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

The standard Selection Questionnaire is a self-declaration, made by you (the potential supplier), that you do not meet any of the grounds for exclusion¹. If there are grounds for exclusion, there is an opportunity to explain the background and any measures you have taken to rectify the situation (we call this self-cleaning).

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

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

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

Supplier Selection Questions: Part 3

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

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

Consequences of misrepresentation

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

¹ For the list of exclusion please see https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/551130/List_of_Mandatory_and_Discretionary_Exclusions.pdf

Contractors to Carry Out Safety Assessments for the Suitability of Hydrogen in Existing Buildings

TRN: 1819/02/2019

OPEN

Notes for completion

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

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

Part 1: Potential Supplier Information

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

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

	c) Public service mutual	
1.1(m)	Are you a Small, Medium or Micro Enterprise (SME) ² ?	Yes <input type="checkbox"/> No <input type="checkbox"/>
1.1(n)	<p>Details of Persons of Significant Control (PSC), where appropriate: ³</p> <ul style="list-style-type: none"> - Name; - Date of birth; - Nationality; - Country, state or part of the UK where the PSC usually lives; - Service address; - The date he or she became a PSC in relation to the company (for existing companies the 6 April 2016 should be used); - Which conditions for being a PSC are met; <ul style="list-style-type: none"> - Over 25% up to (and including) 50%, - More than 50% and less than 75%, - 75% or more. ⁴ <p>(Please enter N/A if not applicable)</p>	
1.1(o)	<p>Details of immediate parent company:</p> <ul style="list-style-type: none"> - Full name of the immediate parent company - Registered office address (if applicable) - Registration number (if applicable) - Head office DUNS number (if applicable) - Head office VAT number (if applicable) <p>(Please enter N/A if not applicable)</p>	
1.1(p)	<p>Details of ultimate parent company:</p> <ul style="list-style-type: none"> - Full name of the ultimate parent company - Registered office address (if applicable) - Registration number (if applicable) - Head office DUNS number (if applicable) - Head office VAT number (if applicable) <p>(Please enter N/A if not applicable)</p>	

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

² See EU definition of SME: <http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/>

³ UK companies, Societates European (SEs) and limited liability partnerships (LLPs) will be required to identify and record the people who own or control their company. Companies, SEs and LLPs will need to keep a PSC register, and must file the PSC information with the central public register at Companies House. [See PSC guidance.](#)

⁴ Central Government contracting authorities should use this information to have the PSC information for the preferred supplier checked before award.

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

Section 1	Bidding model					
Question number	Question	Response				
1.2(a) - (i)	Are you bidding as the lead contact for a group of economic operators?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, please provide details listed in questions 1.2(a) (ii), (a) (iii) and to 1.2(b) (i), (b) (ii), 1.3, Section 2 and 3. If no, and you are a supporting bidder please provide the name of your group at 1.2(a) (ii) for reference purposes, and complete 1.3, Section 2 and 3.				
1.2(a) - (ii)	Name of group of economic operators (if applicable)					
1.2(a) - (iii)	Proposed legal structure if the group of economic operators intends to form a named single legal entity prior to signing a contract, if awarded. If you do not propose to form a single legal entity, please explain the legal structure.					
1.2(b) - (i)	Are you or, if applicable, the group of economic operators proposing to use sub-contractors?	Yes <input type="checkbox"/> No <input type="checkbox"/>				
1.2(b) - (ii)	If you responded yes to 1.2(b)-(i) please provide additional details for each sub-contractor in the following table: we may ask them to complete this form as well.					
Name						
Registered address						
Trading status						
Company registration number						
Head Office DUNS number (if applicable)						
Registered VAT number						
Type of organisation						
SME (Yes/No)						
The role each sub-contractor will take in providing the works and /or supplies e.g. key deliverables						
The approximate % of contractual obligations assigned to each sub-contractor						

Contact details and declaration

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

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

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

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

I am aware of the consequences of serious misrepresentation.

Section 1	Contact details and declaration	
Question number	Question	Response
1.3(a)	Contact name	
1.3(b)	Name of organisation	
1.3(c)	Role in organisation	
1.3(d)	Phone number	
1.3(e)	E-mail address	
1.3(f)	Postal address	
1.3(g)	Signature (electronic is acceptable)	
1.3(h)	Date	

Part 2: Exclusion Grounds

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

Section 2	Grounds for mandatory exclusion	
Question number	Question	Response
2.1(a)	<p>Regulations 57(1) and (2) The detailed grounds for mandatory exclusion of an organisation are set out on this web page, which should be referred to before completing these questions.</p> <p>Please indicate if, within the past five years you, your organisation or any other person who has powers of representation, decision or control in the organisation been convicted anywhere in the world of any of the offences within the summary below and listed on the webpage.</p>	
	Participation in a criminal organisation.	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 2.1(b)
	Corruption.	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 2.1(b)
	Fraud.	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 2.1(b)
	Terrorist offences or offences linked to terrorist activities	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 2.1(b)
	Money laundering or terrorist financing	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 2.1(b)
	Child labour and other forms of trafficking in human beings	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 2.1(b)
2.1(b)	<p>If you have answered yes to question 2.1(a), please provide further details.</p> <p>Date of conviction, specify which of the grounds listed the conviction was for, and the reasons for conviction,</p> <p>Identity of who has been convicted</p> <p>If the relevant documentation is available electronically please provide the web address, issuing authority, precise reference of the documents.</p>	
2.2	If you have answered Yes to any of the points above have measures been taken to demonstrate the reliability of the organisation despite the existence of a relevant ground for exclusion? (Self Cleaning)	Yes <input type="checkbox"/> No <input type="checkbox"/>
2.3(a)	Regulation 57(3)	Yes <input type="checkbox"/> No <input type="checkbox"/>

	Has it been established, for your organisation by a judicial or administrative decision having final and binding effect in accordance with the legal provisions of any part of the United Kingdom or the legal provisions of the country in which the organisation is established (if outside the UK), that the organisation is in breach of obligations related to the payment of tax or social security contributions?	
2.3(b)	If you have answered yes to question 2.3(a), please provide further details. Please also confirm you have paid, or have entered into a binding arrangement with a view to paying, the outstanding sum including where applicable any accrued interest and/or fines.	

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

Section 3		Grounds for discretionary exclusion
	Question	Response
3.1	<p>Regulation 57 (8)</p> <p>The detailed grounds for discretionary exclusion of an organisation are set out on this web page, which should be referred to before completing these questions.</p> <p>Please indicate if, within the past three years, anywhere in the world any of the following situations have applied to you, your organisation or any other person who has powers of representation, decision or control in the organisation.</p>	
3.1(a)	Breach of environmental obligations?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1 (b)	Breach of social obligations?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1 (c)	Breach of labour law obligations?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(d)	Bankrupt or is the subject of insolvency or winding-up proceedings, where the organisation's assets are being administered by a liquidator or by the court, where it is in an arrangement with creditors, where its business activities are suspended or it is in any analogous situation arising from a similar procedure under the laws and regulations of any State?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(e)	Guilty of grave professional misconduct?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(f)	Entered into agreements with other economic operators aimed at distorting competition?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(g)	Aware of any conflict of interest within the meaning of regulation 24 due to the participation in the procurement procedure?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(h)	Been involved in the preparation of the procurement procedure?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(i)	Shown significant or persistent deficiencies in the performance of a substantive requirement under a prior public contract, a prior contract with a contracting entity, or a prior concession contract, which led to early termination of that prior contract, damages or other comparable sanctions?	Yes <input type="checkbox"/> No <input type="checkbox"/> If yes please provide details at 3.2
3.1(j)	Please answer the following statements	
3.1(j) - (i)	The organisation is guilty of serious misrepresentation in supplying the information required for the verification of	Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes please provide details at 3.2

3.1(j) - (ii)	<p>the absence of grounds for exclusion or the fulfilment of the selection criteria.</p> <p>The organisation has withheld such information.</p>	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If Yes please provide details at 3.2</p>
3.1(j) –(iii)	<p>The organisation is not able to submit supporting documents required under regulation 59 of the Public Contracts Regulations 2015.</p>	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If Yes please provide details at 3.2</p>
3.1(j)-(iv)	<p>The organisation has influenced the decision-making process of the contracting authority to obtain confidential information that may confer upon the organisation undue advantages in the procurement procedure, or to negligently provided misleading information that may have a material influence on decisions concerning exclusion, selection or award.</p>	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If Yes please provide details at 3.2</p>

3.2	<p>If you have answered Yes to any of the above, explain what measures been taken to demonstrate the reliability of the organisation despite the existence of a relevant ground for exclusion? (Self Cleaning)</p>	
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Part 3: Selection Questions⁵

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

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

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

⁵ [See Action Note 8/16 Updated Standard Selection Questionnaire](#)

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

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

6.2	<p>Where you intend to sub-contract a proportion of the contract, please demonstrate how you have previously maintained healthy supply chains with your sub-contractor(s)</p> <p>Evidence should include, but is not limited to, details of your supply chain management tracking systems to ensure performance of the contract and including prompt payment or membership of the UK Prompt Payment Code (or equivalent schemes in other countries)</p>

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

Section 7 Modern Slavery Act 2015: Requirements under Modern Slavery Act 2015 ⁶	
7.1	<p>Are you a relevant commercial organisation as defined by section 54 ("Transparency in supply chains etc.") of the Modern Slavery Act 2015 ("the Act")?</p> <p>Yes <input type="checkbox"/> N/A <input type="checkbox"/></p>
7.2	<p>If you have answered yes to question 1 are you compliant with the annual reporting requirements contained within Section 54 of the Act 2015?</p> <p>Yes <input type="checkbox"/> Please provide relevant the url ...</p> <p>No <input type="checkbox"/> Please provide an explanation</p>

⁶ [Procurement Policy Note 9/16 Modern Slavery Act 2015](#)

Section 8	The General Data Protection Regulation (GDPR) ⁷	
8.1	<p>Compliance with the GDPR is a mandatory requirement for all contracts or agreements that involve the transfer and processing of personal data from 25th May 2018. Will your organisation be compliant with the GDPR and all Data Protection Legislation (as defined in the terms and conditions applying to this Invitation to Tender) in regard to the processing required under this contract by the time of contract award?</p> <p>Contractors are also required to complete Declaration 5: The General Data Protection Regulation Assurance Questionnaire for Contractors, to evidence the extent of readiness. The Authority may ask the Contractor to provide evidence to support the position stated in the questionnaire. The Authority may require the successful Contractor to increase their preparedness where the Authority is not satisfied that the Contractor will be in a position to meet its obligations under the terms and conditions. If the Contractor fails to satisfy the Authority that it will be in a position to meet its obligations under the terms and conditions in the event that the Contractor is successful, the Authority reserves the right to exclude the bidder from this procurement.</p>	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>

⁷ [Procurement Policy Note 02/18 Changes to Data Protection Legislation & General Data Protection Regulation](#)

9. Additional Questions

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

Section 9	Additional Questions	
9.1	Suppliers' Past Performance⁸ - (please refer to supplier selection guidance - this question should only be included by central government contracting authorities)	
a.	Can you supply a list of your relevant principal contracts for goods and/or services provided in the last three years?	Yes <input type="checkbox"/> No <input type="checkbox"/>
b.	On request can you provide a certificate from those customers on the list?	Yes <input type="checkbox"/> No <input type="checkbox"/>
c.	If you cannot obtain a certificate from a customer can you explain the reasons why?	Yes <input type="checkbox"/> No <input type="checkbox"/>
d.	If the certificate states that goods and/or services supplied were not satisfactory are you able to supply information which shows why this will not recur in this contract if you are awarded it?	Yes <input type="checkbox"/> No <input type="checkbox"/>
e.	Can you supply the information in questions a. to d. above for any sub-contractors [or consortium members] who you are relying upon to perform this contract?	Yes <input type="checkbox"/> No <input type="checkbox"/>

⁸ [Procurement Policy Note 04/15 Taking Account of Suppliers' Past Performance](#)

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



Declaration%205%20-%20GDPR%20Ass

Declaration 6: Code of Practice for Research⁹

I confirm that I am aware of the requirements of the Department's Code of Practice¹⁰ for Research and, in the proposed project, I will use my best efforts to ensure that the procedures used conform to those requirements under the following headings¹¹:

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

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

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

⁹ Please note that this declaration applies to individuals, single organisations and consortia.

¹⁰ The Code of Practice is attached to this ITT as Annex B

¹¹ Please delete as appropriate

Annex B: Code of Practice for Research

CODE OF PRACTICE FOR RESEARCH

Issued by the Department for Business, Energy and Industrial Strategy

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

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

PRINCIPLES BEHIND THE CODE OF PRACTICE

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

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

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

Most contractors will already have in place many of the measures set out in the Code and its adoption should not require great effort.

COMPLIANCE WITH THE CODE OF PRACTICE

All organisations contracting to the Department (including those sub-contracting as part of a consortium) will be expected to commit to upholding these responsibilities and will be expected to indicate acceptance of the Code when submitting proposals to the Department.

Contractors are encouraged to discuss with the Department any clauses in the Code that they consider inappropriate or unnecessary in the context of the proposed research project. The Code, and records of the discussions if held, will become part of the Terms and Conditions under which the research is funded.

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

MONITORING OF COMPLIANCE WITH THE CODE OF PRACTICE

Monitoring of compliance with the Code is necessary to ensure:

- Policies and managed processes exist to support compliance with the Code
- That these are being applied in practice.

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

In the longer term it is expected that most research organisations will assure the quality of their research processes by means of a formal system that is audited by an impartial and competent third party against an appropriate internationally recognised standard that is fit for purpose.

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

SPECIFIC REQUIREMENTS IN THE CODE OF PRACTICE

1. Responsibilities

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

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

2. Competence

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

3. Project planning

An appropriate level of risk assessment must be conducted to demonstrate awareness of the key factors that will influence the success of the project and the ability to meet its objectives. There must be a written project plan showing that these factors (including research design, statistical methods and others) have been addressed. Projects must be ethical and project plans must be agreed in collaboration with the Department, taking account of the requirements of ethical committees¹² or the terms of project licences, if relevant.

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

¹² Please note ethical approval does not remove the responsibility of the individual for ethical behaviour.

4. Quality Control

The organisation must have planned processes in place to assure the quality of the research undertaken by its staff. Projects must be subjected to formal reviews of an appropriate frequency. Final and interim outputs must always be accompanied by a statement of what quality control has been undertaken.

The authorisation of outputs and publications shall be as agreed by the Department, and subject to senior approval in the Department, where appropriate. Errors identified after publication must be notified to the Department and agreed corrective action initiated.

5. Handling of samples and materials

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

6. Documentation of procedures and methods

All the procedures and methods used in a research project must be documented, at least in the personal records of the researcher. This includes analytical and statistical procedures and the generation of a clear audit trail linking secondary processed information to primary data.

There must be a procedure for validation of research methods as fit for purpose, and modifications must be trackable through each stage of development of the method.

7. Research/work records

All records must be of sufficient quality to present a complete picture of the work performed, enabling it to be repeated if necessary.

The project leader is accountable for the validity of the work and responsible for ensuring that regular reviews of the records of each researcher are conducted¹³

The location of all project records, including critical data, must be recorded. They must be retained in a form that ensures their integrity and security, and prevents unauthorised modification, for a period to be agreed by the Department.

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

¹³ Please note that this also applies to projects being undertaken by consortia.

Mandatory Exclusion Grounds

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

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

Participation in a criminal organisation

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

Conspiracy within the meaning of

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

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

Corruption

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

The common law offence of bribery;

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

Fraud

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

- the common law offence of cheating the Revenue;
- the common law offence of conspiracy to defraud;
- fraud or theft within the meaning of the Theft Act 1968, the Theft Act (Northern Ireland) 1969, the Theft Act 1978 or the Theft (Northern Ireland) Order 1978;
- fraudulent trading within the meaning of section 458 of the Companies Act 1985, article 451 of the Companies (Northern Ireland) Order 1986 or section 993 of the Companies Act 2006;
- fraudulent evasion within the meaning of section 170 of the Customs and Excise Management Act 1979 or section 72 of the Value Added Tax Act 1994;
- an offence in connection with taxation in the European Union within the meaning of section 71 of the Criminal Justice Act 1993;

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

Terrorist offences or offences linked to terrorist activities

Any offence:

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

Money laundering or terrorist financing

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

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

Child labour and other forms of trafficking human beings

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

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

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

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

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

Non-payment of tax and social security contributions

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

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

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

Other offences

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

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

Discretionary exclusions

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

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

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

Bankruptcy, insolvency

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

Grave professional misconduct

Guilty of grave professional misconduct

Distortion of competition

Entered into agreements with other economic operators aimed at distorting competition

Conflict of interest

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

Been involved in the preparation of the procurement procedure.

Prior performance issues

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

Misrepresentation and undue influence

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

Additional exclusion grounds

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

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

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

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

Consequences of misrepresentation

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

- The potential supplier may be excluded from bidding for contracts for three years, under regulation 57(8)(h)(i) of the PCR 2015;
- The contracting authority may sue the supplier for damages and may rescind the contract under the Misrepresentation Act 1967.
- If fraud, or fraudulent intent, can be proved, the potential supplier or the responsible officers of the potential supplier may be prosecuted and convicted of the offence of fraud by false representation under s.2 of the Fraud Act 2006, which can carry a sentence of up to 10 years or a fine (or both).
- If there is a conviction, then the company must be excluded from procurement for five years under reg. 57(1) of the PCR (subject to self-cleaning).