



Department for
Business, Energy
& Industrial Strategy

**Invitation to Tender for Hydrogen Quality Standard
Contractor for UK hydrogen for heat demonstration
(Work Package 2)**

Tender Reference Number: 1525/06/2018

Deadline for Tender Responses: 13 July 2018

Department for Business, Energy & Industrial Strategy

Date: 15th June 2018

The Department for Business, Energy & Industrial Strategy (“BEIS”) wishes to appoint a contractor to manage and deliver a hydrogen quality standard.

Enclosed are the following sections:

- Section 1 (page 3) Instructions on tendering procedures
- Section 2 (page 8) Introduction and Background Information
- Section 3 (page 13) Hydrogen Research and Development:
Specification of Requirements
- Section 4 (page 28) Other Information for Tenderers
- Section 5 (page 39) Further information on tendering procedure
- Section 6 (page 43) Declarations and information to be provided;
 - Statement of Non-Collusion
 - Form of Tender
 - Conflict of Interest
 - Standard Selection Questionnaire
 - Code of Practice for Research
- Annex A: Pricing Schedule – see *separate document (below)*
- Annex B: Code of Practice for Research
- Annex C: Mandatory Exclusion Grounds

See also the following separate documents:

- Annex A: Pricing Schedules
- Contract terms and conditions
- Questions and answers from supplier engagement days

Please register your interest in submitting a tender for this project on the following website www.delta-esourcing.com. All notifications of updates to the ITT process or answers to questions raised by potential bidders 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 on Friday 13th July 2018** clearly marked as “TENDER”.

I look forward to receiving your response.

Yours sincerely,

Steve Loades

Email: hy4heat@arup.com

Section 1

Instructions and Information on Tendering Procedures

Invitation to Tender for Hydrogen Quality Standard Contractor for UK hydrogen for heat demonstration

Tender Reference Number: 1525/06/2018

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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 the Delta portal and circulated to all organisations who have registered an interest in tendering.

Tender Timeline	Date
Prior Information Notice (PIN) published	14 March 2018
Advert (Contract Notice) and full invitation to tender issued	15 June 2018
Deadline for questions relating to the tender	22 June 2018
Responses to questions published	29 June 2018
Deadline for receipt of tender	Friday 13 July 2018 (12:00 Noon)
Invite suppliers for bid clarification (if needed)	w/c 23 July 2018
All suppliers alerted of outcome	3 August 2018
10 day standstill	6 - 15 August 2018
Contract award on signature by both parties	17 August 2018
Contract start date	w/c 20 August 2018
Contract completion date	23 August 2019

The contract is to be for a period of 12 months unless terminated or extended by the Department in accordance with the terms of the contract.

B. Procedure for Submitting Tenders

An application must be submitted in accordance with the checklist in item G below.

The maximum page limit for tenders is 20 A4 (excluding declarations, pricing schedule and CVs). 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-sourcing.com. Please contact the Delta Helpdesk on 0845 270 7050 for any registration queries. Please upload your proposal before the deadline via BIP Solutions Delta Website. 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 22 June 2018; 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 on the portal with our formal reply by the end of 29 June 2018; this information will be available– unnamed - to all organisations that have expressed an interest in bidding. All contractors should then take the replies 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 as the presence of an interest or involvement of the contractor, subcontractor (or consortium member) which could affect the actual or perceived impartiality of the research or analysis.

Where there may be a potential conflict of interest, it is suggested that the consortia or organisation designs a working arrangement such that the findings cannot be influenced (or perceived to be influenced) by the organisation which is the owner of a potential conflict of interest. For example, consideration should be given to the different roles which organisations play in the research or analysis, and how these can be structured to ensure that 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, via the Delta portal, 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 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 46) 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 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.

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 of the assessment criteria are provided in the specification (Part 2).

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 29 June 2018. 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 that 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, Arial font minimum size 12pt with single spacing and minimum 2.5cm margins)
- Annex A – pricing schedule (*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: Code of Practice

Section 2

Introduction and Background Information

Invitation to Tender for Hydrogen Quality Standard Contractor for UK hydrogen for heat demonstration

Tender Reference Number: 1525/06/2018

Deadline for Tender Responses: 13 July 2018

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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 meter)

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

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 successfully deliver Hy4Heat, a programme to demonstrate and de-risk 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 lower pressure, below seven bar 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 of what the consumer experience of a hydrogen fuelled home will be. This includes testing through unoccupied trials appliance suitability, as well as developing requirements and options for progressing to an effective community trial

Successful demonstration will lay the ground work for a potential follow-on project to undertake an occupied community trial.

The Hy4Heat programme will be completed by the end of March 2021. It is envisaged that it will consist of nine Work Packages:

1. Programme management
2. **Definition of a hydrogen quality standard (this Invitation to Tender (ITT))**
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
8. Hydrogen demonstration trials
9. Preparations for an occupied consumer trial

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 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.

This ITT directly supports the delivery of Work Package 2, definition of a hydrogen quality standard

Scottish Gas Networks (SGN) are currently undertaking a research project, funded by

the Network Innovation Allowance (NIA) to explore how the current and potential future odorants behave when used with Hydrogen. After careful review of this scope, it was concluded that this work would meet Hy4Heat objectives and, therefore, removed from our scope to avoid duplication.

3. Summary of Tender Requirements

The overall requirement for this Hy4Heat Work Package is to develop a suitable hydrogen gas standard for use in the Hy4Heat programme. The defined gas quality standard will enable the development and certification of a range of hydrogen appliances and help demonstrate the safety case for the demonstration and any future community trial.

This will involve:

- Development and documentation of the evidence through research and testing (specifically purity, colourant)
- Engagement with key industry stakeholders, specifically IGEM as the owner of the standards to seek approval and adoption prior to commencing trials.

The objectives of Work Package 2 are as follows:

- Develop and document the required evidence through research and testing to define:
 - an optimum hydrogen purity level
 - the level of any potential contaminants which may be picked up by the hydrogen as it moves through the gas grid
 - options for adding a colourant to hydrogen gas
 - cost benefit analysis of different options

Project Overview

Project Title	Description
Research and development of hydrogen purity and colourant	Undertake research and testing studies to determine the optimum solutions for the key elements that need to be confirmed (purity and colourant)

Section 3 sets out the tender requirements

Section 3

Specification of Requirements

Invitation to Tender for Hydrogen Quality Standard Contractor for UK hydrogen for heat demonstration

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1. Aims and Objectives

The aim of this project is to appoint a contractor to provide an assessment of the options available for using hydrogen:

- 1) purity levels
- 2) flame colourant requirements

The objectives for this project are as follows:

1) Hydrogen Purity Levels:

To evaluate the varying hydrogen purity levels available in the UK and the potential impacts of introducing hydrogen at these quality levels into the wider distribution network and to recommend a purity level for use by the Hy4Heat programme.

2) Flame Colourant Requirements:

To determine if there is a requirement for adding a colourant to hydrogen to ensure safe burning and user acceptance is achieved. Investigate the optimum solution if a colourant is required.

2. Methodology / Approach

1) Hydrogen Purity Level Assessment

To enable the Hy4Heat programme to understand how best to achieve the hydrogen gas quality standard from a practical and economic perspective, it will be necessary to investigate where hydrogen gas quality should be regulated, e.g. production, distribution or at the point of use, and what the implications are for consumers, installers, meter operators and appliance manufacturers. To enable the wider use of hydrogen within the context of hydrogen being supplied primarily as a substitute for natural gas for heating and cooking, it will also be necessary to understand how and where best to produce hydrogen of sufficient purity for use in other applications that potentially require a higher level of purity than that expected from hydrogen distributed through the existing low-pressure network, e.g. fuel cells.

The contractor will investigate where the gas quality should be regulated and what the implications are for consumers, installers, meter operators and appliance manufacturers at the point of use by:

- Reviewing the current national and international standards for hydrogen quality to report on the options available for hydrogen purity and confirming which of these IGEN will use as the basis for developing a hydrogen gas quality standard
- Reporting on the different hydrogen purity levels currently and potentially produced in the UK, based on a desktop study
- For each level of hydrogen purity, reporting on the different production methods available, their practical feasibility, an economic assessment, including associated costs and the type and quantity of impurities found in the products from each method
- Obtaining data from the GDNOs on the likely impurities that hydrogen will pick up and to determine the impurities picked up currently by methane
- Assessing the expected impurity level at the point of use from potential contributors (odorant, colourant and pipework contaminants). This should include an assessment of the associated economics on each downstream application.
- When evaluating and defining the hydrogen purity standard, take into consideration the outputs and findings from SGN's H100 odorant work (which seeks to determine a compatible odorant for use with hydrogen) and the colourant work included within this project,
- Liaise with Cadent's Hydrogen grid to vehicle (HG2V) network purity for transport project team, to ensure findings are aligned for the purity level recommended.
- Recommending the optimum purity level of hydrogen to be delivered by a repurposed GB gas network to the typical domestic or commercial user based on the research obtained, ideally with reference to an existing standard, but noting where deviation from this standard may be beneficial to UK.

The contractor will recommend how and where best to produce hydrogen of sufficient purity for use in other applications, which will, potentially, require a higher level of purity than that expected from hydrogen distributed through the existing low-pressure network by:

- Quantifying the purity level recommended for all downstream applications; including by hydrogen flame combustion, fuel cells, catalytic combustion and combined heat and power generation
- Reporting on the practical and commercial feasibility of delivering hydrogen, which at the point of use, is suitably clean for use in the above applications without the need for on-site clean-up
- Reporting on the available gas clean up technologies and the practical and commercial feasibility of cleaning up the hydrogen purity level proposed to meet all end use requirements at the point of use
- Reporting on a high-level analysis of the cost vs. benefit of the available methods for delivering the proposed hydrogen purity level at the point of use, based on a study of existing literature, especially that produced by the IEA Greenhouse Gas R&D Programme (GHG) Committee, the US Department of Energy (USDOE) and the recommendations from the reports above. This report should include recommendations for how best to achieve the purity levels required by each of the downstream applications identified.

2) Hydrogen Flame Colourant Options Assessment

To determine colourant requirements that ensure reliable detection of hydrogen combustion for safety, and aesthetic, purposes, the contractor will:

- Determine if there is a requirement for a flame colour upstream of the meter (i.e. outside of the house) based on information received by liaising with GDNOs. This will require liaising with organisations that have real experience of burning hydrogen (other than Fuel Cell quality hydrogen) in outdoor environments.
- Consider the implications of potentially low visibility flames on the network, which will require consultation with people who have actually encountered such flames.
- determine by consulting with appliance manufacturers and industry stakeholders, for each appliance type (i.e. cookers, boilers and fires) whether a flame colourant is required on aesthetic and/or safety grounds and whether such a colourant would potentially present a risk of deleterious effects on such appliances.
- Consider the potential risks to appliance performance of colourants as occurs with Silanes.
- Consider the implications of odorant on flame colour and the potential benefit of an odorant that inherently improves flame visibility. There may be a conflict in the use of sulphur containing odorant in this context. This will need to be discussed in detail. Therefore, the contractor is to liaise with SGN's H100 project, who are seeking to find an odorant that is compatible with hydrogen.

Consultations with GDNOs and other interested parties such as the fire research community (e.g. the Fire Research Station) and UK Fire Brigades may reveal that there are conflicting or inconclusive opinions on whether a colourant is required to identify flames from leaks of hydrogen from the distribution network or from pipework in buildings. In such circumstances, the answer may need to be informed by empirical testing of a variety of leak scenarios, based on the results of the consultations. Please describe the approach you would use to specify these tests.

Scenarios might include leaks:

- from a pipe below tarmac
- from a pipe below soil (limited types of soils)
- in a meter box
- from a household pipe.

For the purposes of responding to the tender, please outline the approach, time, resources and materials that you estimate would be required to conduct the above test work, plus any additional scenarios you wish to include.

To investigate the optimum solution if a colourant is required, the contractor will:

- report on the practical and economic, (including a cost benefit analysis) feasibility and the desirability of adding a colourant at distribution level, based on desktop research. The report should:
 - document the key safety concerns, potential chemical compounds, risks of toxicity, potential costs and expected appliance lifetime changes from using a colourant. Risks associated with the injection, transportation and combustion process of any proposed colourant will need to be assessed by competent professionals in chemical and biochemical hazards
 - assess the implications of the presence of such colourants on fuel cells and identify any potential techniques for removing the colourant before use
 - recommend the most suitable colourant option for Hy4Heat and for a large scale roll out based on the information collected under the contract.
- If colourant at the distribution level is identified as the appropriate option, then produce a detailed and costed plan to investigate the performance of identified agent(s). The performance should be tested in relevant scenarios and that the estimated costs should include the equipment needed for this. A suitable test location should also be proposed for doing 'full scale' combustion investigations. The actual construction of the rig and execution of an experimental programme is outside of the scope of this project.
- As necessary, investigate with IGEM the issues surrounding a new standard to include colourant at distribution level. This would need to explore all aspects of the colourant.

If local colourant is the preferred option most of the work will be carried out within the appliance lots of WP4. However, to advise gas appliance manufacturers of the general design issues around the use of colourant the contractor will be required to:

To demonstrate the concept and feasibility of such colourant through simulating combustion from a domestic fire (two designs) and a hob using suitable test rigs. Provision of quantified design data, or definitive physical arrangements of the colourant addition system is not required. They will need to:

- Conduct and record a schedule of experiments, using the proposed test rigs, to assess potential flame colourant compounds/chemicals, especially regarding visibility and flame picture when the appliance is fired with methane G20. This is to

demonstrate the viability of the concept of local colourant in a gas flame and its visibility vs. a G20 methane flame without colourant.

- Conduct and record a schedule of experiments that investigate the implications of using such colourants in the context of open flued, room sealed and flueless appliances.
- Conduct and record a schedule of experiments involving limited input from a competent professional in chemical and biochemical hazards to assess any potential compounds/chemicals that must be avoided on safety grounds.
- Make recommendations for any further testing that may be required to determine if the colourant options are safe.
- Produce a report that records the above experiments, references existing literature as required and:
 - i. Recommend the most appropriate chemicals to use
 - ii. Identify chemicals excluded on the grounds of associated hazards.
 - iii. Describe the implications of using such colourants in open flued, room sealed and flueless appliances.
 - iv. identifies other options for generating flame colours

Expected delivery timescales

The contractor is expected to deliver the above scope within the expected delivery timeline indicated below. Contractors are to detail the approach that they intend to take for delivering the scope, which should include a project plan for how they will deliver the works within the timescales set.

Purity	Expected Delivery date
Draft Report	11/01/2019
Final Report	01/03/2019
Colourant	
Draft Report	14/06/2019
Final Report	19/07/2019

3. Outputs Required

When evaluating the varying hydrogen purity levels available in the UK, and the potential impacts of introducing hydrogen at these quality levels into the wider distribution network, the contractor will produce an options appraisal and a recommendations paper on the hydrogen purity level. This will be required to feed into IGEM Hydrogen quality standard.

When determining colourant requirements that ensure the safe burning of hydrogen, the contractor will produce:

- A report on the options, recommendations and wider implications for colouring a hydrogen flame at different distribution locations compared against at appliance level.
- A report providing guidance to appliance manufacturers on the most suitable colourant options, including methods and chemicals for use at the appliance.

For each of the above documents, the contractor will submit a draft for review by the PMC prior to submitting the final version.

The contractor will produce monthly reports containing:

- A general overview of progress including:
- 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

4. Challenges

Added Value: It is critical that the methodology proposed makes clear how contractors will deliver robust evidence and must make innovative proposals to answer the projects key questions. Where applicable, relevant existing evidence should be interrogated, critically analysed, evaluated and, as appropriate, used as a basis to build on.

Timing: This project feeds into other time critical dependent projects. The successful contractor must have a clear project plan and detail how they will ensure prompt delivery to agreed standards.

Output Quality: As set out above the contractor will be required to provide their own quality assurance for this project in line with BEIS's Quality Assurance (QA) policy for evidence and analysis and will be required to include a QA plan as part of their Bid.

Relevant Expertise: Having access to the relevant commercial and technical expertise to address and answer the key aspects of this project to ensure a robust appraisal is put forward.

Stakeholder Engagement: It is expected that the contractor will need to liaise with key industry experts to address the key requirements of this project. Obtaining and balancing their views will be a key challenge that needs to be managed.

As stated in section 2 above, this should take into consideration the outputs from the following hydrogen projects currently being undertaken:

- 1) SGN's H100 project, specifically the odorant selected which will need to be proven suitable for use with hydrogen
<https://www.sgn.co.uk/Hydrogen-100/Road-to-Social-Proof/>
- 2) Cadent's Hydrogen grid to vehicle (HG2V) network purity for transport, specifically the first phase of the project.
http://www.smarternetworks.org/project/nia_cad0022

Hy4Heat Integration: The contractor will need to integrate effectively into the Hy4Heat programme, adopting the processes and ways of working setup to deliver the series of closely interlinked Work Packages.

5. Skills and Experience

BEIS would like the contractor to demonstrate capability that they have the experience 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 propose team as annexes (CVs should be limited to one pages each).

In particular, the contractor should demonstrate capability in the following areas which are considered particularly important for this work:

- Technical experience within the gas industry
- Knowledge of chemical colorants in flames.
- Knowledge of chemical compound and particle toxicity
- Access to a professional toxicologist
- Sufficient understanding of the principles of combustion within gas fires and gas hobs to be able to determine whether use of local colorant is a viable option; And the simplest route by which this could be developed by manufacturers in specific products
- Previous practical research and development (R&D) in the domestic gas industry

Reporting writing and recommendations.

Contractors 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.

Contractors should identify the individual(s) who will be responsible for managing the project.

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 field of hydrogen as well as expertise in conducting primary research.

6. Timetable/Work Plan

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

- Organisation chart and list of key people within the successful contractor's delivery team
- Schedule of expected deliverables, with associated timeframe for submission
- Method that will be used to produce the deliverables and to ensure quality of the deliverable
- Outline description of how risks are planned to be identified and managed
- Outline description of how the time schedule and resources will be managed, in order to ensure that delivery will be completed on time.

An indicative work plan and reporting schedule is presented below:

Reporting Points / Deliverables	Detail	Due Date
Contract commences	Work on the project begins	Contract signature
Introductory meeting with contractors / managers	For introductions and to aid with project initiation	Within week 1
Generation of project timetable agreed with Hy4Heat	Publish to Hy4Heat team	End of month 1
Monthly reports (as detailed above)	Publish to Hy4Heat Team	Monthly
Contract ends	All deliverables accepted by the Hy4Heat team	1 year from contract start date

Contractors will be expected to report monthly on their progress using the following indicative milestone reporting schedule:

Ref.	Milestone Description	Milestone Date
Purity - Report/Paper Writing		
P001	Interim report issued to BEIS	30/11/2018
P002	Issue of the first draft of report/paper	11/01/2019
P003	Issue of final report to BEIS	15/02/2019
P004	Formal acceptance by BEIS of the final draft of report/paper	01/03/2019
Colourant - Report/Paper Writing		
C001	Interim report 01 issued to BEIS	30/11/2018
C002	Interim report 02 issued to BEIS	01/03/2019
C003	Issue of the first draft of report/paper	14/06/2019
C004	Issue of final report to BEIS	19/07/2019
C005	Formal acceptance by BEIS of the final draft of report/paper	02/08/2019

Based on the expected delivery timeline, the indicative work plan, the milestone reporting schedule and the outputs required, the contractor should propose a detailed programme of work showing when the scope will be delivered as part of their tender submission.

7. Budget, Pricing and Commercial Evaluation

The budget for this project is **£150,000** excluding VAT.

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

Tenderers should provide a full and detailed breakdown of costs. Tenderers should provide prices for the tasks itemised in the table below. Resources and day rates should be proposed for other tasks which may reasonably be required in the tenderer's opinion. A format for tenderer responses is given in the table below with some indicative examples of tasks. A similar exercise will be used to estimate a price for any further tasks, based on previously agreed day rates, via change control.

The contract for this work is 12 months.

Tenderers should provide a full and detailed breakdown of costs by filling out and returning the table in appendix A (pricing table also shown below).

All costs are to exclude VAT.

Task ID	Task Description	Staff Names	Staff Day Rates (£)	No. of Days Required	Total Estimated Price (£)
1	General commission management and support				
2	Options appraisal and recommendations paper on hydrogen purity				
6	Report recommending the most suitable location for introducing a flame colourant				
7	Completion of appliance colourant tests				
8	Report providing guidance to BEIS on the most suitable colourant options				
9	Estimated Expenses – please itemise				
	Total Estimated Fee				
	20% Bonus of Total				
	VAT				
	Grand Total				

***Bonus will not form part of the evaluated price**

Daily rates for 8 hr day

Name	Grade	Rate

Total Estimated Fee will be the commercial criterion against which bids which will be assessed.

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.

8. Payment and Bonus Mechanism

Payments will be made monthly (in arrears) and against monthly diary sheets provided by the contractor in line with the schedule of rates for all members of the team (the fee) plus expenses. These will be certified by the PMC Project Manager prior to payment by BEIS.

Each month an additional 20% of the contractor's fee invoiced will be accumulated for the duration of the contract as a running total.

This 20% accumulated will be paid to the contractor as a bonus in their final invoice upon completion and sign-off to the Programme Board's satisfaction as follows:

Bonus of Bonus Paid	Both Final Reports Issued and Approved by BEIS
100%	Before 30/04/2019
50%	Between 01/05/2019 and 30/05/2019
25%	Between 31/05/2019 and 31/07/2019
10%	After 02/08/2019

As per the project milestones set out in section 6 above, the bonus will be paid based upon the date that BEIS sign off of the final report. This has been set as 10 working days after the contractor has issued the final report. This timeframe only applies if all the feedback received by the contractor from BEIS, following submission of the draft report, has been incorporated within the final report.

Please note that the budget of £150,000 set for this project excludes the bonus described above.

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.

9. Evaluation Criteria

Tenderers are invited to submit full tenders of no more than 20 pages excluding declarations and CVs. Tenders will be evaluated by at least three BEIS/Arup+ staff. The cost criterion will be marked by BEIS staff only.

Criterion	Description	Weighting
Conflict of Interest		Pass/Fail
1 Skills and expertise	See sub-criteria below	35%
	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 3b.5 (skills and experience) above. [25%]	
	A demonstration of relevant experience on previous project [10%]	
2 Understanding of requirements	Demonstrate clear understanding of the tender requirements. As set out in sections 3b.3 (outputs required) and 3b.4 (challenges) 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 robust evidence and recommendations required to deliver the gas standard. As set out in sections 3b.1 and 3b.2 above	20%
4 Management and delivery	Effective quality, relevance and breadth of management oversight processes including, project planning, risk management/identification, budget control, effective working arrangements, information handling and quality assurance. As set out in section 4 (other information for tenderers) of the tender	10%
5 Cost	Price: To be marked proportionately to the lowest tender please see example in section 4.6 below.	25%
TOTAL		100%

Scoring methodology can be found in section 4.6

Section 4

Other Information for Tenderers

Invitation to Tender for Hydrogen Quality Standard Contractor for UK hydrogen for heat demonstration

Tender Reference Number: 1525/06/2018

Deadline for Tender Responses: 13 July 2018

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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-disclosive (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.

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 'addressing challenges and risks' criterion.

We expect contractors to adhere to the following GSR Principles:

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; and
5. non-disclosure of identity and personal information.

4. Consortium Bids / Conflicts of Interest

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.

Tenderers must provide details as to how they will manage any sub-contractors engaged to deliver this tender 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 that 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

Introduction

This section sets out the Employer Requirements related to working arrangements and management of this project which form part of the Hy4Heat Programme. Notwithstanding the high-level requirements defined in this section, the successful tenderer will be required to comply with the employer/employer's representative's overall project management processes and procedures, which will be communicated at the start of the commission.

Note: The employer for this work will be BEIS, however, the management of the contract and the delivery of the work will be conducted through the Programme Management Contractor for Hy4Heat acting on behalf of BEIS.

The successful tenderer will be expected to prepare an organisation chart, identifying one named point of contact through whom all enquiries can be filtered.

An Arup+ Work Package Manager, reporting to a BEIS Project Manager will be assigned to the project and will be the central point of contact for all contractor's enquiries.

The Arup+ Work Package Manager will perform the role of contract manager on behalf of BEIS.

5.2 Delivery Plan

The schedule of deliverables included in the Delivery plan shall be agreed in advance with the Work Package Manager. For each discrete deliverable or set of deliverables, a Work Request will be raised by the Work Package Manager, detailing the scope of the work, estimate of resources required and timeframe for delivery. Any change to the approved Work Request, will be subjected to the change control process used in the Programme.

5.3 Reports

The successful tenderer will be required to submit a regular **progress report** to the Work Package Manager no later than the last Friday of each calendar month, unless otherwise agreed with the Work Package Manager.

The report shall include, but not be limited to the following items:

- a narrative summary of work completed during the period, including any area of concern.
- planned activities for the next period, including approaching milestones
- a copy of the updated time schedule
- any key risk or issues and associated proposed mitigation actions
- summary of change request submitted/approved in period

The successful tenderer will be expected to use the standard template for progress reporting, which will be provided upon award of the contract. The report shall be submitted by uploading on the Project Team Space (PTS) area unless otherwise

agreed with the Work Package Manager.

In addition to the regular progress report, the successful tenderer will be required to submit a **final/close-out report** within one month after completion of the contract, which shall contain as a minimum:

- Report on the study findings and associated recommendations
- Final as-is work programme (time schedule)
- Final schedule of deliverables
- Final list of contract variations (if applicable) and final accounts.

The exact content of the close-out report, as well as the format to use, will be specified by the Work Package Manager upon award of the contract.

Notwithstanding the reporting requirements described above, the successful tenderer is expected to raise with the Work Package Manager any early warning or concerns, including on expected delays to the agreed time schedule, as soon as practicable.

The successful tenderer will be required to attend the progress meeting set up by the Work Package Manager. These may include:

- Contract kick-off meeting, within one week from contract award
- Progress meeting, either weekly or monthly as appropriate, depending on the duration of the commission
- Ad-hoc meeting, to discuss specific topics or areas of concern as required. These may include attendance to the Stakeholder Engagement Group meetings¹

The meeting may take the form of teleconferences or videoconference, or may take place either at Arup offices or at the tenderer's office as agreed with the Work Package Manager. The Work Package Manager will chair the meetings and will be responsible to issue the agenda and prepare minutes of meeting/summary of discussion.

5.4 Project Control

The successful tenderers will be required to comply with the project control system in place for the Hy4Heat programme, with particular reference to the following elements:

I. Time Schedule

The successful tendered shall prepare and submit to the Work Package Manager a full programme of work (time schedule) within one week from contract award. Upon acceptance of the time schedule by the Work Package Manager, this will constitute the baseline programme and will be subjected to the change control process in use in the Programme.

The time schedule shall be submitted to the Work Package Manager (via PTS as appropriate) in the form of a Gantt Chart and shall be developed by sequencing tasks and milestones, clearly identifying start date, finish date and milestones associated

with deliverables, documenting constraints and considering resources. The schedule shall clearly identify:

- Activity ID
- Description
- Original duration
- Remaining duration
- Actual start
- Actual finish
- Percent complete
- Total float
- Variance
- Critical path (highlighted in red in the document)
- Milestones (by use of a diamond, flag or other symbol).

The successful tenderer shall be required to submit an updated version of the time schedule, clearly identifying planned and actuals, no later than the last Friday of each calendar month, together with the progress report (ref. 1.4).

II. Risk

The successful tenderer shall be expected to prepare and maintain a risk register and to contribute as appropriate to the risk management activities carried out by the Hy4Heat Programme. The Delivery Plan shall include an outline description of how risks will be identified and managed by the successful tenderer, and mitigation actions implemented.

Risks and issues should be communicated to the Work Package Manager as soon as reasonably practicable (and included in the monthly/weekly progress report and/or meeting), together with mitigation actions/plans.

The successful tenderer will be deemed to have included in the contract price an allowance for implementing all mitigation measures in connection with all risks for which they are responsible. Those mitigation measures are to be such as will ensure that the risks do not become realities.

III. Change Control

The successful tenderer will comply with the change control process in use in the Hy4Heat Programme (which shall be communicated by the Work Package Manager upon award of the contract), and with the contract variation procedures described in the contract.

Request for change will be submitted to the Work Package Manager as soon as possible, using the relevant change request template and uploading this on the Project Team Site as appropriate. Change requests shall include an assessment of impact on time, resources and cost, as well as description of proposed action/plan for implementation.

All change requests raised will be subjected to review by the Work Package Manager and decision by the relevant governance body (e.g. Project Board). This will depend

on the level of authority required for the change. Approval or rejection of change will be officially communicated to the contractor by the Work Package Manager and recorded in the programme change log.

5.5 Communication and Document Management

I. Communication

Ways, methods and frequency of communication between the successful tenderer and the Work Package Manager, shall be agreed at the contract kick off meeting.

All communication with BEIS and all external communications (press release, interviews, hands-out and similar), related to this contract or any part of the works shall be submitted to the Programme for acceptance (via the Work Package Manager) prior to issue or release.

All documents and correspondence produced in connection with this contract or any part of the work shall be subjected to the requirements of the Freedom of Information (FOI – Freedom of Information Act 2000), as well as the General Data Protection Regulation (GDPR).

English shall be used for all correspondence, plans, reports, and notes. All documents, plans, and technical reports must express their quantities using the International System of Units (SI).

The successful tenderer shall comply with the communication protocol in use on the Hy4Heat Programme, which shall be communicated by the Work Package Manager upon award of contract.

II. Document Management

The successful tenderer shall use the Hy4Heat Project Team Site (Office 365 SharePoint), for the submittal, circulation, filing and storage of all project documentation. The responsibility for security, access control, availability of this platform lies with the Employer. All correspondence between the successful tenderer and the Work Package Manager shall be filed by the latter using the Arup Mail Manager system (system access is restricted to Arup employees only). BEIS

In addition, the successful tendered shall use the Arup document numbering tool and process in use: all documents uploaded on the Project Team site must have an assigned unique document number.

The Work Package Manager, via the Hy4Heat Project Management Office (PMO), shall organise access to both the Hy4Heat team site and document numbering tool for all relevant parties, as well as provide guidance on use of the platform and technical assistance as required.

The successful tenderer shall comply with the document quality management procedures in use in the Programme, which shall be communicated by the Work Package Manager upon award of the contract.

The Employer uses Microsoft Office suite. All Microsoft files submitted by the Contractor shall be readable by Office 2016 or below.

III. Protection of Information

The successful tenderer shall be expected to confirm that they understand the Employer information security requirements and shall be responsible for complying with them. These include compliance with the Data Protection Act (DPA) 2018 and General Data Protection Regulation (GDPR) 2018, requiring that any information collected, processed and transferred as part of the Hy4Heat Programme, and in particular personal information, must be held and transferred securely. Tenderers must provide assurances of compliance with the DPA and set out in their proposals details of the practices and systems they have in place for handling data securely including transmission between the field and head office and then to the Employer. Contractors will have responsibility for ensuring that they and any subcontractor who processes or handles information on behalf of the Employer is conducted securely. The sorts of issues which must be addressed satisfactorily and described in contractors' submissions include:

- Procedures for storing both physical and system data
- Data back-up procedures
- Procedures for the destruction of physical and system data;
- How data is protected
- Data encryption software used;
- Use of laptops and electronic removable media; details of person/s responsible for data security
- Policies for unauthorised staff access or misuse of confidential/personal data
- Policies for staff awareness and training of DPA
- Physical security of premises
- How research respondents will be made aware of all potential uses of their data.

The successful tenderer shall be expected to agree to be subjected to audits at the Employer's request for the duration of the contract.

5.6 Commercial management and invoicing

Notwithstanding the specific contractual requirements in terms of commercial management, the successful tenderer will be required to submit on a monthly basis (or at different frequency as agreed with the Work Package Manager), an updated cost report including, as a minimum, the following information:

- Baseline budget (i.e. contract sum)
- Total estimated planned spent in period
- Total spent to date
- Any variance
- Estimate of cost at completion
- Summary in invoiced in period
- total invoiced to date.

Invoicing shall be linked to an invoicing schedule to be agreed with the Work Package Manager upon appointment. Invoicing will be based on the time and material costs incurred by the contractor for the month in arrears. Deviations to the forecasted invoicing schedules (20+%) will need to be agreed with the work package manager in advance of the expected variance in the month in question.

Payment of invoices shall be subjected to:

- the Work Package Manager’s review and approval of the payment application (including weekly time sheets) submitted by the contractor
- the Work Package Manager’s recommendation of payment to the BEIS Project Manager
- The BEIS Project Manager’s approval of payment recommendation

6. Evaluation 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 contractor 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

There will be a maximum of 25 marks for the “Price” evaluation.

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

For example, if 25 marks are available and the cheapest bid is £130,000, then:

Supplier	Price	Marks
1 (lowest bid)	£130,000	25
2	£134,000	$130/134 * 25 = 24.3$
3	£145,000	$130/145 * 25 = 22.4$

7. 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 (separate document), specifying the daily rates (ex-VAT) you will charge for each level of your staff.

Tenderers should ensure that a breakdown of tasks is provided and identify which team members will be working on each task.

Tenders to be submitted in an electronic format:

- 1 full proposal
- ≤ 20 pages, excluding declarations and CVs
- A4, minimum margins 2.5 cm, minimum single line spacing
- Arial font, minimum 12 pt

8. Bid Clarification

The Department reserves the right to award the contract based on applicants’ written evaluation only if one candidate emerges from the evaluation stage as significantly stronger than the others.

BEIS may invite all suppliers for bid clarification if they feel bid clarification should be carried out.

9. Feedback

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

Section 5

Further Information on Tender Procedure

Invitation to Tender for Hydrogen Quality Standard Contractor for UK hydrogen for heat demonstration

Tender Reference Number: 1525/06/2018

Deadline for Tender Responses: 13 July 2018

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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 the Data Protection Act (DPA) 2018 and General Data Protection Regulation (GDPR) 2018 and any information collected, processed and transferred on behalf of *the Department*, and in particular personal information, must be held and transferred securely. **Contractors must provide assurances of compliance with the DPA and set out in their proposals details of the practices and systems they have in place for handling data securely including transmission between the field and head office and then to the Department.** Contractors will have responsibility for ensuring that they and any subcontractor who processes or handles information on behalf of *the Department* is conducted securely. The sorts of issues which must be addressed satisfactorily and described in contractors' submissions include:

- procedures for storing both physical and system data;
- data back-up procedures;
- procedures for the destruction of physical and system data;
- how data is protected;
- data encryption software used;
- use of laptops and electronic removable media;
- details of person/s responsible for data security;
- policies for unauthorised staff access or misuse of confidential/personal data;
- policies for staff awareness and training of DPA;
- physical security of premises.
- how research respondents will be made aware of all potential uses of their data.

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 4 contains a "Statement of non-collusion" (declaration 1); any breach of the undertakings covered under items 1 - 3 inclusive will invalidate your tender. If a contractor has indulged or attempted to indulge in such practices and the tender is accepted, then grounds shall exist for the termination of the contract and the claiming 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 6

Declarations to be submitted by the Tenderer

Invitation to Tender for Hydrogen Quality Standard Contractor for UK hydrogen for heat demonstration

Tender Reference Number: 1525/06/2018

Deadline for Tender Responses: 13 July 2018

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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/she shall refrain from 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 13 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 exclusion². If there are grounds for exclusion, there is an opportunity to explain the background and any measures you have taken to rectify the situation (we call this self-cleaning).

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

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

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

Supplier Selection Questions: Part 3

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

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

Consequences of misrepresentation

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.

² 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

Hydrogen Quality Standard Contractor for UK hydrogen for heat demonstration

TRN: 1525/06/2018

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. All sub-contractors are required to complete Part 1 and Part 23.
7. For answers to Part 3 - If you are bidding on behalf of a group, for example, a consortium, or you intend to use sub-contractors, you should complete all of the questions on behalf of the consortium and/ or any sub-contractors, providing one composite response and declaration.

The authority confirms that it will keep confidential and will not disclose to any third parties any information obtained from a named customer contact, other than to the Cabinet Office 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.

³ See PCR 2015 regulations 71 (8)-(9)

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 <ul style="list-style-type: none"> Public limited company Private limited company Private limited liability partnership Other partnership Sole trader Third sector 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) <ul style="list-style-type: none"> • Voluntary Community Social Enterprise (VCSE) • Sheltered Workshop • Public service mutual 	
1.1(m)	Are you a Small, Medium or Micro Enterprise (SME) ⁴ ?	Yes <input type="checkbox"/> No <input type="checkbox"/>
1.1(n)	Details of Persons of Significant Control (PSC), where appropriate: ⁵ <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. ⁶ (Please enter N/A if not applicable)	
1.1(o)	Details of immediate parent company: <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) (Please enter N/A if not applicable)	
1.1(p)	Details of ultimate parent company: <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) 	

⁴ See EU definition of SME: <http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/>

⁵ 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.](#)

⁶ Central Government contracting authorities should use this information to have the PSC information for the preferred supplier checked before award.

	- Head office VAT number (if applicable) (Please enter N/A if not applicable)	
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Please note: A criminal record check for relevant convictions may be undertaken for the preferred suppliers and the persons of significant in control of them.

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

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

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. These are also included under Annex C.</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)	<p>Regulation 57(3)</p> <p>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?</p>	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>
2.3(b)	<p>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.</p>	

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

3.2	If you have answered Yes to any of the above, explain what measures been taken to demonstrate the reliability of the organisation despite the existence of a relevant ground for exclusion? (Self Cleaning)	
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Part 3: Selection Questions⁷

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"/>

⁷ [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 ⁸	
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"/></p> <p>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"/></p> <p>Please provide relevant the url ...</p> <p>No <input type="checkbox"/></p> <p>Please provide an explanation</p>

⁸ [Procurement Policy Note 9/16 Modern Slavery Act 2015](#)

8. 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 8	Additional Questions	
8.1	Suppliers' Past Performance⁹ - (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"/>

⁹ [Procurement Policy Note 04/15 Taking Account of Suppliers' Past Performance](#)

Declaration 5: Code of Practice¹⁰

I confirm that I am aware of the requirements of the Department's Code of Practice¹¹ 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 headings¹²:

- 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.)

¹⁰ Please note that this declaration applies to individuals, single organisations and consortia.

¹¹ The Code of Practice is attached to this ITT as Annex B

¹² Please delete as appropriate

Annex A: Pricing Schedule

See separate document.

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 committees¹³ or the terms of project licences, if relevant.

¹³ Please note ethical approval does not remove the responsibility of the individual for ethical behaviour.

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

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 conducted¹⁴

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>

¹⁴ 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).