

**CONTRACT FOR THE PROVISION OF Research into Suitability of Solder and Brazing Alloys for Use in Low Pressure Hydrogen Gas Installations
DEPARTMENT FOR SCIENCE, INNOVATION & TECHNOLOGY &
DEPARTMENT FOR ENERGY SECURITY & NET ZERO (THE CONTRACT
OFFER LETTER)**

This Contract is dated 04/09/2023 and is made between: -

1. **The Secretary of State for Department for Science, Innovation & Technology & Department for Energy Security & Net Zero** (the “Authority”) of 1 Victoria Street, London SW1H 0ET, acting as part of the Crown;

and
2. **Frazer Nash Consultancy Ltd**, (the “Contractor”) whose registered office is at Hill Park South, KBR Campus, Springfield Drive, Leatherhead, Surrey, UK.

INTRODUCTION

- (A) On 9th May 2023 the Authority issued an invitation to tender for the provision of Research into Suitability of Solder and Brazing Alloys for Use in Low Pressure Hydrogen Gas Installations Competition - including the specification a copy of which is set out in Schedule 1 (the “Specification”).
- (B) In response the Contractor submitted a proposal dated 16/06/2023 and entitled ‘Research into Suitability of Solder and Brazing Alloys for Use in Low Pressure Hydrogen Gas Installations’ explaining how it would provide the Services, a copy of which is set out in Schedule 2 (the “Proposal”).
- (C) The Specification and the Proposal were supplemented by the correspondence copies of which are set out in Schedule 5 (the “Correspondence”).

The parties agree as follows:-

1. SUPPLY OF SERVICES AND PRICE

In consideration of payment by the Authority to the Contractor of the sums set out in Schedule 4 exclusive of Value Added Tax) (the “Contract Price”) and in accordance with (a) the Specification; (b) the Contractor’s Proposal; and (c) the Authority’s Standard Terms and Conditions of Contract for Services (the “Standard Terms”) (a copy of which is attached at Schedule 3); and (d) the Correspondence, the Contractor shall provide the Services described in the Specification and the Contractor’s Proposal and the Correspondence to the Authority.

2. COMMENCEMENT AND CONTINUATION

This Contract shall commence on 04/09/2023 and subject to any provisions for earlier termination contained in the Standard Terms shall end on 05/08/2024.

3. TERMS AND CONDITIONS

- 3.1 The Standard Terms shall form part of this Contract.
- 3.2 The Contractor's terms and conditions of business shall not apply to this Contract.
- 3.3 This Contract is formed of these clauses and the Schedules hereto. Any other attachments are provided for information purposes only and are not intended to be legally binding. In the event of any conflict or inconsistency, the documents prevail in the following order:

- a) these clauses;
- b) the Standard Terms (as set out in Schedule 3);
- c) the Correspondence (as set out in Schedule 5);
- d) the Specification (as set out in Schedule 1) and Contract Price (as set out in Schedule 4); and
- e) finally, the Contractor's Proposal (as set out in Schedule 2)

(save that where the Contractor's Proposals contain a provision requiring a higher standard of service provision, the Authority may (at its discretion and for no additional remuneration confirm that such higher standard applies).

4. CONTRACTOR'S OBLIGATIONS

- 4.1 Where the Contractor is supplying goods to the Authority these shall be delivered to the Authority in full compliance with the Specification and shall be of satisfactory quality and fit for purpose. Where the Contractor is performing Services for the Authority it shall do so in accordance with the Specification and exercise reasonable skill and care.

5. MANAGEMENT AND COMMUNICATIONS

- 5.1 The Contractor shall perform the Services under the direction of the Authority.
- 5.2 Any direction by the Authority may be given by [REDACTED] (the "Contract Manager") who is an officer in the Authority's Science & Innovation for Climate & Energy office at 1 Victoria Street, London SW1H 0ET or such other person as is notified by the Authority to the Contractor in writing. All queries (including any notice or communication

required to be provided under this Contract) to the Authority from Contractor shall initially be addressed to the Contract Manager

- 5.3 The Contractor appoints [REDACTED]
[REDACTED]
to be the Contractor's first point of contact for this Contract. All queries (including any notice or communication required to be provided under this Contract) to the Contractor from the Authority's Contract Manager shall initially be addressed to the Contractor's first point of contact.
- 5.4 The Contractor's first point of contact and the Contract Manager shall meet as often as either the Contractor or the Authority may require to review the Contractor's performance of the Contract.

6. INVOICES AND PAYMENT

- 6.1 Subject to the Contractor providing the Services to the Authority in accordance with this Contract and submitting invoice/s to the Contract Manager in the manner reasonably required by the Contract Manager payment will be made by the Authority to the Contractor in accordance with condition 17 of the Standard Terms.

7. TRANSPARENCY

- 7.1 The Authority will publish the Contract and the Schedules hereto on a designated government internet site, using the redacted version of the contract attached. (That version is for illustrative purposes only, and does not form part of the Contract). The Authority has made the decision on the specific redactions to be made in light of the exemptions under the Freedom of Information Act 2000 (FOIA) and Condition 40 of the Standard Terms.

However, subject to those redactions, the rest of the Contract and Schedules will be published in full, in accordance with the government's policy on the publication of contracts, which forms part of the government's transparency agenda, and the Contract is therefore entered into on the basis of such publication taking place.

The Authority emphasises that its decision to redact information on this occasion does not preclude it publishing such information in the future in the context of other contracts. Neither does it preclude the disclosure of such information in the circumstances of a request for disclosure under FOIA or the Environmental Information Regulations 2004 (EIR) or where such disclosure is required by virtue of any other legal requirement. In such cases, the Authority would need to consider disclosure in the context of the particular circumstances of the request or requirement concerned.

Signed by the parties’ duly authorised representatives:-

For the Secretary of State for Department for Science, Innovation & Technology & Department for Energy Security & Net Zero

Signature: [REDACTED]

Print Name: [REDACTED]

Job Title: [REDACTED]

Date: 9/4/2023

For the Contractor [REDACTED]

Signature: [REDACTED]

Print Name: .. [REDACTED]

Job Title: [REDACTED]

Date: 01/09/23

The following Schedules form part of this Contract:

- | | |
|------------|---|
| Schedule 1 | The Authority’s Specification |
| Schedule 2 | The Contractor’s Proposal |
| Schedule 3 | The Authority’s Standard Terms & Conditions of Contract for Supplies/Services |
| Schedule 4 | Contract Price |
| Schedule 5 | The Correspondence |
| Schedule 6 | Annex 1 - Processing, Personal Data and Data Subjects schedule |

Schedule 1 – Authority's Specification**Invitation to Tender**

Title:	Research into Suitability of Solder and Brazing Alloys for Use in Low Pressure Hydrogen Gas Installations
Tender Reference Number:	prj_1824
Deadline for Responses:	2:00pm 16/06/2023

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Date: [9th May 2023]

The Department for Energy Security & Net Zero (referred throughout these documents as “DESNZ” or the “Department”) wishes to commission a project to conduct Research into Suitability of Solder and Brazing Alloys for Use in Low Pressure Hydrogen Gas Installations.

Enclosed are the following sections:

- Section 1 Instructions on tendering procedures
- Section 2 Specification of Requirements
- Section 3 Further information on tender procedure
- Section 4 Declarations to be submitted by the tenderer;
 - Statement of non-collusion
 - Form of tender
 - Conflict of interest
 - Standard Selection Questionnaire
 - The General Data Protection Regulation Assurance Questionnaire for Contractors
- Annex A: Pricing schedule
- Annex B: Code of practice for research
- Annex C: Exclusion grounds
- Annex D: Milestone Verification and Approval – Guidance for Contractors

Please register your interest in submitting a tender through the Jaggaer platform <https://beisgroup.ukp.app.jaggaer.com>. This will ensure you receive immediate notification of updates to the ITT process or answers to questions raised by potential bidders.

Please read the instructions on the tendering procedures carefully since failure to comply with them may invalidate your tender. Your tender must be returned by the closing date clearly displayed in the Jaggaer portal.

I look forward to receiving your response.

Yours sincerely,

Name: John Foyster
Email: nzip.hydrogen@beis.gov.uk

Privacy Notice

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

YOUR DATA

We will process the following personal data:

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

Purpose

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

If you intend to use the above personal data collected in the procurement exercise to evaluate the procurement exercise and obtain feedback from tenderers, you need to highlight this here and update the section on retention.

Legal basis of processing

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

Recipients

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

Retention

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

YOUR RIGHTS

You have the right to request information about how your personal data are

processed, and to request a copy of that personal data.

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

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

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

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

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

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

INTERNATIONAL TRANSFERS

Your personal data will not be processed outside the UK/EEA.

COMPLAINTS

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

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

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

CONTACT DETAILS

The data controller for your personal data is the Department for Energy Security and Net Zero (DESNZ).

You can contact the DESNZ Data Protection Officer at: DESNZ Data Protection Officer, Department for Energy Security and Net Zero, 1 Victoria Street, London SW1H 0ET. Email: dataprotection@beis.gov.uk.

Section 1

Instructions and Information on Tendering Procedures

Invitation to tender for: Research into Suitability of Solder and Brazing Alloys for Use in Low Pressure Hydrogen Gas Installations

Tender reference number: prj_1824

Deadline for tender responses: 2:00 pm 16/06/23

Section 1 – Instructions and Information on Tendering Procedures

A. Indicative Timetable

The anticipated timetable for this tender exercise is as follows. The Department reserves the right to vary this timetable. Any variations will be published on contracts finder or circulated to all organisations who have registered an interest in notifications.

Tender Timeline	Date
Advert and full invitation to tender issued	09/05/23
Deadline for questions relating to the tender	2:00pm 30/05/23
Responses to questions published	05/06/23
Deadline for receipt of tender	2:00 pm 16/06/23
Bid clarification (if required)	W/C 03/07/23
Invite top suppliers for interview	W/C 10/07/23
All suppliers alerted of outcome	14/07/23
10 day standstill	14/7/23-24/7/23
Contract award on signature by both parties	28/07/23
Contract start date	31/07/23

The contract is to be for a period of 13 months unless terminated or extended by the Department in accordance with the terms of the contract.

B. Procedure for Submitting Tenders

The maximum page limit for tenders is 25 (excluding declarations, pricing schedule and CVs).

To apply for this tender, please register on <https://beisgroup.ukp.app.jaggaer.com/>. For any registration queries, please contact the Jaggaer Helpdesk on 08000 698 632 or email customersupport@jaggaer.com.

Please upload your proposal before the deadline via <https://beisgroup.ukp.app.jaggaer.com/>.

For questions regarding the procurement process please contact us via the “Messages” tab of the ITT on Jaggaer.

Tenders will be received up to the time and date stated. Please ensure that your tender is delivered not later than the appointed time on the appointed date. 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, email nzip.hydrogen@beis.gov.uk. All questions should be submitted by 30 May; questions submitted after this date may not be answered. Should questions arise during the tendering period, which in our judgement are of material significance, we will publish these questions with our formal reply by the end of 5 June and circulate – unnamed - to all organisations that have expressed an interest in bidding. All contractors should then take that reply into consideration when preparing their own bids, and we will evaluate bids on the assumption that they have done so.

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

C. Conflict of Interest

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

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

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

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

1. **During the bidding process, organisations may contact DESNZ 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 contract finder (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' 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.

D. Evaluation of Responses

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

E. Terms and conditions applying to this Invitation to Tender

The Department's Standard Terms and Conditions of Contract will apply to this contract. These are available to download on <https://beisgroup.ukp.app.jaggaer.com/>.

Please read the Procurement Guidance on GDPR and Cyber-Security. If the Contractor will be a Joint Data Controller, the data protection provisions contained in the Standard Terms and Conditions will be replaced by a Data Sharing Agreement drafted by Government Legal Department. If this applies to your procurement, the change from the standard data protection provisions should be described in this section of the Invitation to Tender.

If the Contractor will transfer personal data outside of the European Economic Area or the countries highlighted in Procurement Guidance on GDPR and Cyber-Security, please inform your Procurement Business Partner, who will highlight the changes which will need to be made to the standard data protection provisions.

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 7 June. Where amendments are significant, the Department may at its discretion extend the deadline for receipt of tenders.

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

any tender and reserves the right to accept a portion of any tender unless the tenderer expressly stipulates otherwise in their tender.

G. Checklist of Documents to be Returned

- Proposal (maximum 25 pages)
- Annex A: Pricing schedule
- Declaration 1: Statement of non-collusion
- Declaration 2: Form of Tender
- Declaration 3: Conflict of Interest
- Declaration 4: Standard Selection Questionnaire
- Declaration 5: The General Data Protection Regulation Assurance Questionnaire for Contractors
- Declaration 6: Code of Practice

Section 2

Specification of Requirements

Invitation to Tender for: Research into Suitability of Solder and Brazing Alloys for Use in Low Pressure Hydrogen Gas Installations

Tender Reference Number: prj_1824

Deadline for Tender Responses: 2:00 pm 16/06/23

Section 2 – Specification of Requirements

1. Introduction and Summary of Requirements

This Invitation to Tender (ITT) invites potential suppliers to deliver an evidence project on the suitability of solder and brazing alloys for use in low pressure hydrogen gas installations. The evidence generated will support a series of hydrogen standards and training specifications being developed under the DESNZ Hydrogen Skills and Standards for Heat (HSS4H) programme. For further programme information, please also refer to the web page [here](#).

2. Background

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. From 2016-18, BEIS performed an extensive review of evidence and analysis on heat decarbonisation and undertook modelling work to assess the costs and benefits of different pathways¹. This review identified further work that was needed to explore the options before decisions could be made about the future of heat.

The Government is working with industry, regulators and others to deliver a range of research, development and testing projects to assess the feasibility, costs and benefits of using 100% hydrogen for heating. This work includes a pioneering programme of community trials. As set out in the Prime Minister's Ten Point Plan for a Green Industrial Revolution², the Government will support industry to deliver a first-of-a-kind 100% hydrogen 'Neighbourhood Trial', which is planned to go live at the earliest opportunity in 2024, a large 'Village Trial' by 2025 and a plan for a potential 'Town Pilot' before the end of the decade. The local trials and planning work, together with the results of a wider R&D and testing programme, will enable strategic decisions in 2026 on the role of hydrogen for heat decarbonisation and whether to proceed with a hydrogen heated town.

The HSS4H programme is working towards the development of technical standards for domestic and non-domestic hydrogen gas installations, and on associated competence frameworks and training specifications for installers. These will enable repurposing of the existing natural gas system to be used with 100% hydrogen downstream of the emergency control valve (ECV). The standards developed will define the required criteria to safely repurpose existing natural gas equipment for hydrogen, to design and install new hydrogen-safe pipework and appliances, and to train a workforce of competent hydrogen gas installers. It has four workstreams as described in the subsequent paragraphs.

BSI Publicly Available Specification (PAS) standards: PAS 4441, 4442, 4443.

Three PAS standards will cover functional and test requirements for hydrogen gas metering, material requirements for ancillary components and devices, and functional and test methods for complex ancillary components and devices for use with

¹ Department for Business, Energy and Industrial Strategy (2018) Clean Growth – Transforming Heating. Overview of Current Evidence <https://www.gov.uk/government/publications/heat-decarbonisation-overview-of-current-evidence-base>

² HMG (2020) The Ten Point Plan for a Green Industrial Revolution <https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution/title>

hydrogen. This ITT specifies work required to inform PAS 4442 (PAS 4442 Material requirements for pipework and fittings used in hydrogen gas installation: Specification). The supplier of the work in this ITT will need to provide frequent progress updates to help manage programme dependencies.

IGEM enabling standards: IGEM/H/1, H/2, H/3. The Institution of Gas Engineers and Managers (IGEM) has used the latest information from industry to update the Hydrogen Reference Standard for low pressure hydrogen utilisation, IGEM/H/1³. Following the update, two full enabling standards will be produced covering considerations for gas installers for domestic and non-domestic scenarios (up to light industrial sites). The standards will cover both installing new gas pipes and repurposing existing gas infrastructure in a building.

EUS competence framework and training specification: Energy and Utility Skills (EUS) will codify both the IGEM domestic and non-domestic enabling standards into competency frameworks and training specifications to facilitate the training of a competent workforce for trials. They will produce Accredited Certification Scheme (ACS) assessment criteria and Approved Code of Practice (ACoP) assessment modules for both enabling standards, working with industry to ensure there is a clear path for existing competent engineers to train for hydrogen installations.

Supporting Technical Research and Evidence Gathering: New primary research and evidence gathering is currently being undertaken under the HSS4H programme. Summaries of workstreams can be found [here](#). This has included a workstream assessing and testing metallic and polymer material grades, with an evidence review undertaken in this work identifying a gap in the evidence base for the suitability of solder and brazing alloys. It is currently unknown if metal pipework joined through soldering and brazing exposed to low pressure hydrogen results in an unacceptable predicted failure rate due to degradation of the solder and brazing alloys when compared to exposure to Natural Gas.

It should be noted that there are a range of research projects ongoing looking at materials research with hydrogen. The most relevant for this work is National Gas Transmissions FutureGrid project which includes research into welds and materials commonly used in transmission pipework. This contract will focus on solders and brazes most commonly found in end user installations downstream of the Emergency Control Valve.

The HSS4H programme forms part of the DESNZ £1 billion Net Zero Innovation Portfolio (NZIP), which aims to accelerate the commercialisation of innovative clean energy technologies and processes through the 2020s and 2030s. The NZIP programme follows on from BEIS's Energy Innovation Portfolio, which supported the Hy4Heat programme⁴ that carried out work related to this ITT.

³ IGEM/H/1 Reference Standard for low pressure hydrogen utilisation (with amendments June 2022, Communication 1860
<https://www.igem.org.uk/resource/igem-h-1-with-amendments-june-2022-reference-standard-for-low-pressure-hydrogen-utilisation.html>

⁴ Hy4Heat Programme <https://www.hy4heat.info/>

3. Aims and Objectives

The evidence project to be delivered through this ITT aims to provide supporting evidence on the suitability of solder and brazing alloys for use in domestic and non-domestic low pressure hydrogen gas installations. The project will:

1. Define a methodology for assessing material suitability including appropriate test methods, specimen types, environmental conditions, analysis techniques and material assessment criteria.
2. Provide clear unambiguous evidence in accordance with the defined methodology to categorise relevant grades of solder and brazing alloys as either suitable or not suitable for use with low pressure hydrogen.
3. Communicate with standards bodies to support writing of sections relating to suitability of materials within hydrogen standards being developed under the HSS4H programme and make information available in a way that will support future standards.

Scope

The supporting evidence generated within the project **must**:

Directly support the scope of hydrogen standards being developed under the HSS4H programme. These include BSI's PAS 4441, PAS 4442 and PAS 4443 as well as IGEN IGEN/H/2 and IGEN/H/3. PAS 4442 is most relevant for this ITT, covering materials for pipework and fittings for use with hydrogen. Relevant requirements have been detailed in this ITT and access to the PAS is not required to be successful at tender stage.

Consider a range of solder and brazing alloy grades and configurations that have been previously used in existing UK Natural Gas installations and are likely to be used or found in future hydrogen installations following a potential conversion. Note: a required list of grades is provided in '5. Methodology – Table 1', deviation from this list will require justification.

Define a material suitability assessment methodology that reflects the in-service conditions the materials will be subjected to in low pressure domestic and non-domestic hydrogen installations. Note: environmental conditions of expected hydrogen gas installations are provided in '5. Methodology – Table 3'.

The supporting evidence generated within the project **should**:

Define assessment criteria to enable categorisation of material types as suitable or not suitable for use with hydrogen.

Include an appraisal of the potential increased risk of failure for existing pipework installations repurposed for use with hydrogen compared to newly installed pipework, due to degradation of solder and brazing alloys from hydrogen effects. Consideration of the impact of hydrogen on the installed

lifetime of the pipework will be important, and contractor insight on the possible need for additional tests such as accelerated life or dynamic testing will be valuable in final report conclusions.

Cover the materials referred to in '5. Methodology – Table 1'. The extent to which the testing method could yield definitive results of their suitability for use with hydrogen will be taken into consideration when evaluating tenders.

The supporting evidence generated within the project **could**:

Include an appraisal of the prevalence, quantity, and types of solder and brazing jointing configurations in existing domestic and non-domestic premises to provide supporting context to the evidence produced.

The supporting evidence generated within the project **will not**:

Require a systematic literature review to assess the existing evidence base on suitability of solder and brazing alloys with hydrogen. Note, evidence and literature should be referred to within deliverables, where relevant.

Suppliers must be clear in their proposal how they will address these points.

Methodology

Suppliers should set out in the tender details of their proposed methodology for delivering the scope of work as per the below stages.

Stage 1: Detailed Test Plan

The initial stage of the project will develop a detailed test plan for achieving the aims and objectives set out in this ITT, demonstrating alignment to the scope. The test plan shall outline test methods, material grades, environmental test conditions, specimen types / configurations and number of samples to be tested, as well as methods to pre-charge and expose materials to hydrogen during testing, and analysis techniques. A systematic literature review is not required as part of this work, however existing evidence should be referenced to provide the rationale for the technical approach. The test plan shall clearly define time and cost to complete, the resources and equipment that will be assigned to deliver the project, alongside detailed project plans and a risk register. Suppliers will also be expected to engage with BSI and IGEM (introductions can be facilitated by DESNZ) to ensure information from the test work would be compatible with future updates to PAS 4442, IGEM/H/2 and IGEM/H/3. Acceptance criteria to agree material suitability should be agreed at this stage, informed by industry best practice and agreement with standards bodies. Further details of specific requirements can be found in the relevant assessment criterion in '7. Evaluation of Tenders'.

Please note, DESNZ will hold a stage gate review with the supplier on completion of the detailed test plan before proceeding to Stage 2: Materials Testing Programme. Further details of the requirements of this stage gate can be found in '6. Deliverables and Stage Gate'.

Stage 2: Materials Testing Programme

The materials testing will need to provide the required evidence to make clear conclusions on the suitability of solder and brazing alloys to meet the requirements set out in the scope section. The testing programme must consider the following:

Material types. A list of solder and brazing alloys and associated materials that should be used in testing have been provided in Table 1 "Material grades to be used in materials testing programme" below. The supplier is expected to cover the list of materials in the table, strong rationale must be provided if the supplier does not intend to cover this list and this will be assessed.

Appropriate testing methodology. A material suitability assessment methodology that reflects the in-service conditions the materials will be subjected to in low pressure domestic and non-domestic hydrogen installations should be provided. The environmental in-service conditions to be replicated in testing are provided in [Table 3](#).

Applicability of sample preparation and testing methodology to in-service conditions. The specimen geometry and the nature of the test loading should also generate representative data of in-service components and conditions. The contractor should explain how results generated from the proposed choice of specimen and test type relate to the actual in-service conditions experienced by pipework joined using soldering and brazing. Guidance on two possible methods is provided in [Table 2](#).

Appropriate testing environment. The proposed testing environments must be described. Material performance in the hydrogen environment outlined in Table 3 below should be compared to a standard baseline such as air or natural gas. The supplier should justify their choice of baseline.

Reproducibility of results.

- A rationale should be provided for how the proposed specimen design and manufacturing processes will limit effects of external variables so any effects of hydrogen exposure on mechanical properties and material characteristics can be attributed with sufficient confidence. This should include consideration of specimen types or testing protocols that could produce effects that obscure measurements attributable to differences between hydrogen and non-hydrogen environments. For example, tube tensile testing could introduce variable flaws into the specimens that may make it difficult to attribute changes in material properties to differences in gaseous environment alone. Table 2 provides comments on a selection of testing protocols, but contractors should propose their own detailed methodology and be able to justify their proposal.
- To mitigate the potential variability of the test specimens, at a minimum, triplicate tests for each specimen condition in each environment must be planned into the programme.

- Consideration must be given to the repeatability of the preparation of samples while recognising that joints in use can have significant variability in quality. The test plan could consider how to address this variable quality in a repeatable and scientific way. For example, consideration for an experimental sample preparation procedure analogous in detail to a weld procedure could be produced, along with clear evidence of competent personnel in the organisation.
- To reduce the potential for variability due to defective joints an inspection protocol should be proposed to detect defects within the joint. Previous studies have used radiography or ultrasonic NDT methods for this purpose. EN 12799 contains guidance on non-destructive test methods. Joints to be tested should meet the moderate quality level (D) as defined in ISO 18279. Any defects within test joints should be described using the terminology defined within ISO 18279 and the description associated with the joint record.

Use of existing standards. Where possible existing materials test standards or known best practices should be adopted for testing and specimen preparation. Where existing standards are deemed unsuitable or unavailable, the supplier should outline requirements for verifying bespoke or developed test methods. Any test development work should be proportionate to the size of the contract and not the focus of the project.

Table 1 Material grades to be used in materials testing programme*

Function	Material Class	Grade(s)
Parent material (pipework)	Copper alloy	BS EN 1057 grades (after 1996) BS 2871 Part 1 (before 1996) BS EN 1254-1 (fittings)
Flux		ASTM B813 – One self-cleaning type ASTM B813 – One tinned type Both for soldered joints
Filler metals	Solder and brazing alloys	BS EN 29453 alloy 11 (solders) BS EN 29453 alloy 12 (solders) BS EN 29453 alloy 13 (solders) BS EN 1044 (braze filler) Braze Joint to be made to BS EN 14324

Table 2. Test protocol comments

Test Type	Description	Comments
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"Tube tensile" testing	Sample comprises soldered pipe sections in socket joint placed in tension	Sample geometry is representative of in-service components, however, tensile loads experienced by the joint are not indicative of in-service conditions, Possibility of the introduction of flaws during specimen manufacture – could negatively influence repeatability.
"Butt tensile" testing	Sample comprises soldered pipe sections in a butt joint placed in tension	Tensile loads experienced by the joint are not indicative of in-service conditions, Guidance for specimen design and test protocol is outlined in BS 12797 – standardised process could positively influence repeatability. Alternatively use the single lap joint specimen defined in AWS C3.2-82, Standard Method for Evaluating the Strength of Braze Joints in Shear.

Table 3. Environmental conditions of low-pressure hydrogen installations

Parameter	Details
Hydrogen	100% hydrogen (nominal) Hydrogen could be specified to either DNV Hy4Heat Work Package 2 Purity Standard or BS ISO 14687 Type A Standard. No requirement for inclusion of additives or odorants.
Pressure	Up to 250 mbar This reflects the upper limit of the standards being developed under this programme.
Temperature	-30°C to +50°C The range is selected to reflect extreme temperature range within the UK (though not absolute extremes). The upper temperature reflects that gas pipework tends to be run through ceiling voids, and within plantrooms where higher ambient temperatures may be experienced. Contractors should provide insight in final report conclusions if higher temperatures are likely to have a deleterious effect on the joints and materials studied with hydrogen.
Lifetime	50 years [expected lifetime exposure to hydrogen]

Note – The Future Grid project is investigating the performance of welds in systems commonly used in upstream transmission pipework. Consideration should be given to avoid duplication of effort with this and any other projects the contractor is aware of. Though the working pressure of pipework downstream of the regulator in low and medium pressure systems is below 250mbar the contractor should also give consideration to use of a test pressure

that adequately reflects end use environments while maintaining a suitable rate of hydrogen diffusion into the sample.

Stage 3: Interpretation of Evidence for Standards

Following completion of the physical testing, the supplier will set out an approach for interpreting the evidence to support the relevant sections of standards. This should include a clear rationale for criteria to base the assessment of material suitability. The timelines of this specific piece of work mean that the evidence is unlikely to be ready for the initial publication of the BSI and IGEM standards outlined in the Background section as this is expected to be over the summer 2023. However, the supplier will be expected to make the material available in a form that can be easily incorporated into any future revision of these standards and DESNZ will support the supplier to liaise with IGEM and BSI appropriately to ensure this will be possible.

Deliverables and Stage Gate

During the research project, DESNZ will expect to review and comment on a range of outputs. Specific deliverables expected from the successful supplier are provided below. This also sets out expectations at a stage gate following submission of the Detailed Test Plan. The expected timetable for delivery can be found in section 0. Further information on the requirements for each deliverable can be found in Annex D

Deliverable 1: Project Inception Meeting

The supplier will be expected to attend a project inception meeting with DESNZ following successful contract award. The content of this meeting will include discussion on the proposed methodology, identification of key project team members delivering the work, outline the project plan and agree ways of working. Any significant issues or risks identified by assessors from the evaluation stage will be discussed with the supplier. The inception meeting will be held in person at DESNZ office in London.

Deliverable 2: Detailed Test Plan

The supplier will need to provide a Detailed Test Plan in accordance with the requirements set out in '5. Methodology – Stage 1: Detailed Test Plan'. This detailed test plan must be delivered a minimum of two weeks before the stage gate. The test plan will be shared by DESNZ with standard bodies, programme technical advisors, and HSE technical personnel due to be in attendance at Stage Gate 1. The test plan should include information on the format and structure of the expected output of results that can be shared with standard bodies, in order to ensure that outputs will be in a format that can support future standard production.

Stage Gate 1: DESNZ Project Review with Supplier

Following delivery of the Detailed Test Plan, DESNZ will hold a stage gate with the supplier. The test plan will be presented by the supplier to DESNZ, standard bodies, programme technical advisors, and HSE technical personnel and a review held with the supplier before agreeing to proceed to the Materials Test Programme. This will include an assessment of the deliverability of the project. Experimental work representing 50% project completion will be agreed with the supplier to define the required content and due date of the Interim Report and Presentation. The meeting will be hybrid with the supplier attending DESNZ office in London.

Deliverable 3: Interim Report and Presentation

The supplier will submit an Interim Report of the findings from the project at 50%

project completion point agreed in Stage Gate 1. This report is expected to follow the structure of the Final Report. The Interim Report will be sent for review with DESNZ, standard bodies, programme technical advisors, and HSE technical personnel two weeks in advance of an Interim Presentation from the suppliers. The presentation shall discuss the content of the report, an update on the project schedule to complete, and provide opportunity for Q&A. The presentation will be virtual.

Deliverable 4: Final Report and Dissemination

The supplier will submit a Final Report describing the work carried out in the project including an executive summary, detailed description of the test methodologies, experimental set-up, analysis of results, outline considerations for incorporating evidence into the relevant standards, conclusions and recommendations and technical appendices with supporting analysis and data as appropriate. All findings from the complete experimental work must be included. The contractor must make clear recommendations on the suitability of materials tested for use in the conditions stated in table 3 above. Where any further work is suggested as a result of the study the rationale must be clearly articulated and recommendations to achieve a clear result made.

The Final Report will be sent for review with DESNZ, standard bodies, programme technical advisors, and HSE technical personnel with a three week review period, following which a further iteration of changes may be required. An expected report structure and review process to follow for the report is outlined in Annex D.

A presentation of final results to industry and public sector stakeholders will also be undertaken by the contractor to assist with dissemination of the findings.

Other expectations

In addition to the above deliverables, suppliers will be required to attend online monthly progress meetings (up to 1 hour) with the DESNZ programme team in addition to a mid month touch base call with a DESNZ Project Monitoring Officer (up to 30 minutes) throughout the duration of the contract. Furthermore, the suppliers will be required to attend HSS4H Working Group meetings (90 minutes) occurring online on a 6-weekly basis, suppliers are suggested to price for attendance at six meetings. Third parties such as standards bodies and technical advisors may join calls from time to time.

Further information on the Working Group can be found in 'Working Arrangements' The progress meetings allow for regular updates between the contractor and DESNZ HSS4H Project Manager, either via telephone or virtual meeting. These should be held monthly at a minimum but more regular short meetings may be required at times, for example around milestone deliveries. The contractor will produce monthly reports containing a general overview of progress and KPIs including:

- General update supported by the relevant reports as required.

- Progress against the 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 DESNZ project team for additional input from other parts of the Hydrogen Skills and Standards for Heat programme.

Additional information on the monthly monitoring KPIs can be found in Annex E.

The contractor will also need to report on a short set of evaluation KPIs at project start and closure.

Evaluation of Tenders

Suppliers are invited to submit full tenders of no more than 25 A4 pages, excluding cover page, declarations, CVs, finance breakdown form, Key Work Packages document, Gantt chart and Risk Register. Any pages in excess of this limit will not be assessed. Tenders will be evaluated by a minimum of 3 assessors, which may include assessors external to DESNZ. DESNZ will select the successful supplier based on the highest total score achieved from the assessment criteria. There is an additional requirement to score at least 45 out of 75 for the quality criteria (excluding Criteria 2) There are 5 assessment criteria, some of which are broken into sub-criteria as shown in Table 4. Suppliers are strongly advised to structure their bids so that responses to individual sub-criterion can be easily identified.

Criteria 5, the interview, is only relevant for the top three suppliers and any other supplier within 5 marks of the third highest scoring supplier. If no other supplier is within 10 marks of the highest scoring supplier DESNZ reserves the right not to proceed with an interview process. An additional 30 marks are available through the interview which will be added to the suppliers’ score for the written bid submission to give a final result. Should two suppliers achieve the same total combined written and interview score the supplier with the higher interview score shall be awarded the contract. An independent DESNZ commercial expert will attend the interviews in an oversight capacity to ensure a fair and transparent process, they will not be evaluating responses.

- **Conflict of interest:** pass/fail. See page 14 of the ITT for further information

Table 4. Summary of assessment criteria

Criteria	Criteria weighting	Sub-criteria	Sub-criteria weighting
1. Methodology	35%	1a. Technical Approach	20%
		1b. Facilities and Equipment	15%
2. Cost and Value for Money	25%	2a. Price Relative to Lowest Tender	10%
		2b. Project Cost Breakdown Form	15%
3. Delivery	30%	3a. Delivery Plan and Risk Management	15%
		3b. Skills and Capabilities	10%
		3c. Previous Relevant Project Involvement	5%
4. Social Value	10%	4. Social Value	10%
5. Interview – top suppliers only	Additional 30%	5a. Presentation and related question	15%
		5b. Question	5%
		5c. Question	5%
		5d. Question	5%

Criterion 1: Methodology (35%)

This criterion will assess the proposed methodology to deliver the scope of work outlining the technical approach and providing details of the facilities and equipment that will be used to deliver the project.

Criterion 1a: Technical Approach (20%)

Guidance for criterion 1a:

- ❖ Detailed description of methodology and experimental design to address the aims and objectives (Section 3) and scope (Section 4) set out in this ITT. Any limitations of the proposed methodology should be discussed with justification for why the proposed method will produce robust evidence commensurate with underpinning standards.
- ❖ Test matrix to detail materials test programme indicating testing protocols, specimen types / configurations, number of specimens per material type and material properties characterised. Any deviation from the materials list provided in Table 1 should be robustly justified, including explaining how the aims and objectives of the programme will still be met.
- ❖ Explain how rigorous scientific data will be produced, including repeatability and reproducibility (Section 0), detailing quality procedures and standards followed.

Higher marks will be awarded to proposals that provide a technical approach that will clearly generate scientifically rigorous evidence relevant to in-service conditions that could be incorporated into standards.

Criterion 1b: Facilities and Equipment (15%)

Guidance for criterion 1b:

- ❖ Description of the equipment that will be used for specific work packages.
- ❖ Demonstration of suitable facilities (lab environmental control, specimen preparation and machining).
- ❖ Assurances on how equipment and facilities will be prioritised for delivery of this project.
- ❖ Assurance that appropriate health and safety controls are in place for working with hazardous materials including hydrogen and lead.

Higher marks will be awarded to proposals that outline facilities and equipment that clearly demonstrate how they will be used to deliver specific elements of the technical approach and

provide assurances of their utilisation for this project.

Criterion 2: Cost and Value for Money (25%)

This criterion will assess whether the proposed project costs represent good value for money, are accurate, realistic and justified for delivering the scope of work outlined in the proposal.

Criterion 2a: Price Relative to Lowest Tender (10%)

Guidance for criterion 2a:

- ❖ Price will be marked using a proportionate pricing approach, relative to the lowest total price submitted by all suppliers.
- ❖ There will be a maximum of 10 marks, with the lowest priced bid receiving the full 10 marks. All other bids will be marked relative to that as set out below:

Proportionate pricing example:

Supplier	Price	Calculation	Marks
1 (lowest bid)	£50,000	n/a	10
2	£60,000	$50/60 \times 10 =$	8.3
3	£75,000	$50/75 \times 10 =$	6.6

Criterion 2b: Project Cost Breakdown Form (15%)

Guidance for criterion 2b:

- ❖ Complete the Project Cost Breakdown Form
- ❖ Justify all project costs, explaining why costs are necessary and sufficient to deliver Work Packages.
- ❖ Explain how the supplier will manage unexpected costs

Higher marks will be awarded to proposals that complete all sections of the Project Cost Breakdown Form, demonstrate costs are accurate, realistic, justified, fair market value, and sufficiently disaggregate costs to enable us to judge this is the case.

Criterion 3: Delivery (3%)

This criterion will assess the effectiveness, feasibility and efficiency of the delivery plan and risk management approach, the skills and capabilities of the project team, and previous project experience relevant to the scope of work.

Criterion 3a: Delivery Plan and Risk Management (15%)

Guidance for criterion 3a:

- ❖ Key work packages document linked to personnel and in line with hours stated in project cost breakdown form
- ❖ Gantt chart identifying key milestones, interdependencies, and critical path items
- ❖ Project risk register
- ❖ Clear plans for procurement and commissioning of any long lead time items
- ❖ Realistic timeframes for reviewing and updating deliverables including the Interim and Final Reports.
- ❖ Clear description of plans and resourcing to engage with standards bodies and DESNZ working groups to ensure successful alignment of evidence with standards.

Higher marks will be awarded to proposals that provide a detailed project plan focused on achieving the project aims and objectives, building in sufficient time and resource for

stakeholder engagement activity with DESNZ and standards bodies and providing a high-quality risk register with mitigations and risk owners.

Criterion 3b: Skills and Capabilities (10%)

Guidance for criterion 3b:

- ❖ Organogram of the proposed project team including key links with external partner organisations.
- ❖ CVs of key individuals including in partner organisations. CVs should be no longer than 2 pages, anything in excess will not be assessed.
- ❖ Relevant skills and qualifications for materials testing, welding and brazing, hydrogen, and knowledge of domestic and non-domestic gas installations.
- ❖ Demonstrate commitment from any partner organisations or sub-contractors.
- ❖ Explain how the team have sufficient capacity to deliver the work packages assigned to them.

Higher marks will be awarded to proposals that provide an organogram outlining involvement and roles of key personnel, identify the individual skillsets directly mapped to project activities, with a combination of materials expertise and understanding of domestic and non-domestic gas installations and current work on the use of hydrogen for heat.

Criterion 3c: Previous Relevant Project Involvement (5%)

Guidance for criterion 3c:

- ❖ Description of up to three previous relevant projects including client, date, location, project value
- ❖ Directly link current project staff to the delivery of elements of previous projects
- ❖ Clearly articulate how the previous project involvement will contribute to the successful delivery of this contract.

Higher marks will be awarded to proposals that provide clear evidence of successful delivery of comparable previous projects related to the scope of work, and directly highlight the involvement of the project team with relevant demonstrated capability in the delivery of this project.

Criterion 4: Social Value (10%)

Guidance for criterion 4:

This criterion will be used to assess how well the proposed project could generate social value, including through supporting the UK's commitment to reach Net-Zero emissions by 2050. Further information and guidance on social value can be found on Gov.uk (In particular see MAC 3.4 in the [The Social Value Model](#) and for general guidance see the [policy note](#)).

- ❖ Bidders are required to provide a clear plan of how the delivery of the social value will be delivered and tracked over the duration of the project.
- ❖ Because of the size and duration of this contract the Contracting Authority considers that the main social value is likely to come from the dissemination of the work linked to MAC 3.4, bidders should state what additional work (outside the scope of this contract) will be undertaken to disseminate and build on the funded work. Examples might include (with DESNZ permission) incorporation into academic teaching modules, research papers to be published or workshops / seminars to be held with industry.

Criterion 5: Interview (additional 30%) – for the 3 top scoring bids only

Guidance for criterion 5:

Interviews will be conducted over Microsoft Teams in the W/C 10/07/23 and suppliers are advised to hold this time for project staff to be available for interviews. Supplier attendees at the interview must be staff who will work on the project only.

- The interview will be made up of a marked presentation and standardised headline questions which all suppliers will be asked. Evaluators may ask follow up probing questions to clarify information provided as part of the supplier's initial responses. Both the initial and clarifying responses will be taken into account by the evaluators when assigning a score.
- The presentation will focus on the proposed methodology, facilities and relevant previous projects, questions will examine how suppliers approach analysing results, technical details and deliverability. Further information will be made available to suppliers selected for interview.
- The interview will be technical and suppliers are suggested to make arrangements for key staff to be available W/C 10/07/23.

Scoring Method

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 for the written response, including price will be 100 with a further 30 marks available to any supplier proceeding to interview. Should any contractor score 1 in any of the criteria, they will be excluded from the tender competition.

To be successful, contractors will need to achieve a minimum Quality level that considers scores associated with all criterion outside of Criterion 2 (Cost and Value for Money). The minimum quality threshold will be 60% of the 75 marks (i.e. 45/75 marks) available from Criterion 1, 3 and 4.

Criteria 5, the interview, is only relevant for the top three suppliers and any other supplier within 5 marks of the third highest scoring supplier. If no other supplier is within 10 marks of the highest scoring supplier DESNZ reserves the right not to proceed with an interview process. An additional 30 marks are available through the interview which will be added to the suppliers' score for the written bid submission to give a final result. Should two suppliers achieve the same total combined written and interview score the supplier with the higher interview score shall be awarded the contract. An independent DESNZ commercial expert will attend the interviews in an oversight capacity to ensure a fair and transparent process, they will not be evaluating responses.

Each sub-criterion will be awarded a score of 1 to 5 based on the scoring guidance summarised below.

Score	Description
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1	Not satisfactory: There is little to no evidence that the question has been satisfactorily answered, with major omissions evident. The response does not give confidence that the project will result in a satisfactory outcome.
2	Partially satisfactory: The question has been satisfactorily answered in part however, notable omissions are evident and considerable clarification is needed. Supporting evidence is lacking and there is uncertainty whether the project will result in a satisfactory outcome.
3	Satisfactory: The question has been satisfactorily addressed, with reasonable evidence provided but some omissions may be evident and further clarification may be needed. There is a reasonable expectation that the answer provided can lead to satisfactory project outcomes.
4	Good: The question has been well addressed with only minor omissions or lack of clarity and good evidence provided. There is a good probability that the answer provided will lead to a strong project outcome.
5	Excellent: The question has been addressed clearly and concisely in all aspects with strong evidence provided. Very minor clarifications may be needed however, the answer provides confidence that a strong project outcome is likely to be achieved.

Structure of Tenders

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

Bid Clarification

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

Feedback

Feedback will be given in the unsuccessful letters or emails.

Timetable

Deliverable / Reporting Point	Indicative Date
Contract start	24 July 2023
Project Inception Meeting	28 July 2023
Detailed Test Plan	11 August 2023
Stage Gate	25 Aug 2023
Interim Report and Presentation	8 Jan 2024
Draft Final Report	15 April 2024
Final Report	13 May 2024
Dissemination	3 June 2024
DESNZ Sign-off	1 July 2024

Budget

The budget to deliver this tender is expected to be in the region of £140,000 to £200,000 (excluding VAT). Cost will be a criterion against which bids which will be assessed and marked (see criterion 2).

Contractors should provide a full and detailed breakdown of costs. This should include staff (and day rate) allocated to specific tasks. The cost breakdown will also be evaluated to check that the costs claimed are appropriate (see criterion 2).

Payments will be linked to delivery of key milestones. The indicative milestones and phasing of payments are as follows. This can be adjusted and agreed with the contractor based on the tender response/ details. Please advise in your tender response how this breakdown reflects your usual payment processes:

Ref.	Expected Milestone	Percentage Paid
1	DESNZ acceptance of test plan	15%
2	Interim presentation and report of progress (to be held and submitted once at least 50% of the work can be presented)	35%
3	DESNZ acceptance of the draft report once all work is completed	20%
4	Receipt of final report	20%
5	DESNZ acceptance of the final report and final results presentation	10%

In submitting full tenders, contractors confirm in writing that the price offered will be held for a minimum of 90 calendar days from the date of submission. Any payment conditions applicable to the prime contractor must also be replicated with sub-contractors.

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.

4. Working Arrangements

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

Approximately every 6 weeks there is a working group meeting held to assist with coordinating the development of standards and the evidence base. These meetings are typically held online and are 90 minutes. Typically updates are provided from each project and two to three priority topic areas are discussed. The contractor should expect to attend up to six working group meetings.

The contractor should make provision for DESNZ to attend two site visits, it is anticipated that these will be during the experimental phase of the project.

5. Data Protection

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

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

Annex 1: Processing, Personal Data and Data Subjects

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

DESNZ Data Protection Officer
Department for Energy Security & Net Zero
1 Victoria Street
London
SW1H 0ET

Email: dataprotection@beis.gov.uk

- (2) The contact details of the Contractor's Data Protection Officer (or if not applicable, details of the person responsible for data protection in the organisation) are: [To be completed by the Contractor]
- (3) The Contractor shall comply with any further written instructions with respect to processing by the Authority.
- (4) Any such further instructions shall be incorporated into this Annex 1.

Description	Details
Subject matter of the processing	<p>It is not expected that any processing of personal data will be required under this contract this includes collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction of data.</p> <p>The processing of names and business contact details of staff of both the Authority and the Contractor will be necessary to deliver the services exchanged during the course of the Contract, and to undertake contract and performance management.</p> <p>The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.</p>

Duration of the processing	Processing will take place from 31/07/2023 for the duration of the Contract plus a 12 month retention period. The Contract will end by 31/08/2024.
Nature and purposes of the processing	<p>The nature of the processing will include collection, recording, organisation, structuring, storage, retrieval, use, restriction and manual erasure or destruction of data etc.</p> <p>The nature of processing will include the storage and use of names and business contact details of staff of both the Authority and the Contractor as necessary to deliver the services and to undertake contract and performance management. The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.</p>
Type of Personal Data	Names, business telephone numbers and email addresses, office location and position of staff of both the Authority and the Contractor as necessary to deliver the services and to undertake contract and performance management. The Contract itself will include the names and business contact details of staff of both the Authority and the Contractor involved in managing the Contract.
Categories of Data Subject	Staff of the Authority and the Contractor, including where those employees are named within the Contract itself or involved within contract management.
Plan for return and destruction of the data once the processing is complete UNLESS requirement under European Union or European member state law to preserve that type of data	The Personal Data will be retained by the Contractor for a twelve month retention period, following which the Contractor will provide the Authority with a complete and uncorrupted version of the Personal Data in electronic form (or such other format as reasonably required by the Authority) and erase from any computers, storage devices and storage media that are to be retained by the Contractor after the expiry of the Contract and the Contractor retention period. The Contractor will certify to the Authority that it has completed such deletion. Where Personal Data is contained within the Contract documentation, this will be retained in line with the Department's privacy notice found within the Invitation to Tender.

6. Skills and experience

DESNZ would like you to demonstrate that you have the experience and capabilities to undertake the project. Your tender response should include a summary of each

proposed team member's experience and capabilities. Responses should include CVs for the proposed team as annexes (CVs should be limited to two single-sided pages each and are not included in the overall application page limit).

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 and those who will carry out quality assurance (QA).

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

The following skills are considered particularly important for this work:

- Technical experience within the gas industry.
- Previous practical research and development (R&D) in the gas industry.
- Excellent understanding of the principles of hydrogen interaction with materials.
- Proven track record for delivering experimental work in a controlled environment to provide data suitable for underpinning standards.
- Suitable facilities to conduct the research and experimental work required.
- Excellent track record of delivering work of this nature safely.
- Reporting writing and clear recommendations.

7. Consortium Bids

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

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

If a consortium is not proposing to form a corporate entity, full details of alternative proposed arrangements should be provided in the Annex. However, please note the Department reserves the right to require a successful consortium to form a single legal entity in accordance with Regulation 19 of the Public Contracts Regulations 2015

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.

Section 3

Further Information on Tender Procedure

Invitation to Tender for: Research into Suitability of Solder and Brazing Alloys for
Use in Low Pressure Hydrogen Gas Installations

Tender Reference Number: prj_1824

Deadline for Tender Responses: 2.00 pm 16/06/23

Section 3 – Further Information on Tender Procedure

A. Definitions

Please note that references to the "Department" throughout these documents mean The Secretary of State for Energy Security & Net Zero acting through his/her representatives in the Department for Energy Security & Net Zero.

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

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

B. Data security

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

Section 4 contains a "The General Data Protection Regulation Assurance Questionnaire for Contractors" (Declaration 5) to evidence the extent of readiness. The Authority may ask the Contractor to provide evidence to support the position stated in the questionnaire. The Authority may require the successful Contractor to increase their preparedness where the Authority is not satisfied that the Contractor will be in a position to meet its obligations under the terms and conditions. If the Contractor fails to satisfy the Authority that it will be in a

position to meet its obligations under the terms and conditions in the event that the Contractor is successful, the Authority reserves the right to exclude the bidder from this procurement.

C. Non-Collusion

No tender will be considered for acceptance if the contractor has indulged or attempted to indulge in any corrupt practice or canvassed the tender with an officer of the Department. Section 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 4

Declarations to be submitted by the Tenderer

Invitation to Tender for: Research into Suitability of Solder and Brazing Alloys for
Use in Low Pressure Hydrogen Gas Installations

Tender Reference Number: prj_1824

Deadline for Tender Responses: 2:00 pm 16/06/23

Section 4 – Declarations to be submitted by the Tenderer

Declaration 1: Statement of non-collusion

To: The Department for Energy Security & Net Zero

1. We recognise that the essence of competitive tendering is that the Department will receive a bona fide competitive tender from all persons tendering. We therefore certify that this is a bona fide tender and that we have not fixed or adjusted the amount of the tender or our rates and prices included therein by or in accordance with any agreement or arrangement with any other person.
2. We also certify that we have not done and undertake not to do at any time before the hour and date specified for the return of this tender any of the following acts:
- (a) communicate to any person other than the Department the amount or approximate amount of our proposed tender, except where the disclosure, in confidence, of the approximate amount is necessary to obtain any insurance premium quotation required for the preparation of the tender;
 - (b) enter into any agreement or arrangement with any other person that he shall refrain for submitting a tender or as to the amount included in the tender;
 - (c) offer or pay or give or agree to pay or give any sum of money, inducement or valuable consideration directly or indirectly to any person doing or having done or causing or having caused to be done, in relation to any other actual or proposed tender for the contract any act, omission or thing of the kind described above.
3. In this certificate, the word “person” shall include any person, body or association, corporate or unincorporated; and “any agreement or arrangement” includes any such information, formal or informal, whether legally binding or not.

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

.....
Print name

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

.....
Date

Declaration 2: Form of Tender

To: The Department for Energy Security & Net Zero

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

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

.....
Print name

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

.....
Date

Declaration 3: Conflict of Interest

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

Signed

Name

Position

OR

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

-
-
-

Where a potential conflict of interest has been declared for an individual or organisation within a consortia, 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.

-
-
-

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 SQ template includes a self-declaration, made by you (the potential supplier), that none of the grounds for exclusion apply⁵. If any of the grounds for exclusion do apply, there is an opportunity to explain any measures you have taken to demonstrate your reliability notwithstanding the existence of a ground for exclusion (we call this self-cleaning).

We require all the organisations that form part of your bidding group/consortium and each subcontractor that you are relying on to meet the selection criteria to provide a completed part 1 and part 2. This means that where you are joining a group of organisations, including joint ventures and partnerships, each organisation in that group must complete one of these self-declarations. Subcontractors that you rely on to meet the selection criteria, must also complete a self-declaration (although subcontractors 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.

Supplier Selection Questions: Part 3

The procurement documents 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 subcontractors, you should complete all of the selection questions on behalf of the group/consortium and/or any subcontractors.

If the relevant documentary evidence referred to in the Selection Questionnaire is not provided upon request and without delay we reserve the right to exclude you from the procurement process, including where an award decision has already been notified, and award to another supplier.

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.

⁵For the list of exclusions please see

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/551130/List_of_Mandatory_and_Discretionary_Exclusions.pdf

Research into Suitability of Solder and Brazing Alloys for Use in Low Pressure Hydrogen Gas Installations

REFERENCE NUMBER: prj_1824

PROCUREMENT PROCEDURE: 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 subcontractors, 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 member of your bidding group/consortium, and any subcontractor that is being relied on to meet the selection criteria, must complete and submit the self-declaration.
6. For the mandatory exclusion grounds only (Q2.1(a)), you must complete the declaration for all relevant persons and entities. There are two categories of persons and entities:
 - members of your administrative, management or supervisory board; secondly, entities and persons who have powers of representation, decision or control. You must decide, depending on the nature and structure of the entity or person who is bidding, which entities and persons this applies to in your particular circumstances. Clearly, members of your administrative, management or supervisory board should be easily identifiable and will cover company directors (or equivalent for other types of corporate entities) and members of an executive board.
 - the second category of those with powers of representation, decision or control, is likely to be more complicated. As an illustration, entities or persons with 25% or more shareholding (or equivalent for other types of corporate entities) are likely to have powers or representation, decision or control, although those with a lower shareholding may still have the relevant powers depending on their particular rights. Similarly, your ultimate parent company (or equivalent for other types of corporate entities) is likely to have powers of representation, decision or control. Depending on your particular structure, intermediate parent companies who do not have a direct shareholding, directors or members of an executive board of your immediate parent company (for example in the case of an SPV set up

specifically to bid for a particular contract), and holders of mortgages or liens may be covered. It isn't necessary to identify which entities and persons you think are covered but you must be satisfied that your declaration is made in respect of all of those that are covered.

7. *All subcontractors are required to complete their own part 1 and part 2⁶.*

8. *For answers to part 3 – If you are bidding on behalf of a group, for example, a consortium, or you intend to use subcontractors, you should complete all of the questions on behalf of the consortium and/ or any subcontractors, 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.

9. The Public Procurement Review Service allows government suppliers and potential government suppliers to raise concerns anonymously about unfair public sector procurement practice. The government can then investigate and resolve these concerns for contracting authorities as listed in [Schedule 1](#) of the Public Contracts Regulations 2015. To use the Public Procurement Review Service, [read the terms](#) and email publicprocurementreview@cabinetoffice.gov.uk or phone 0345 010 3503.

⁶See [PCR 2015 regulations 71 \(8\)-\(9\)](#)
(http://www.legislation.gov.uk/uksi/2015/102/pdfs/uksi_20150102_en.pdf)

Part 1: Your information and the bidding model.

You must answer all questions in parts 1 and 2. If you are the supplier, you must answer all questions in part 3 as well.

Bidders must ensure that every organisation on which they will rely to meet the selection criteria completes and submits their own answers and declaration for part 1 and 2.

Yes ☐

No ☐

N/A ☐

Section 1		Your information
Question number	Question	Response
1.1(a)	Name (if registered, please give the registered name)	
1.1(b) – (i)	Registered address (if applicable) or head office address	
1.1(b) – (ii)	Registered website address (if applicable)	
1.1(c)	Trading status a) - public limited company b) - private limited company c) - limited liability partnership d) - other partnership e) - sole trader f) - third sector g) - other (please specify your trading status)	
1.1(d)	Date of registration (if applicable) or date of formation.	
1.1(e)	Registration number (company, partnership, charity, etc if applicable).	
1.1(f)	Registered VAT number.	
1.1(g) - (i)	Are you registered with the appropriate professional or trade register(s) specified for this procurement in the Member State where your organisation is established?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
1.1(g) - (ii)	If you responded yes to 1.1(h) - (i), please provide the relevant details, including the name of the register and registration number(s), and if evidence of registration is available electronically, please provide - the website address, - issuing body - reference number.	
1.1(h) - (i)	For procurements for services only, is it a legal requirement in the country where you are established for you to:	Yes <input type="checkbox"/> No <input type="checkbox"/>

	<p>a) possess a particular authorisation, or</p> <p>b) be a member of a particular organisation,</p> <p>to provide the requirements specified in this procurement?</p>	
1.1(h) - (ii)	If you responded yes to 1.1(j) - (i), please provide additional details of what is required, confirmation that you have complied with this and, if evidence of compliance is available electronically, please give the website address, issuing body and reference number.	
1.1(i)	<p>Relevant classifications (state whether you fall within one of these, and if so which one)</p> <p>a) Voluntary Community Social Enterprise (VCSE).</p> <p>b) Sheltered Workshop.</p> <p>c) Public service mutual.</p>	
1.1(j)	Are you a Small, Medium or Micro Enterprise (SME) ⁷ ?	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>
1.1 (k)	<p>Details of Persons with Significant Control (PSC)⁸, where appropriate⁹:</p> <ul style="list-style-type: none"> - Name - Date of birth - Nationality - Country, state or part of the UK where the PSC usually lives - Service address - The date he or she became a PSC in relation to the company ; - 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 	

⁷See definition of SME https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en

⁸UK companies, Societates European (SEs) and limited liability partnerships (LLPs) are required to identify and record the people who own or control their company. Companies, SEs and LLPs are required to keep a PSC register, and must file the PSC information with the central public register at Companies House. See [PSC guidance](#). Overseas bidders are required to provide equivalent information.

⁹Only information that relates to the persons with powers of representation, decision or control within the meaning of regulation 57(2) can be considered in relation to the mandatory exclusion grounds and other details are requested for information only.

	(Please enter N/A if not applicable)	
1.1(l)	Details of your immediate parent company: - Full name of immediate parent company, - Registered or head office address, - Registration number (if applicable), - VAT number (if applicable), Please enter N/A if not applicable)	
1.1(m)	Details of ultimate parent company: - Full name of ultimate parent company, - Registered or head office address, - Registration number (if applicable), - VAT number (if applicable), (Please enter N/A if not applicable)	
Please note: A criminal record check for relevant convictions may be undertaken for the preferred supplier and all relevant persons and entities (as described above).		

Please provide the following information about your approach to this procurement:		
Section 1 (cont.)	Bidding model	
Question number	Question	Response
1.2	<p>Please indicate if you are bidding as a single supplier or as part of a group or consortium?</p> <p><i>If you are bidding as a single supplier please go to Q 1.3.</i></p> <p>If you are bidding as part of a group or consortium (including where you intend to establish a legal entity to deliver the contract, or you are a subcontractor), please tell us:</p> <p>a) The name of the group/consortium.</p> <p>b) The proposed structure of the group/consortium, including the legal structure where applicable.</p> <p>c) The name of the lead member in the group/consortium.</p> <p>d) Your role in the group/consortium (e.g. lead member, consortium member, subcontractor).</p> <p>e) If you are the lead member in the group/consortium, whether you are relying on other consortium members to meet the selection criteria (i.e. are</p>	

	you relying on other consortium members for economic and technical standing and/or technical and professional ability?) and, if so, which criteria you are relying on them for	
1.3	<p>If you are proposing to use subcontractors please provide the details for each subcontractor¹⁰.</p> <ul style="list-style-type: none"> - Name - Registration number - Registered or head office address, - Trading status <ul style="list-style-type: none"> a. Public limited company b. Private limited company c. Limited liability partnership d. Other partnership e. Sole trader f. Third sector g. Other (please specify your trading status) - Registered VAT number - SME (Yes/No) - The role each subcontractor will take in providing the works and /or supplies e.g. key deliverables - if known - The approximate % of contractual obligations assigned to each subcontractor, if known - Is the subcontractor being relied upon to meet the selection criteria (i.e. are you relying on the subcontractor for economic and technical standing and/or technical and professional ability?) and, if so, which criteria are you relying on them for? 	
1.4	<p>Lots</p> <p>Where applicable, please tell us which lot(s) you wish to bid for?</p>	<p>Answer</p> <p>N/A</p>

Part 2: Exclusion Grounds

¹⁰This applies to all supply chain members and/or subcontractors, where their identity is known at this stage, irrespective of whether you are relying on them to meet the selection criteria. Where a supply chain member and/or subcontractor has been identified in response to this question, any resulting subcontract entered into with that subcontractor for that part of the works, services or supplies identified in response to that question will not be subject to the requirement for contracts to advertise the subcontracting opportunity, as set out in PPN 01/18.

Please answer the following questions in full. Note that every organisation that forms part of your bidding group/consortium, as well as every organisation that is being relied on (including subcontractors being relied on) to meet the selection criteria must complete and submit responses to part 1 and the declarations in part 2.

Section 2		Grounds for mandatory exclusion
Question number	Question	Declaration
2.1 (a)	<p>Within the past five years, anywhere in the world, have you or any person who:</p> <ul style="list-style-type: none"> • is a member of the supplier's administrative, management or supervisory body or • has powers of representation, decision or control in the supplier¹¹, • been convicted of any of the offences within the summary below and listed in full on the webpage? 	
	Participation in a criminal organisation.	Yes <input type="checkbox"/> No <input type="checkbox"/>
	Corruption.	Yes <input type="checkbox"/> No <input type="checkbox"/>
	Terrorist offences or offences linked to terrorist activities.	Yes <input type="checkbox"/> No <input type="checkbox"/>
	Money laundering or terrorist financing.	Yes <input type="checkbox"/> No <input type="checkbox"/>
	Child labour and other forms of trafficking in human beings.	Yes <input type="checkbox"/> No <input type="checkbox"/>
	Any other offence within the meaning of Article 57(1) of the Directive as defined by the law of any jurisdiction <u>outside</u> England, Wales or Northern Ireland.	Yes <input type="checkbox"/> No <input type="checkbox"/>
	Any other offence within the meaning of Article 57(1) of the Directive created after 26th February 2015 in England, Wales or Northern Ireland.	Yes <input type="checkbox"/> No <input type="checkbox"/>
2.1(b)	<p>If you have answered yes to any part of question 2.1(a), please provide further details, including:</p> <ul style="list-style-type: none"> • date of conviction and the jurisdiction, • which of the grounds listed the conviction was for, • the reasons for conviction, • the identity of who has been 	

¹¹see Notes for Completion

	<p>convicted.</p> <p>If the relevant documentation is available electronically please provide:</p> <ul style="list-style-type: none"> • the web address, • issuing authority, • precise reference of the documents. 	
2.1(c)	<p>If you have answered yes to any part of the question above please explain what measures have been taken to demonstrate your reliability despite the existence of relevant grounds for exclusion. (Self cleaning).</p>	

Section 3	Mandatory and discretionary grounds relating to the payment of taxes and social security contributions	
<p>The detailed grounds for mandatory and discretionary exclusion of a supplier for non-payment of taxes and social security contributions, are set out on this webpage,¹² and should be referred to before completing these questions.</p>		
Question number	Question	Declaration
3.2(a)	<p>Please confirm that you have met all your obligations relating to the payment of taxes and social security contributions, both in the country in which you are established and in the UK.</p> <p>If documentation is available electronically please provide:</p> <ul style="list-style-type: none"> • the web address, • issuing authority, • precise reference of the documents 	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>
3.2(b)	<p>If you have answered no to 3.2(a) please provide further details including the following:</p> <ul style="list-style-type: none"> • Country concerned, • what is the amount concerned • how the breach was established, i.e. through a judicial or administrative decision or by other means. • if the breach has been established through a judicial or administrative decision please provide the date of the decision, • if the breach has been established by other means please specify the means. 	
3.3	<p>Please also confirm whether 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>	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>
<p>Please Note: We reserve our right to use our discretion to exclude your bid where we can demonstrate by any appropriate means that you are in breach of your obligations relating to the payment of taxes or social security contributions</p>		

¹²https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/551130/List_of_Mandatory_and_Discretionary_Exclusions.pdf

Section 4	Grounds for Discretionary Exclusion	
<p>The detailed grounds for discretionary exclusion of an organisation are set out on this webpage,¹³ and should be referred to before completing these questions.</p>		
Question number	Question	Declaration
4.1	Within the past three years, anywhere in the world, have any of the situations summarised below and listed in full on the webpage applied to you?	
4.1(a)	Breach of environmental obligations? To note that environmental law obligations include Health and Safety obligations. See webpage .	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.1(b)	Breach of social law obligations?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.1(c)	Breach of labour law obligations?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.1(d)	Bankruptcy or subject of insolvency?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.1(e)	Guilty of grave professional misconduct?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.1(f)	Distortion of competition?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.1(g)	Conflict of interest?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.1(h)	Been involved in the preparation of the procurement procedure?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.1(i)	Prior performance issues?	Yes <input type="checkbox"/> No <input type="checkbox"/>
4.1(j)	Do any of the following statements apply to you ? 4.1(j) - (i) You have been 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. 4.1(j) - (ii) You have withheld such information. 4.1(j) - (iii) You are not able, without delay, to submit documents if/when required.	Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/>

¹³ [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/551130/List of Mandatory and Discretionary Exclusions.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/551130/List_of_Mandatory_and_Discretionary_Exclusions.pdf)

4.1(j)-(iv)	<p>You have undertaken to unduly influence the decision-making process of the contracting authority to obtain confidential information that may confer upon you undue advantages in the procurement procedure, or to negligently provide misleading information that may have a material influence on decisions concerning exclusion, selection or award.</p>	<p>No <input type="checkbox"/></p> <p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>
4.2	<p>You are a relevant commercial organisation subject to Section 54 of the Modern Slavery Act 2015 if you carry on your business, or part of your business in the UK, supplying goods or services and you have an annual turnover of at least £36 million.</p> <p>If you are a relevant commercial organisation please -</p> <ul style="list-style-type: none"> • confirm that you have published a statement as required by Section 54 of the Modern Slavery Act. • confirm that the statement complies with the requirements of Section 54 and any guidance issued under Section 54. 	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>
4.3	<p>If your latest published statement is available electronically please provide:</p> <ul style="list-style-type: none"> • the web address, • precise reference of the documents. 	
4.4	<p>If you have answered YES to any of the questions in 4.1, or NO to question 4.2, please explain what measures have been taken to demonstrate your reliability despite the existence of a relevant ground for exclusion. (Self cleaning)</p>	

Part 3: Selection Questions		
Section 5	Economic and Financial Standing	
Question number	Question	Response
5.1	<p>If documentary evidence of economic and financial standing is available electronically (e.g. financial statements filed with Companies House), please provide:</p> <ul style="list-style-type: none"> • the web address • issuing authority • precise reference of the documents 	
5.2	<p>If documentary evidence of economic and financial standing is not available electronically, please provide a copy of your detailed accounts for the last two years (audited if required by law).</p> <p>Also, for any other person or entity on whom you are relying to meet the selection criteria relating to economic and financial standing, please provide a copy of their detailed accounts for the last two years (audited if required by law).</p>	
5.3	<p>If you are not able to provide a response to questions 5.1 or 5.2, please provide any of the following alternatives.</p>	
5.3(a)	<p>A statement of your annual turnover, Profit and Loss Account/Income statement, Balance Sheet/statement of Financial Position and Statement of Cash Flow for the most recent year(s) of trading and a bank letter outlining the current cash and credit facility position.</p>	
5.3(b)	<p>Alternative information to evidence economic and financial standing (e.g. forecast financial statements and a statement of funding provided by the owners and/or the bank, charity accruals accounts or an alternative means of demonstrating financial status).</p>	
5.4	<p>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.</p>	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>

Section 6	Technical and Professional Ability
Question number	Question
	Relevant experience and contract examples
6.1	<p>Please provide details of up to three contracts, to meet the technical and professional ability criteria set out in the procurement documents in any combination from either the public or private sectors; voluntary, charity or social enterprise (VCSE) that are relevant to our requirement. VCSEs may include samples of grant-funded work. Where this procurement is for supplies or services, the examples must be from the past three years. Where this procurement is for works, the examples 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>For consortium bids, or where you have indicated that you are relying on a subcontractor in order to meet the technical and professional ability, you should provide relevant examples of where the consortium/subcontractors have 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 members of the Special Purpose Vehicle or subcontractors (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 subcontractor(s) who will deliver the contract.</p> <p>For each contract please provide the following information</p> <p>If you cannot provide examples see question 7.2</p>

	Contract 1	Contract 2	Contract 3
Name of customer organisation who signed the contract			
Name of supplier who signed the contract			
Point of contact in the customer's organisation.			
Position in the customer's organisation			

E-mail address			
Description of contract.			
Contract Start date.			
Contract completion date.			
Estimated contract value			

6.2	If you cannot provide at least one example for question 6.1, in no more than 500 words please provide an explanation for this and how you meet the selection criteria relating to technical and professional ability e.g. your organisation is a new start-up or you have provided services in the past but not under a contract.
6.3	<p>Where you intend to subcontract a proportion of the contract, please demonstrate how you have previously maintained healthy supply chains with your subcontractor(s).</p> <p>The description 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 and whether you are a signatory of the UK Prompt Payment Code (or have given commitments under other equivalent schemes).</p>

Section 7	Additional Questions including Project Specific Questions	
Question number	Question	Response
7.1	<p>Insurance Please confirm whether you already have, or can commit to obtain, prior to the commencement of the contract, the levels of insurance cover indicated below:</p> <p>Employer's (Compulsory) Liability Insurance = £5m</p> <p>Public Liability Insurance = £5m</p> <p>Professional Indemnity Insurance = £2m</p> <p>*There is a legal requirement for certain employers to hold Employer's (Compulsory) Liability Insurance of £5 million as a minimum. See the Health and Safety Executive website for more information:</p>	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>

	http://www.hse.gov.uk/pubns/hse39.pdf	
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Contact details and declaration

I declare that to the best of my knowledge the answers submitted and information contained in this complete document are correct and accurate, including parts 1, 2 and part 3.

I declare that, upon request and without delay I will provide the certificates and/or documentary evidence referred to in this document except where this documentation can be accessed by the contracting authority via a national database free of charge or the contracting authority already possesses the documentation.

I understand that the information will be used in the selection process to assess my suitability 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.

Signature (electronic is acceptable)

Date

Contact details of those making the declaration

	Response
Contact name	
Name of organisation	
Role in organisation	
Phone number	
E-mail address	
Postal address	



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



GDPR
declaration.xls

Declaration 6: Code of Practice¹⁴

I confirm that I am aware of the requirements of the Department's Code of Practice¹⁵ 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 headings¹⁶:

- Responsibilities
- Competence
- Project planning
- Quality Control
- Handling of samples and materials
- Facilities and equipment

¹⁴ Please note that this declaration applies to individuals, single organisations and consortia.

¹⁵ The Code of Practice is attached to this ITT as Annex B

¹⁶ Please delete as appropriate



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- 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.)



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Annex A: Pricing Schedule

Annex A Pricing Schedule

Complete the separate project cost breakdown form embedded below and submit it alongside your tender.



HS&S Solders and
Brazes Project cost br



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Annex B: Code of Practice for Research

Annex B 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.



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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



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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 committees¹⁷ or the terms of project licences, if relevant.

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

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.

¹⁷ Please note ethical approval does not remove the responsibility of the individual for ethical behaviour.



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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 conducted¹⁸

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>

¹⁸ Please note that this also applies to projects being undertaken by consortia.



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Annex C: Mandatory Exclusion Grounds

Annex C 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



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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;



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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



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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



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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)



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- 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).



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**Annex D: Milestone Verification and Approval – Guidance for
Contractors**

**Annex D: Milestone Verification and Approval –
Guidance for Contractors**

See separate document embedded below “Milestone Verification and Approval –
Guidance for Contractors”



Milestone
Verification and Appr



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Annex E: Key Performance Indicators

Annex E: Key Performance Indicators

Key Performance Indicators (KPIs) will be used to align the Supplier's performance with the requirements of the contract. The KPIs detailed below will be used throughout the duration of the contract:

- Timeliness of delivery: Work delivered to timescale agreed with the Authority.
- Quality of delivery: Work delivered to the standard agreed with the Authority.
- Risk Register: Up-to-date risk register provided to the Authority.

Scoring methodology for KPIs:

Green score: If a green score has been awarded to a KPI then no further action is required from the Supplier, with the exception of continuing activities to maintain this score for the next reporting period.

Amber score: If an amber score is awarded, the Contractor should examine and implement measures to prevent this KPI being scored an amber or below in subsequent reporting periods. The Authority will not expect formal improvement measures at that stage. If a single KPI is awarded amber in two consecutive invoice periods, or twice in four consecutive invoicing periods then the Contractor should create a Remediation Plan at their own cost. This should detail how they will change their practices to prevent another amber score being awarded for this KPI. The timeline for producing this Remediation Plan should be agreed between the Authority and the Contractor and should only be implemented following approval by the Authority. The Authority reserves the right to terminate the Contract if a satisfactory Remediation Plan cannot be agreed.

Red score: If a red score is awarded, the Contractor should create a Remediation Plan at their own cost. This Remediation Plan should detail how they will change practices to prevent another red score being awarded for this KPI. As above, the Authority must agree to the timelines and contents of the Remediation Plan prior to implementation and reserves the right to terminate the Contract if a satisfactory plan cannot be agreed. If, following implementation of a Remediation Plan, the Contractor scores a red in the same KPI in any subsequent period throughout the duration of the Contract, the Authority reserves the right to terminate the Contract. The Authority also reserves the right to terminate this Contract based on a red score without requesting a Remediation Plan, if it is of the Authority's view that a material default has occurred. The Authority reserves the right to suspend, or partially terminate this



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Contract, while a Remediation Plan is being developed and agreed, where there is justification to do so.

KPIs must maintain a green rating to demonstrate that the service is being delivered to an adequate quality. The Authority reserves the right to amend the existing KPIs detailed above or add any new KPIs throughout delivery with agreement of the Supplier. A KPI to measure the Social Value element of the contract will be agreed within the first month of the contract. Any changes to the KPIs will be agreed with the Supplier and confirmed in writing.



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Schedule 4 – Contract Price

1. Calculation of the Contract Price

The Contract Price shall be calculated on the basis of the rates and prices set out in this Schedule. The Contract Price shall represent the sole remuneration due to the Contractor under this Contract.

2. Contract Price for Fixed Price/Lump Sum Contract

Ref.	Milestone	Due Date	Percentage Paid	Price
1	DESNZ acceptance of test plan	22/09/23	15%	£28,536
2	Interim presentation and report of progress (to be held and submitted once at least 50% of the work can be presented)	19/02/24	35%	£66,584
3	DESNZ acceptance of the draft report once all work is completed	27/05/24	20%	£38,048
4	Receipt of final report	17/06/24	20%	£38,048
5	DESNZ acceptance of the final report and final results presentation	05/08/24	10%	£19,024
Total				£190,240.00

3. General

Amounts are exclusive of VAT.