**Invitation to Tender for**

**Assessing the cost reduction potential and competitiveness of novel (next generation) UK carbon capture technology**

Tender Reference Number: **TRN 1222/09/2016**

Deadline for Tender Responses: **12pm 21st November 2016**

**Department for Business, Energy & Industrial Strategy**

Date: **18th October 2016**

The Department for Business, Energy & Industrial Strategy (“BEIS”) wishes to commission a project to undertake a technical study on Assessing the cost reduction potential and competitiveness of novel UK carbon capture technology.

Enclosed are the following sections:

* Section 1 (page 3) Instructions on tendering procedures
* Section 2 (page 8) Specification of requirements
* Section 3 (page 22) Further information on tendering procedure
* Section 4 (page 25) Declarations and information to be provided;

Statement of Non-Collusion

Form of Tender

Conflict of Interest

Questions for tenderers

Code of Practice for Research

* Annex A: Pricing schedule
* Annex B: Code of practice for research

Please register your interest in submitting a tender for this project by emailing **amy.cutter@beis.gov.uk**. 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 12pm 21st November 2016** clearly marked as “TENDER”.

I look forward to receiving your response.

Yours sincerely,

Amy Cutter

Email: [amy.cutter@beis.gov.uk](mailto:Brian.allison@beis.gov.uk)

**Section 1**

**Instructions and Information on Tendering Procedures**

Invitation to Tender for Assessing the cost reduction potential and competitiveness of novel UK carbon capture technology

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# Indicative Timetable

The anticipated timetable for this tender exercise is as follows. BEIS 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 | 18th October 2016 |
| Deadline for questions relating to the tender | 12pm 31st October 2016 |
| Responses to questions published | 2nd November 2016 |
| Deadline for receipt of tender | **12pm 21st November 2016** |
| Invite suppliers for bid clarification (if needed) | 25th November 2016 |
| All suppliers alerted of outcome | W/C 28th November 2016 |
| Contract award on signature by both parties | W/C 28th November 2016 |
|  | **W/C 28th November 2016** |
| Contract start date | **(Inception Meeting 1st December 2016)** |

**Note:** A contract award may take place sooner than listed above if the tender board conclude the evaluation process sooner than anticipated.

The contract is to be for a period of **10** months unless terminated or extended by the Department in accordance with the terms of the contract.

# Procedure for Submitting Tenders

The maximum page limit for tenders is **15 pages** (excluding declarations).

Please send **3 hard copies** of your tender (one of which must be signed) to **Amy Cutter,** Department for Business, Energy & Industrial Strategy, 3 Whitehall Place, London, SW1A 2AW **by 12pm 21st November** **2016** and electronic versions of your bids are to be emailed AFTER the deadline to Amy Cutter (amy.cutter@decc.gsi.gov.uk).

For questions regarding the procurement process please contact amy.cutter@beis.gov.uk

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.

BEIS 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. BEIS 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 **amy.cutter@beis.gov.uk**. All questions should be submitted by **12pm 31st October 2016** 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 **2nd November 2016** 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.

# Conflict of Interest

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

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

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

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

1. **During the bidding process, organisations may contact BEIS to discuss whether or not their proposed arrangement is likely to yield a conflict of interest.** Any responses given to individual organisations or consortia will be published on 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 (page 28) 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.

# 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.

# Terms and conditions applying to this Invitation to Tender

The Department’s Standard Terms and Conditions of Contract will apply to this contract. These can be downloaded from Contracts Finder.

# 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 the **7th November 2016**. 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.

# Checklist of Documents to be returned

* Proposal (maximum **15** pages)
* Annex A – pricing schedule
* Declaration 1: Statement of non-collusion
* Declaration 2: Form of Tender
* Declaration 3: Conflict of Interest
* Declaration 4: Questions for tenderers
* Declaration 5: Code of Practice

**Section 2**

**Specification of Requirements**

Invitation to Tender for Assessing the cost reduction potential and competitiveness of novel UK carbon capture technology

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# Introduction and summary of requirements

The Department of Business, Energy and Industrial Strategy (“DBEIS”), wishes to appoint a specialist supplier to investigate the techno-economics of novel UK carbon capture innovation.

The UK has supported the research and development of novel carbon capture innovation to the point where they can be assessed and benchmarked to the current state-of-the-art capture technology and other novel capture innovation being developed internationally.

BEIS requires evidence based analytical and technical studies on State of the Art and next generation capture technologies in order to inform future innovation spending programmes and to shape the future policy direction for capture technologies in the Power and Energy Intensive Industries (EIIs) respectively.

# Background

Government is clear that the costs of CCS must come down if it is to play a role in decarbonising the UK. Following the recent (12 September 2016) publication of the Lord Oxburgh report to Government, Government has confirmed that it will set out its future approach to CCS in due course.

To inform this work, engineering evidence of the potential of new technologies that are in the research phase and have not been implemented yet will be important. This project will do this in the specific area of carbon capture.

Innovation in these technologies would result in reduced costs and risks, through improvements in performance, materials, processes and capital and operating expenditure.

This will enable novel CCS innovation to be supported during the 2016-21 BEIS innovation programme and move closer towards commercialisation.

# Aims and Objectives

The aim is to study state of the art and novel (next generation) **carbon capture technologies only** (storage and transport is not within the scope of this work)

The project is aimed at studying UK led technologies, as they will be the focus of the future innovation programme and are opportunities for UK economic growth in this sector.

The objective of this study is to make an assessment of the cost reduction and competitiveness of novel UK capture technology using engineering and economics (called from here on as Techno-economics).

This will consist of the following:

* Technical due diligence (although not limited to performance, materials, processes and capital and operating expenditure etc.)
* Producing cost estimates for techno-economic analysis
* Benchmarking the capture technologies
* Undertaking detailed engineering studies of two best performing technologies applied to four industry applications (which may include: post-combustion carbon capture on gas fired power, carbon capture on steam methane reforming, carbon capture on gas processing and carbon capture on either Iron & Steel, chemicals, refining or cement.)

This will be used for BEIS Innovation Programme Planning, Government policy evidence and to provide assumption data for BEIS models.

The work packages and associated outputs are highlighted in section 4 (methodology) and section 5 (Outputs required) respectively.

# Methodology

The contractors will be invited to propose a methodology which would best meet the overall aims and objectives of this project for approval by BEIS.

The work can be divided into the following activities:

**Work Package 1 (WP1): Project management of the study:**

A plan should be provided to show how the work packages defined in section 4 (methodology) will be delivered which should highlight any risks & issues and provide mitigation plans.

The plan should also include a project organogram and should highlight the interaction between the project team, BEIS officials and wider stakeholders.

BEIS expects two project boards should be formed for the effective management and decision making for the project. This should include:

**Internal Project board:** This should be made up of the supplier project team and BEIS officials responsible for decision making, project governance, disclosure of confidential information and project escalations

**Advisory Project Board:** This should be made up of the (although not limited to) supplier project team, BEIS officials, Energy Technology Institute (ETI), Innovate UK, and the IEA Greenhouse Gas R&D programme (IEAGHG) and the Carbon Capture and Storage Association (CCSA). The advisory board are expected to provide input to the project via their technical, industrial and academic expertise. A minimum of 4 Advisory project board meetings should be planned (possibly more which should consider the use of conferencing media). No confidential information should be disclosed at the advisory board, unless an agreement can be arranged with the owner.

**WP2: Undertake a Literature review and produce a concise interim report**

This is work package could be undertaken as a parallel activity with WP1 and BEIS expects the literature review to be undertaken at pace as the (appointed) supplier should have expertise in this subject area and familiar with the sources of evidence available.

BEIS expects that previous IEAGHG reports, especially “2014/TR4 Assessment of Emerging CO2 Capture Technologies and Their Potential to Reduce Costs”, will be the prime information source.

WP2 should refresh any new information on these technologies and consider the merits and challenges of each the selected technologies and highlight the applicability the Energy Intensive and Power industries respectively.

**WP3: Agree methodology for benchmarking of State of the Art and Next Generation Capture technologies and metric data with BEIS.**

WP3 will produce techno-economic analysis for state-of-the-art and novel capture being developed internationally to allow UK technology to be benchmarked against the technologies assessed in WP2.

**Benchmarking data:** It is anticipated that the benchmarking will be a similar approach as previous IEAGHG studies. Where possible this will make use of existing IEAGHG studies, but modified for a UK context (characteristic UK site and costing). The following state-of-the-art scenarios will be benchmarked against the current best available technologies such as Cansolv (to be agreed at project inception):

* Post-combustion capture for power generation on gas and coal;
* Pre-combustion capture for power generation on gas and coal;
* Oxy-fire capture for power generation on coal;

**Metrics data (quantitative and qualitative data):** A matrix spreadsheet (technology list) should be developed listing all the promising technologies along with the associated metric data. The contractor should provide a comprehensive metric list which agreed with BEIS at project inception.

A short description of each metric should be provided in order to define what they are and how they will be calculated and used.

Metrics may include: (although not limited to)[[1]](#footnote-1)

1. Technology description;
2. £/tCO2;
3. tCO2/y captured;
4. tCO2 avoided;
5. CAPEX;
6. OPEX;
7. Equipment life-time;
8. Levelised Costs Of Energy (LCOE) and cost reductions over time;
9. Levelised price of clean electricity (£/MWh);
10. What are their current Technology Readiness Levels (TRLs?)
11. What are their TRL levels after a hypothetical upscale? i.e. (The assessed TRL level is at W, you would need to undertake X to achieved a TRL Y)
12. What would be the best way to upscale the technology?
13. What are the barriers to implementation and innovation?
14. What is the extent of deployment of each technology in each industry sector both inside and outside the UK?

**WP4:** **Interim** **Report on the opportunities and barriers of next generation capture technology**

This work package is not prescriptive in terms of how it should be undertaken although BEIS expects a measure of due diligence undertaken with technology developers and other stakeholders to understand the merits and limitations of the next generation capture technologies. Concise research and application of sector and technical expertise should also be exercised to produce WP4.

The plan for undertaking this need to be produced by the specialist supplier and agreed by the steering groups. Topics may include (although not limited to) the feasibility to deploy at scale within X years, technical/engineering characteristics, industry applications, barriers to upscale, economics and understanding what the UK can learn from other players internationally.

**WP5: Interim Report on the stakeholders views on the applicability of the various technology approaches to Carbon emitting industries.**

WP4 should then be tested with stakeholders (confidential data should be anonymised) which should include how the state of the art and next generation technologies could be applied to the power and Energy Intensive Industries (respectively)

The contractor will also need to develop scenarios for the hypothetical technology deployment for agreement with BEIS. The industry applications may include power generation (Fossil fuel, biomass, hydrogen, other renewables) Iron and Steel, Chemicals, Cement and Refineries.

The supplier is expected to undertake a **minimum of 2** stakeholder workshops and should consider the use of conferencing media at the workshops at the event and to follow up off-line.

BEIS anticipates that the matrix spreadsheet continues to be updated in the light of new information and an interim report produced.

**WP6: Provide a prioritised list of next generation capture technologies and undertake detailed engineering design and analysis.**

An analysis should be undertaken of all the previous deliverables to date in order to recommend a prioritised list of next generation of capture technologies.

The intention is to select a minimum of two best performing technologies from the prioritised list. A prioritised list is needed because other funding streams may be available from other areas of BEIS which could utilise the evidence for further enabling projects and business cases.

This further study will involve detailed engineering design, analysis and economics with up to four applications. These will be selected by agreement with the contractor but are likely to include:

* 1. Post-combustion carbon capture on gas-fired power;
  2. Carbon capture on steam methane reforming;
  3. Carbon capture on gas processing such as natural gas sweetening;
  4. Carbon capture on Iron & Steel, chemicals, Refining or cement

An assessment of what further innovation is also needed in order to overcome the practical applications/limitations of these Carbon Capture techniques.

BEIS anticipates that the matrix spreadsheet continues to be updated in the light of new information and an interim report produced.

**WP7: Final reports**

Two final reports will be needed, one of which will be published on the BEIS website (without commercially confidential data) and the other containing commercial confidential data for the department use only.

Note: The interim reports/spreadsheets should be included in the final reports as annexes.

1. **Outputs required**

|  |  |  |
| --- | --- | --- |
| **Work Package** | **Outputs** | **Description** |
| WP1 | Project Plan | i.e. Gantt chart, milestones etc. on how to undertake the project. |
| Risk Register | Continual assessment/review of the project risks and how to mitigate |
| Organogram | People relationships i.e. project team, sponsor(s), Internal & advisory boards and other stakeholders and how they fit together. |
| Internal and advisory project board planning | Analysis of which organisations and/or staff this should be included (to be agreed by BEIS) and should be programmed into the overall plan. |
| WP2 | Interim Report | Highlight and refresh any new information on these technologies and consider the merits and challenges of each the selected technologies and highlight the applicability the Energy Intensive and Power industries respectively. |
| WP3 | Interim Report | 1. Benchmarking methodology and data. (similar to IEAGHG) The methodology can be supplemented by flow diagrams and other suitable models. It may include an options analysis and preferred option (if relevant)      1. The interim report should include decisions made on the metrics to be used, how the data will be obtained & calculated and assumptions. |
| Matrix spreadsheet | To include agreed, Capture Technologies, metrics and benchmarking data. |
| WP4 | Interim Report | Produce a report analysing the opportunities and barriers of the next generation capture technology. Analysis criteria needs to be developed by the supplier although it may include: technical, engineering, industry applicability and economic criteria and analysis of the matrix spreadsheet. |
| Revised Matrix spreadsheet | Revised data and include and quantitative and qualitative from the interim report. |
| WP5 | Interim report | Develop applicability scenarios in the power and EIIs and map onto the next generation technology list  Test applicability with stakeholders.  Produce a report concluding from the stakeholder engagement. |
| Revised Matrix Spreadsheet | Revised data and include applicability scenarios and associated data. |
| WP6 | Interim Report | Produce a list of prioritised technologies from the long list and recommend the top 2 best performing technologies for further study. Options analysis should be undertaken.  Undertake detailed engineering design and analysis of the top 2 best performing technologies in four industry applications (Top 2 needs to be agreed) and likely to include:   1. Post-combustion carbon capture on gas-fired power; 2. Carbon capture on steam methane reforming; 3. Carbon capture on gas processing such as natural gas sweetening; 4. Carbon capture on Iron & Steel, chemicals, Refining or cement   Innovation assessment should be undertaken to overcome practical limitations/applications. |
| Revised Matrix Spreadsheet | Revised data and include quantitative and qualitative data from the detailed engineering study of the two best performing technologies applied to four scenarios. |
| WP7 | Final Reports | 1. Produce a publishable final report which should omit any commercially confidential data      1. Produce a final report suitable for internal use and should include commercially confidential data.   Note: Both reports should include all other work package deliverables as Annexes. |

# Ownership and Publication

BEIS will own any Intellectual property rights to utilise the data. The department anticipates that the data will be used to inform policy shaping, innovation programme development and assumptions in the departments techno-economic modelling.

The publically available copy of the report will be published in similar fashion as other BEIS publications, dependant on forthcoming Ministerial positions on publication and transparency.

BEIS will produce two final reports: (i) To a publishable quality which should omit commercially sensitive data (ii) A final report for internal use which should contain commercially sensitive data.

Both reports should have all the previous work package deliverables as annexes in the final reports.

The publically available copy of the report will be published in similar fashion as other BEIS publications, dependant on forthcoming Ministerial positions on publication and transparency.

# Quality Assurance

# The project will have an internal steering group composed of BIES officials and contractor which will be responsible for the overall quality of the outputs.

# Day to day management QA management will be undertaken by the BIES engineering group.

# The project will also have an advisory board which may consist of the ETI, IEAGHG, CCSA and Innovate UK for further Quality Assurance.

# Timetable

The project is expected to be launched by **November 2016** and expected to be completed by **September 2017**.

BEIS may require some draft information by **January/February 2017** and this will be discussed during the project inception meeting.

As part of the tender response the contractor should provide a detailed project plan as defined in WP1 and presented as a draft at the inception meeting; although an indicative programme is provided in section 13.

# Challenges

Information on capture technology is company confidential and hence technology developers will be reluctant to share the information. Therefore the major constraint on the research is the engagement of technology developers and how proprietary knowledge is protected.

* The expert supplier should already know the major players in the industry and should be more than familiar with association from technology developers.
* There may be resistance from technology developers sharing commercially confidential data. To mitigate against this, two reports will be produced, one of which will be published on the BIES website and the other for internal use.
* This study is not going to be able to fully assess the applicability of all next-generation carbon capture technologies in all industries as the engineering design is too complex. This will be mitigated by doing a limited number of studies to understand the effect of technical decisions made (2 technologies in four industries including power).
* There may be limited quantitative data on the technologies that are at an early stage of development. However it is part of the study to identify the available evidence and associated evidence gaps. The budget is available from the innovation programme to take on further enabling work to reduce the risk of insufficient information (if this is found).

As part of good project management practice the specialist supplier should manage and maintain a comprehensive risk register as well as other project management documents.

# Working Arrangements

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

# Skills and experience

BEIS 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 members experience and capabilities.

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.

# Consortium Bids

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

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

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

The Department recognises that arrangements in relation to consortia may (within limits) be subject to future change. Potential Providers should therefore respond in the light of the arrangements as currently envisaged. Potential Providers are reminded that any future proposed change in relation to consortia must be notified to the Department so that it can make a further assessment by applying the selection criteria to the new information provided.

# Budget

**The budget for this contract is £150,000 (excluding VAT) and is a fixed price**

**Contract.**

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

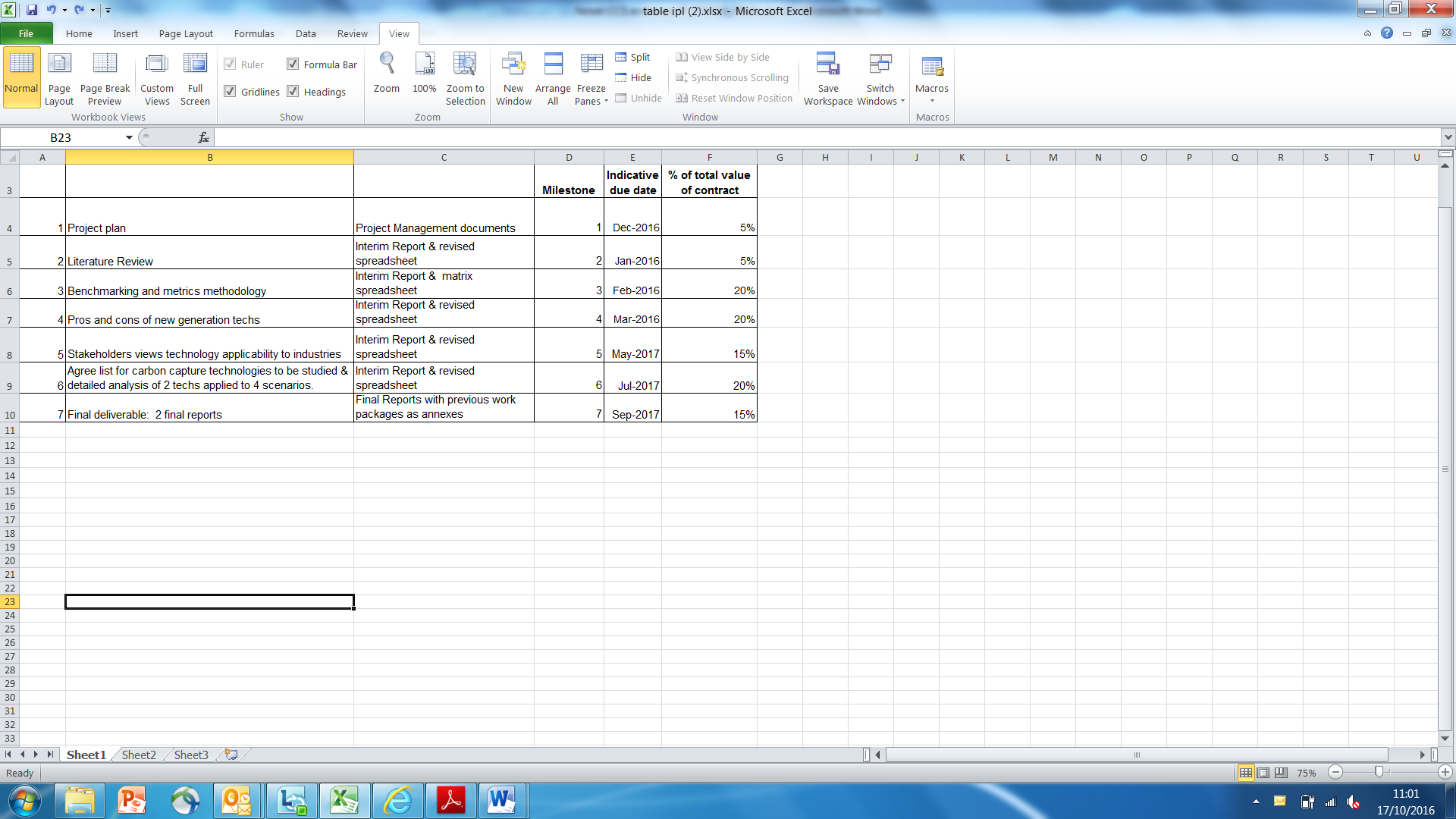
Cost will be a criterion against which bids which will be assessed.

Payments will be linked to delivery of key milestones. The indicative milestones and phasing of payments is as follows. Please advise in your tender response how this breakdown reflects your usual payment processes:

In submitting full tenders, contractors confirm in writing that the price offered will be held for a minimum of 60 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.

An indicative timetable is provided below:



# Evaluation of Tenders

Contractors are invited to submit full tenders of no more than **15 pages**, excluding declarations. Tenders will be evaluated by at least three BEIS staff.

BEIS will select the bidder that scores highest against the criteria and weighting listed below:

* **Conflict of interest:** pass/fail. See page 5 of the ITT for further information

The evaluation criterion is provided below:

|  |  |
| --- | --- |
| **Evaluation Criteria** | Weighting |
| **1. Technical approach** | 50% |
| 1A – Methodological approach & technical expertise with stated objectives (WP 2-7) including experience (or equivalent) of State of the Art and Next Generation capture technologies | 40% |
| 1B – Project management (WP1) and quality assurance approach | 10% |
| **2. Project team capability** | 40% |
| 2A – Technical capability and experience | 30% |
| 2B – Contacts and links within the Carbon Capture community demonstrating ability to engage and manage stakeholders. | 10% |
| **3. Cost effectiveness (Price)** | 10% |
| **Total** | 100% |

**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 will be 100. Should any contractor score 1 in any of the criteria, they will be excluded from the tender competition.

|  |  |
| --- | --- |
| **Score** | **Description** |
| 1 | Not Satisfactory: Proposal contains significant shortcomings and does not meet the required standard |
| 2 | Partially Satisfactory: Proposal partially meets the required standard, with one or more moderate weaknesses or gaps |
| 3 | Satisfactory: Proposal mostly meets the required standard, with one or more minor weaknesses or gaps. |
| 4 | Good: Proposal meets the required standard, with moderate levels of assurance |
| 5 | Excellent: Proposal fully meets the required standard with high levels of assurance |

**Marking proportionate to the lowest price**

Price will be scored as set out below. There will be a maximum of e.g. 10 marks:

The lowest priced bid will receive the full 10 marks, all other bids will then be marked as set out below.

Proportionate Pricing scoring example

If 10% = 10 marks

|  |  |  |
| --- | --- | --- |
| Supplier | Price | Marks |
| 1 (lowest bid) | £100,000 | 10 |
| 2 | £125,000 | 100/125 \* 10 = 8 |
| 3 | £150,000 | 100/150 \* 10 = 6.7 |

**Structure of Tenders**

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

**Bid Clarification**

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

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

**Feedback**

Feedback will be given in the unsuccessful letters or emails.

**Section 3**

**Further Information on Tender Procedure**

Invitation to Tender for Assessing the cost reduction potential and competitiveness of novel UK carbon capture technology

Tender Reference Number: **TRN 1222/09/2016**

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# Definitions

Please note that references to the "Department" throughout these documents mean The Secretary of State for Energy and Climate Change[[2]](#footnote-2) acting through his/her representatives in the Department for Energy & Industrial Strategy.

The Freedom of Information Act 2000 (“FOIA”) and the Environmental Information Regulations 2004 (“EIR”) apply to the Department. You should be aware of the Department’s obligations and responsibilities under FOIA or EIR to disclose, on written request, recorded information held by the Department. Information provided in connection with this procurement exercise, or with any contract that may be awarded as a result of this exercise, may therefore have to be disclosed by the Department in response to such a request, unless the Department decides that one of the statutory exemptions under the FOIA or the exceptions in the EIR applies. If you wish to designate information supplied as part of this response as confidential, of 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.

# Data security

The successful tenderer must comply with the Data Protection Act (DPA) 1998 and any information collected, processed and transferred on behalf of *The Department*, and in particular personal information, must be held and transferred securely**. Contractors must provide assurances of compliance with the DPA and set out in their proposals details of the practices and systems they have in place for handling data securely including transmission between the field and head office and then to *BEIS***. Contractors will have responsibility for ensuring that they and any subcontractor who processes or handles information on behalf of *The Department* is conducted securely. The sorts of issues which must be addressed satisfactorily and described in contractors’ submissions include:

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

# 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 BEIS. 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 Assessing the cost reduction potential and competitiveness of novel UK carbon capture technology

Tender Reference Number: **TRN 1222/09/2016**

Deadline for Tender Responses: **12pm 21st November 2016**

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# Declaration 1: Statement of non-collusion

To: The Department for Business, Energy & Industrial Strategy

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

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

1. 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;
2. 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;
3. offer or pay or give or agree to pay or give any sum of money, inducement or valuable consideration directly or indirectly to any person doing or having done or causing or having caused to be done, in relation to any other actual or proposed tender for the contract any act, omission or thing of the kind described above.

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

……………………………………………………………………………….….

Signature (duly authorised on behalf of the tenderer)

……….………………………………………………………………………….

Print name

…………………………………………………………….…………………….

On behalf of (organisation name)

…………………………………………………………………….…………….

Date

# Declaration 2: Form of Tender

To: The Department for Business, Energy & Industrial Strategy

1. Having considered the invitation to tender and all accompanying documents

(including without limitation, the terms and conditions of contract and the Specification) we confirm that we are fully satisfied as to our experience and ability to deliver the goods/services in all respects in accordance with the requirements of this invitation to tender.

2. We hereby tender and undertake to provide and complete all the services required to be performed in accordance with the terms and conditions of contract and the Specification for the amount set out in the Pricing Schedule.

3. We agree that any insertion by us of any conditions qualifying this tender or any unauthorised alteration to any of the terms and conditions of contract made by us may result in the rejection of this tender.

4. We agree that this tender shall remain open to be accepted by the Department for 8 weeks from the date below.

5. We understand that if we are a subsidiary (within the meaning of section 1159 of (and schedule 6 to) the Companies Act 2006) if requested by the Department we may be required to secure a Deed of Guarantee in favour of the Department from our holding company or ultimate holding company, as determined by the Department in their discretion.

6. We understand that the Department is not bound to accept the lowest or any tender it may receive.

7. We certify that this is a bona fide tender.

…………………………………………………………………………........

Signature (duly authorised on behalf of the tenderer)

…………………………………………………………………………………

Print name

………………………………………………………………………….

On behalf of (organisation name)

………………………………………………………………………….

Date

# Declaration 3: Conflict of Interest

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

Signed …………………………………….

Name …………………………………….

Position …………………………………….

***OR***

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

* X
* X

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

* X
* X

Signed …………………………………….

Name …………………………………….

Position …………………………………….

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

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

* A professional or personal interest in the outcome of this research
* For evaluation projects, a close working, governance, or commercial involvement in the project under evaluation
* Current or past employment with relevant organisations
* Payment (cash or other) received or likely to be received from relevant organisations for goods or services provided (Including consulting or advisory fees)
* Gifts or entertainment received from relevant organisations
* Shareholdings (excluding those within unit trusts, pension funds etc) in relevant organisations
* Close personal relationship or friendships with individuals employed by or otherwise closely associated with relevant organisations

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

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

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

# Declaration 4: Questions for tenderers

In some circumstances the Department is required by law to exclude you from participating further in a procurement. If you cannot answer ‘no’ to every question in this section it is very unlikely that your application will be accepted, and you should contact us for advice before completing this form.

Please state ‘Yes’ or ‘No’ to each question.

|  |  |
| --- | --- |
| **Has your organisation or any directors or partner or any other person who has powers of representation, decision or control been convicted of any of the following offences?** | **Answer** |
| 1. conspiracy within the meaning of [section 1](http://www.lexisnexis.com:80/uk/legal/search/runRemoteLink.do?langcountry=GB&linkInfo=F%23GB%23UK_ACTS%23section%251%25sect%251%25num%251977_45a%25&risb=21_T12077301839&bct=A&service=citation&A=0.2630909849289865) 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; |  |
| 1. corruption within the meaning of [section 1](http://www.lexisnexis.com:80/uk/legal/search/runRemoteLink.do?langcountry=GB&linkInfo=F%23GB%23UK_ACTS%23section%251%25sect%251%25num%251889_69a%25&risb=21_T12077301839&bct=A&service=citation&A=0.774070316337072)(2) of the Public Bodies Corrupt Practices Act 1889 or [section 1](http://www.lexisnexis.com:80/uk/legal/search/runRemoteLink.do?langcountry=GB&linkInfo=F%23GB%23UK_ACTS%23section%251%25sect%251%25num%251906_34a%25&risb=21_T12077301839&bct=A&service=citation&A=0.24433813672949012) of the Prevention of Corruption Act 1906; where the offence relates to active corruption; |  |
| 1. the offence of bribery, where the offence relates to active corruption; |  |
| 1. bribery within the meaning of section 1 or 6 of the Bribery Act 2010; |  |
| 1. fraud, 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, within the meaning of: |  |
| 1. the offence of cheating the Revenue; |  |
| 1. the offence of conspiracy to defraud; |  |
| 1. fraud or theft within the meaning of the [Theft Act 1968](http://www.lexisnexis.com:80/uk/legal/search/runRemoteLink.do?langcountry=GB&linkInfo=F%23GB%23UK_ACTS%23num%251968_60a_Title%25&risb=21_T12077301839&bct=A&service=citation&A=0.35766330215827113), the Theft Act (Northern Ireland) 1969, the Theft Act 1978 or the Theft (Northern Ireland) Order 1978; |  |
| 1. fraudulent trading within the meaning of [section 458](http://www.lexisnexis.com:80/uk/legal/search/runRemoteLink.do?langcountry=GB&linkInfo=F%23GB%23UK_ACTS%23section%25458%25sect%25458%25num%251985_6a%25&risb=21_T12077301839&bct=A&service=citation&A=0.5972529271560607) of the Companies Act 1985, article 451 of the Companies (Northern Ireland) Order 1986 or section 993 of the Companies Act 2006; |  |
| 1. fraudulent evasion within the meaning of section 170 of the [Customs and Excise Management Act 1979](http://www.lexisnexis.com:80/uk/legal/search/runRemoteLink.do?langcountry=GB&linkInfo=F%23GB%23UK_ACTS%23num%251979_2a_Title%25&risb=21_T12077301839&bct=A&service=citation&A=0.22540552446837803)  [or section 72 of the Value Added Tax Act 1994](http://www.lexisnexis.com:80/uk/legal/search/runRemoteLink.do?langcountry=GB&linkInfo=F%23GB%23UK_ACTS%23num%251994_23a_Title%25&risb=21_T12077301839&bct=A&service=citation&A=0.9838628229561671); |  |
| 1. an offence in connection with taxation in the European Union within the meaning of section 71 of the Criminal Justice Act 1993; |  |
| 1. destroying, defacing or concealing of documents or procuring the execution of a valuable security within the meaning of [section 20](http://www.lexisnexis.com:80/uk/legal/search/runRemoteLink.do?langcountry=GB&linkInfo=F%23GB%23UK_ACTS%23section%2520%25sect%2520%25num%251968_60a%25&risb=21_T12077301839&bct=A&service=citation&A=0.5036676212568264) of the Theft Act 1968 or section 19 of the Theft Act (Northern Ireland) 1969; |  |
| 1. fraud within the meaning of section 2, 3 or 4 of the Fraud Act 2006; or |  |
| 1. making, adapting, supplying or offering to supply articles for use in frauds within the meaning of section 7 of the Fraud Act 2006; |  |
| 1. money laundering within the meaning of section 340(11) of the Proceeds of Crime Act 2002; |  |
| 1. 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; or |  |
| 1. 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; or |  |
| 1. any other offence within the meaning of Article 45(1) of Directive 2004/18/EC as defined by the national law of any relevant State. |  |

# Declaration 5: Code of Practice[[3]](#footnote-3)

I confirm that I am aware of the requirements of the BEIS Code of Practice[[4]](#footnote-4) 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 headings[[5]](#footnote-5):

Responsibilities

Competence

Project planning

Quality Control

Handling of samples and materials

Facilities and equipment

Documentation of procedures and methods

Research/work records

I understand that BEIS 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 BEIS.

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

**Annex A: Pricing Schedule**

**Part A – Staff/project team charges**

|  |  |
| --- | --- |
| Set up Costs – please specify |  |
|  |
| Expenses |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **\*Grade/level of staff** | **Daily rate**  **(ex VAT)** | **No. days offered over course of contract** | **Tasks to be undertaken on this project** | **Total price offered per staff member** |
|  | £ |  |  | £ |
|  | £ |  |  | £ |
|  | £ |  |  | £ |
|  | £ |  |  | £ |
|  | £ |  |  | £ |
| **Sub-total** | | |  | **£** |

[\*Suppliers should also include sub-contractors]

**Part B – Non-staff/project team charges**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **No. of items** | **Price per item**  **(ex VAT)** | **Total price per offered** |
|  |  | £ | £ |
|  |  | £ | £ |
|  |  | £ | £ |
|  |  | £ | £ |
|  |  | £ | £ |
| **Sub-total** | | | **£** |

**Part C – Full price offered**

|  |  |
| --- | --- |
| **Sub-total (Part A + Part B)** | **£** |
| **VAT** | **£** |
| **TOTAL (Sub-total + VAT)** | **£** |

**Annex B: Code of Practice for Research**

**CODE OF PRACTICE FOR RESEARCH**

***Issued by the Department for Energy & 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 BEIS. 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 BEIS 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 BEIS any clauses in the Code that they consider inappropriate or unnecessary in the context of the proposed research project. The Code, and records of the discussions if held, will become part of the Terms and Conditions under which the research is funded.

Additionally, BEIS 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, BEIS can require contractors to conduct planned internal audits although BEIS reserve the right to obtain evidence that a funded project is carried out to the required standard. BEIS may also conduct an audit of a Contractor’s research system if deemed necessary.

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

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

***SPECIFIC REQUIREMENTS IN THE CODE OF PRACTICE***

***1. Responsibilities***

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

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

***2. Competence***

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

***3. Project planning***

An appropriate level of risk assessment must be conducted to demonstrate awareness of the key factors that will influence the success of the project and the ability to meet its objectives. There must be a written project plan showing that these factors (including research design, statistical methods and others) have been addressed. Projects must be ethical and project plans must be agreed in collaboration with BEIS, taking account of the requirements of ethical committees[[6]](#footnote-6) or the terms of project licences, if relevant.

Significant amendments to the plan or milestones must be recorded and approved by BEIS 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 BEIS, and subject to senior approval in BEIS, where appropriate. Errors identified after publication must be notified to BEIS 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 BEIS. 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 trial linking secondary processed information to primary data.

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

***7. Research/work records***

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

The project leader is accountable for the validity of the wok and responsible for ensuring that regular reviews of the records of each researcher are conducted[[7]](#footnote-7)

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 BEIS

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

1. This should be in keeping with DECC’s non-renewable cost of electricity generation reporting. (expected to be published shortly) [↑](#footnote-ref-1)
2. The Invitation to Tender is issued for the Secretary of State for Energy and

   Climate Change, as the new office of Secretary of State for Business,

   Energy and Industrial Strategy has yet to be constituted as a corporation sole.

   It is expected that rights and liabilities of the Secretary of State for Energy and

   Climate Change, including this Invitation to Tender, will in due course be transferred to

   the Secretary of State for Business, Energy and Industrial Strategy by an

   Order in Council under section 2 of the Ministers of the Crown Act 1975. [↑](#footnote-ref-2)
3. Please note that this declaration applies to individuals, single organisations and consortia. [↑](#footnote-ref-3)
4. The Code of Practice is attached to this ITT as Annex C [↑](#footnote-ref-4)
5. Please delete as appropriate [↑](#footnote-ref-5)
6. Please note ethical approval does not remove the responsibility of the individual for ethical behaviour. [↑](#footnote-ref-6)
7. Please note that this also applies to projects being undertaken by consortia. [↑](#footnote-ref-7)