



# Invitation to Quote

**Invitation to Quote (ITQ) on behalf of Natural Environment Research Council (NERC)**

**Subject Contracting Authority UK SBS FM17117 DTS and DAS interrogator boxes**

**Sourcing reference number FM17117**

**UK Shared Business Services Ltd (UK SBS)**  
[www.uksbs.co.uk](http://www.uksbs.co.uk)

Registered in England and Wales as a limited company. Company Number 6330639.  
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**UKSBS**  
  
*Shared Business Services*

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# Section 1 – About UK Shared Business Services

## Putting the business into shared services

UK Shared Business Services Ltd (UK SBS) brings a commercial attitude to the public sector; helping Contracting Authorities improve efficiency, generate savings and modernise.

It is our vision to become the leading service provider for Contracting Authorities for of shared business services in the UK public sector, continuously reducing cost and improving quality of business services for Government and the public sector.

Our broad range of expert services is shared by our Contracting Authorities. This allows Contracting Authorities the freedom to focus resources on core activities; innovating and transforming their own organisations.

Core services include Procurement, Finance, Grants Admissions, Human Resources, Payroll, ISS, and Property Asset Management all underpinned by our Service Delivery and Contact Centre teams.

UK SBS is a people rather than task focused business. It's what makes us different to the traditional transactional shared services centre. What is more, being a not-for-profit organisation owned by the Department for Business, Energy & Industrial Strategy (BEIS), UK SBS' goals are aligned with the public sector and delivering best value for the UK taxpayer.

UK Shared Business Services Ltd changed its name from RCUK Shared Services Centre Ltd in March 2013.

## Our Customers

Growing from a foundation of supporting the Research Councils, 2012/13 saw Business, Energy and Industrial Strategy (BEIS) transition their procurement to UK SBS and Crown Commercial Services (CCS – previously Government Procurement Service) agree a Memorandum of Understanding with UK SBS to deliver two major procurement categories (construction and research) across Government.

UK SBS currently manages £700m expenditure for its Contracting Authorities.

Our Contracting Authorities who have access to our services and Contracts are detailed [here](#).

## Section 2 – About the Contracting Authority

### Natural Environment Research Council (NERC)

NERC is the UK's main agency for funding and managing research, training and knowledge exchange in the environmental sciences.

NERC's work covers the full range of atmospheric, Earth, biological, terrestrial and aquatic science, from the deep oceans to the upper atmosphere and from the poles to the equator.

The organisation coordinates some of the world's most exciting research projects, tackling major issues such as climate change, environmental influences on human health, the genetic make-up of life on Earth, and much more.

Working internationally, NERC have bases at some of the most hostile places on the planet; running a fleet of research ships and aircraft and investing in satellite technology to monitor gradual environmental change on a global scale. NERC provide forewarning of, and solutions to, the key environmental challenges facing society.

### Examples of funded research

- Showing the importance of mature tropical forests to the global climate.
- Developing a safer and cleaner way to mine gold by reducing the use of mercury.
- Studying the hole in the ozone layer - discovered by our British Antarctic Survey - and monitoring climate change.
- Playing a major role in the International Census of Marine Life that monitors our oceans.

### NERC also runs six organisations of world renown:

- British Antarctic Survey, in Cambridge.
- British Geological Survey, in Nottingham.
- National Oceanography Centre, in Southampton.
- Centre for Ecology & Hydrology, in Oxfordshire.
- National Centre for Atmospheric Science, in Leeds.
- National Centre for Earth Observation, Swindon.

[www.nerc.ac.uk](http://www.nerc.ac.uk)

## Section 3 - Working with the Contracting Authority.

In this section you will find details of your Procurement contact point and the timescales relating to this opportunity.

Section 3 – Contact details		
3.1	Contracting Authority Name and address	Natural Environment Research Council (NERC) British Geological Survey (BGS) Environmental Science Centre Keyworth Nottingham NG12 5GG
3.2	Buyer name	Deborah Banner
3.3	Buyer contact details	<a href="mailto:FMPProcurement@uksbs.co.uk">FMPProcurement@uksbs.co.uk</a>
3.4	Estimated value of the Opportunity	£140,000 exc VAT
3.5	Process for the submission of clarifications and Bids	<b>All correspondence shall be submitted within the Emptoris e-sourcing tool. Guidance Notes to support the use of Emptoris is available <a href="#">here</a>. Please note submission of a Bid to any email address including the Buyer <u>will</u> result in the Bid <u>not</u> being considered.</b>

Section 3 - Timescales		
3.6	Date of Issue of Contract Advert and location of original Advert	02/08/2017 Contracts Finder
3.7	Latest date/time ITQ clarification questions shall be received through Emptoris messaging system	11/08/2017 11.00am
3.8	Latest date/time ITQ clarification answers should be sent to all Bidders by the Buyer through Emptoris	16/08/2017 11.00am
3.9	Latest date/time ITQ Bid shall be submitted through Emptoris	21/08/2017 11.00am
3.10	Anticipated Award date	30/08/2017
3.11	Anticipated Contract Start date	05/09/2017

3.12	Anticipated Contract End date	31 <sup>st</sup> March 2019
3.13	Bid Validity Period	60 Days

## Section 4 – Specification

### Introduction

The British Geological Survey is a world-leading geological survey. It focuses on public-good science for government, and research to understand earth and environmental processes.

It is the UK's premier provider of objective and authoritative geoscientific data, information and knowledge to help society to:

- Use its natural resources responsibly
- Manage environmental change
- Be resilient to environmental hazards

The BGS provides expert services and impartial advice in all areas of geoscience. Our client base is drawn from the public and private sectors both in the UK and internationally.

### Background to requirement

The British Geological Survey in partnership with the University of Nottingham will use optic fibre to undertake Distributed Temperature Sensing (DTS) and Distributed Acoustic Sensing (DAS) surveys at the GeoEnergy Test Bed (GTB), a field laboratory near Nottingham, UK. The contract for the interrogator boxes will be signed with BGS (NERC). The science programme around the GTB is a key activity for BGS

Site areal extent is 100 by 250 m at surface. Main depths of interest are at 0 – 20 and 150 - 280m. Multimode optic fibre (contains 4 individual fibres) has been installed in six wells to a depth of 280m in five wells and 30 m in the last well. These fibres have been terminated at the bottom of the well such that the fibres can be joined in a daisy chain fashion through all of the wells. Total length of downhole fibre is around 1425 m.

The fibres in the well will be joined into a continuous daisy chain so that only one DAS and one DTS interrogator boxes are required. Total length of surface fibre connecting the wells together and to the monitoring hut is around 490m.

The interrogator boxes will be installed in a 'monitoring hut' which is constructed of metal. The monitoring hut is around 115 m from the closest well and 160 m from the farthest well.

The interrogator boxes should be portable so that they can be used at different sites if required.

### Scope

### Field Equipment: Mandatory Requirements

- Quoted equipment should be making a complete system when connected to the fibre that has been installed at the site. The system must include all necessary components to connect the fibre in all of the wells simultaneously in a 'daisy chain' and be suitable to undertake multiple DTS and DAS surveys over a period of 10 years
- The vendor should include any further recommended spare/ancillary equipment not mentioned in the ITQ documents that is needed to complete the system as described above
- It is assumed that the system can be controlled through installation of software on a PC that is connected to the DAS and DTS boxes over the internet. The interrogator boxes will be installed at the GTB, the customer needs to be able to control the interrogator boxes and to receive and interpret the data in the BGS office. If the boxes need to be setup by using a laptop/remote computer terminal in the monitoring hut, please state this. Any required software that will incur any costs (including licence costs) should also be indicated and included in the quote
- Connections should be standard so that box can be moved to other sites if required.
- All costs for connecting fibre to box should be included in the quote. For example, any costs for connecting the system such as engineer time from the contractor are required to connect the fibre to the boxes
- System must be compatible with multimode fibre
- System must be able to detect very small temperature and acoustic signals in the subsurface
- Training for up to 6 customer staff must be included in the quote
- DAS system should allow spatial resolution of at least 2 m downhole and a sampling resolution of at least 30 cm. DTS system should allow a sampling resolution of at least 30 cm downhole, a spatial resolution of 1m and a temperature resolution of at least 0.05C. Sampling interval of at least once a minute should be possible.
- DTS and DAS boxes must be able to transmit data over the internet (connection will be provided) in real-time to a remote operator
- Vendor must include costs for all cable reels and equipment/transit boxes necessary to store/transport the interrogator boxes

#### **Desirable requirements**

System can be 'tuned' to have greater resolution in different subsurface intervals to allow maximum sampling frequency and resolution in these intervals

#### **Out of scope**

Downhole fibre has already been installed so new fibre is out of scope

#### **Timescales**

- A delivery date for equipment and training no later than 28th February 2018 is required. An earlier delivery date is preferred.

## **Section 5 – Evaluation model**

The evaluation model below shall be used for this ITQ, which will be determined to two decimal places.

Where a question is 'for information only' it will not be scored.

The evaluation team may comprise staff from UK SBS, and the Contracting Authority ----- and any specific external stakeholders the Contracting Authority deems required. After evaluation the scores will be finalised by performing a calculation to identify (at question level) the mean average of all evaluators (Example – a question is scored by three evaluators and judged as scoring 5, 5 and 6. These scores will be added together and divided by the number of evaluators to produce the final score of 5.33 ( $5+5+6=16\div3=5.33$ ))

### Pass / fail criteria

Questionnaire	Q No.	Question subject
Commercial	SEL1.2	Employment breaches/ Equality
Commercial	SEL3.11	Financial Turnover
Commercial	FOI1.1	Freedom of Information Exemptions
Commercial	AW1.1	Form of Bid
Commercial	AW1.3	Certificate of Bona Fide Bid
Commercial	AW3.1	Validation check
Commercial	AW4.1	Contract Terms
Commercial	AW4.2	AW4.1 – No with justification
Price	AW5.5	E Invoicing
Price	AW5.6	Implementation of E-Invoicing
Quality	AW6.1	Compliance to the Specification
Quality	PROJ1.1	Delivery
Quality	PROJ1.2	All items included in quote
Quality	PROJ1.3	Training
-	-	Invitation to Quote – received on time within e-sourcing tool

### Scoring criteria

#### Evaluation Justification Statement

In consideration of this particular requirement the Contracting Authority has decided to evaluate Potential Providers by adopting the weightings/scoring mechanism detailed within this ITQ. The Contracting Authority considers these weightings to be in line with existing best practice for a requirement of this type.

Questionnaire	Q No.	Question subject	Maximum Marks
Price	AW5.2	Price	60%
Quality	PROJ1.4	DTS interrogator specs	15%
Quality	PROJ1.5	DAS interrogator specs	15%
Quality	PROJ1.6	Safety features	5%
Quality	PROJ1.7	Robustness of Equipment	5%



## Evaluation of criteria

### Non-Price elements

Each question will be judged on a score from 0 to 100, which shall be subjected to a multiplier to reflect the percentage of the evaluation criteria allocated to that question.

Where an evaluation criterion is worth 20% then the 0-100 score achieved will be multiplied by 20%.

Example if a Bidder scores 60 from the available 100 points this will equate to 12% by using the following calculation:

$$\text{Score} = \{\text{weighting percentage}\} \times \{\text{bidder's score}\} = 20\% \times 60 = 12$$

The same logic will be applied to groups of questions which equate to a single evaluation criterion.

The 0-100 score shall be based on (unless otherwise stated within the question):

0	The Question is not answered or the response is completely unacceptable.
10	Extremely poor response – they have completely missed the point of the question.
20	Very poor response and not wholly acceptable. Requires major revision to the response to make it acceptable. Only partially answers the requirement, with major deficiencies and little relevant detail proposed.
40	Poor response only partially satisfying the selection question requirements with deficiencies apparent. Some useful evidence provided but response falls well short of expectations. Low probability of being a capable supplier.
60	Response is acceptable but remains basic and could have been expanded upon. Response is sufficient but does not inspire.
80	Good response which describes their capabilities in detail which provides high levels of assurance consistent with a quality provider. The response includes a full description of techniques and measurements currently employed.
100	Response is exceptional and clearly demonstrates they are capable of meeting the requirement. No significant weaknesses noted. The response is compelling in its description of techniques and measurements currently employed, providing full assurance consistent with a quality provider.

All questions will be scored based on the above mechanism. Please be aware that the final score returned may be different as there may be multiple evaluators and their individual scores will be averaged (mean) to determine your final score.

### Example

Evaluator 1 scored your bid as 60  
Evaluator 2 scored your bid as 60  
Evaluator 3 scored your bid as 40  
Evaluator 4 scored your bid as 40  
Your final score will  $(60+60+40+40) \div 4 = 50$

**Price elements** will be judged on the following criteria.

The lowest price for a response which meets the pass criteria shall score 100.  
All other bids shall be scored on a pro rata basis in relation to the lowest price. The score is then subject to a multiplier to reflect the percentage value of the price criterion.

For example - Bid 1 £100,000 scores 100.

Bid 2 £120,000 differential of £20,000 or 20% remove 20% from price scores 80

Bid 3 £150,000 differential £50,000 remove 50% from price scores 50.

Bid 4 £175,000 differential £75,000 remove 75% from price scores 25.

Bid 5 £200,000 differential £100,000 remove 100% from price scores 0.

Bid 6 £300,000 differential £200,000 remove 100% from price scores 0.

Where the scoring criterion is worth 50% then the 0-100 score achieved will be multiplied by 50.

In the example if a supplier scores 80 from the available 100 points this will equate to 40% by using the following calculation:  $\text{Score/Total Points multiplied by 50}$  ( $80/100 \times 50 = 40$ )

The lowest score possible is 0 even if the price submitted is more than 100% greater than the lowest price.

Once the evaluation process and due diligence is complete, should the result of the process result in a tied place(s) then the supplier(s) who scored the highest total in the Price criterion AW5.2 shall be considered the successful supplier and shall be awarded the opportunity.

## **Section 6 – Evaluation questionnaire**

Bidders should note that the evaluation questionnaire is located within the **e-sourcing questionnaire**.

Guidance on completion of the questionnaire is available at  
<http://www.uksbs.co.uk/services/procure/Pages/supplier.aspx>

**PLEASE NOTE THE QUESTIONS ARE NOT NUMBERED SEQUENTIALLY**

## Section 7 – General Information

### What makes a good bid – some simple do's 😊

#### DO:

- 7.1 Do comply with Procurement document instructions. Failure to do so may lead to disqualification.
- 7.2 Do provide the Bid on time, and in the required format. Remember that the date/time given for a response is the last date that it can be accepted; we are legally bound to disqualify late submissions. Unless formally requested to do so by UK SBS e.g. Emptoris system failure
- 7.3 Do ensure you have read all the training materials to utilise e-sourcing tool prior to responding to this Bid. If you send your Bid by email or post it will be rejected.
- 7.4 Do use Microsoft Word, PowerPoint Excel 97-03 or compatible formats, or PDF unless agreed in writing by the Buyer. If you use another file format without our written permission we may reject your Bid.
- 7.5 Do ensure you utilise the Emptoris messaging system to raise any clarifications to our ITQ. You should note that we will release the answer to the question to all Bidders and where we suspect the question contains confidential information we may modify the content of the question to protect the anonymity of the Bidder or their proposed solution
- 7.6 Do answer the question, it is not enough simply to cross-reference to a 'policy', web page or another part of your Bid, the evaluation team have limited time to assess bids and if they can't find the answer, they can't score it.
- 7.7 Do consider who the Contracting Authority is and what they want – a generic answer does not necessarily meet every Contracting Authority's needs.
- 7.8 Do reference your documents correctly, specifically where supporting documentation is requested e.g. referencing the question/s they apply to.
- 7.9 Do provide clear, concise and ideally generic contact details; telephone numbers, e-mails and fax details.
- 7.10 Do complete all questions in the questionnaire or we may reject your Bid.
- 7.11 Do check and recheck your Bid before dispatch.

## What makes a good bid – some simple do not's ☹

### DO NOT

- 7.12 Do not cut and paste from a previous document and forget to change the previous details such as the previous buyer's name.
- 7.13 Do not attach 'glossy' brochures that have not been requested, they will not be read unless we have asked for them. Only send what has been requested and only send supplementary information if we have offered the opportunity so to do.
- 7.14 Do not share the Procurement documents, they are confidential and should not be shared with anyone without the Buyers written permission.
- 7.15 Do not seek to influence the procurement process by requesting meetings or contacting UK SBS or the Contracting Authority to discuss your Bid. If your Bid requires clarification the Buyer will contact you. All information secured outside of formal Buyer communications shall have no Legal standing or worth and should not be relied upon.
- 7.16 Do not contact any UK SBS staff or the Contracting Authority staff without the Buyers written permission or we may reject your Bid.
- 7.17 Do not collude to fix or adjust the price or withdraw your Bid with another Party as we will reject your Bid.
- 7.18 Do not offer UK SBS or the Contracting Authority staff any inducement or we will reject your Bid.
- 7.19 Do not seek changes to the Bid after responses have been submitted and the deadline for Bids to be submitted has passed.
- 7.20 Do not cross reference answers to external websites or other parts of your Bid, the cross references and website links will not be considered.
- 7.21 Do not exceed word counts, the additional words will not be considered.
- 7.22 Do not make your Bid conditional on acceptance of your own Terms of Contract, as your Bid will be rejected.

## Some additional guidance notes

- 7.23 All enquiries with respect to access to the e-sourcing tool and problems with functionality within the tool must be submitted to Crown Commercial Service (previously Government Procurement Service), Telephone 0345 010 3503.
- 7.24 Bidders will be specifically advised where attachments are permissible to support a question response within the e-sourcing tool. Where they are not permissible any attachments submitted will not be considered as part of the evaluation process.
- 7.25 Question numbering is not sequential and all questions which require submission are included in the Section 6 Evaluation Questionnaire.
- 7.26 Any Contract offered may not guarantee any volume of work or any exclusivity of supply.
- 7.27 We do not guarantee to award any Contract as a result of this procurement
- 7.28 All documents issued or received in relation to this procurement shall be the property of the Contracting Authority. / UKSBS.
- 7.29 We can amend any part of the procurement documents at any time prior to the latest date / time Bids shall be submitted through Emptoris.
- 7.30 If you are a Consortium you must provide details of the Consortiums structure.
- 7.31 Bidders will be expected to comply with the Freedom of Information Act 2000 or your Bid will be rejected.
- 7.32 Bidders should note the Government's transparency agenda requires your Bid and any Contract entered into to be published on a designated, publicly searchable web site. By submitting a response to this ITQ Bidders are agreeing that their Bid and Contract may be made public
- 7.33 Your bid will be valid for 60 days or your Bid will be rejected.
- 7.34 Bidders may only amend the contract terms during the clarification period only, only if you can demonstrate there is a legal or statutory reason why you cannot accept them. If you request changes to the Contract terms without such grounds and the Contracting Authority fail to accept your legal or statutory reason is reasonably justified we may reject your Bid.
- 7.35 We will let you know the outcome of your Bid evaluation and where requested will provide a written debrief of the relative strengths and weaknesses of your Bid.
- 7.36 If you fail mandatory pass / fail criteria we will reject your Bid.
- 7.37 Bidders are required to use IE8, IE9, Chrome or Firefox in order to access the functionality of the Emptoris e-sourcing tool.
- 7.38 Bidders should note that if they are successful with their proposal the Contracting Authority reserves the right to ask additional compliancy checks prior to the award of

any Contract. In the event of a Bidder failing to meet one of the compliancy checks the Contracting Authority may decline to proceed with the award of the Contract to the successful Bidder.

- 7.39 All timescales are set using a 24 hour clock and are based on British Summer Time or Greenwich Mean Time, depending on which applies at the point when Date and Time Bids shall be submitted through Emptoris.
- 7.40 All Central Government Departments and their Executive Agencies and Non Departmental Public Bodies are subject to control and reporting within Government. In particular, they report to the Cabinet Office and HM Treasury for all expenditure. Further, the Cabinet Office has a cross-Government role delivering overall Government policy on public procurement - including ensuring value for money and related aspects of good procurement practice.

For these purposes, the Contracting Authority may disclose within Government any of the Bidders documentation/information (including any that the Bidder considers to be confidential and/or commercially sensitive such as specific bid information) submitted by the Bidder to the Contracting Authority during this Procurement. The information will not be disclosed outside Government. Bidders taking part in this ITQ consent to these terms as part of the competition process.

- 7.41 The Government is introducing its new Government Security Classifications (GSC) classification scheme on the 2<sup>nd</sup> April 2014 to replace the current Government Protective Marking System (GPMS). A key aspect of this is the reduction in the number of security classifications used. All Bidders are encouraged to make themselves aware of the changes and identify any potential impacts in their Bid, as the protective marking and applicable protection of any material passed to, or generated by, you during the procurement process or pursuant to any Contract awarded to you as a result of this tender process will be subject to the new GSC. The link below to the Gov.uk website provides information on the new GSC:

<https://www.gov.uk/government/publications/government-security-classifications>

The Contracting Authority reserves the right to amend any security related term or condition of the draft contract accompanying this ITQ to reflect any changes introduced by the GSC. In particular where this ITQ is accompanied by any instructions on safeguarding classified information (e.g. a Security Aspects Letter) as a result of any changes stemming from the new GSC, whether in respect of the applicable protective marking scheme, specific protective markings given, the aspects to which any protective marking applies or otherwise. This may relate to the instructions on safeguarding classified information (e.g. a Security Aspects Letter) as they apply to the procurement as they apply to the procurement process and/or any contracts awarded to you as a result of the procurement process.

## USEFUL INFORMATION LINKS

- [Emptoris Training Guide](#)
- [Emptoris e-sourcing tool](#)
- [Contracts Finder](#)
- [Equalities Act introduction](#)
- [Bribery Act introduction](#)
- [Freedom of information Act](#)