

Request for Proposal



Request for Proposal (RFP) on behalf of **UK Research and Innovation**

Subject: **FEBE Hutch Magnets: Specification**

Sourcing Reference Number: **PR19028**

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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 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 our customers 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 Innovation and Skills (BIS) 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](#).

Privacy Statement

At UK Shared Business Services (UK SBS) we recognise and understand that your privacy is extremely important, and we want you to know exactly what kind of information we collect about you and how we use it.

This privacy notice link below details what you can expect from UK SBS when we collect your personal information.

- We will keep your data safe and private.
- We will not sell your data to anyone.
- We will only share your data with those you give us permission to share with and only for legitimate service delivery reasons.

<https://www.uksbs.co.uk/use/pages/privacy.aspx>

For details on how the Contracting Authority protect and process your personal data please follow the link below:

<https://www.ukri.org/privacy-notice/>

Section 2 – About the Contracting Authority

UK Research and Innovation

Operating across the whole of the UK and with a combined budget of more than £6 billion, UK Research and Innovation represents the largest reform of the research and innovation funding landscape in the last 50 years.

As an independent non-departmental public body UK Research and Innovation brings together the seven Research Councils (AHRC, BBSRC, EPSRC, ESRC, MRC, NERC, STFC) plus Innovate UK and a new organisation, Research England.

UK Research and Innovation ensures the UK maintains its world-leading position in research and innovation. This is done by creating the best environment for research and innovation to flourish.

For more information, please visit: www.ukri.org

Science and Technology Facilities Council (STFC)

STFC is a world-leading multi-disciplinary science organisation. Their research seeks to understand the Universe from the largest astronomical scales to the tiniest constituents of matter, yet creates impact on a very tangible, human scale.

<https://stfc.ukri.org/>

Section 3 – Working with the Contracting Authority.

Section 3 – Contact details		
3.1.	Contracting Authority Name and address	UK Research and Innovation Polaris House North Star Avenue Swindon SN2 1FL
3.2.	Buyer	UK SBS (Major Projects)
3.3.	Buyer contact details	majorprojects@uksbs.co.uk
3.4.	Estimated value of the Opportunity	The estimated value of the opportunity is £250,000.00 Ex VAT
3.5.	Process for the submission of clarifications and Bids	All correspondence shall be submitted within the Messaging Centre of the e-sourcing tool. Guidance Notes to support the use of Delta eSourcing are available here. 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.

Section 3 - Timescales		
3.6.	Date of posting of Contract advert to OJEU.	Wednesday 02 nd September 2020
3.7.	Date RFP available to Bidders on Contracts Finder	Monday 07 th September 2020
3.8.	Latest date / time RFP clarification questions shall be received through Delta eSourcing messaging system	Thursday 08 th October 2020 at 14.00
3.9.	Latest date / time RFP clarification answers should be sent to all Bidders by the Buyer through Delta eSourcing Portal	Monday 12 th October 2020 at 14.00
3.10.	Closing date and time for Bidder to request RFP documents	Thursday 15 th October 2020 at 14.00
3.11.	Closing date and time for Bidder to submit their response (' the deadline ').	Thursday 15 th October 2020 at 14.00
3.12.	Clarifications and / or site visits (if required)	N/a
3.13.	Notification of proposed Contract award to unsuccessful bidders	Wednesday 11 th November 2020
3.14.	Anticipated Contract Award Date	Monday 23 rd November 2020
3.15.	Commencement of Contract	Monday 01 st December 2020
3.16.	Completion of Contract	Monday 02 nd August 2021
3.17.	Bid Validity Period	90 Days

Section 4 – Specification and about this procurement

1. Introduction

Introduction

This document is intended to accompany the Request for Proposal (RFP) documentation for the FEBE magnets. It describes the deliverables for this contract and the technical specification for the magnets.

1.2 Offer Compliance

1.2.1 Complete system

It is essential that a complete system as stated in the RFP document shall be proposed to the Contracting Authority by the Bidder.

All components plus all necessary minor and/or ancillary items shall be provided to the Contracting Authority by the Bidder in completion of any contract arising from this tender.

1.2.2 Functionality

The Bidder will propose a complete solution to the Contracting Authority including the design, selection and sizing of all components and equipment to be used, such that they will provide a working and complete installation to satisfy the stated requirements for full operational functionality in the identified working environment.

1.2.3 Responsibility

The Bidder will be responsible for ensuring the compatibility and integration of all parts of the proposed magnets.

This will include all hardware whether it is provided by the Bidder, a subsidiary or related organisation or an independent third party.

The Bidder will be fully responsible for the proposed design and liable for any mistake, inaccuracy, discrepancy or omission in their proposed solution to the stated requirements.

Nothing contained in the Bidder's design or proposal will relieve the Contracting Authority from their obligations or liabilities detailed within this document and agreed or contained within any final contract documentation.

1.2.4 Good practice

To the extent of his obligations pursuant to the above clauses, the Bidder shall warrant to the Contracting Authority that:

- They have exercised and shall continue to exercise, both in the design of the proposal and fulfilment of any final Contract Document, all the skill that shall be expected of a professionally qualified and competent designer experienced in work of a similar nature and scope

- The tender proposal shall, unless otherwise agreed in writing, comply in all respects with the Contracting Authority's requirements and the proposed equipment shall be fit for purpose
- The Bidder's proposal has been designed using proven up-to-date good practice and to standards which are consistent with the stated requirements of the purchasing organisation
- No plant or equipment generally known to be deleterious or otherwise not in accordance with good engineering practice, has been or shall be specified or selected by the Bidder or anyone acting on his behalf
- No plant or equipment which, after its specification or selection by or on behalf of the Bidder but before being incorporated into the Contracting Authority, becomes generally known to be deleterious or otherwise not in accordance with good engineering practice shall not be incorporated into the purchasing organisation
- The design of the contracted proposed System has taken or shall take full account of the effects of both the intended use and installation methods.

1.3 Overview of project

The Accelerator Science and Technology Centre (ASTeC) at Daresbury Laboratory is currently building an accelerator test facility, CLARA – the Compact Linear Accelerator for Research and Applications.

The CLARA Conceptual Design Report (CDR) was published in May 2014, and can be found on the IOP website: <https://iopscience.iop.org/article/10.1088/1748-0221/9/05/T05001/meta>.

2. Aims & Objectives

2.1 Overview of procurement

FEBE (Full Energy Beam Exploitation) is an add-on to the CLARA project, taking the 250 MeV electron beam into a separately-shielded experimental hutch, providing additional resources for experiments and exploitation such as laser-plasma acceleration. The beamline requires dipole, quadrupole, and corrector magnets. This procurement relates to the quadrupole and corrector beamline magnets.

The Contracting Authority is looking to procure the magnets for this beamline from Bidders who specialise in design, manufacture and testing of similar magnetic systems for accelerators.

3. Background to the Requirement

The Contracting Authority is building the FEBE beamline as an extension to the CLARA accelerator. FEBE will transport a 250 MeV electron beam to a shielded experimental area. Dipole, quadrupole and corrector magnets are required to focus the beam along the FEBE transport line.

The CLARA project is split into work packages (WPs), each of which is led by a UKRI staff member. The magnet specifications are set by WP2 Magnets and Undulators, in consultation with WP9 Accelerator Physics, WP11 Mechanical Engineering, and WP13 Electrical Engineering.

4. Scope

4.1 Deliverables

The deliverables for this project are as follows:

- 9 “Type 4” quadrupole magnets
- 3 “Type 7” corrector magnets
- One spare quadrupole coil
- One spare corrector coil
- Drawings
- QA documents
- Measurement data

This contract covers the:

- magnetic design
- engineering design (mechanical, thermal and electrical)
- procurement of all materials
- manufacture and assembly (including all jigs and fixtures)
- magnetic measurement
- electrical and mechanical testing, including fiducialisation
- documentation
- delivery to Daresbury Laboratory, Warrington, WA4 4AD, UK

The contract does not cover:

- power supplies for the magnets
- the supporting girders

4.2 Component labelling

Each individual magnet will be identified and numbered. The identification number will be printed on an identification plate and glued onto the magnet at an agreed position, as shown on Bidder’s drawings approved by the Contracting Authority. These serial numbers will be used for all manufacturing and test records and in all communications when reference is made to specific magnets.

5. Requirement

5.1 Quadrupole specification

These are the detailed specifications for the Type 4 quadrupole magnets. The basic parameters are:

- Quantity: 9
- Pole gap: 68 mm
- Nominal integrated gradient: 4.50 T
- Field quality (maximum variation of integrated gradient over good field region): $\pm 1 \times 10^{-3}$
- Good field region: ± 17 mm

- Maximum length including coils (along beam axis): 265 mm
- Maximum half-height from beam axis to bottom edge of magnet (including coils): 313 mm
- Maximum current to generate nominal integrated gradient: 200 A
- Maximum voltage to generate nominal integrated gradient: 60 V
- Maximum inductance: 1 H
- Impedance must be such that the time constant (L/R) is less than 20 ms
- Linearity of gradient versus current over range from zero to nominal: 98%
- Yoke type: Laminated

Integrated independently-powered horizontal and vertical corrector coils are required for eight of the quadrupole magnets. One quadrupole does not require integrated correctors; it's assumed that this will be made to the same design but that the corrector coils will not be fitted. The specifications for these coils are as follows:

- Integrated field: 10 T.mm
- Good field region: ± 17 mm
- Field quality (maximum variation of integrated field over good field region): $\pm 3 \times 10^{-3}$
- Maximum current to generate nominal integrated field: 30 A
- Maximum voltage to generate nominal integrated gradient: 10 V
- Maximum inductance: 10 mH
- Impedance must be such that the time constant (L/R) is less than 20 ms

5.2 Corrector specification

These are the detailed specifications for the Type 7 corrector magnets. The basic parameters are:

- Quantity: 3
- Minimum aperture for vacuum pipe: 42 mm
- Integrated field: 10.00 T.mm
- Field quality (maximum variation of integrated field over good field region): $\pm 3 \times 10^{-3}$
- Good field region: ± 17 mm
- Maximum length including coils (along beam axis): 100 mm
- Maximum current to generate nominal integrated gradient: 30 A
- Maximum voltage to generate nominal integrated gradient: 10 V
- Maximum inductance: 10 mH
- Impedance must be such that the time constant (L/R) is less than 20 ms
- Linearity of gradient versus current over range from zero to nominal: 98%
- Yoke type: Laminated

5.4 Engineering design

The engineering design of the magnets will include the following details:

- Features for the mounting of survey monuments;
- a footplate to interface with Daresbury Laboratory's girder arrangement;
- the position of power and water connections.

These details need to comply with the Contracting Authority's layout and planning, and arrangements will be jointly agreed early during the design phase of the contract.

Overall design of the FEBE beamline is approaching completion. The space available for components must be tightly controlled to avoid clashes. Any protrusion outside the space envelope given in this specification must be agreed with Daresbury Laboratory engineers.

Drawings are attached to this specification showing the maximum space envelope and interface requirements: drawing number **256-18369** for the quadrupole magnets and **256-14173** for the corrector magnets.

The magnets shall be designed with lifting brackets that are adequate for the support of the complete magnet.

Exposed live contacts should be enclosed with a clear plastic guard; an extra 10mm is permitted on one side of the magnet.

The design shall ensure that the upper and lower halves of magnets correctly mate and align on reassembly after separation to insert the vacuum vessel.

5.5 Fasteners and fittings

All equipment shall use ISO metric A4 stainless steel fasteners, nuts and washers throughout.

5.6 Survey and alignment

The nominal magnetic axis of the magnets will be aligned at Daresbury Laboratory by reference to fixed points on the supplied structure. The magnetic axis will be related to these fixed points by a process of fiducialisation, whereby the magnetic axis is measured in situ at the Bidder and the exact location of these reference points are then established by measuring offsets either via a coordinate measuring machine (CMM) or laser tracker type device. Offsets of the magnet axis in X, Y, Z type coordinate system in mm are then provided as part of the deliverables as a data set relative to these points.

These points are then referenced at Daresbury Laboratory using our own Leica and Faro laser trackers which – along with offset data - then allows us to align the quadrupole magnetic axis with respect to our own survey network.

An orientation vector for each data set is also required and this is likely to be best established off a machined plane of the magnet support. A complete set of survey data must be provided with each magnet upon delivery. The form of the survey data as a baseline minimum is as a tabulated list (Excel file) but preference is given for SpatialAnalyzer (SA) file (if this is capable of being generated by the Bidder). Each data set must be clearly and unambiguously identifiable with the specific magnet delivered.

The fiducial reference points on the structure will be provided by a range of precision reamed holes - that will fit standard laser tracker target mounts with minimal error – and are located into various planes of the magnet support. The provision of these holes to agreed specification is the responsibility of the Bidder.

The holes are nominally defined as 10 mm diameter with an H6/H7 precision finish (ISO 286-2) i.e. zero to 11/18 µm oversize. This hole size will fit our range of preferred laser tracker targets 0.5TH type Brunson. See this reference: <https://brunson.us/0-5th-series-smr-adapter.html>

If it suits the measurement process proposed by the Bidder at their premises, then the Contracting Authority may be able to supply as free issue several Brunson standard survey monument targets so that

they can be incorporated into the measurement process. Otherwise it is assumed the Bidder will use their own targets (with suitable offsets stated with survey data provided upon delivery).

The fiducialisation measurements should ideally be performed at 23°C to an RMS accuracy of ± 0.025 mm. If temperature at the contractors cannot be set to 23°C, then the proposed measuring temperature shall be stated and a method to compensate or provide offset for the CLARA operational temperature of 23°C specified.

If it is envisaged that the ideal RMS accuracy of ± 0.025 mm tolerance between any set of target points cannot be met, then a realistic achievable RMS should be stated in the tender return.

The fiducials must be stable and repeatable to within the RMS accuracy defined after several warm-up and cool-down cycles of the structure. A check should be made on at least a test sample of finished magnets prior to delivery over a $\pm 5^\circ\text{C}$ temperature cycle.

An outline proposal of the alignment process should be provided with the tender return that includes and addresses the issues raised above. Final details must be discussed and agreed between the Bidder and STFC at the Final Design Review. We note that in this tender specification we have established what we envisage as a baseline expectation for survey. Dependent on aspects of the design of the magnets and the Bidder's own proposals - we anticipate that the final agreed measured data set and number of holes required may be streamlined to be simpler than the baseline specification.

5.7 Tooling

The Bidder should hold the tooling used in the manufacture of the magnets in a satisfactory storage area for a period of 5 years from the completion of the contract.

5.8 Magnet Yokes

5.8.1 Yoke assembly

It must be possible to split the magnets, to introduce the vacuum vessels from above.

For both the quadrupoles and correctors, laminated yokes are required to achieve the fast adjustment necessary for CLARA operation.

The Bidder should determine and indicate in their tender document the method of stacking and securing the laminations they intend to use. These methods shall be proposed as part of the engineering design, and subject to the Contracting Authority's approval.

The Bidder should give a clear explanation of how, by machining, they intend to ensure that the specified dimensions and angles required on the completed block will be achieved.

5.8.2 Steel

This section defines the steel quality that is to be used for the magnet yokes.

The magnetic performance of the magnets is the responsibility of the Bidder, who must choose steel of the correct grade to meet the required performance. However, the material used in the magnet yokes shall comply with the following magnetic properties:

Field H (A/m)	Minimum Induction B (T)	Minimum relative permeability μ_r
150	0.5	2650
320	1.0	2480
1000	1.5	1190

The material's coercivity should not exceed 100 A/m.

5.8.3 Dimensional Control

The acceptance of the yokes will be determined by measuring all dimensions shown on the specification drawings or within this specification as mandatory. No further dimensional measurements are required, as acceptance is based on magnetic performance.

5.8.4 Painting the Yokes

After assembly and control, the yokes will be protected against rusting by coating the appropriate surfaces by means of a powder coating system of minimum thickness 0.2 mm.

The following faces will not be painted:

- reference and mating faces;
- the survey monument supports.

The unpainted areas shall be protected by a light oil or other rust preventative measures.

The colour to be used for the magnets is as follows:

- Quadrupoles: RAL 3001 Signal Red
- Correctors: RAL 2011 Deep Orange

5.9 Magnet Coils

5.9.1 Coil Construction

The coils shall be constructed using solid copper conductor, or hollow conductor with a water-cooling channel where necessary.

The coil conductors shall be insulated by an enamelled surface layer which provides adequate inter-turn insulation. This enamel insulation shall comply with IEC standard 60317-8 and satisfy the requirements of Thermal Class H specifications. Additional outer-ground insulation shall be added to ensure that the coils meet the IP2X specification.

The coils of the magnets shall be designed to have the following thermal parameters when operated with nominal flow in the water-cooling circuit (the inlet water temperature should be assumed to be 25°C):

Maximum allowed coil temperature rise at nominal DC current (measured at 10 °C
coil surface inside magnet gap)

Maximum allowed coil temperature rise at nominal DC current (measured by coil resistance) 15 °C

Maximum allowed coil temperature rise at 110% of nominal DC current (measured at coil surface inside magnet gap) 15 °C

Maximum allowed coil temperature rise at 110% of nominal DC current (measured by coil resistance) 20 °C

The wound coils will be mechanically consolidated by the use of an epoxy resin system applied either during the winding of the coils or present as a 'B stage' coating on the coil material. The Bidder shall ensure that the bonding process is adequate for the long-term mechanical stability and soundness of the coil and that the design used provides an adequate outer electrical insulation.

The coils shall be terminated on suitably mounted, insulated, connection panels.

After completion of winding and the curing of the resin bonding system, the resin on the coils must be fully transparent, with no colouriser or additive that would limit observation of the enamelled turns within the coil. No paint or other external coating will be allowed.

5.9.2 Conductor

The conductor shall use oxygen-free high conductivity (OFHC) copper with a maximum volume resistivity of 17.3 nΩm at 20°C, and its properties shall be as specified in DIN 1787 OF-Cu (DE), or BS 6017:1981 Cu-OF (UK), or A 53-100 Cu-c1 (France).

The material shall be in the fully-annealed condition prior to winding, and the coil fabrication method must be such as to minimise work hardening during the winding operation.

The dimensions of the conductor shall be as determined by the Bidder's design, as approved by the Contracting Authority.

The uniformity of the conductor shall be such that the resistance of all coils constructed from it shall be equal to within ±5%.

The use of joints within the coils will not be permitted.

5.9.3 Bonding and Outer-insulation System

No material, other than those detailed in this section shall be included in the coil without the written permission of the Contracting Authority or its authorised representative. All materials must be suitable for use in a high radiation environment.

The resin bonding system shall comprise a radiation-resistant epoxy resin with an anhydride curing agent, with optional inclusion of an accelerator. The choice of the resin Bidder, the resin type and the curing agent are left to the Bidder. However, this choice is part of the offer and must be indicated within the offer, with corresponding technical documents appended.

Any addition of additives or wetting agents will be subject to written authorisation from the Contracting Authority.

The use of additives with resin systems is known in many cases to prejudice the required mechanical and electrical properties, in particular the irradiation stability. Dilutants, fillers, plasticisers and flexibilisers are therefore specifically prohibited.

Details of bonding and curing operations for the resin system must be submitted at the tendering stage. The Contracting Authority will approve all materials and processes prior to use in coil manufacture, but such approval shall in no way release the manufacturing company from any of its responsibilities under the contract.

The coil terminals, the connection posts and all metallic parts connected to them will be insulated from the yoke and able to sustain 5 kV DC without any electrical breakdown and with an insulation resistance greater than 10 MΩ.

The coil terminals, the connection posts and all metallic parts connected to them will be protected against accidental contact by an insulating, transparent cover, shielded against contact to IP2X, which can only be removed by the use of tools; the Bidder's proposals for this cover shall be described in the offer.

Magnet electrical termination connectors are to be decided in conjunction with the Contracting Authority once the overall magnet design has been finalised.

A single terminal connection post able to receive a 10 mm² cable shall be provided for earthing the yoke and other components. This shall be connected to all laminations (if used) in each block comprising the yoke by means of a single, resistive, conducting strip painted along the yoke block. This shall be designed so as not to create a shorted turn around the yoke laminations.

5.9.4 Water Connections

Magnets should be supplied with an inlet manifold and outlet manifold mounted on the magnet. The manifold should be manufactured from metric stainless steel tube, grade 304/316 and conform to ASTM A269, suitable for connection to the supply and return water system via a single Swagelok metric compression fitting onto each manifold. The manifold pipe will be mounted vertically on the mechanical services panel and the connection point will be at the bottom end of the tube.

All hoses and pipes located on the magnet should be metric Swagelok except the Inlet and Outlet manifold connections, these should be Rp1/2" (Female). Swagelok American Standard Pipe Thread (NPT) is NOT to be used.

The Bidder shall, during initial design, avoid locating any organic based material in the median plane of the magnet centre where it would be subject to long-term radiation damage from the electron beam.

Water connections to the manifolds should be well above and below the beam-line. Where water conduits cross the beam-line horizontal plane, pipe work should be metallic.

The Bidder shall ensure that there is adequate electrical connection between the earthing post, the manifolds and other components so that all the exposed metallic parts of the magnet are safely earthed by this terminal post.

5.9.5 Inspection and Tests of Coils at Works

The Contracting Authority or its authorised representative shall inspect and approve all tooling, fixtures, materials and processes prior to their use in fulfilment of the contract.

Inspection and approval shall not release the Bidder from any responsibilities under the terms of the contract.

All coils shall bear an identification number stencilled in a position as shown on Bidder's drawings approved by the Contracting Authority, as described above.

The programme of tests to be carried out shall be as specified in the section below.

All tests shall be undertaken using equipment and procedures which have been agreed by the Contracting Authority. The Bidder must specify the methods which it is proposed to use to carry out the test programme.

The Contracting Authority reserves the right to reject any material or coil not fulfilling the conditions laid down in this specification.

No conductor or coil failing any test shall be used or repaired without the written permission of the Contracting Authority or its authorised representative.

5.9.6 Test Schedule for Coils at Works

Test certificates shall be available relating to tests undertaken by the copper Bidder, to include dimensions, resistivity and Brinell hardness.

All coils shall be visually inspected, and must be free from cracking, voids and other flaws or defects. The bonding insulation must not exhibit resin-rich areas, and the thickness of resin on the coil surface must not exceed 0.5 mm. Coils failing to satisfy any of these criteria shall not normally be accepted.

The electrical resistance of all coils shall be measured with a DC bridge. The values shall be corrected to 20°C and must be within $\pm 5\%$ of the mean value for all coils.

Each coil shall be energised until the coil temperature increases to 55°C, as measured by the change in electrical resistance. On attaining the required temperature, the current shall be interrupted and the coil allowed to cool until the conductor again assumes the ambient temperature, as measured by the conductor resistance. This cycle shall be repeated ten (10) times. Any coil exhibiting evidence of cracking or delamination shall be rejected. The Bidder may wish to undertake this procedure on several coils simultaneously.

Each coil shall be immersed in tap water at ambient temperature, but with the terminals exposed above the water level. Any other part of the coil body not then completely immersed shall be covered with wet cloths, the ends of which are in contact with the water.

The following test sequence shall then be carried out:

- Record insulation resistance between coil terminals and water bath, at a voltage of 500 V.
- Apply direct voltage of 5 kV between coil terminals and water bath for one minute and record the leakage current.
- Repeat the insulation resistance measurement.

Any coil exhibiting evidence of breakdown or significant changes of insulation resistance during these tests shall be rejected.

Immediately after the test described above the coil shall be tested by using it as the secondary winding of a transformer. A maximum voltage of 2.5 kV RMS shall be induced across the coil terminations for a period of one minute, and the corresponding primary current recorded. Any indication of short-circuiting between turns shall result in rejection of the coil.

5.10 Testing and Measurement

5.10.1 Mechanical Test and Measurement Programme

The Bidder shall give details of their normal test procedure for routine mechanical tests during manufacture with the tender. Details of the specific tests which will be used in this contract shall be agreed at the Design Review.

5.10.2 Electrical Test and Measurement Programme

A direct voltage of 2 kV shall be applied between the terminals of each coil and its magnet yoke for one minute. Any coil showing evidence of breakdown, indicated by a leakage resistance of less than 10 MΩ, shall be rejected.

On each magnet, the coils shall be powered for a period of at least two hours at the nominal current specified and with the nominal water flow rate. During this test the temperature of coil surfaces and all coil interconnections and terminals will be checked with contact thermometers; the coil voltage and current shall be monitored with an accuracy that will allow the average coil temperature rise, measured by resistance, to be assessed. Results shall be judged with respect to the appropriate magnet thermal specifications.

During this time, the mechanical, electrical and thermal stability of the magnet will be monitored.

Any magnet showing evidence of any of the following shall be rejected:

- electrical discharge in the coils, at the terminals between laminations or parts of the yoke and other fittings;
- overheating of the coils;
- a terminal voltage which is more than 5% lower than the mean for that type of magnet (evidence of low inductance due to a shorted turn around the yoke).

The inductance of each magnet should be measured and recorded.

5.10.3 Magnetic measurements

The following magnetic tests must be completed successfully at the Bidder's premises before shipment. The tests consist of in-situ magnetic field measurements by means of suitable probes and should show that the magnets meet the magnetic specifications detailed above.

The magnetic axis of each magnet must be accurately determined and referenced to the magnet's fiducials.

The results of the measurements must be analysed and compared directly to the specification. Measurement errors and reproducibility must also be evaluated.

5.10.3.1 Quadrupoles

For the quadrupoles, field integrals and harmonics should be measured using a rotating coil of sufficiently large radius to encompass the good field region, and sufficiently long to encompass the quadrupole's fringe fields. A calculation of the variation of the integrated gradient within the good field region must be made from the measured data.

The central gradient in the quadrupoles must be measured using a Hall probe.

All the above measurements must be carried out at the nominal quadrupole current, and in steps of 10% from zero up to 110% of the nominal current.

The field produced by integrated correctors in the quadrupoles must be measured as outlined in the section below.

5.10.3.2 Correctors

The integrated field produced by the corrector coils, and the field quality inside the specified good field region, must be measured. This can be either a rotating coil or Hall probe measurement.

The central field produced by the corrector coils must be measured using a Hall probe.

The above measurements must be carried out independently for the horizontal and vertical corrector coils.

The above measurements must be carried out at the nominal corrector current, and in steps of 10% from zero up to 110% of the nominal current.

5.10.4 Acceptance Tests after Delivery

After delivery, each magnet will be visually inspected for mechanical damage suffered in transit. Any such damage will be reported to the Bidder. Possible repair will be the subject to the agreement of the Contracting Authority. Where the damage has resulted in alteration to the magnet iron geometry or to the soundness or shape of coil conductor, insulation or terminals, the magnet shall normally be rejected.

Mechanical, electrical and magnetic tests shall be carried out by the Contracting Authority's staff at Daresbury Laboratory after delivery. The Bidder has the right to be represented during these tests but shall notify the Contracting Authority in writing if this right is to be exercised. Likewise, the Contracting Authority will endeavour to provide the Bidder with adequate notice concerning the timing of such test sequences.

A direct voltage of 2 kV will be applied between the terminals of each coil and its magnet yoke for one minute. Any coil showing evidence of breakdown, indicated by a leakage resistance of less than 10 MΩ, shall be rejected.

Each magnet will be energised with a direct current of value equal to the nominal current specified in the appropriate magnet parameters, for a period of at least two hours. Any coil showing evidence of breakdown, local hot spots or other faults during this period shall be rejected.

5.11 Project Management

5.11.1 Contract Engineer

At the start of the contract the Bidder should nominate a Contract Engineer who will be responsible for all reporting and contact with the nominated Contracting Authority's point of contact.

5.11.2 Reviews and reporting

Start of contract

Within two weeks of the start of the contract, the Bidder should issue a detailed programme covering the design, procurement, manufacturing, testing and assembly phases in sufficient detail to allow regular progress monitoring.

At this time, the Bidder should also produce a QA plan, listing all certification, supporting documentation and procedures that will be implemented within the contract, and which will form the basis of the final QA dossier.

Kick-off meeting

The kick-off meeting should take place after the programme and QA plan have been issued, either at the premises of the Contracting Authority or the Bidder or via videoconference. It should establish a good working relationship between the successful Bidder and the Contracting Authority.

At the meeting:

1. The Contracting Authority will present an overview of the project.
2. The successful Bidder will carry out a walk-through of its initial proposed solution.
3. The Contracting Authority and the successful Bidder will firm up what is required for the final design review.

Throughout the contract, the Contract Engineer should supply a written report to the Contracting Authority every month (or at significant milestones), detailing progress with respect to the programme. A videoconference meeting should be held after the report is received by the Contracting Authority.

Preliminary Design Review

Within one month of the start of the contract a Preliminary Design Review (PDR) will be held with the Bidder, either at the premises of the Contracting Authority or the Bidder or via videoconference. At this review the Bidder will present their proposed design solution for the magnets. UKRI STFC and the Bidder must agree that the solution proposed is suitable and that it should proceed to a full design. The Bidder will also present a plan for the execution of the contract and a Quality Assurance plan.

An agreed set of minutes will be produced following the PDR recording the state of the design work as well as all decisions and actions.

Final Design Review

The Final Design Review (FDR) will be held in an agreed location (or via videoconference) with the presentation of the final design for the quadrupole magnets and all supporting systems. The review must be successful for the project to continue.

Before the FDR takes place, the successful Bidder should send the following information:

1. Detailed technical design including a list of all components used in the design and a full CAD model
2. Project plan
3. Manufacturing plan
4. Assembly plan
5. Test and measurement plan

An agreed set of minutes will be produced following the FDR accurately recording whether all aspects of the design have been completed, as well as all decisions and actions. The final design must be approved by the Contracting Authority before manufacture begins.

Unforeseen delays

In the case of exceptional events or delays in the project, the Bidder will immediately inform The Contracting Authority to assess the situation and discuss the steps to be undertaken.

5.11.3 Communication

Throughout the project, the Bidder and The Contracting Authority will communicate regarding the interfaces between their work areas by email, telephone or videoconference.

5.11.4 Deviation from the specification

During the construction, all proposed deviations from the specification must be submitted to the Contracting Authority in writing; the Contracting Authority will give its approval or refusal also in writing.

5.11.5 QA system

The Bidder shall maintain and apply a Quality Assurance (QA) system compliant with ISO9001:2000 for the design, manufacture and testing of all systems and equipment provided by them.

The Bidder shall ensure that all subcontractors have a similar QA system and shall take all the necessary actions to guarantee the quality of the subcontractor's delivery.

5.11.6 Documentation and file formats

Before completion of the contract the successful Bidder will provide electronic copies of the following documentation relating to the project and the completed system:

- Preliminary Design Review (PDR) documents
- Final Design Review (FDR) documents
- Factory Acceptance Test procedures
- Factory Acceptance Test reports
- Full set of manufacturing drawings for all equipment supplied
- Safety report
- Electrical safety test certificates

- QA documents, certifying that the equipment conforms to the specification and the supplied engineering drawings, and containing all certificates, relevant documents and results of test procedures
- Magnetic measurement results in spreadsheet format

In addition to the sets of final drawings, the successful Bidder shall make drawings available as soon as possible throughout the term of the contract, for the Contracting Authority's inspection and/or approval.

Monthly and milestone reports should be submitted in PDF format.

The Bidder will be required to produce a full set of engineering drawings showing all components and enough assembly details to allow complete construction of the magnets. Drawings should be submitted in a format compatible with the Contracting Authority's CAD systems – STEP or Creo is preferred. Electrical drawings showing all agreed cabling and connections should be supplied in AutoCad DWG or DXF file format. The Contracting Authority will provide a batch of drawing numbers at the start of the project so that drawings can be integrated into our drawing registry.

Measurement data should be sent in Excel-compatible format.

All reports should be in English.

5.11.7 Safety and Hazard Management

The successful Bidder shall carry out a safety assessment of the equipment and its operation. This shall be fully documented in the corresponding manuals. Any safety and risk assessments carried out shall be supplied to the Contracting Authority.

The Contracting Authority requires successful Bidders to employ hazard management techniques to reduce the risk of personnel becoming injured as a result of interaction with their equipment.

Consideration should be made of hazards that exist at all stages of the life of the equipment, including installation, commissioning, operation, maintenance, repair, decommissioning and disposal. The analysis should include hazards that may occur during fault conditions and should include all potentially hazardous materials.

The hazard management system should:

1. Identify hazards
2. Reduce severity
3. Mitigate likely hazards
4. Predict casualty rates.

5.12 Delivery

5.12.1 Packaging

All items to be delivered should be protected during transport from damage due to dirt, weather and rough handling.

5.12.2 Delivery timescales

All magnets to be delivered by 31st July 2021.

5.13 Warranty

5.13.1 Warranty period

The Bidder shall include 12 months warranty from point of installation, including preventative maintenance and servicing, to guarantee the delivered equipment against defects due to either faulty components or faulty manufacture for a minimum period of 12 months after installation of the equipment.

6. Timetable

Key milestones for this project listed below, with values of staged payments to be made at each milestone.

- The Final Design Review between The Contracting Authority and the successful Bidder (40%).
- Delivery of all materials and components to the successful Bidder (40%).
- Final delivery of all magnets to the Contracting Authority (20%).

The Contracting Authority expects the final delivery to take place by the end of July 2021.

The Contract duration shall be for a period of 8 months from commencement of the Contract.

Terms and Conditions

Bidders are to note that any requested modifications to the Contracting Authority Terms and Conditions on the grounds of statutory and legal matters only, shall be raised as a formal clarification during the permitted clarification period.

Section 5 – Evaluation model

5.1. Introduction

- 5.1.1. The evaluation process will be conducted to ensure that Bids are evaluated fairly to ascertain the bidders who can demonstrate the required skills qualities, technical ability and capacity, commercial stability and experience to ensure successful performance of the Contract.
- 5.1.2. The evaluation team may comprise staff from UK SBS and the Contracting Authority, and any specific external stakeholders the Contracting Authority deem required

5.2. Evaluation of Bids

- 5.2.1. Evaluation of Bids shall be based on a Selection questionnaire and Award criteria as clearly defined in the e-sourcing tool.

5.3. SELECTION questionnaire

- 5.3.1. The Selection questionnaire shall be marked against the following Selection pass / fail and scoring criteria.
- 5.3.2. The selection questionnaire shall be marked against the following Mandatory or discretionary pass / fail criteria.

Selection Pass/fail criteria		
Questionnaire	Q No.	Question subject
Selection Questionnaire Part 1: Potential Supplier Information		
Section 1	1.3	Contact details and declaration
Part 2: Exclusion Grounds		
Section 2	2.1 (a)(i)	Participation in a criminal organisation
Section 2	2.1(a)(ii)	Corruption
Section 2	2.1(a)(iii)	Fraud
Section 2	2.1(a)(iv)	Terrorist Offences or offences link to terrorist activities
Section 2	2.1(a)(v)	Money laundering or Terrorist financing
Section 2	2.1(a)(vi)	Child Labour and other forms of trafficking in human beings
Section 2	2.2	Self cleaning
Section 2	2.3(a)	Payment of tax or social security
Section 3	3.1 (a)	Breach of environmental obligations
Section 3	3.1 (b)	Breach of social obligations
Section 3	3.1 (c)	Breach of labour law obligations
Section 3	3.1(d)	Bankruptcy
Section 3	3.1(e)	Guilty of grave professional misconduct
Section 3	3.1(f)	Distorting competition
Section 3	3.1(g)	Conflict of Interest
Section 3	3.1(h)	Prior involvement in procurement process
Section 3	3.1(i)	Prior performance of contract
Section 3	3.1(j)(i)	Serious Misrepresentation

Section 3	3.1(j)(ii)	Withholding information
Section 3	3.1(j)(iii)	Unable to provide supporting documentation for ESPD
Section 3	3.1(j)(iv)	Influenced the decision-making process
Part 3: Selection Questions		
Section 4	4.1	Audited accounts
Section 4	4.2	Minimum financial threshold
Section 5	5.1	Wider group
Section 5	5.2	Parent Company Guarantee
Section 5	5.3	Other Guarantee
Section 6	6.1	Relevant experience and contract examples
Section 7	7.1	Compliance under Modern Slavery Act 2015
Section 8	8.1(a)	Insurance
Section 8	8.3 (a)	Steel
Section 9	9.2	Systems to manage supply chain
Section 9	9.3	Procedures for resolving disputes
Section 9	9.5	Meeting the requirements of the code/standards
Section 9	9.6	Confirmation of 30 days payment
Section 9	9.7	Payments to supply chain
Section 9	SEL5.5	Health and Safety Policy
Section 9	SEL5.6	Enforcement/remedial orders in relation to the Health and Safety Executive
Section 9	SEL5.7	Breaching environmental legislation
Section 9	SEL5.8	Checking sub-contractors for infringement of environmental legislation
Section 9	SEL5.9	Unlawful discrimination
Section 9	SEL5.10	Checking sub-contractors for unlawful discrimination
Section 9	FOI1.1	Freedom of information
	In the event of a Bidder failing to meet the requirements of a Mandatory pass / fail criteria, the Contracting Authority reserves the right to disqualify the Bidder and not consider evaluation of the any of the selection stage scoring methodology, nor the Award stage scoring methodology or Mandatory pass / fail criteria.	

5.3.3. Each Mandatory pass / fail question includes a clear definition of the requirements of a successful response to the question.

5.4. AWARD questionnaire

5.4.1. The award questionnaire shall be marked against the following Mandatory or discretionary pass / fail criteria. Each Mandatory pass / fail question includes a clear definition of the requirements of a successful response to the question.

Award Pass/fail criteria		
Questionnaire	Q No.	Question subject
Commercial	AW1.1	Form of Bid
Commercial	AW1.2	Bid validity period
Commercial	AW1.3	Certificate of bona fide Bid

Commercial	AW4.1	Compliance to the Contract Terms
Commercial	AW4.2	Changes to the Contract Terms
Price	AW5.1	Firm and fixed price
Commercial	AW5.4	E Invoice
Quality	AW6.1	Compliance to the Specification
Quality	AW6.2	Variable Bids
-	-	Request for Proposal response – received on time within the e-sourcing tool
In the event of a Bidder failing to meet the requirements of a Mandatory pass / fail criteria, the Contracting Authority reserves the right to disqualify the Bidder and not consider evaluation of the any of the selection stage scoring methodology, nor the Award stage scoring methodology or Mandatory pass / fail criteria.		

5.4.2. The Award stage of due process shall be marked against the following Award scoring criteria.

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

5.4.4. Questions marked 'for information only' do not contribute to the scoring model.

Award 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 RFP. 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	35.00%
Quality	PROJ1.1	Facilities	6.00%
Quality	PROJ1.2	Design	18.00%
Quality	PROJ1.3	Alignment	6.00%
Quality	PROJ1.4	Tooling	3.00%
Quality	PROJ1.5	Magnetic Measurements	6.00%
Quality	PROJ1.6	Delivery Timescales	15.00%
Quality	PROJ1.7	Schedule of Work	8.00%
Quality	PROJ1.8	Packaging and Shipping	3.00%

Award Evaluation of criteria

Non-Price elements

Each question will be evaluated 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 there may be multiple evaluators. If so, their individual scores will be averaged (mean) to determine your final score as follows:

Example

Evaluator 1 scored your bid as 60

Evaluator 2 scored your bid as 40

Evaluator 3 scored your bid as 80

Evaluator 4 scored your bid as 60

Your final score will $(60+40+80+60) \div 4 = 60$

Price elements will be evaluated 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: 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.

5.5. Evaluation process

5.5.1. The evaluation process will feature some, if not all, the following phases

Stage	Summary of activity
Receipt and Opening	<ul style="list-style-type: none"> RFP logged upon opening in alignment with UK SBS's procurement procedures. Any RFP Bid received after the closing date will be rejected unless circumstances attributed to the Contracting Authority or the e-sourcing tool beyond the bidder control are responsible for late submission.
Compliance check	<ul style="list-style-type: none"> Check all Mandatory requirements are acceptable to the Contracting Authority. Unacceptable Bids maybe subject to clarification by the Contracting Authority or rejection of the Bid.
Scoring of the Bid	<ul style="list-style-type: none"> Evaluation team will independently score the Bid and provide a commentary of their scoring justification against the Selection criteria.
Clarifications	<ul style="list-style-type: none"> The Evaluation team may require written clarification to Bids
Re - scoring of the Bid and Clarifications	<ul style="list-style-type: none"> Following Clarification responses, the Evaluation team reserve the right to independently re-score the Bid and Clarifications and provide a commentary of their re-scoring justification against the Selection criteria.
Validation of unsuccessful Bidders	<ul style="list-style-type: none"> To confirm contents of the letters to provide details of scoring and relative feedback on the unsuccessful Bidders Bid in comparison with the successful Bidders Bid.

Section 6 – Selection and award questionnaires

Section 6 – Selection questionnaire

6.1. Introduction

The Selection questionnaires are located in the within the e-sourcing tool.

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

PLEASE NOTE THE QUESTIONS ARE NOT NUMBERED SEQUENTIALLY

Section 6 – Award questionnaire

- 6.2. The Award questionnaires are located within the e-sourcing tool.
- 6.3. Guidance on completion of the questions 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

7.1. Introduction

- 7.1.1. The Contracting Authority wishes to establish a Contract for the provision of FEBE Hutch Magnets. The Contracting Authority is managing this procurement process in accordance with the Public Contracts Regulations 2015 (as may be amended from time to time) (the “Regulations”). This is a FEBE Hutch Magnets Contract being procured under the OJEU Open Procedure
- 7.1.2. The Contracting Authority is procuring the Contract for add for its exclusive use or cross reference the list of customers provided in the [OJEU Notice](#) or [Contracts Finder](#) Notice supported if relevant by the statement on the UK SBS website currently located [here](#). (OPB)
- 7.1.3. UK SBS and the Contracting Authority logo, trademarks and other identifying marks are proprietary and may not be incorporated in the Companies response without or the Contracting Authority’s written permission.
- 7.1.4. The Bidder shall indemnify and keep indemnified UK SBS and the Contracting Authority against all actions, claims, demands, proceedings, damages, costs, losses, charges and expenses whatsoever in respect of any breach by the Bidder of this document.
- 7.1.5. If there is any doubt with regard to the ambiguity of any question or content contained in this questionnaire then PLEASE ASK a clarification question, but please ensure that your question is via the formal clarification process in writing to the UK SBS representative nominated. No approach of any kind in connection with this opportunity should be made to any other person within or associated with UK SBS or the Contracting Authority. All information secured outside of this named contact shall have no legal standing or worth and should not be relied upon.
- 7.1.6. It remains the responsibility of the Bidder to keep UK SBS and the Contracting Authority informed of any matter that may affect continued qualification
- 7.1.7. Prior to commencing formal evaluation, Submitted Responses will be checked to ensure they are fully compliant with the Pass / Fail criteria within the Evaluation model. Non-compliant Submitted Responses may be rejected by the Contracting Authority. Submitted Responses which are deemed by the Contracting Authority to be fully compliant will proceed to evaluation. These will be evaluated using the criteria and scores detailed in the matrix set out in [Section 5](#).
- 7.1.8. Whilst it is the Contracting Authority’s intention to purchase the majority of its supplies under this Contract Arrangement from the Supplier(s) appointed this does not confer any exclusivity on the appointed Suppliers. The Contracting Authority and any relevant Other Public Bodies reserve the right to purchase any supplies and services (including those similar to the supplies covered by this procurement) from any Supplier outside of this Contract.
- 7.1.9. The Contracting Authority reserves the right not to conclude a Contract as a result of the current procurement process. Bidders should review the contents of Section 7 paragraph 7.8.1 when considering submitting their Response.

- 7.1.10. The supplies covered by this procurement exercise have NOT been sub-divided into Lots.
- 7.1.11. The Contracting Authority shall utilise the Delta eSourcing Procurement Tool available at <https://uksbs.delta-esourcing.com/> to conduct this procurement. There will be no electronic auction following the conclusion of the evaluation of the Request for Proposal (RFP) responses. Bidders will be specifically advised where attachments are permissible to support a question response within the e-sourcing tool. All enquiries with respect to problems or functionality within the tool may be submitted to Delta eSourcing on 0845 270 7050
- 7.1.12. Please utilise the messaging system within the e-sourcing tool located at <https://uksbs.delta-esourcing.com/> within the timescales detailed in [Section 3](#). if you have any doubt as to what is required or will have difficulty in providing the information requested. Bidders should note that any requests for clarifications may not be considered by the Contracting Authority if they are not articulated by the Bidder within the discussion forum within the e-sourcing tool.
- 7.1.13. Bidders should read this document, Stage One: Overview Section and the evaluation questionnaires carefully before completing the Response submission. Failure to comply with any of these instructions for completion and submission of the Submitted Response may result in the rejection of the Response. Bidders are advised therefore to acquaint themselves fully with the extent and nature of the supplies and contractual obligations. These instructions constitute the Conditions of Response. Participation in the RFP process automatically signals that the Bidder accepts these Conditions.
- 7.1.14. All material issued in connection with this RFP shall remain the property of the Contracting Authority and/or as applicable relevant OPB and shall be used only for the purpose of this procurement. All Due Diligence Information shall be either returned to the Contracting Authority or securely destroyed by the Bidder (at the Contracting Authority's option) at the conclusion of the procurement
- 7.1.15. The Bidder shall ensure that each and every sub-contractor, consortium member and adviser abide by the terms of these instructions and the Conditions of Response.
- 7.1.16. The Bidder shall not make contact with any other employee, agent or consultant of UK SBS or the Contracting Authority or any relevant OPB or Customer who are in any way connected with this procurement during the period of this procurement, unless instructed otherwise by the Contracting Authority.
- 7.1.17. The Contracting Authority shall not be committed to any course of action as a result of:
- 7.1.17.1. issuing this RFP or any invitation to participate in this procurement ;
 - 7.1.17.2. an invitation to submit any Response in respect of this procurement;
 - 7.1.17.3. communicating with a Bidder or a Bidder's representatives or agents in respect of this procurement; or
 - 7.1.17.4. any other communication between UK SBS, the Contracting Authority and/or any relevant OPB (whether directly or by its agents or representatives) and any other party.
- 7.1.18. Bidders shall accept and acknowledge that by issuing this RFP the Contracting Authority shall not be bound to accept any Response and reserves the right not to conclude a Contract for some or all of the supplies for which Responses are invited.

- 7.1.19. The Contracting Authority reserves the right to amend, add to or withdraw all or any part of this RFP at any time during the procurement.
- 7.1.20. Bidders should not include in the Response any extraneous information which has not been specifically requested in the RFP including, for example, any sales literature, standard terms of trading etc. Any such information not requested but provided by the Bidder shall not be considered by the Contracting Authority.
- 7.1.21. If the Bidder is a consortium, the following information must be provided: full details of the consortium; and the information sought in this RFP in respect of each of the consortium's constituent members as part of a single composite response. Potential Providers should provide details of the actual or proposed percentage shareholding of the constituent members within the consortium as indicated in the relevant section of the selection questionnaire SEL1.9 specifically refers. If a consortium is not proposing to form a corporate entity, full details of alternative proposed arrangements should be provided as indicated in the relevant section of the RFP. However, please note the Contracting Authority reserves the right to require a successful consortium to form a single legal entity in accordance with regulation 19(6) of the Regulations. The Contracting Authority 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 Contracting Authority so that it can make a further assessment by applying the selection criteria to the new information provided and consider rejection of the Response if the Contracting Authority reasonably consider the change to have a material impact of the delivery of the viability of the Response.

7.2. Bidder conference

- 7.2.1. A Bidders' Conference will not be held in conjunction with this procurement.

7.3. Confidentiality

- 7.3.1. Subject to the exceptions referred to in paragraph 7.3.2, the contents of this RFP are being made available by the Contracting Authority on condition that:
- 7.3.1.1. Bidders shall at all times treat the contents of the RFP and any related documents (together called the 'Information') as confidential, save in so far as they are already in the public domain;
 - 7.3.1.2. Bidders shall not disclose, copy, reproduce, distribute or pass any of the Information to any other person at any time or allow any of these things to happen;
 - 7.3.1.3. Bidders shall not use any of the Information for any purpose other than for the purposes of submitting (or deciding whether to submit) a Response; and
 - 7.3.1.4. Bidders shall not undertake any publicity activity within any section of the media in relation to this procurement
- 7.3.2. Bidders may disclose, distribute or pass any of the Information to the Bidder's advisers, sub-contractors or to another person provided that either:
- 7.3.2.1. This is done for the sole purpose of enabling a Response to be submitted and the person receiving the Information undertakes in writing to keep the Information confidential on the same terms as if that person were the Bidder; or

- 7.3.2.2. The disclosure is made for the sole purpose of obtaining legal advice from external lawyers in relation to the procurement or to any Contract arising from it; or
 - 7.3.2.3. The Bidder is legally required to make such a disclosure
- 7.3.3. In paragraphs 7.3.1 and 7.3.2 above the term 'person' includes but is not limited to any person, firm, body or association, corporate or incorporate.
- 7.3.4. UK SBS and the Contracting Authority may disclose detailed information relating to Responses to its employees, agents or advisers and they may make any of the Contract documents available for private inspection by its officers, employees, agents or advisers. UK SBS and the Contracting Authority also reserve the right to disseminate information that is materially relevant to the procurement to all Bidders, even if the information has only been requested by one Bidder, subject to the duty to protect each Bidder's commercial confidentiality in relation to its Response (unless there is a requirement for disclosure as explained in paragraphs 7.4.1 to 7.4.3 below).
- 7.3.5. 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. Subject to section 7.4 below, the information will not be disclosed outside Government. Bidders taking part in this RFP consent to these terms as part of the competition process.

- 7.3.6. The Government introduced its new Government Security Classifications ("GSC") classification scheme 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 from 2nd April 2014. The link below to the Gov.uk website provides information on the new GSC:
<https://www.gov.uk/government/publications/government-security-classifications>
- 7.3.7. The Contracting Authority reserves the right to amend any security related term or condition of the draft contract accompanying this RFP to reflect any changes introduced by the GSC. In particular where this RFP 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

- [Contracts Finder](#)
- [Tenders Electronic Daily](#)
- [Equalities Act introduction](#)
- [Bribery Act introduction](#)
- [Freedom of information Act](#)

7.4. Freedom of information

- 7.4.1. In accordance with the obligations and duties placed upon public authorities by the Freedom of Information Act 2000 (the 'FoIA') and the Environmental Information Regulations 2004 (the 'EIR') (each as amended from time to time), UK SBS and the Contracting Authority may be required to disclose information submitted by the Bidder to the to the Contracting Authority.
- 7.4.2. In respect of any information submitted by a Bidder that it considers to be commercially sensitive the Bidder should complete the Freedom of Information declaration question defined in the Question FOI1.2.
- 7.4.3. Where a Bidder identifies information as commercially sensitive, the Contracting Authority will endeavour to maintain confidentiality. Bidders should note, however, that, even where information is identified as commercially sensitive, the Contracting Authority may be required to disclose such information in accordance with the FoIA or the Environmental Information Regulations. In particular, the Contracting Authority is required to form an independent judgment concerning whether the information is exempt from disclosure under the FoIA or the EIR and whether the public interest favours disclosure or not. Accordingly, the Contracting Authority cannot guarantee that any information marked 'confidential' or "commercially sensitive" will not be disclosed.
- 7.4.4. Where a Bidder receives a request for information under the FoIA or the EIR during the procurement, this should be immediately passed on to the Contracting Authority and the Bidder should not attempt to answer the request without first consulting with the Contracting Authority.
- 7.4.5. Bidders are reminded that the Government's transparency agenda requires that sourcing documents, including RFP templates such as this, are published on a designated, publicly searchable web site, and, that the same applies to other sourcing documents issued by the Contracting Authority, and any contract entered into by the Contracting Authority with its preferred supplier once the procurement is complete. By submitting a response to this RFP Bidders are agreeing that their participation and contents of their Response may be made public.

7.5. Response Validity

- 7.5.1. Your Response should remain open for consideration for a period of 90 days. A Response valid for a shorter period may be rejected.

7.6. Timescales

- 7.6.1. [Section 3](#) of the RFP sets out the proposed procurement timetable. The Contracting Authority reserves the right to extend the dates and will advise potential Bidders of any change to the dates.

7.7. The Contracting Authority's Contact Details

- 7.7.1. Unless stated otherwise in these Instructions or in writing from UK SBS or the Contracting Authority, all communications from Bidders (including their sub-contractors, consortium members, consultants and advisers) during the period of this procurement must be directed through the e-sourcing tool to the designated UK SBS contact.
- 7.7.2. All enquiries with respect to access to the e-sourcing tool may be submitted to Delta eSourcing on 0845 270 7050 please note this is a free self-registration website and this can be done by completing the online questionnaire at <https://uksbs.delta-esourcing.com/>
- 7.7.3. Bidders should be mindful that the designated Contact should not under any circumstances be sent a copy of their Response outside of the e-sourcing tool. Failure to follow this requirement will result in disqualification of the Response.

7.8. Preparation of a Response

- 7.8.1. Bidders must obtain for themselves at their own responsibility and expense all information necessary for the preparation of Responses. Bidders are solely responsible for all costs, expenses and other liabilities arising in connection with the preparation and submission of their Response and all other stages of the selection and evaluation process. Under no circumstances will UK SBS or the Contracting Authority, or any of their advisers, be liable for any such costs, expenses or liabilities borne by Bidders or their sub-contractors, suppliers or advisers in this process.
- 7.8.2. Bidders are required to complete and provide all information required by the Contracting Authority in accordance with the Conditions of Response and the Request for Proposal. Failure to comply with the Conditions and the Request for Proposal may lead the Contracting Authority to reject a Response.
- 7.8.3. The Contracting Authority relies on Bidders' own analysis and review of information provided. Consequently, Bidders are solely responsible for obtaining the information which they consider is necessary in order to make decisions regarding the content of their Responses and to undertake any investigations they consider necessary in order to verify any information provided to them during the procurement.
- 7.8.4. Bidders must form their own opinions, making such investigations and taking such advice (including professional advice) as is appropriate, regarding their Responses, without reliance upon any opinion or other information provided by the Contracting Authority or their advisers and representatives. Bidders should notify the Contracting Authority promptly of any perceived ambiguity, inconsistency or omission in this RFP, any of its associated documents and/or any other information issued to them during the procurement.
- 7.8.5. Bidders must ensure that each response to a question is within any specified word count. Any responses with words in excess of the word count will only be considered up to the point where they meet the word count, any additional words beyond the volume defined in the word count will not be considered by the evaluation panel.

- 7.8.6. Bidders must ensure that each response to a question is not cross referenced to a response to another question. In the event of a Bidder adding a cross reference it will not be considered in evaluation.

7.9. Submission of Responses

- 7.9.1. The Response must be submitted as instructed in this document through the e-sourcing tool. Failure to follow the instruction within each Section of this document, to omit responses to any of the questions or to present your response in alignment with any guidance notes provided may render the Response non-compliant and it may be rejected.
- 7.9.2. The Contracting Authority may at its own absolute discretion extend the closing date and the time for receipt of Responses specified [Section 3](#).
- 7.9.3. Any extension to the RFP response period will apply to all Bidders.
- 7.9.4. Any financial data provided must be submitted in or converted into pounds sterling. Where official documents include financial data in a foreign currency, a sterling equivalent must be provided. Failure to adhere to this requirement will result in the Response not being considered.
- 7.9.5. The Contracting Authority do not accept responsibility for the premature opening or mishandling of Responses that are not submitted in accordance with the instructions of this document.
- 7.9.6. The Response and any documents accompanying it must be in the English language
- 7.9.7. Bidders must submit their response through the e-sourcing tool, unless explicitly requested by the Contracting Authority either in the procurement documents or via a formal clarification from the Contracting Authority. Responses received by any other method than requested will not be considered for the opportunity.
- 7.9.8. Responses will be submitted any time up to the date indicated in [Section 3](#). Responses received before this deadline will be retained in a secure environment, unopened until this deadline has passed.
- 7.9.9. Responses received after the date indicated in [Section 3](#) shall not be considered by the Contracting Authority, unless the Bidder can justify that the reason for the delay is solely attributable to the Contracting Authority
- 7.9.9.1. The Bidder must demonstrate irrefutable evidence in writing they have made best endeavours to ensure the Response was received on time and that the issue was beyond their control.
 - 7.9.9.2. Any request for a late Response to be considered must be emailed to the Buyer in [Section 3](#) in advance of 'the deadline' if a bidder believes their Response will be received late.
 - 7.9.9.3. The Contracting Authority reserves the right to accept or reject any late Response without justification to the affected Bidder and make no guarantee it will consider any request for a late Response to be considered.
- 7.9.10. Do not seek changes to the Bid after responses have been submitted and the deadline (date and time) for receipt of responses has passed.

7.10. Canvassing

- 7.10.1. Any Bidder who directly or indirectly canvasses any employee, or agent of UK SBS, the Contracting Authority or its members or any relevant OPB or any of its employees concerning the establishment of the Contract or who directly or indirectly obtains or attempts to obtain information from any such officer, member, employee or agent or concerning any other Bidder, Response or proposed Response will be disqualified.

7.11. Disclaimers

- 7.11.1. Whilst the information in this RFP, Due Diligence Information and supporting documents has been prepared in good faith, it does not purport to be comprehensive nor has it been independently verified.
- 7.11.2. Neither UK SBS, the Contracting Authority, nor any relevant OPB's nor their advisors, nor their respective directors, officers, members, partners, employees, other staff or agents:
- 7.11.2.1. makes any representation or warranty (express or implied) as to the accuracy, reasonableness or completeness of the RFP; or
 - 7.11.2.2. accepts any responsibility for the information contained in the RFP or for their fairness, accuracy or completeness of that information nor shall any of them be liable for any loss or damage (other than in respect of fraudulent misrepresentation) arising as a result of reliance on such information or any subsequent communication.
- 7.11.3. Any persons considering making a decision to enter into contractual relationships with the Contracting Authority and/or, as applicable, relevant OPB following receipt of the RFP should make their own investigations and their own independent assessment of the Contracting Authority and/or, as applicable, relevant OPB and its requirements for the supplies and should seek their own professional financial and legal advice. For the avoidance of doubt the provision of clarification or further information in relation to the RFP or any other associated documents (including the Schedules) is only authorised to be provided following a query made in accordance with Paragraph 7.15 of this RFP.

7.12. Collusive behaviour

- 7.12.1. Any Bidder who:
- 7.12.1.1. fixes or adjusts the amount of its Response by or in accordance with any agreement or arrangement with any other party; or
 - 7.12.1.2. communicates to any party other than UK SBS, the Contracting Authority or, as applicable, relevant OPB the amount or approximate amount of its proposed Response or information which would enable the amount or approximate amount to be calculated (except where such disclosure is made in confidence in order to obtain quotations necessary for the preparation of the Response or insurance or any necessary security); or
 - 7.12.1.3. enters into any agreement or arrangement with any other party that such other party shall refrain from submitting a Response; or
 - 7.12.1.4. enters into any agreement or arrangement with any other party as to the amount of any Response submitted; or
 - 7.12.1.5. offers or agrees to pay or give or does pay or give any sum or sums of money, inducement or valuable consideration directly or indirectly to any party for doing or having done or causing or having caused to be

done in relation to any other Response or proposed Response, any act or omission, shall (without prejudice to any other civil remedies available to the Contracting Authority and without prejudice to any criminal liability which such conduct by a Bidder may attract) be disqualified.

7.13. No inducement or incentive

- 7.13.1. The RFP is issued on the basis that nothing contained in it shall constitute an inducement or incentive nor shall have in any other way persuaded a Bidder to submit a Response or enter into the Contract or any other contractual agreement.

7.14. Acceptance of the Contract

- 7.14.1. The Bidder in submitting the Response undertakes that in the event of the Response being accepted by the Contracting Authority and the Contracting Authority confirming in writing such acceptance to the Bidder, the Bidder will within 8 days of being called upon to do so by the Contracting Authority execute the Contract in the form set out in the Contract Terms or in such amended form as may subsequently be agreed.
- 7.14.2. The Contracting Authority shall be under no obligation to accept the lowest priced or any Response.

7.15. Queries relating to the Response

- 7.15.1. All requests for clarification about the requirements or the process of this procurement shall be made in through the e-sourcing tool unless where the e-sourcing tool is unavailable due to Delta eSourcing system maintenance or failure, in this instance all clarifications shall be by email to the contact defined in [Section 3](#).
- 7.15.2. The Contracting Authority will endeavour to answer all questions as quickly as possible but cannot guarantee a minimum response time.
- 7.15.3. In the event of a Bidder requiring assistance uploading a clarification to the e-sourcing portal they should use the contact details defined in [Section 3](#).
- 7.15.4. No further requests for clarifications will be accepted after 7 days prior to the date for submission of Responses.
- 7.15.5. In order to ensure equality of treatment of Bidders, the Contracting Authority intends to publish the questions and clarifications raised by Bidders together with the Contracting Authority's responses (but not the source of the questions) to all participants on a regular basis.
- 7.15.6. Bidders should indicate if a query is of a commercially sensitive nature – where disclosure of such query and the answer would or would be likely to prejudice its commercial interests. However, if the Contracting Authority at its sole discretion does not either; consider the query to be of a commercially confidential nature or one which all Bidders would potentially benefit from seeing both the query and the Contracting Authority's response, the Contracting Authority will:
- 7.15.6.1. invite the Bidder submitting the query to either declassify the query and allow the query along with the Contracting Authority's response to be circulated to all Bidders; or

- 7.15.6.2. request the Bidder, if it still considers the query to be of a commercially confidential nature, to withdraw the query prior to the end of the closing date and time for Bidder clarifications.
- 7.15.7. The Contracting Authority reserves the right not to respond to a request for clarification or to circulate such a request where it considers that the answer to that request would or would be likely to prejudice its commercial interests.

7.16. Amendments to Response Documents

- 7.16.1. At any time prior to the deadline for the receipt of Responses, the Contracting Authority may modify the RFP by amendment. Any such amendment will be numbered and dated and issued by the Contracting Authority to all prospective Bidders. In order to give prospective Bidders reasonable time in which to take the amendment into account in preparing their Responses, the Contracting Authority may, at its discretion, extend the time and/or date for receipt of Responses.

7.17. Modification and withdrawal

- 7.17.1. Bidders may modify their Response where allowable within the e-sourcing tool. No Response may be modified after the deadline for submission of Responses.
- 7.17.2. Bidders may withdraw their Response at any time prior the deadline for submission of Responses [or any other time prior to accepting the offer of a Contract]. The notice to withdraw the Response must be in writing and sent to the Contracting Authority by recorded delivery or equivalent service and delivered to the Head of Policy UK SBS at UK Shared Business Services Ltd, Procurement, Polaris House, North Star Avenue, Swindon, Wiltshire, SN2 1ET

7.18. Right to disqualify or reject

- 7.18.1. The Contracting Authority reserves the right to reject or disqualify a Bidder where
 - 7.18.1.1. the Bidder fails to comply fully with the requirements of this Request for Proposal or presents the response in a format contrary to the requirements of this document; and/or
 - 7.18.1.2. the Bidder is guilty of serious misrepresentation in relation to its Response; expression of interest; or the Response process; and/or
 - 7.18.1.3. there is a change in identity, control, financial standing or other factor impacting on the selection and/or evaluation process affecting the Bidder.

7.19. Right to cancel, clarify or vary the process

- 7.19.1. The Contracting Authority reserves the right to:
 - 7.19.1.1. cancel the evaluation process at any stage; and/or
 - 7.19.1.2. require the Bidder to clarify its Response in writing and/or provide additional information. (Failure to respond adequately may result in the Bidder not being selected),

7.20. Notification of award

- 7.20.1. The Contracting Authority will notify the successful Bidder of the Contract award in writing and will publish an Award Notice in the Official Journal of the European Union in accordance with the Regulations within 30 days of the award of the contract.

7.20.2. As required by the Regulations all successful and unsuccessful Bidders will be provided with an email advising the outcome of the submission of their RFP response.

Appendix ‘A’ Glossary of Terms

TERM	MEANING
“UK SBS”	means UK Shared Business Services Ltd herein after referred to as UK SBS.
“Bid”, “Response”, “Submitted Bid”, or “RFP Response”	means the Bidders formal offer in response to this Request for Proposal
“Bidder(s)”	means the organisations being invited to respond to this Request for Proposal
“Central Purchasing Body”	means a duly constituted public sector organisation which procures supplies/services/works for and on behalf of contracting authorities
“Conditions of Bid”	means the terms and conditions set out in this RFP relating to the submission of a Bid
“Contract”	means the agreement to be entered by the Contracting Authority and the Supplier following any award under the procurement
“Contracting Bodies”	means the Contracting Authority and any other contracting authorities described in the OJEU Contract Notice
“Contracting Authority”	A public body regulated under the Public Contracts Regulations on whose behalf the procurement is being run
“Customer”	means the legal entity (or entities) for which any Contract agreed will be made accessible to.
“Due Diligence Information”	means the background and supporting documents and information provided by the Contracting Authority for the purpose of better informing the Bidders responses to this Request for Proposal
"EIR"	mean the Environmental Information Regulations 2004 together with any guidance and/or codes of practice issued by the Information Commissioner or relevant Government department in relation to such regulations
“FoIA”	means the Freedom of Information Act 2000 and any subordinate legislation made under such Act from time to time together with any guidance and/or codes of practice issued by the Information Commissioner or relevant Government department in relation to such legislation
“Lot”	means a discrete sub-division of the requirements
“Mandatory”	Means a pass / fail criteria which must be met in order for a Bid to be considered, unless otherwise specified.
“OJEU Contract Notice”	means the advertisement issued in the Official Journal of the European Union
“Order”	means an order for served by any Contracting Body on the Supplier
“Other Public Bodies”	means all Contracting Bodies except the Contracting Authority
“Request for Proposal” or “RFP”	means this Request for Proposal documentation and all related documents published by the Contracting Authority and made available to Bidders and includes the Due Diligence Information. NOTE: This document is often referred to as an Invitation to Tender within other organisations
“Supplier”	means the organisation awarded the Contract
“Supplies / Services / Works”	means any supplies/services and supplies or works set out at within Section 4 Specification

