



# Invitation to Quote

**Invitation to Quote (ITQ) on behalf of UK Research and Innovation (UKRI)**

**Subject: Aquarium Sea Water Pumps & Holding Tank Works at National Oceanography Centre Southampton**

**Sourcing Reference Number: FM18139**



**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.  
Registered Office Polaris House, North Star Avenue, Swindon, Wiltshire SN2 1FF  
VAT registration GB618 3673 25  
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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 our Contracting Authorities improve efficiency, generate savings and modernise.

It is our vision to become the leading service provider for the 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 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

### 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](http://www.ukri.org)

The National Oceanography Centre (NOC) is a national research organisation, delivering integrated marine science and technology from the coast to the deep ocean, working in partnership with the UK marine research community.

Wholly owned by UKRI, the NOC was formed by bringing together the NERC-managed activity at Liverpool's Proudman Oceanographic Laboratory and the National Oceanography Centre, Southampton, creating the UK's leading institution for sea-level science, coastal and deep-ocean research and technology development.

The centre works in close partnership with institutions across the UK marine science community addressing key science challenges including sea-level change, the oceans' role in climate change, predicting and simulating the behaviour of the oceans through computer modelling, development, the future of the Arctic Ocean and long-term monitoring technologies.

The NOC works with many organisations and partners to help deliver national capability through major research facilities, mapping, data management and programmes of sustained observing.

## 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	UK Research and Innovation (UKRI) National Oceanography Centre Waterfront Campus European Way Southampton SO14 3ZH
3.2	Buyer name	N/A
3.3	Buyer contact details	01793 867005 <a href="mailto:FMPProcurement@uksbs.co.uk">FMPProcurement@uksbs.co.uk</a>
3.4	Estimated value of the Opportunity	£85,000.00 exclusive of 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	17 <sup>th</sup> of August 2018
3.7	Site Visits  <b>We Strongly recommend that you attend a Site Visit in order to gain complete clarity of our requirements and the environment that you will be working in.</b>	<b>21<sup>st</sup> and 22<sup>nd</sup> of August 2018</b> <b>To book onto one of the site visits please submit your preferred date and time along with the names of those that wish to attend through the message function on the eSourcing Portal.</b>  <b>Bidders will be limited to 3 people per company. A reply will be sent via the eSourcing Portal in confirmation where we will also request the vehicle registration.</b>
3.8	Latest date/time ITQ clarification questions shall be received through Emptoris messaging system	24 <sup>th</sup> of August 2018 at 11:00
3.9	Latest date/time ITQ clarification answers should be sent to all Bidders by the Buyer through Emptoris	28 <sup>th</sup> of August 2018 at 11.00

3.10	Latest date/time ITQ Bid shall be submitted through Emptoris	<del>31<sup>st</sup> of August 2018 at 14:00</del> 3 <sup>rd</sup> of September 2018 at 10:00
3.11	Anticipated notification date of successful and unsuccessful Bids	11 <sup>th</sup> of September 2018
3.12	Anticipated Award date	13 <sup>th</sup> of September 2018
3.13	Anticipated Contract Start date	17 <sup>th</sup> of September 2018
3.14	Anticipated Contract End date	6 <sup>th</sup> of January 2019
3.15	Bid Validity Period	60 Days

## Section 4 – Specification

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### **00-05-10 Project Definition**

#### **101 Project description**

- Project reference: J2180202
- Project title: NOCS Aquarium Seawater Circulation System Modifications
- Project description: Aquarium seawater system upgrade

#### **102 Project overview**

- General: - Replacement of steel pipework connections to holding tanks
- Modifications to plastic pipework connections and valves.
- Replacement of corroded fixings, brackets and supports.
- Replacement of corroded aquarium pump motors.
- Recondition/clean existing polypropylene aquarium pumps.
- Replace existing laboratory seawater pumps.
- Replace external fill point enclosure.
- Replacement of corroded controls items.
- Inspection and condition report for the concrete seawater holding tanks.

### **Hazardous substances information**

#### **150 Asbestos survey report**

- Details: Refer to NOCS building asbestos register.

#### **Design information**

#### **165 Drawings**

- Details: NOCS Aquarium
- Status: Tender
- Format: AUTOCAD. Electronic.
- Provision: Issued by NOCS.
- Contract drawings:
- Generally: The same as the tender drawings.

#### **170 Pre-construction information**

- Scope: Integral with the project specification, including but not restricted to the following: Information to follow Appendix D.

### **00-05-15 Works Terminology**

#### **110 Terminology**

- Meaning: Terms, derived terms and synonyms used are as defined in this section or in the appropriate referenced document.

#### **210 Description terminology**

- Attendance: Includes

The use of the Main Contractor's temporary roads, pavings and paths, standing scaffolding, standing power operated hoisting plant,

The provision of temporary lighting of an equivalent brightness to the finished lighting brightness,

The provision of water,

The clearing away of rubbish and paying all charges in connection with its disposal, the provision of secure hard standing space for the sub-contractor's own offices, plant and material storage,

The use of standing mess rooms, sanitary accommodation and welfare facilities and

The provision of all Health and Safety facilities and all Fire Safety precautions, services, equipment, signage, facilities, Marshall's and the like necessary to comply with the relevant parts of the Joint Fire Code.

Additional requirements should be described as 'Special attendance'.

- Building Manual: A document containing information of use to subsequent building owners, occupiers and users about the requirements and procedures for effective operation, maintenance, decommissioning and demolition of the building.
- Construction Work: Permanent work together with temporary work.
- Contractor: The party who undertakes to perform the services, supply goods or carry out work defined in a contract. Includes Main Contractor, Prime Contractor, Supplier, Service provider, Builder, Subcontractor, etc. as the context dictates, which may be defined terms in certain standard contract forms.
- Contractor's choice: Selection delegated to the Contractor, but liability to remain with the specifier.
- Contractor's design: Design to be carried out or completed by the Contractor, supported by appropriate contractual arrangements, to correspond with specified requirements.
- Cost: The amount paid or given by one party to another in exchange for goods, work or services.
- Designer: A person carrying out design on a project.
- Deviation: Difference between a specified dimension or position and the actual dimension or position.
- Employer: The party to the Contract for whom the goods, work or services are provided. Includes Client (in consultancy contracts and CDM Regulations), the Employer, Building owner or Purchaser (in construction contracts), the Developer (in development agreements and funding agreements), or the 'Main' contractor in contractor/ subcontractor agreements - which may be defined terms in certain standard contract forms
- Estimate: An approximate evaluation of either time or cost of part or the whole of a project.
- Execute: To complete a task fully and put into effect. To fix, apply, install or lay products securely, accurately, plumb and in alignment.
- Existing: Items retained in place to receive new work.
- Fastener: Device for mechanically attaching something to something else.
- Manufacturer and Product reference: Manufacturer - the body under whose name the particular product, component or system is marketed.  
Product reference - the proprietary brand name and/ or reference by which the particular product, component or system is identified.  
References are as specified in the manufacturer's technical literature current on the date specified.
- Manufacturer's standard: Where used in conjunction with a specified proprietary product, accessories to be those recommended by the product manufacturer.
- Permanent Work: Work to be constructed and completed in accordance with the Contract.
- Price: An indication of the amount required to be paid by one party to another in exchange for goods, work or services.



- Product: Material, both manufactured and naturally occurring, goods and accessories for permanent incorporation into the Works.
- Requirements: A description in outline or detailed form of the development, or a part of it, which one party requires another to design and/or build.
- Schedule of rates: The subdivision of product and execution prices by a pre-determined unit basis.
- Schedule of Work: The subdivision of work items by a pre-determined classification. Can form the basis of a pricing document where Bills of Quantities are not used.
- Schematic: A drawing of a system showing components, products, systems and their interconnections.
- Site equipment: The Contractor's apparatus, appliances, machinery, vehicles or things of whatsoever nature required in or about the construction for the execution and completion of the Works and the remedying of defects.  
Includes Appliances, vehicles, consumables, tools, temporary work, scaffolding, cabins and other site facilities.  
Excludes: Temporary work, Employer's products and equipment or anything intended to form or forming part of the permanent Works.
- Specification: Written description of requirements.
- System: Products, components, equipment, accessories, controls, supports and ancillary items, including installation, necessary for that section of the work to function.
- Temporary work: Incidental work to undertaken during construction but not intended to form part of the completed work.

### **310 Activity terminology**

- Advise: See 'Communicate'.
- Agree: See 'Communicate'.
- Approve: Record conformance of work to specified criteria by giving formal or official sanction.
- Communicate: Includes advise, inform, agree, confirm, notify, seek or obtain information, consent or instructions, or make arrangements.
- Confirm: See 'Communicate'.
- Ease: Adjust moving parts of designated products, systems or work to achieve free movement and good fit in open and closed positions.
- Fix: Receive, unload, handle, store, protect, place and fasten in position; dispose of waste and surplus packaging; to include labour, materials and site equipment for that purpose.
- Give notice: Communicate in writing to the person administering the Contract at the address listed therein.
- Inform: See 'Communicate'.
- Keep for recycling: As 'keep for use' but relates to a naturally occurring material rather than a manufactured product.
- Keep for reuse: Do not damage designated products, systems or work. Clean off bedding and jointing materials. Stack neatly, adequately protect and store until required by the Employer or Purchaser, or for use in the Works as instructed.
- Make good: Execute local remedial work to designated work. Make secure, sound and neat.
- Match existing: Provide products and work of the same appearance and features as the original, excluding ageing and weathering. Make joints between existing and new work as inconspicuous as possible.
- Notify: See 'Communicate'.
- Quote: Use 'Estimate'.
- Recycle: Collect, sort, process and convert discarded or recovered components into raw materials for use in the creation of new products.
- Refix: Fix previously removed products.

- Remove: Disconnect, dismantle as necessary and take out the designated products or work, together with associated accessories, fixings, supports, linings and bedding materials. Dispose of unwanted materials.  
Removal of a system includes this work.
- Remediate: Action or measures taken to lessen, clean-up, remove or mitigate the existence of hazardous materials existing on a property; in accordance with standards, specifications or requirements as may be required by statutes, rules, regulations or specification.
- Repair: Execute remedial work to designated products. Make secure, sound and neat. Excludes redecoration and replacement.
- Replace: Supply and fix new products matching those removed. Execute work to match the original new state of that removed.
- Reuse: Recover components to be fixed or used in the project or other buildings without the requirement for recycling.
- Submit: Deliver an item in a specified format to a specified person within a specified timeframe.
- Submit proposals: Submit information in response to specified requirements.
- Supply and fix: Supply of products, components or systems to be fixed, together with their fixing.

### **00-05-20 Project Participants**

Due to the Nature of these works the following Statutory Management and delivery roles have been appointed by the client for technical services consultation & undertaking the Principal Designer Role

- Principal Designer
- Electrical Services Engineer
- Mechanical Services Engineer

### **00-05-70 Project Location**

#### **110 Project location**

- Details: National Oceanography Centre
- Address:
- Street: European Way
- City: Southampton
- Post code: SO14 3ZH

#### **150 Surrounding land and building uses**

- Surrounding land uses or activities: Southampton docks and industrial units.

#### **170 Access**

- Details: Dock Gate 4.
- Limitations: Secure manned access.

### **Outline Specification**

### **55-40-40 Hot and cold water supply systems**

#### **120 Cold water supply system**

Seawater Holding Tank Inspections

The existing seawater holding tanks (St1 & St2) require inspection and the Contractor shall arrange through the contract for a specialist to inspect the tanks and provide a report on their condition.

The following company have made an initial visit to site to review the installation and it is suggested that the Contractor approach them for a formal quotation:-

RS Specialist Services Ltd

Contact: REDACTED

Mobile: REDACTED

Email: REDACTED

Where Brand names, manufacturers, suppliers or installers of products are identified within the specification, equivalent and compatible alternatives may be selected and shall be submitted for approval.

The tanks are defined as 'confined spaces' and will require the inspections to be carried out by suitably trained operatives who will provide all necessary risk assessments and a safe system of work folder prior to anyone entering the tanks.

Operationally both tanks cannot be drained at the same time so the inspections will need to be carried out at different times agreed with the users.

The inspection works cost is covered by a Provisional Sum. Subsequent to the findings of the inspections, any necessary refurbishment works identified are not covered within this specification.

#### Seawater Holding Tank Pipework Connections

Pipework connections from the seawater holding tanks are of steel construction and are badly corroded. The Contractor shall break out the existing pipework and any installed puddle flanges from the concrete wall of the tanks and replace the pipework and puddle flanges with a corrosion resistant material such as marine grade 316 stainless steel or titanium tubing complete with a bolted flange made of the same material for connection to the plastic pipework.

The Contractor shall make good the concrete wall of the tank around the new pipework connections and shall test for leaks by refilling the tanks and making good if necessary.

#### Modifications to Plastic (PVC-u) Pipework

Modifications will be required to the existing plastic pipework and valves to accommodate the new pipework connections to the holding tanks and to maintain continuous operation of the seawater systems whilst each of the tanks has been drained.

Supplier of plastic pipework:

George Fischer Sales Ltd

Contact: REDACTED

Mobile: REDACTED

Email: REDACTED

Where Brand names, manufacturers, suppliers or installers of products are identified within the specification, equivalent and compatible alternatives may be selected and shall be submitted for approval.

Plastic pipework and valves shall be installed in accordance with the manufacturer's recommendations.

#### Fill Point

The seawater fill point is severely corroded and shall be replaced.

The Contractor shall remove and dispose from site the existing fill point and replace it with a new bespoke GRP enclosure constructed to fit into the existing opening.

The enclosure shall have a lockable hinged lid and shall house a plastic isolating valve and suitable hose connector.

The Contractor shall provide a weather seal around the enclosure to prevent moisture ingress.

The existing tank level alarms fitted within the existing fill point are no longer operational and shall be disconnected and removed.

#### Aquarium Circulation Pump Motors

The existing aquarium circulation pumps are manufactured from polypropylene and therefore have not suffered any corrosion. The Contractor shall allow for the existing pumps to be cleaned before they are put back into operation.

The pumps motors have suffered from corrosion and shall be replaced with new motors provided with a corrosion resistant coating. Refer to schedules.

The pumps are configured in a duty/standby arrangement and to maintain service only one pump/motor shall be worked on at any one time.

The Contractor shall make allowance for the electrical disconnection, removal and disposal of the existing redundant motors, installation of the new motors and electrical re-connection for each pump in turn.

#### Laboratory Circulation Pumps

The existing laboratory circulation pumps were installed c.1996 and are suffering from visible surface corrosion and shall be replaced with new. Refer to the Schedule of Technical Requirements in Appendix B.

The new pumps are a direct replacement for the existing pumps however they are specified to utilise titanium components for corrosion resistance.

The Contractor shall make allowance for the electrical disconnection, removal and disposal from site of the existing pumps, installation of the new pumps and electrical re-connection for each pump in turn.

The pumps are configured in a duty/standby arrangement and to maintain service only one pump shall be worked on at any one time.

#### Replacement of Brackets, Fixings and Supports

Generally, the plastic (PVC-u) pipework distribution system appears to be in good order however there are a number of issues with the corrosion of pipe brackets, fixings and supports.

The Contractor shall survey the entire aquarium pipework system and shall make allowance to replace all corroded ferrous fixings, brackets, supports and pipework connectors in the

basement plantroom on level 0, aquarium laboratories on level 1 including the external hatchery and MEDA 492 on level 2.

As fitted drawings of the existing installation are included in Appendix G for information.

#### Controls Modifications

A number of existing control sensors are suffering from corrosion. The Contractor shall liaise with the controls specialist familiar with site requirements and complexities:

Matrix Controls Solutions Ltd

Contact: REDACTED

Mobile: REDACTED

Email: REDACTED

3MSE Ltd

Contact: REDACTED

Mobile: REDACTED

Email: REDACTED

Where Brand names, manufacturers, suppliers or installers of products are identified within the specification, equivalent and compatible alternatives may be selected and shall be submitted for approval.

To replace corroded sensors and/or controls equipment with suitable equivalent corrosion resistant types including stainless steel pockets for sensors.

### **70-70-45 Low voltage distribution systems**

#### **110 Low voltage distribution system**

As part of this project 2 No. existing Laboratory Seawater pumps will be replaced, as well as 2 No. Aquarium Seawater pump motors.

All (4 No. total) of these existing items of equipment are fed from rotary isolators in single core cabling contained within flexible conduits.

The Electrical Contractor shall allow for the safe isolation and disconnection of the 2No. existing pumps and the 2No. existing pump motors. The Electrical Contractor will carefully check the condition of the existing services to ensure that the existing rotary switch disconnect, cabling and containment are suitable for re-use, informing the project engineer should anything untoward be identified. The Electrical Contractor will reconnect the existing flexible conduit on to each new item of equipment and re-terminate the existing single core cabling.

The Electrical Contractor will carry out electrical testing and inspection of these circuits in accordance with the requirements of BS 7671 and IET Guidance Note 3.

### **55-40-40/120 Cold water supply system**

#### System outline

#### 55-40-40/120 Cold water supply system

- Description: Seawater Holding Tank Inspections

The existing seawater holding tanks (St1 & St2) require inspection and the Contractor shall arrange through the contract for a specialist to inspect the tanks and provide a report on their condition.

The following company have made an initial visit to site to review the installation and it is suggested that the Contractor approach them for a formal quotation:-

RS Specialist Services Ltd  
Contact: REDACTED  
Mobile: REDACTED  
Email: REDACTED

Where Brand names, manufacturers, suppliers or installers of products are identified within the specification, equivalent and compatible alternatives may be selected and shall be submitted for approval.

The tanks are defined as 'confined spaces' and will require the inspections to be carried out by suitably trained operatives who will provide all necessary risk assessments and a safe system of work folder prior to anyone entering the tanks.

Operationally both tanks cannot be drained at the same time so the inspections will need to be carried out at different times agreed with the users.

The inspection works cost is covered by a Provisional Sum. Subsequent to the findings of the inspections, any necessary refurbishment works identified are not covered within this specification.

#### Seawater Holding Tank Pipework Connections

Pipework connections from the seawater holding tanks are of steel construction and are badly corroded. The Contractor shall break out the existing pipework and any installed puddle flanges from the concrete wall of the tanks and replace the pipework and puddle flanges with a corrosion resistant material such as marine grade 316 stainless steel or titanium tubing complete with a bolted flange made of the same material for connection to the plastic pipework.

The Contractor shall make good the concrete wall of the tank around the new pipework connections and shall test for leaks by refilling the tanks and making good if necessary.

#### Modifications to Plastic (PVC-u) Pipework

Modifications will be required to the existing plastic pipework and valves to accommodate the new pipework connections to the holding tanks and to maintain continuous operation of the seawater systems whilst each of the tanks has been drained.

Supplier of plastic pipework:

George Fischer Sales Ltd  
Contact: REDACTED  
Mobile: REDACTED  
Email: REDACTED

Where Brand names, manufacturers, suppliers or installers of products are identified within the specification, equivalent and compatible alternatives may be selected and shall be submitted for approval.

Plastic pipework and valves shall be installed in accordance with the manufacturer's recommendations.

#### Fill Point

The seawater fill point is severely corroded and shall be replaced.

The Contractor shall remove and dispose from site the existing fill point and replace it with a new bespoke GRP enclosure constructed to fit into the existing opening.

The enclosure shall have a lockable hinged lid and shall house a plastic isolating valve and suitable hose connector.

The Contractor shall provide a weather seal around the enclosure to prevent moisture ingress.

The existing tank level alarms fitted within the existing fill point are no longer operational and shall be disconnected and removed.

#### Aquarium Circulation Pump Motors

The existing aquarium circulation pumps are manufactured from polypropylene and therefore have not suffered any corrosion. The Contractor shall allow for the existing pumps to be cleaned before they are put back into operation.

The pumps motors have suffered from corrosion and shall be replaced with new motors provided with a corrosion resistant coating. Refer to schedules.

The pumps are configured in a duty/standby arrangement and to maintain service only one pump/motor shall be worked on at any one time.

The Contractor shall make allowance for the electrical disconnection, removal and disposal of the existing redundant motors, installation of the new motors and electrical re-connection for each pump in turn.

#### Laboratory Circulation Pumps

The existing laboratory circulation pumps were installed c.1996 and are suffering from visible surface corrosion and shall be replaced with new. Refer to the Schedule of Technical Requirements in Appendix B.

The new pumps are a direct replacement for the existing pumps however they are specified to utilise titanium components for corrosion resistance.

The Contractor shall make allowance for the electrical disconnection, removal and disposal from site of the existing pumps, installation of the new pumps and electrical re-connection for each pump in turn.

The pumps are configured in a duty/standby arrangement and to maintain service only one pump shall be worked on at any one time.

#### Replacement of Brackets, Fixings and Supports

Generally, the plastic (PVC-u) pipework distribution system appears to be in good order however there are a number of issues with the corrosion of pipe brackets, fixings and supports.

The Contractor shall survey the entire aquarium pipework system and shall make allowance to replace all corroded ferrous fixings, brackets, supports and pipework connectors in the basement plantroom on level 0, aquarium laboratories on level 1 including the external hatchery and MEDA 492 on level 2.

As fitted drawings of the existing installation are included in Appendix G for information.

#### Controls Modifications

A number of existing control sensors are suffering from corrosion. The Contractor shall liaise with the controls specialist:

Matrix Controls Solutions Ltd

Contact: REDACTED

Mobile: REDACTED

Email: REDACTED

3MSE Ltd

Contact: REDACTED

Mobile: REDACTED

Email: REDACTED

Where Brand names, manufacturers, suppliers or installers of products are identified within the specification, equivalent and compatible alternatives may be selected and shall be submitted for approval.

To replace corroded sensors and/or controls equipment with suitable equivalent corrosion resistant types including stainless steel pockets for sensors.

- Storage tank or cistern: Existing
- Pipelines:
  - Above ground: PVC-u
- Pipeline accessories:
  - Accessories: As section 90/10/60
- Execution: 55-40-40/620 Installing hot and cold water systems generally and 55-40-40/650 Hydraulic pressure testing of hot and cold water supply systems.
- System completion: 55-40-40/840 Documentation;  
55-40-40/870 Operating tools;  
55-40-40/880 Maintenance;  
55-40-40/860 Spares;  
and 55-40-40/810 Commissioning of hot and cold water supply systems.

#### System performance

55-40-40/210 Design and detailing hot and cold water systems

- Design: Complete the design and detailing of the hot and cold water supply.
- Requirement: Submit proposals including detailed design drawings, technical information, calculations and manufacturer's literature.

55-40-40/220 Cold water supply

- Type of system: Pumped from a break cistern or storage provision.

#### Execution

55-40-40/650 Hydraulic pressure testing of hot and cold water supply systems

- Standard: To BS 8558 and BS EN 806-4.
- Notice (minimum): 24 h.
- Pressure: 2 times working pressure.
- Duration of test: 1 h.

#### System completion

55-40-40/810 Commissioning of hot and cold water supply systems

- Pre-commissioning: In accordance with BSRIA BG 2/2010 and CIBSE

Commissioning Code W.

- Commissioning: In accordance with BS EN 806-4, BSRIA BG 2/2010 and CIBSE Commissioning Code W.



- Notice (minimum): To be defined.
  - Equipment: Check and adjust operation of equipment, controls and safety devices.
- 55-40-40/840 Documentation
- Operating and maintenance instructions:
    - Scope: Submit for the system giving optimum settings for controls.
    - Product information: Include product description, date of purchase, performance characteristics, application (suitability for use), method of operation and control, and cleaning and maintenance requirements.
    - Format: Paper copy.
  - Record drawings:
    - Content: Location and arrangement of plant in plant rooms; Location, size and route of hot and cold water services; Location and identification of regulating, isolation and control valves; and Location of outlets.
    - Format: Electronic.
  - Submittal date: At handover.
  - Wholesome water consumption notice: Submit within five days.
- 55-40-40/870 Operating tools
- Tools: Supply tools for operation, maintenance and cleaning purposes.
  - Keys: Supply keys for valves and vents.
- 55-40-40/880 Maintenance
- Servicing and maintenance: Undertake for 12 months after completion.
- Ω End of system
- 70-70-45/110 Low voltage distribution system

#### System outline

##### 70-70-45/110 Low voltage distribution system

- Description: As part of this project 2 No. existing Laboratory Seawater pumps will be replaced, as well as 2 No. Aquarium Seawater pump motors.
- All (4 No. total) of these existing items of equipment are fed from rotary isolators in single core cabling contained within flexible conduits.

The Electrical Contractor shall allow for the safe isolation and disconnection of the 2No. existing pumps and the 2No. existing pump motors. The Electrical Contractor will carefully check the condition of the existing services to ensure that the existing rotary switch disconnector, cabling and containment are suitable for re-use, informing the project engineer should anything untoward be identified. The Electrical Contractor will reconnect the existing flexible conduit on to each new item of equipment and re-terminate the existing single core cabling.

The Electrical Contractor will carry out electrical testing and inspection of these circuits in accordance with the requirements of BS 7671 and IET Guidance Note 3.

- Connection to low voltage supply: Existing.
- Switchgear: Existing.
- Distribution circuit cabling: 90-55-15/334 Single core non-sheathed cables with LSHF insulation.
- Containment: Existing.
- Containment accessories: Existing.
- Rewireable installation: Required.
- Concealed installation: Required, where possible.
- Execution: 70-70-45/630 Electrical property measurement of low voltage systems.
- System completion: 70-70-45/810 Inspecting, testing and commissioning of switchgear generally.

#### Products

90-55-15/334 Single core non-sheathed cables with LSHF insulation

- Manufacturer: Contractor's choice.
- Standards: To BS EN 50525-1 and BS EN 50525-3-41.
- Third party certification: British Approvals Service for Cables (BASEC) certified.
- Cable type: H07Z-R.
- Size: Submit proposals.
- Execution: 90-55-15/635 Installing low voltage cables and 90-55-15/660 Installing low voltage cables in conduit and trunking.

#### Execution

##### 70-70-45/630 Electrical property measurement of low voltage systems

- Objectives: To determine the integrity of the existing installation, prior to carrying out new works.
- Property values to be recorded: Carry out Testing, Inspection and Verification of the existing services to be re-used.
- Results:
  - Format: Electronic Certificated results, with one hard copy.

##### 90-55-15/635 Installing low voltage cables

- Standard: In accordance with BS 7671.
- Preparation: Store cables above 5°C for 24 hours before installation.

#### Clear cable path of debris.

- Installation temperature (minimum): 5°C.
- Cables: Install in one length. Dress cables flat, free from twists, kinks and strain.
- Cable pulling: Do not overstress. Prevent kinks and twisting of the cable.
- Cable protection: Cables passing through walls and floors to be sleeved with conduit or pipe duct to a minimum of 300 mm. Bush at both ends. Ensure that appropriate fire stopping materials are used to maintain the original fire integrity of the wall or floor around the penetration.
- Concealed cable runs to wall accessories: Run vertically from the accessory.
- Exposed cable runs: Direct to surface.
- Distance from other services running parallel (minimum): 150 mm. Position cables below heating pipes.
- Jointing and termination:
  - Final circuit cables: At electrical accessories only.
  - Core connections: Using compression lugs to equipment without integral clamping terminals.
  - Terminating cables when not using glands: Take sheathing of cables into accessory boxes and equipment and protect against abrasion with grommets.

##### 90-55-15/660 Installing low voltage cables in conduit and trunking

- Cable installation: Orderly and capable of being withdrawn.
- Single core wiring: Arrange using the loop-in method.

#### System completion

##### 70-70-45/810 Inspecting, testing and commissioning of switchgear generally

- Standard: In accordance with BS 7671.
- Notice before testing and commissioning: 7 days.
- Switches and circuit breakers: Clean to remove all visible traces of dust.
- Protective devices settings: Configure to match the grading study.
- Switchboard monitoring: Continuous for 30 minutes following first energizing.
- Additional inspecting and testing: Check levelling and alignment of assembly.

Check operation of instruments and metering devices.

Check tightness of bolted connections.

Check earth connections.

Check clearance of live parts from direct contact.

Check polarity and phase sequence of protective devices.

Check operation of protective devices using secondary and primary current injection.

Manually operate protective devices.

Carry out earth fault protection simulation tests.

Check functional operation of circuit breakers.

Check operation of switch tripping devices.

- Testing and commissioning results: Submit one copy.
- Certificates of calibration for meters and instruments: Submit.

Where Brand names, manufacturers, suppliers or installers of products are identified within the specification, equivalent and compatible alternatives may be selected and shall be submitted for approval.

### **Site Tour**

- Nature of the site: Ascertain before Tendering, including access thereto and local conditions and restrictions likely to affect the execution of the Work.
- Arrangements for visit: During the Tender period, the proposed site will be available for on-site viewing by appointment with the Employer's Agent. The Contractor shall be deemed to have visited site, to have acquainted himself as to the nature and extent of the works, to inspect local conditions, means of access and other matters that may affect the Tender price and to have examined the Specification, Drawings and Conditions of Contract.

Please note that questions related to the tender are not authorised to be asked during the site visit. Any questions must be submitted as a Clarification of Sourcing Documents through the Tender Event.

### **Please note the following –**

Programme is to highlight a Work Breakdown Structure of – Preliminaries, Goods Delivery Schedules, Site mobilization, Mechanical Works, Electrical Works, System Shutdown & Isolations, In & Out-of Hours Works, System Commissioning, Snagging, Project Handover, O&M information Handover – on or before contractual completion date.

This is a basic programme that will be required to be submitted with the tender documentation. The programme shall be finalised with the client at contract pre-commencement meeting.

Welfare Facilities including washrooms and canteen (0830-1630hrs) is located on site. Water & Electricity services are free issue for the duration of this project.

All contact information which has been redacted will be provided upon award 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.

### **CCTV**

Please note that the site is monitored by CCTV at all times. This electronic data is retained for a period of 30 days for site surveillance, security and monitoring purposes before being deleted and/or written over.

## 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 ( $5+5+6=16 \div 3 = 5.33$ ))

Pass / fail criteria		
Questionnaire	Q No.	Question subject
Commercial	SEL1.2	Employment breaches/ Equality
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	SEL3.11	Compliance to Section 54 of the Modern Slavery Act
Commercial	AW4.1	Contract Terms Part 1
Commercial	AW4.2	Contract Terms Part 2
Price	AW5.5	E Invoicing
Price	AW5.6	Implementation of E-Invoicing
Commercial	PROJ2.0	Non Negotiable Bid
Commercial	PROJ2.1	NOC Health and Safety Questionnaire
Commercial	PROJ2.2	Privacy Statement - CCTV
Quality	AW6.1	Compliance to the Specification

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	40.00% of Overall Bid
Quality	PROJ1.1	Description of Methodology	12.00% of Overall Bid
Quality	PROJ1.2	Managing Working Conditions	12.00% of Overall Bid
Quality	PROJ1.3	Project Plan	For information only
Quality	PROJ1.4	Risks and Mitigation of Risks	12.00% of Overall Bid

Quality	PROJ1.5	Project Team and Capability to deliver	12.00% of Overall Bid
Quality	PROJ1.6	Energy Efficient Procurement	12.00% of Overall Bid

## 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: 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.

## **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](#)