

This is a published notice on the Find a Tender service: <https://www.find-tender.service.gov.uk/Notice/002731-2021>

Award

Supply & Delivery of PLC, HMI, SCADA and Industrial Networking Equipment

UNITED UTILITIES WATER LIMITED

F15: Voluntary ex ante transparency notice

Notice identifier: 2021/S 000-002731

Procurement identifier (OCID): ocds-h6vhtk-029212

Published 10 February 2021, 3:14pm

Section I: Contracting authority/entity

I.1) Name and addresses

UNITED UTILITIES WATER LIMITED

Haweswater House, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey

WARRINGTON

WA53LP

Contact

Grace Power

Email

RegulatoryProcurementTeam@uuplc.co.uk

Telephone

+44 1925677588

Country

United Kingdom

NUTS code

UKD - NORTH WEST (ENGLAND)

Internet address(es)

Main address

<https://www.unitedutilities.com/corporate>

Buyer's address

<https://www.unitedutilities.com/corporate>

I.4) Type of the contracting authority

Other type

Utilities

I.5) Main activity

Other activity

Water

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Supply & Delivery of PLC, HMI, SCADA and Industrial Networking Equipment

Reference number

PRO004136

II.1.2) Main CPV code

- 38800000 - Industrial process control equipment and remote-control equipment

II.1.3) Type of contract

Supplies

II.1.4) Short description

The requirement is to supply a range of site based hardware & software supported by a supervisory control and data acquisition platform to support the United Utilities Wholesale business and its need to automate, monitor & control.

- Local Automation PLC/HMI Hardware & Software

- SCADA Software - Supervisory Control Software

- SCADA Systems Hardware - Servers & PLC's

II.1.6) Information about lots

This contract is divided into lots: No

II.1.7) Total value of the procurement (excluding VAT)

Value excluding VAT: £8,000,000

II.2) Description

II.2.2) Additional CPV code(s)

- 31682210 - Instrumentation and control equipment
- 32441200 - Telemetry and control equipment
- 35710000 - Command, control, communication and computer systems
- 38810000 - Industrial process control equipment
- 42961200 - Scada or equivalent system

II.2.3) Place of performance

NUTS codes

- UKD - NORTH WEST (ENGLAND)

II.2.4) Description of the procurement

The contractual arrangement for supplies will include:

- Local Automation PLC/HMI Hardware & Software
- SCADA Software - Supervisory Control Software
- SCADA Systems Hardware - Servers & PLC's

The contractual arrangement for services will include:

- Pre and post sales application support
- Technical support and training
- Engineering software licences.
- Supply of hardware and software compliant with the BS EN 62443 Standard for Cyber Security and represent best practice with regards to the NIS Directive
- Associated Spares
- Field Services

In delivering the supplies under this contractual agreement, it is a requirement that the

Supplier shall comply with the relevant technical standards which will be detailed within the agreement.

With regards to the hardware and software (i.e. supplies), these shall be required by a number of third party routes, including but not limited to:

- UU Internal teams
- UU Framework Systems Integrators working for UU's delivery partners
- Maintenance delivery partners
- Construction delivery partners
- Design & Build contractors

II.2.11) Information about options

Options: No

II.2.14) Additional information

Type of procedure

Negotiated procedure without prior call for competition

Additional deliveries by the original supplier ordered under the strict conditions stated in the directive

Explanation:

United Utilities the contracting entity, 90% of its operational sites are controlled, monitored and automated using Siemens S7 PLCs and WinCC SCADA software and the next investment programme calls for circa 2% of its PLC/SCADA to be replaced. Awarding the PLC/SCADA contract to any supplier other than the incumbent will re-introduce 'Islands of Automation' onto our sites.

This introduces numerous potential issues such as:

- Single Points of Failure;
- Duplication of both tasks and data;

- More complex designs;
- Lengthier troubleshooting; and
- is generally and much more inefficient way to automate a site.

At a site level United Utilities has mostly eliminated this issue, to introduce differing technology (with limited to no interconnectivity) to these sites would be to reintroduce issues such as the above.

An alternative to introducing Islands of Automation would be to replace all hardware and software on a site that is introducing new hardware. This would require software to be reverse engineered and redesigned in a way to work on the new platform and then being re-commissioned.

Independent third parties have provided proposals for a full PLC replacement project (using non incumbent technology), based on a typical UU Waste Water plant size using the above scenario for verification. The technical complexity (design, coding and testing effort required) to achieve this, when compared to implementing an additional PLC onto a site using the incumbent's technology, was found to be a ratio of 11:1.

The Framework was last tendered in 2009, with minor amendments to scope and terms negotiated with the successful supplier, (Siemens PLC), as part of the strategy for Kit Framework awards for AMP6 in 2015.

Prior to 2009, Siemens were also the incumbent supplier for these products and services and have been the UU SCADA platform provider since 2004

The Kit Framework is still in place with Siemens PLC until Sept 2020, with no further extension options under the current arrangement which has now expired.

United Utilities conducted stakeholders meetings and agreement sought that confirm the optimum solution would be to re-negotiate with the current incumbent, there is a need to justify and confirm the disproportionality of re-tendering v transition costs, i.e. the cost of changing asset base, associated protocols, training material, maintenance regimes, spares and knowledge etc., should the solution provider change.

United Utilities conclusion is that the significant extra technical steps required to transition to a change of supplier would oblige the utility to acquire supplies having different technical characteristics which would result in incompatibility or disproportionate technical difficulties in operation and maintenance. It is therefore, necessary to conduct a negotiated procedure without prior call for competition, as highlighted above United Utilities have acted in good faith prior to coming to this decision based on the due diligence that has been conducted.

Section IV. Procedure

IV.1) Description

IV.1.1) Type of procedure

Award of a contract without prior publication of a call for competition in the cases listed below

- The procurement falls outside the scope of application of the regulations

Explanation:

United Utilities the contracting entity, 90% of its operational sites are controlled, monitored and automated using Siemens S7 PLCs and WinCC SCADA software and the next investment programme calls for circa 2% of its PLC/SCADA to be replaced. Awarding the PLC/SCADA contract to any supplier other than the incumbent will re-introduce 'Islands of Automation' onto our sites.

This introduces numerous potential issues such as:

- Single Points of Failure;
- Duplication of both tasks and data;
- More complex designs;
- Lengthier troubleshooting; and
- is generally and much more inefficient way to automate a site.

At a site level United Utilities has mostly eliminated this issue, to introduce differing technology (with limited to no interconnectivity) to these sites would be to reintroduce issues such as the above.

An alternative to introducing Islands of Automation would be to replace all hardware and software on a site that is introducing new hardware. This would require software to be reverse engineered and redesigned in a way to work on the new platform and then being re-commissioned.

Independent third parties have provided proposals for a full PLC replacement project (using non incumbent technology), based on a typical UU Waste Water plant size using the above

scenario for verification. The technical complexity (design, coding and testing effort required) to achieve this, when compared to implementing an additional PLC onto a site using the incumbent's technology, was found to be a ratio of 11:1.

The Framework was last tendered in 2009, with minor amendments to scope and terms negotiated with the successful supplier, (Siemens PLC), as part of the strategy for Kit Framework awards for AMP6 in 2015.

Prior to 2009, Siemens were also the incumbent supplier for these products and services and have been the UU SCADA platform provider since 2004

The Kit Framework is still in place with Siemens PLC until Sept 2020, with no further extension options under the current arrangement which has now expired.

United Utilities conducted stakeholders meetings and agreement sought that confirm the optimum solution would be to re-negotiate with the current incumbent, there is a need to justify and confirm the disproportionality of re-tendering v transition costs, i.e. the cost of changing asset base, associated protocols, training material, maintenance regimes, spares and knowledge etc., should the solution provider change.

United Utilities conclusion is that the significant extra technical steps required to transition to a change of supplier would oblige the utility to acquire supplies having different technical characteristics which would result in incompatibility or disproportionate technical difficulties in operation and maintenance. It is therefore, necessary to conduct a negotiated procedure without prior call for competition, as highlighted above United Utilities have acted in good faith prior to coming to this decision based on the due diligence that has been conducted.

IV.1.3) Information about a framework agreement

The procurement involves the establishment of a framework agreement

IV.1.8) Information about the Government Procurement Agreement (GPA)

The procurement is covered by the Government Procurement Agreement: No

IV.2) Administrative information

IV.2.1) Previous publication concerning this procedure

Notice number: [2018/S 238-544820](#)

Section V. Award of contract/concession

Contract No

PRO004136

Lot No

1

Title

Supply & Delivery of PLC, HMI & SCADA and Industrial Networking Equipment

A contract/lot is awarded: Yes

V.2) Award of contract/concession

V.2.1) Date of conclusion of the contract

10 February 2021

V.2.2) Information about tenders

The contract has been awarded to a group of economic operators: No

V.2.3) Name and address of the contractor/concessionaire

Siemens Plc

00727817 Farraday House, Sir William Siemens Square, Frimley

Camberley

GU168QD

Country

United Kingdom

NUTS code

- UKJ - SOUTH EAST (ENGLAND)

The contractor/concessionaire is an SME

No

V.2.4) Information on value of contract/lot/concession (excluding VAT)

Total value of the contract/lot/concession: £8,000,000

Section VI. Complementary information

VI.4) Procedures for review

VI.4.1) Review body

High Court of England and Wales, London, United Kingdom

London

Country

United Kingdom