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Tender

## Digital Twin of Water Treatment Works

THAMES WATER UTILITIES LIMITED

F05: Contract notice – utilities

Notice identifier: 2024/S 000-014079

Procurement identifier (OCID): ocds-h6vhtk-045695

Published 1 May 2024, 2:48pm

### Section I: Contracting entity

#### I.1) Name and addresses

THAMES WATER UTILITIES LIMITED

Reading

RG18DB

#### Contact

Thames Water

#### Email

[procurement.support CENTRE@thameswater.co.uk](mailto:procurement.support CENTRE@thameswater.co.uk)

#### Country

United Kingdom

#### Region code

UKJ11 - Berkshire

## **Companies House**

02366661

## **Internet address(es)**

Main address

<https://www.thameswater.co.uk/>

## **I.3) Communication**

Access to the procurement documents is restricted. Further information can be obtained at

<https://www.thameswater.co.uk/procurement>

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

<https://thameswater.smartsourceportal.com/>

## **I.6) Main activity**

Water

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## **Section II: Object**

### **II.1) Scope of the procurement**

#### **II.1.1) Title**

Digital Twin of Water Treatment Works

Reference number

FA2150

#### **II.1.2) Main CPV code**

- 72000000 - IT services: consulting, software development, Internet and support

#### **II.1.3) Type of contract**

Services

#### **II.1.4) Short description**

Thames Water (TW) are seeking a qualified bidder to provide a Water Treatment Works Digital Twin (WTW DT) solution as a proof-of-concept. It is expected that the solution will enhance our organisation's operational efficiency, streamline processes, and improve overall productivity allowing it to be implement at key facilities across the estate.

The DT will identify gaps in efficiencies and recommend process interventions to reduce these gaps, with an aim of delivering an ROI for the proof-of-concept of

#### **II.1.5) Estimated total value**

Value excluding VAT: £2,000,000

#### **II.1.6) Information about lots**

This contract is divided into lots: No

### **II.2) Description**

#### **II.2.2) Additional CPV code(s)**

- 48100000 - Industry specific software package
- 72200000 - Software programming and consultancy services

### **II.2.3) Place of performance**

NUTS codes

- UKI - London
- UKJ - South East (England)

Main site or place of performance

Whole of the Thames Water Region

### **II.2.4) Description of the procurement**

Development of a digital twin, as a proof-of-concept project, at Chingford WTW:

- Optimise efficiency across the whole site - source to pumps. Optimisation will be in the form of recommendations for operators to conduct on a day-to-day basis, driving down costs in areas such as power and consumeables
- The digital twin solution will mimic the physical asset to allow what-if analysis, running hypothetical scenarios to understand how the physical treatment work will operate under certain conditions
- The tool should integrate advances in innovation and machine learning to help Thames in becoming more proactive: identifying changing trends that wouldn't be possible manually and outputting a preventative response to mitigate emerging events
- The digital twin should be adaptable so that it can be tailored to help solve site-specific challenges, example at Chingford algae and pH control
- The product should be able to assist in the quantification of benefits it delivers enabling ROI calculations to be drawn which will inform scalability

### **II.2.5) Award criteria**

Price is not the only award criterion and all criteria are stated only in the procurement documents

### **II.2.6) Estimated value**

Value excluding VAT: £2,000,000

### **II.2.7) Duration of the contract, framework agreement or dynamic purchasing system**

Duration in months

60

This contract is subject to renewal

Yes

Description of renewals

Any Agreement awarded for an initial duration of three years (within which break clauses may apply after the proof of concept phase and at any roll out phase) and then with the option to extend annually to a maximum of overall duration of five years.

### **II.2.9) Information about the limits on the number of candidates to be invited**

Envisaged number of candidates: 5

### **II.2.10) Information about variants**

Variants will be accepted: Yes

### **II.2.11) Information about options**

Options: Yes

Description of options

Any Agreement awarded for an initial duration of three years (within which break clauses may apply after the proof of concept phase and at any roll out phase) and then with the option to extend annually to a maximum of overall duration of five years.

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## **Section III. Legal, economic, financial and technical information**

### **III.1) Conditions for participation**

#### **III.1.2) Economic and financial standing**

Selection criteria as stated in the procurement documents

#### **III.1.3) Technical and professional ability**

Selection criteria as stated in the procurement documents

#### **III.1.4) Objective rules and criteria for participation**

List and brief description of rules and criteria

As detailed in section VI.3 & PQQ.

#### **III.1.6) Deposits and guarantees required**

Bonds and/or parent company guarantees of performance and financial standing may be required

#### **III.1.7) Main financing conditions and payment arrangements and/or reference to the relevant provisions governing them**

Specified in Invitation to Negotiate Document

#### **III.1.8) Legal form to be taken by the group of economic operators to whom the contract is to be awarded**

Consortia may be required to form a legal entity prior to award

### **III.2) Conditions related to the contract**

#### **III.2.3) Information about staff responsible for the performance of the contract**

Obligation to indicate the names and professional qualifications of the staff assigned to performing the contract

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## **Section IV. Procedure**

### **IV.1) Description**

#### **IV.1.1) Type of procedure**

Negotiated procedure with prior call for competition

#### **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.2.2) Time limit for receipt of tenders or requests to participate**

Date

17 May 2024

Local time

12:00pm

#### **IV.2.4) Languages in which tenders or requests to participate may be submitted**

English

#### **IV.2.6) Minimum time frame during which the tenderer must maintain the tender**

Duration in months: 4 (from the date stated for receipt of tender)

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## **Section VI. Complementary information**

### **VI.1) Information about recurrence**

This is a recurrent procurement: Yes

### **VI.2) Information about electronic workflows**

Electronic ordering will be used

Electronic invoicing will be accepted

Electronic payment will be used

### **VI.3) Additional information**

All suppliers who wish to respond to this contract notice must request a pre-qualification questionnaire (PQQ) by using the web link in Section I.3 ([www.thameswater.co.uk/procurement](http://www.thameswater.co.uk/procurement)).

From your response to the link in Section I.3 or above, Thames Water's Procurement Support Centre will send you an email providing login details for our eSourcing system (i.e. IASTA

Smartsource). To complete the PQQ you will need to login to IASTA Smartsource.

If the project requires it, you will receive an additional and separate survey to complete for Data Protection.

Note - The client may be Thames Water Utilities Limited or another company within the Kemble Water group structure

### **VI.4) Procedures for review**

#### **VI.4.1) Review body**

Thames Water Utilities Limited

Reading

Country

United Kingdom



### **VI.4.3) Review procedure**

Precise information on deadline(s) for review procedures

Thames Water Utilities Limited will incorporate a standstill period at the point information on the award of the contract is communicated to tenderers. That notification will provide full information on the award decision. The standstill period, which will be for a minimum of 10 calendar days, provides time for unsuccessful tenderers to challenge the award decision before the contract is entered into.

The Utilities Contracts Regulations 2016 (SI 2016 No 274) provide for aggrieved parties who have been harmed or are at risk of harm by a breach of the rules to take action in the High Court (England, Wales and Northern Ireland).