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Planning

## **Tritium Plant Virtual Control Room**

United Kingdom Atomic Energy Authority

F01: Prior information notice

Prior information only

Notice identifier: 2024/S 000-024185

Procurement identifier (OCID): ocids-h6vhtk-0486e1

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### **Section I: Contracting authority**

#### **I.1) Name and addresses**

United Kingdom Atomic Energy Authority

Culham Campus

Abingdon

OX14 3DB

#### **Contact**

Ioanna Bampatsia

#### **Email**

[ioanna.bampatsia@ukaea.uk](mailto:ioanna.bampatsia@ukaea.uk)

#### **Telephone**

+44 0123546

**Country**

United Kingdom

**Region code**

UKJ14 - Oxfordshire

**National registration number**

N/A

**Internet address(es)**

Main address

<http://www.gov.uk/government/organisations/uk-atomic-energy-authority>

Buyer's address

<https://uk.eu-supply.com/ctm/Company/CompanyInformation/Index/72814>

**I.3) Communication**

The procurement documents are available for unrestricted and full direct access, free of charge, at

[https://uk.eu-supply.com/app/rfq/rwlentrance\\_s.asp?PID=84268&B=UKAEA](https://uk.eu-supply.com/app/rfq/rwlentrance_s.asp?PID=84268&B=UKAEA)

Additional information can be obtained from the above-mentioned address

**I.4) Type of the contracting authority**

Body governed by public law

**I.5) Main activity**

Other activity

Fusion Research

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## **Section II: Object**

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

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

Tritium Plant Virtual Control Room

Reference number

T/IB126/24)

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

- 48151000 - Computer control system

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

Supplies

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

UKAEA is currently designing a new tritium processing plant, referred to as the Hydrogen-3 Advanced Technology (H3AT) Facility. The H3AT Facility will be located on the UKAEA Culham site in the existing H3AT building.

A virtual control room for the H3AT facility is required to train operators, engineers and users on the operation of the facility, by providing the capability to simulate the behaviour of the tritium processing plant. It is envisaged that this will be similar to the operator training simulators used elsewhere in industrial processing plants. The design for the H3AT facility is based on process models developed using AVEVA Process Simulation software.

The process control and safety systems for the H3AT facility consists of the following three systems:

- H3AT Integrated Control System
- H3AT Integrated Interlock System
- H3AT Integrated Safety System

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

This contract is divided into lots: No

## **II.2) Description**

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

- 30200000 - Computer equipment and supplies
- 48100000 - Industry specific software package
- 48150000 - Industrial control software package
- 51900000 - Installation services of guidance and control systems

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

NUTS codes

- UKJ14 - Oxfordshire

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

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A virtual control room for the H3AT facility is required to train operators, engineers and users on the operation of the facility, by providing the capability to simulate the behaviour of the tritium processing plant. It is envisaged that this will be similar to the operator training simulators used elsewhere in industrial processing plants. The design for the H3AT facility is based on process models developed using AVEVA Process Simulation software.

The process control and safety systems for the H3AT facility consists of the following three systems:

- H3AT Integrated Control System
- H3AT Integrated Interlock System
- H3AT Integrated Safety System

The envisaged scope of supply is for the design, build and installation of a virtual control room, including the requisite hardware, software, licences and furniture. The supplier is

expected to provide a fully integrated solution incorporating both Siemens PCS7/S7 for the control and safety system and AVEVA Process Simulation software for the process modelling.

Initial requirements for the process control and safety system include the requisite hardware for a Siemens PCS7 control system, and S7 control and safety PLC's. Four workstations are required to be used as both operator and engineering workstations, with two or three monitors per workstation.

### **II.3) Estimated date of publication of contract notice**

29 November 2024

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## **Section IV. Procedure**

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

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

The procurement is covered by the Government Procurement Agreement: Yes