

This is a published notice on the Find a Tender service: <https://www.find-tender.service.gov.uk/Notice/026383-2021>

Planning

## **H3AT Tritium Plant – HPS Sub-System – Permeators and Palladium Membrane Reactors**

United Kingdom Atomic Energy Authority

F01: Prior information notice

Prior information only

Notice identifier: 2021/S 000-026383

Procurement identifier (OCID): ocds-h6vhtk-02ee7c

Published 21 October 2021, 12:40pm

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

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

United Kingdom Atomic Energy Authority

Culham Science Centre

Abingdon

OX14 3DB

#### **Contact**

Abigail Woods

#### **Email**

[abigail.woods@ukaea.uk](mailto:abigail.woods@ukaea.uk)

#### **Telephone**

+44 1235467082

**Country**

United Kingdom

**NUTS 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/rwlenrance\\_s.asp?PID=40170&B=UK](https://uk.eu-supply.com/app/rfq/rwlenrance_s.asp?PID=40170&B=UK)

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

---

## **Section II: Object**

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

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

H3AT Tritium Plant – HPS Sub-System – Permeators and Palladium Membrane Reactors

Reference number

T/AW198/21

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

- 42510000 - Heat-exchange units, air-conditioning and refrigerating equipment, and filtering machinery

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

Supplies

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

UKAEA wishes to engage with potential prime contractors, SME's, system designers and manufacturers of selected equipment for the HPS Sub-System within the Tritium Plant located in the new H3AT Facility, to separate and recover the isotopes of hydrogen from tritium-bearing gas mixtures.

Through this process we are looking to open the engagement for suppliers to understand the specific requirements for the HPS Sub-System (Permeators and PMRs) and assist with informing the final procurement strategy.

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

This contract is divided into lots: No

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

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

- 38126300 - Temperature or humidity surface observing apparatus
- 38420000 - Instruments for measuring flow, level and pressure of liquids and gases
- 38800000 - Industrial process control equipment and remote-control equipment
- 42511000 - Heat-exchange units and machinery for liquefying air or other gases

- 42511100 - Heat-exchange units
- 42910000 - Distilling, filtering or rectifying apparatus
- 42993000 - Chemical industry machinery
- 51000000 - Installation services (except software)
- 51100000 - Installation services of electrical and mechanical equipment
- 51110000 - Installation services of electrical equipment
- 51112000 - Installation services of electricity distribution and control equipment
- 51112100 - Installation services of electricity distribution equipment
- 51112200 - Installation services of electricity control equipment
- 51120000 - Installation services of mechanical equipment
- 51430000 - Installation services of laboratory equipment
- 51500000 - Installation services of machinery and equipment
- 51510000 - Installation services of general-purpose machinery and equipment
- 51800000 - Installation services of metal containers
- 51810000 - Installation services of tanks
- 71300000 - Engineering services
- 71323000 - Engineering-design services for industrial process and production
- 71330000 - Miscellaneous engineering services
- 71333000 - Mechanical engineering services
- 71334000 - Mechanical and electrical engineering services
- 71335000 - Engineering studies
- 71336000 - Engineering support services
- 71340000 - Integrated engineering services
- 71350000 - Engineering-related scientific and technical services
- 73000000 - Research and development services and related consultancy services
- 73100000 - Research and experimental development services

- 73120000 - Experimental development services
- 73300000 - Design and execution of research and development
- 73430000 - Test and evaluation

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

NUTS codes

- UKJ14 - Oxfordshire

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

UKAEA wishes to engage with potential prime contractors, SME's, system designers and manufacturers of selected equipment for the HPS Sub-System within the Tritium Plant located in the new H3AT Facility, to separate and recover the isotopes of hydrogen from tritium-bearing gas mixtures.

The H3AT Facility Tritium Plant consists of the following sub-systems:

- SDS - Storage and Delivery System
- TVS - Tokamak Vacuum Simulation
- HPS - Hydrogen Chemical Purification System
- ISS - Hydrogen Isotope Separation System (deemed collaborative contract development)
- WDS - Water Detritiation System (deemed collaborative contract development)
- ADS - Atmosphere Detritiation System
- ANS - Chemical and Isotope Analysis of Gaseous Mixtures System
- RGM - Radiological and Hazardous Gas Monitoring System.

The Facility is a tool of the H3AT Project, for which the missions are:

- Supporting Delivery of fusion as a commercial power source.
- Promoting industry, academia and research companies for work related to handling tritium and other radioactive isotopes.
- Providing capability for training of next generation of scientists and engineers for

development of the new power sources.

Through this process we are looking to open the engagement for suppliers to understand the specific requirements for the HPS Sub-System (Permeators and PMRs) and assist with informing the final procurement strategy.

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

1 December 2021

---

## **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: No