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Award

## **Chemical Vapour Infiltration and Deposition of Silicon Carbide, Carbon, and Oxides**

United Kingdom Atomic Energy Authority

F15: Voluntary ex ante transparency notice

Notice identifier: 2024/S 000-037407

Procurement identifier (OCID): ocds-h6vhtk-0351be

Published 19 November 2024, 3:52pm

### **Section I: Contracting authority/entity**

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

United Kingdom Atomic Energy Authority

Culham Science Centre

Abingdon

OX14 3DB

#### **Contact**

Charlotte Byrne

#### **Email**

[charlotte.byrne@ukaea.uk](mailto:charlotte.byrne@ukaea.uk)

#### **Country**

United Kingdom

**Region code**

UK - United Kingdom

**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.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**

Chemical Vapour Infiltration and Deposition of Silicon Carbide, Carbon, and Oxides

Reference number

T/JM119/22

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

- 71350000 - Engineering-related scientific and technical services

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

Services

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

The purpose of this RFI is to have a better understanding of the capabilities for chemical vapour infiltration of fibre reinforced composites which currently exist. The materials of interest to be manufactured by chemical vapour infiltration or deposition (CVI or CVD) are silicon carbide fibre reinforced composites. The CVI materials will act as the interphase coating on the fibres, and the matrix. Interphase materials of interest include pyrolytic carbon, and rare earth oxides (eg. erbia) and silicates (eg. yttrium disilicate). Matrix materials of interest are silicon carbide, and coatings of interest are silicon carbide and rare earth oxides. Alternative methods of applying sub-micron scale interphases are also of interest.

#### **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: £140,298

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

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

- 71350000 - Engineering-related scientific and technical services

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

NUTS codes

- UK - United Kingdom

Main site or place of performance

UKAEA Culham

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

The purpose of this RFI is to have a better understanding of the capabilities for chemical vapour infiltration of fibre reinforced composites which currently exist. The materials of interest to be manufactured by chemical vapour infiltration or deposition (CVI or CVD) are silicon carbide fibre reinforced composites. The CVI materials will act as the interphase coating on the fibres, and the matrix. Interphase materials of interest include pyrolytic carbon, and rare earth oxides (eg. erbia) and silicates (eg. yttrium disilicate). Matrix materials of interest are silicon carbide, and coatings of interest are silicon carbide and rare earth oxides. Alternative methods of applying sub-micron scale interphases are also of interest.

The main objective is to find out supplier's capabilities to produce parts, and obtain an understanding of the possible size, and geometric complexity which can be achieved, including limitations on the supply of raw materials. These parts are intended for material testing, with potential application as structural materials in the blanket of a tokamak fusion reactor. The aims of this RFI are given in section 3.1. UKAEA wish to ask prospective suppliers to answer the requirements in section 3.2. Estimation of cost and timelines would also be appreciated to aid us in planning.

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

Options: No

## **II.2.13) Information about European Union Funds**

The procurement is related to a project and/or programme financed by European Union funds: No

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## 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:

A PIN (Prior Information Notice) was issued in August 2022 for these services, and responses were invited from eligible suppliers via an RFI (Request for Information).

Following this exercise, Archer Technicoat Ltd were found to be the primary UK supplier of these specialist services.

Recent market engagement in 2024 has confirmed that Archer Technicoat Ltd are still the primary UK supplier for these specialist services, and therefore the award is justified on the grounds that the "services can be supplied only by a particular economic operator [because] competition is absent for technical reasons".

#### 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: [2022/S 000-019222](#)

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## Section V. Award of contract/concession

### Title

Fusion Futures: Industrialisation of interphase coatings for silicon carbide fibre composites for flow channel inserts

A contract/lot is awarded: Yes

### V.2) Award of contract/concession

#### V.2.1) Date of conclusion of the contract

19 November 2024

#### 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

Archer Technicoat Ltd

High Wycombe

Country

United Kingdom

NUTS code

- UKJ13 - Buckinghamshire CC

The contractor/concessionaire is an SME

Yes

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

Total value of the contract/lot/concession: £140,298

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## **Section VI. Complementary information**

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

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

UK Atomic Energy Authority

Culham Science Centre

Abingdon

OX14 3DB

Country

United Kingdom

Internet address

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

#### **VI.4.2) Body responsible for mediation procedures**

UK Atomic Energy Authority

Culham Science Centre

Abingdon

OX14 3DB

Country

United Kingdom

Internet address

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

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

Precise information on deadline(s) for review procedures

#### VI.4.2) Body responsible for mediation procedures

#### VI.4.3) Review procedure

Precise information on deadline(s) for review procedures:

The authority will incorporate a minimum 10 calendar day standstill period at the point information on the award of the contract is communicated to tenderers.

This period allows unsuccessful tenderers to seek further debriefing from the authority before a contract is entered into applicants have 2 working days from the notification of the award decision to request. Additional debriefing and that information have to be provided within a minimum of 3 working days before the expiry of the standstill period. Such additional information should be sought from the contact named in this notice.

If an appeal regarding the award of a contract has not been successfully resolved, the Public Contracts Regulations 2015 (SI 2015 No. 102) 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).

Any such action must be brought promptly.

(generally within 3 months).

#### **VI.4.4) Service from which information about the review procedure may be obtained**

UK Atomic Energy Authority

Culham Science Centre

Abingdon

OX14 3DB

Country

United Kingdom

Internet address

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



