Planning

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

United Kingdom Atomic Energy Authority

F01: Prior information notice
Prior information only
Notice identifier: 2022/S 000-019222
Procurement identifier (OCID): ocds-h6vhtk-0351be
Published 13 July 2022, 5:41pm

Section I: Contracting authority

I.1) Name and addresses

United Kingdom Atomic Energy Authority

Culham Science Centre

Abingdon

OX14 3DB

Contact

Jim McGough

Email

jim.mcgough@ukaea.uk

Telephone

+44 1235467082

Country

United Kingdom

NUTS 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.2) Information about joint procurement

The contract is awarded by a central purchasing body

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=50430&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

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.1.5) Estimated total value

Value excluding VAT: £60,000

II.1.6) Information about lots

This contract is divided into lots: No

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

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.3) Estimated date of publication of contract notice

14 October 2022

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