Planning

Fusion Futures: Ceramic to Metal Bonding

United Kingdom Atomic Energy Authority

F01: Prior information notice
Prior information only
Notice identifier: 2024/S 000-019348
Procurement identifier (OCID): ocds-h6vhtk-047244
Published 24 June 2024, 4:49pm

Section I: Contracting authority

I.1) Name and addresses

United Kingdom Atomic Energy Authority

Culham Campus

Abingdon

OX14 3DB

Contact

Charlotte Byrne

Email

charlotte.byrne@ukaea.uk

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=83020&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

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Fusion Futures: Ceramic to Metal Bonding

Reference number

T/RK090/24

II.1.2) Main CPV code

- 42942200 - Vacuum ovens

II.1.3) Type of contract

Supplies

II.1.4) Short description

The objective of this work package is to develop microwave vacuum windows for either circular or rectangular waveguide.

There will be two general applications in which a ceramic is inserted into a waveguide or metallic wall: • Standard WR-## rectangular waveguide • Small circular or rectangular window with ceramic having a high index of refraction)

The bonding should be compatible with ultra-high vacuum applications with leak rates kept below 10-9mbar/(l•s)

The ceramic material is to be determined based on the suppliers capability, materials index of refraction and microwave transmission efficiency over the range of 25 to 400GHz.

The metallic material is preferred to be either Aluminium (allow 6061 or 6062) and copper (CuCrZr).

II.1.5) Estimated total value

Value excluding VAT: £50,000

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.2) Additional CPV code(s)

- 71300000 - Engineering services
- 79415200 - Design consultancy services

- 79930000 - Specialty design services

II.2.3) Place of performance

NUTS codes

- UKJ14 - Oxfordshire

Main site or place of performance

OX14 3DB

II.2.4) Description of the procurement

The objective of this work package is to develop microwave vacuum windows for either circular or rectangular waveguide.

There will be two general applications in which a ceramic is inserted into a waveguide or metallic wall: • Standard WR-## rectangular waveguide • Small circular or rectangular window with ceramic having a high index of refraction)

The bonding should be compatible with ultra-high vacuum applications with leak rates kept below 10-9mbar/(l•s)

The ceramic material is to be determined based on the suppliers capability, materials index of refraction and microwave transmission efficiency over the range of 25 to 400GHz.

The metallic material is preferred to be either Aluminium (allow 6061 or 6062) and copper (CuCrZr).

The estimated budget for this is £50,000.

This piece of work is required to be completed by March 2025, it is anticipated that this contract will be 8 months long.

II.3) Estimated date of publication of contract notice

5 August 2024

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