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Contract

SBRI: UKAEA Fusion industry challenges prototype development

United Kingdom Atomic Energy Authority

F03: Contract award notice

Notice identifier: 2023/S 000-030386

Procurement identifier (OCID): ocids-h6vhtk-040c24

Published 16 October 2023, 8:51am

Section I: Contracting authority

I.1) Name and addresses

United Kingdom Atomic Energy Authority

Culham Science Centre

Abingdon

OX14 3DB

Contact

Suleiman Deen

Email

suleiman.deen@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.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

SBRI: UKAEA Fusion industry challenges prototype development

Reference number

T/VT043/23

II.1.2) Main CPV code

- 73110000 - Research services

II.1.3) Type of contract

Services

II.1.4) Short description

This is a Small Business Research Initiative (SBRI) competition funded by the UK Atomic Energy Authority (UKAEA).

This funding programme will support the UK's leadership in economic, sustainable, and scalable fusion energy.

The aim of this competition is to encourage innovation in the development of Lithium in an economic, sustainable, and scalable fusion energy fuel cycle.

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: £7,410,371

II.2) Description

II.2.2) Additional CPV code(s)

- 14784000 - Lithium

II.2.3) Place of performance

NUTS codes

- UKJ14 - Oxfordshire

II.2.4) Description of the procurement

A pre-commercial activity under SBRI. The aim of this competition is to encourage innovation in the development of Lithium in an economic, sustainable, and scalable fusion energy fuel cycle.

Your project can focus on one or more of the following:

Isotopic Enrichment

- Technologies that can enrich the proportion of the minor isotope Lithium-6.

- Enrichment will be essential to the fuel sustainability of many fusion power designs and, where it is not essential, can add value by boosting Tritium production. This will enable the commissioning and re-start of other fusion power plants.
- Lithium enrichment represents a front-end fuel cycle service that will be demanded by fusion reactor operators around the world.

Examples of performance measures that would constitute an improvement over existing Lithium enrichment technologies include:

- product quality, for example, maximum enrichment level (percentage), purity and product form (metal or compound)
- economics, for example, production rate, capital cost, energy and resource consumption or value of co-products
- environmental and worker protection, for example, hazards, waste production, obstacles to licensing such as the Minamata Convention

Tritium Extraction

Technologies that can extract Tritium from a Lithium breeding material and make it available, fast and efficient enough to fuel the ongoing Deuterium-Tritium (DT) reaction.

Performance parameters relevant to a fusion energy plant's fuel cycle system include:

- rate of extraction
- continuous operation
- availability of recovered Tritium
- energy cost
- Conversion and Manufacturing

Technologies or techniques that can convert Lithium from the form available in existing supply chains into either:

- a form suitable for an isotopic enrichment process
- a form required by the Tritium breeding system of a fusion energy plant

Aspects relevant to a sustainable and competitive supply chain include:

- raw material input forms for example, Lithium Chloride, Carbonate, Hydroxide
- product output forms, for example, suitability for a variety of enrichment processes or breeding systems

potential to recycle Lithium, for example, use of recycled Lithium from other sectors in fusion, or recycling of Lithium after its use in a fusion energy plant

II.2.5) Award criteria

Quality criterion - Name: Proposed idea or technology / Weighting: 10

Quality criterion - Name: Technical project summary / Weighting: 20

Quality criterion - Name: Current state of the art and intellectual property / Weighting: 15

Quality criterion - Name: Project plan and methodology / Weighting: 15

Quality criterion - Name: Technical team and expertise / Weighting: 15

Quality criterion - Name: Commercial potential / Weighting: 15

Cost criterion - Name: Costs and value for money / Weighting: 10

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

II.2.14) Additional information

<https://apply-for-innovation-funding.service.gov.uk/competition/1572/overview/b46f6801-18ac-401d-b654-a540f79f9171#how-to-apply>

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:

This was a pre-commercial procurement activity lead by Innovate UK. All information relating to the tender can be found here: <https://apply-for-innovation-funding.service.gov.uk/competition/1572/overview/b46f6801-18ac-401d-b654-a540f79f9171>

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

The procurement is covered by the Government Procurement Agreement: Yes

IV.2) Administrative information

IV.2.9) Information about termination of call for competition in the form of a prior information notice

The contracting authority will not award any further contracts based on the above prior information notice

Section V. Award of contract

Title

Encourage innovation in the development of Lithium in an economic, sustainable, and scalable fusion energy fuel cycle

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

12 October 2023

V.2.2) Information about tenders

Number of tenders received: 21

The contract has been awarded to a group of economic operators: No

V.2.3) Name and address of the contractor

Bangor University

Bangor

LL57 2DG

Country

United Kingdom

NUTS code

- UKL12 - Gwynedd

The contractor is an SME

No

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

Total value of the contract/lot: £1,164,578

Section V. Award of contract

Title

Encourage innovation in the development of Lithium in an economic, sustainable, and scalable fusion energy fuel cycle.

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

12 October 2023

V.2.2) Information about tenders

Number of tenders received: 21

The contract has been awarded to a group of economic operators: No

V.2.3) Name and address of the contractor

Frazer-Nash Consultancy Ltd

Leatherhead

KT22 7NL

Country

United Kingdom

NUTS code

- UKJ2 - Surrey, East and West Sussex

The contractor is an SME

No

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

Total value of the contract/lot: £1,498,332

Section V. Award of contract

Title

Encourage innovation in the development of Lithium in an economic, sustainable, and scalable fusion energy fuel cycle.

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

12 October 2023

V.2.2) Information about tenders

Number of tenders received: 21

The contract has been awarded to a group of economic operators: No

V.2.3) Name and address of the contractor

University of Bristol

Bristol

BS81QU

Country

United Kingdom

NUTS code

- UKK11 - Bristol, City of

The contractor is an SME

No

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

Total value of the contract/lot: £726,383

Section V. Award of contract

Title

Encourage innovation in the development of Lithium in an economic, sustainable, and scalable fusion energy fuel cycle.

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

12 October 2023

V.2.2) Information about tenders

Number of tenders received: 21

The contract has been awarded to a group of economic operators: No

V.2.3) Name and address of the contractor

University of Bristol

Bristol

BS81QU

Country

United Kingdom

NUTS code

- UKK11 - Bristol, City of

The contractor is an SME

No

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

Total value of the contract/lot: £1,237,502

Section V. Award of contract

Title

Encourage innovation in the development of Lithium in an economic, sustainable, and scalable fusion energy fuel cycle.

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

12 October 2023

V.2.2) Information about tenders

Number of tenders received: 21

The contract has been awarded to a group of economic operators: No

V.2.3) Name and address of the contractor

University of Edinburgh

Edinburgh

EH8 9YL

Country

United Kingdom

NUTS code

- UKM75 - Edinburgh, City of

The contractor is an SME

No

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

Total value of the contract/lot: £1,497,970

Section V. Award of contract

Title

Encourage innovation in the development of Lithium in an economic, sustainable, and scalable fusion energy fuel cycle.

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

12 October 2023

V.2.2) Information about tenders

Number of tenders received: 21

The contract has been awarded to a group of economic operators: No

V.2.3) Name and address of the contractor

University of Manchester

Manchester

M13 9PL

Country

United Kingdom

NUTS code

- UKD33 - Manchester

The contractor is an SME

No

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

Total value of the contract/lot: £1,285,606

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:

Precommercial procurement activity not subject to Public Contract Regulations 2015.

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>