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Awarded contract

SBRI FIP Challenge Application

United Kingdom Atomic Energy Authority

F03: Contract award notice
Notice reference: 2021/S 000-023238
Published: 17 September 2021, 5:08pm

Section I: Contracting authority

I.1) Name and addresses

United Kingdom Atomic Energy Authority

Culham Science Centre

Abingdon

OX14 3DB

Contact

Vincent Tsang

Email

vincent.tsang@ukaea.uk

Telephone

+44 1235466444

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.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 FIP Challenge Application

Reference number

T/VT169/21

II.1.2) Main CPV code

- 73100000 - Research and experimental development 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. The aim of the competition is to develop solutions to fusion energy challenges in two key priority areas. This competition has two themes:

Accelerating fusion power plant design with next-generation digital tools

Reducing fusion power plant fuel requirements with advanced production and handling technology for hydrogen isotopes

This is phase 1 of a potential 2 phase competition. A decision to proceed with phase 2 will depend on the outcomes from phase 1 and assessment of a separate application into a subsequent phase 2 competition.

Only successful applicants from phase 1 will be able to apply to take part in phase 2. Applicants for phase 2 will need to apply directly to the UK Atomic Energy Authority.

II.1.6) Information about lots

This contract is divided into lots: Yes

II.1.7) Total value of the procurement (excluding VAT)

Value excluding VAT: £2,322,059

II.2) Description

II.2.1) Title

Accelerating fusion power plant design with next-generation digital tools

Lot No

1

II.2.2) Additional CPV code(s)

- 73210000 - Research consultancy services

II.2.3) Place of performance

NUTS codes

- UKJ14 - Oxfordshire

II.2.4) Description of the procurement

A Pre-commercial Procurement Activity

1.Accelerating fusion power plant design with next-generation digital tools

To meet Net Zero targets, there is not enough time for traditional Design-Build-Test-Learn (DBTL) approach for fusion power plants. Increasing emphasis will be placed upon emerging innovation from in silico engineering design:

Exascale artificial Intelligence era Digital Thread platform

beyond current Product Lifecycle Management

endures for the lifetime of the product (100 years)

low-code

time efficient

scalable

enable and promote automation

enable design integration

Optimise the extraction of information and knowledge from experiment and simulation

Text update 19 May 2021: we have changed the detail below to clarify what we are looking for in applications.

data science for experiment and simulation automation and optimisation

decisions based upon all prior data rather than tacit knowledge

dramatically improve extraction of information from data

surrogate models and emulators

improve extrapolation of simulation and empirical data

II.2.5) Award criteria

Quality criterion - Name: How well does the proposed idea/solution/technologies meet the challenge as detailed in the brief? / Weighting: 14.28571428571428571

Quality criterion - Name: How valid is the technical approach that will be adopted? / Weighting: 14.28571428571428571

Quality criterion - Name: How innovative is this project? To what extent does the project develop or employ novel concepts, approaches, methodologies, tools or technologies for this area? / Weighting: 14.28571428571428571

Quality criterion - Name: To what extent does the proposal show a clear plan for establishing technical and commercial feasibility and the development of a working prototype? / Weighting: 14.28571428571428571

Quality criterion - Name: To what extent does the applicant appear to have the right skills, capabilities and experience to deliver the intended benefits? / Weighting: 14.28571428571428571

Quality criterion - Name: Is there a clear commercial potential to lead to a marketable product, process or service and a clear plan to deliver that and route to market? / Weighting: 14.28571428571428571

Cost criterion - Name: How appropriate is the proposal financially? Is the overall budget realistic and justified in terms of the aims and methods proposed? Are the costs appropriate and justified? / Weighting: 14.28571428571428571

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/925/overview#summary

II.2) Description

II.2.1) Title

Reducing fusion power plant fuel requirements with advanced production and handling technology for hydrogen isotopes

Lot No

2

II.2.2) Additional CPV code(s)

- 73100000 - Research and experimental development services

II.2.3) Place of performance

NUTS codes

- UKJ14 - Oxfordshire

II.2.4) Description of the procurement

A Pre-commercial procurement activity

2. Reducing fusion power plant fuel requirements with advanced production and handling

technology for Hydrogen isotopes

Tritium is a radioactive isotope with a half-life of around 12 years, because of this natural reserves are scarce. Developing techniques for safely and efficiently managing hydrogen isotopes is an essential step in the path to making fusion a commercial energy source, for example:

Hydrogen Isotope Separation Technologies

improving efficiency of tritium and hydrogen systems (e.g. pumps, sealants, inner loop)

waste management and decommissioning

development of on-line Tritium production measurement (e.g. Raman spectroscopy)

tracking and location of hydrogen, e.g. Atom probe tomography, Raman spectroscopy

II.2.5) Award criteria

Quality criterion - Name: How well does the proposed idea/solution/technologies meet the challenge as detailed in the brief? / Weighting: 14.28571428571428571

Quality criterion - Name: How valid is the technical approach that will be adopted? / Weighting: 14.28571428571428571

Quality criterion - Name: How innovative is this project? To what extent does the project develop or employ novel concepts, approaches, methodologies, tools or technologies for this area? / Weighting: 14.28571428571428571

Quality criterion - Name: To what extent does the proposal show a clear plan for establishing technical and commercial feasibility and the development of a working prototype? / Weighting: 14.28571428571428571

Quality criterion - Name: To what extent does the applicant appear to have the right skills, capabilities and experience to deliver the intended benefits? / Weighting: 14.28571428571428571

Quality criterion - Name: Is there a clear commercial potential to lead to a marketable product, process or service and a clear plan to deliver that and route to market? / Weighting: 14.28571428571428571

Cost criterion - Name: How appropriate is the proposal financially? Is the overall budget realistic and justified in terms of the aims and methods proposed? Are the costs appropriate

and justified? / Weighting: 14.28571428571428571

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/925/overview#scope

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/925/overview#summary. An open, transparent and fair procurement process was still adhered to despite this RTM falling outside of PCR15.

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

The procurement is covered by the Government Procurement Agreement: Yes

Section V. Award of contract

Lot No

1

Title

Accelerating fusion power plant design with next-generation digital tools

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 27

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

V.2.3) Name and address of the contractor

ASSYSTEM ENERGY & INFRASTRUCTURE LIMITED

Lancashire

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

No

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

Total value of the contract/lot: £73,571

Section V. Award of contract

Lot No

1

Title

Accelerating fusion power plant design with next-generation digital tools

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 27

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

V.2.3) Name and address of the contractor

CAE Tech Limited

Leamington Spa

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

Yes

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

Total value of the contract/lot: £76,001

Section V. Award of contract

Lot No

1

Title

Accelerating fusion power plant design with next-generation digital tools

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 27

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

V.2.3) Name and address of the contractor

CORPORATE RISK ASSOSCIATES LIMITED

London

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

Yes

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

Total value of the contract/lot: £50,935

Section V. Award of contract

Lot No

1

Title

Accelerating fusion power plant design with next-generation digital tools

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 27

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

V.2.3) Name and address of the contractor

FIRST LIGHT FUSION LIMITED

Kidlington

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

Yes

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

Total value of the contract/lot: £249,454

Section V. Award of contract

Lot No

1

Title

Accelerating fusion power plant design with next-generation digital tools

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 27

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

V.2.3) Name and address of the contractor

FULL MATRIX LIMITED

Cambridge

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

Yes

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

Total value of the contract/lot: £111,210

Section V. Award of contract

Lot No

1

Title

Accelerating fusion power plant design with next-generation digital tools

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 27

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

V.2.3) Name and address of the contractor

HyBird Ltd

London

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

Yes

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

Total value of the contract/lot: £244,196

Section V. Award of contract

Lot No

1

Title

Accelerating fusion power plant design with next-generation digital tools

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

25 September 2020

V.2.2) Information about tenders

Number of tenders received: 27

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

V.2.3) Name and address of the contractor

SLINGSHOT SIMULATIONSLTD

Leeds

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

Yes

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

Total value of the contract/lot: £108,926

Section V. Award of contract

Lot No

1

Title

Accelerating fusion power plant design with next-generation digital tools

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

10 September 2021

V.2.2) Information about tenders

Number of tenders received: 27

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

V.2.3) Name and address of the contractor

THE UNIVERSITY OF MANCHESTER

Manchester

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

No

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

Total value of the contract/lot: £117,804

Section V. Award of contract

Lot No

2

Title

Reducing fusion power plant fuel requirements with advanced production and handling technology for hydrogen isotopes

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 18

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

V.2.3) Name and address of the contractor

AQSORPTION LTD

Nottingham

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

Yes

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

Total value of the contract/lot: £237,322

Section V. Award of contract

Lot No

2

Title

Reducing fusion power plant fuel requirements with advanced production and handling technology for hydrogen isotopes

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 18

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

V.2.3) Name and address of the contractor

Cagecapture Limited

Liverpool

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

Yes

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

Total value of the contract/lot: £215,976

Section V. Award of contract

Lot No

2

Title

Reducing fusion power plant fuel requirements with advanced production and handling technology for hydrogen isotopes

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 18

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

V.2.3) Name and address of the contractor

Gencoa Limited

Liverpool

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

Yes

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

Total value of the contract/lot: £137,436

Section V. Award of contract

Lot No

2

Title

Reducing fusion power plant fuel requirements with advanced production and handling technology for hydrogen isotopes

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 18

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

V.2.3) Name and address of the contractor

IDOM (UK) LIMITED

London

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

Yes

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

Total value of the contract/lot: £130,327

Section V. Award of contract

Lot No

2

Title

Reducing fusion power plant fuel requirements with advanced production and handling technology for hydrogen isotopes

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 18

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

V.2.3) Name and address of the contractor

IS-INSTRUMENTS LIMITED

Kent

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

Yes

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

Total value of the contract/lot: £171,518

Section V. Award of contract

Lot No

2

Title

Reducing fusion power plant fuel requirements with advanced production and handling technology for hydrogen isotopes

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 18

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

V.2.3) Name and address of the contractor

Jacobs Clean Energy Limited

Warrington

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

No

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

Total value of the contract/lot: £186,511

Section V. Award of contract

Lot No

2

Title

Reducing fusion power plant fuel requirements with advanced production and handling technology for hydrogen isotopes

A contract/lot is awarded: Yes

V.2) Award of contract

V.2.1) Date of conclusion of the contract

27 August 2021

V.2.2) Information about tenders

Number of tenders received: 18

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

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor is an SME

No

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

Total value of the contract/lot: £210,872

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