Planning

Advanced Materials Science and Technology (S&T) - Centre of Excellence in Materials for Extreme Physical Environments - Announcement of S&T Supplier Day

Defence Science and Technology Laboratory

F01: Prior information notice
Prior information only
Notice identifier: 2022/S 000-022963
Procurement identifier (OCID): ocds-h6vhtk-035fe4
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Section I: Contracting authority

I.1) Name and addresses

Defence Science and Technology Laboratory

Porton Down

SALISBURY

SP40JQ

Contact

Ollie Kell

Email

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Country

United Kingdom

Region code

UKK15 - Wiltshire CC

Justification for not providing organisation identifier

Not on any register

Internet address(es)

Main address

https://www.gov.uk/government/organisations/defence-science-and-technology-laboratory

I.3) Communication

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

Defence

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Advanced Materials Science and Technology (S&T) - Centre of Excellence in Materials for Extreme Physical Environments - Announcement of S&T Supplier Day

II.1.2) Main CPV code

- 73410000 - Military research and technology

II.1.3) Type of contract

Services

II.1.4) Short description

The Dstl Advanced Materials Programme is exploring different ways of working to deliver future research. To supplement existing routes to market, Dstl is exploring working collaboratively with a UK Centre of Excellence in Materials for Extreme Physical Environments .

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.3) Place of performance

NUTS codes

- UKK15 - Wiltshire CC

II.2.4) Description of the procurement

The Dstl Advanced Materials Programme (AMP) has explored different ways of working to deliver its S&T. It has preliminary approval to create a Centre of Excellence to deliver S&T in Materials for Extreme Physical Environments.

The aims of working collaboratively with a Centre of Excellence include:

• Acceleration of the development of advanced materials for generation-after-next (GAN) defence capabilities

• Engagement with and linking to other entities across the Advanced Materials ecosystem to support work and transition for onward development and exploitation

• Contribution to stewardship of S&T capability (suitably Qualified and Experienced Personnel (SQEP) and facilities)

• Strengthening and achieving resilient access to expertise and expert advice for the UK

It is currently envisaged that the Centre will likely be formed through a Lead Contractor (with demonstrated access to a range of relevant organisation's SQEP and facilities) or by a consortium with the capabilities, attributes and behaviours capable of delivering high impact Advanced Materials S&T. Demonstration and evidence of experience, capability, capacity and a track record of excellence in the field will be required and sought as part of the future procurement. The Centre will have a core ambition of Technology Readiness Levels (TRL) 1-4 and a development ambition of TRL6. It will run for 5 years from contract placement. Guidance on TRL definition can be found at: https://www.gov.uk/guidance/defence-and-security-accelerator-terms-and-conditions-and-contract-guidance

The Advanced Materials Strategic Capability in Dstl does not run its own laboratories. Therefore, we are also exploring opportunities to develop mutually agreeable ways of working that may help our staff maintain their technical skills as part of collaborative working with the Centre of Excellence.

Dstl's definition of S&T of Materials for Extreme Environments

"Extreme" may describe a large number of defence environments, which will be prioritised for the Centre for affordability, but may include:

• Extremes of temperature, e.g. temperatures greater than 1000 °C, including in oxidising environments

• Polar to tropical operations and associated environmental challenges

• Vibration and fatigue

• Impact and shock

• Radiation

• Vacuum (e.g. outgassing)

• Water depth

• Erosion and accretion, e.g. sand, dust, ice

• Although not necessarily considered an 'extreme' environment, Dstl is also interested in understanding the implications of typical service life in a defence environment context on the performance of materials

Advanced Materials S&T Capabilities

Dstl is not seeking to create the Centre from scratch but build on existing and developing UK capabilities (people, equipment and infrastructure) that already exist. The Centre shall be focused on a range of structural materials including ceramics, metals, polymers and their composites, and functional materials to protect components from extreme physical environments (e.g. coatings, vibration damping). It will have capabilities for the interrogation and design of the processing - structure - properties - performance relationships in these materials through:

• modelling and simulation

• state-of-the-art materials characterisation and testing facilities

• processing facilities across TRL-relevant scales (from laboratory to pilot-scale and potentially industrial scale if appropriate)

• component prototyping (depending on TRL goal)

• digital tools to support materials assurance

II.2.14) Additional information

The purpose of this Prior Information Notice (PIN) is to inform the market that Dstl's Advanced Materials Programme plans to hold a Supplier Day to present its plans to run a future competitive procurement to create a Centre of Excellence in Materials for Extreme Physical Environments. The Centre will be the primary method of delivery for S&T in this Theme of the Programme. The Supplier Day will:

• Be held on 10 October 2022 between 09:30 and 16:00 at The National Space Centre, Leicester

• Inform UK Advanced Materials S&T suppliers of Dstl's thinking regarding the Centre of Excellence, and how it will be designed to deliver most of Dstl's S&T on the Theme of Materials for Extreme Physical Environments

• Share Dstl's preliminary thinking regarding a Statement of Requirement and obtain views from the market to inform its construct, in order to ensure that this is ready for the future procurement

• Share a preliminary timeline for procurement/business case activities and deadlines

• Provide an opportunity for suppliers to ask questions

• Provide an opportunity for suppliers to network with one another in advance of formal competition launch

• Obtain views and feedback from the market on Dstl's plans in advance of formal competition launch

Registration for the Supplier Day:

Delegates can register their interest to attend the Supplier Day at using the below link to Eventbrite.

https://www.eventbrite.co.uk/e/centre-of-excellence-in-materials-for-extreme-physical-environments-tickets-394282889737

The Eventbrite website is open for expressions of interest to attend and will close at 18:00 hrs on 5th October 2022.

Owing to venue capacity places are limited to a maximum of two attendees per organisation or major business unit within that organisation. Dstl reserves the right to review proposed attendees to ensure that attendance is appropriate and relevant to this future procurement. In order to manage attendance, only individuals who have registered their interest via Eventbrite and have been subsequently approved by Dstl, will be permitted to attend this event.

II.3) Estimated date of publication of contract notice

31 March 2023

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