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Planning

## **UKRI-1242 NQCC WP2 Ion Processor Fully Controlling 10+ Qubits**

UK Research & Innovation

F01: Prior information notice

Prior information only

Notice identifier: 2021/S 000-013399

Procurement identifier (OCID): ocds-h6vhtk-02bbca

Published 14 June 2021, 4:15pm

### **Section I: Contracting authority**

#### **I.1) Name and addresses**

UK Research & Innovation

Science & Technology Facilities Council, Rutherford Appleton Laboratory, Harwell

Oxford

OX110QX

#### **Email**

[elizabeth.gage@ukri.org](mailto:elizabeth.gage@ukri.org)

#### **Telephone**

+44 7563420665

#### **Country**

United Kingdom

**NUTS code**

UK - United Kingdom

**Internet address(es)**

Main address

<https://www.ukri.org/>

**I.2) Information about joint procurement**

The contract is awarded by a central purchasing body

**I.3) Communication**

Additional information can be obtained from the above-mentioned address

Electronic communication requires the use of tools and devices that are not generally available. Unrestricted and full direct access to these tools and devices is possible, free of charge, at

<https://ukri.delta-esourcing.com/>

**I.4) Type of the contracting authority**

Body governed by public law

**I.5) Main activity**

Other activity

Research

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## **Section II: Object**

### **II.1) Scope of the procurement**

#### **II.1.1) Title**

UKRI-1242 NQCC WP2 Ion Processor Fully Controlling 10+ Qubits

Reference number

UKRI-1242

#### **II.1.2) Main CPV code**

- 73000000 - Research and development services and related consultancy services

#### **II.1.3) Type of contract**

Services

#### **II.1.4) Short description**

This tender is related to UKRI-1242 NQCC WP2 Ion Processor Fully Controlling 10+ Qubits.

The National Quantum Computing Centre has an objective to deliver an early-stage quantum computer (Noisy Intermediate Scale Quantum, NISQ machine) that can outperform conventional computing for a range of tasks, by 2025.

#### **II.1.5) Estimated total value**

Value excluding VAT: £750,000

#### **II.1.6) Information about lots**

This contract is divided into lots: No

### **II.2) Description**

#### **II.2.3) Place of performance**

NUTS codes

- UK - United Kingdom

Main site or place of performance

UNITED KINGDOM

#### **II.2.4) Description of the procurement**

The NQCC has developed a technology roadmap, and has identified a series of technical work packages (WPs) that are suitable for delivery by external contractors. These WPs focus on the delivery of technology solutions according to a set of required technical performance specifications, for both hardware and software, related to quantum computing.

The NQCC intends to hold an event to inform potential suppliers of the tendering process and requirements for two work packages related to ion trap systems:

WP1 - High Fidelity Two-Qubit Microwave Gates for Ion Traps.

WP2 - Ion Processor Fully Controlling 10+ Qubits. WP2 involves the development of an in-lab demonstrator comprising an ion trap system with 10+ individually-addressable qubits and featuring a multi-zoned trap.

Further information will be provided at the event.

#### **II.2.14) Additional information**

The Supplier Event for both WP1 and WP2 is being held on 12:00pm 13th July 2021.

Suppliers are to confirm whether they will be attending the Supplier Event by emailing their contact name, organisation name and contact details to [Elizabeth.Gage@ukri.org](mailto:Elizabeth.Gage@ukri.org) no later than Thursday 8th July 2021.

#### **II.3) Estimated date of publication of contract notice**

27 September 2021

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### **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

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## **Section VI. Complementary information**

### **VI.3) Additional information**

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<https://ukri.delta-esourcing.com/delta/viewNotice.html?noticeId=595199142>

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