This is a published notice on the Find a Tender service: <a href="https://www.find-tender.service.gov.uk/Notice/013400-2021">https://www.find-tender.service.gov.uk/Notice/013400-2021</a>

**Planning** 

# UKRI-1243 NQCC WP10 High Fidelity Two-Qubit Superconducting Gates

**UK Research & Innovation** 

F01: Prior information notice

Prior information only

Notice identifier: 2021/S 000-013400

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

Published 14 June 2021, 4:15pm

## **Section I: Contracting authority**

### I.1) Name and addresses

**UK Research & Innovation** 

Polaris House

Swindon

SN2 1FL

#### **Email**

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

Regional or local Agency/Office

## I.5) Main activity

Other activity

Research

## **Section II: Object**

## II.1) Scope of the procurement

#### II.1.1) Title

UKRI-1243 NQCC WP10 High Fidelity Two-Qubit Superconducting Gates

Reference number

**UKRI-1243** 

#### 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 tender is related to UKRI-1243 NQCC WP10 High Fidelity Two-Qubit Superconducting Gates.

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: £330,000

#### 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 superconducting circuits:

WP10 - High fidelity two-qubit superconducting gates. WP10 involves the development of an in-lab demonstrator comprising a scalable, several qubit, circuit-based quantum device that meets specific performance targets for initialisation and one- and two-qubit gate operations.

WP11 - Demonstrator of 2D array scaling for superconducting qubits.

Further details are to be provided at the event

#### II.2.14) Additional information

The Supplier Event for both WP10 and WP11 is being held on 13:30 on 13th July 2021.

Suppliers are to confirm whether they will be attending the Supplier Event by emailing their contact name, organisation name and conatct details to <a href="mailto:Elizabeth.Gage@ukri.org">Elizabeth.Gage@ukri.org</a> no later than Thursday 8th July 2021.

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

16 August 2021

#### 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

# **Section VI. Complementary information**

## VI.3) Additional information

To view this notice, please click here:

https://ukri.delta-esourcing.com/delta/viewNotice.html?noticeId=595252073

GO Reference: GO-2021614-PRO-18396232