This is a published notice on the Find a Tender service: https://www.find-tender.service.gov.uk/Notice/033937-2024

Planning

Quantum Technology Missions Roadmapping

DESNZ & DSIT Group Commercial

F01: Prior information notice

Prior information only

Notice identifier: 2024/S 000-033937

Procurement identifier (OCID): ocds-h6vhtk-04af9b

Published 21 October 2024, 12:42pm

Section I: Contracting authority

I.1) Name and addresses

DESNZ & DSIT Group Commercial

London

Email

pippa.haslam@dsit.gov.uk

Country

United Kingdom

Region code

UK - United Kingdom

Internet address(es)

Main address

 $\underline{https://www.gov.uk/government/organisations/department-for-science-innovation-and-technology}$

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://beisgroup.ukp.app.jaggaer.com/

I.4) Type of the contracting authority

Ministry or any other national or federal authority

I.5) Main activity

General public services

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Quantum Technology Missions Roadmapping

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

The Department for Science Innovation and Technology (DSIT) would like individuals or organisations with commercial and technical knowledge of the quantum technology sector to develop detailed road maps to support the design and delivery of the each of the National Quantum Strategy Mission.

II.1.6) Information about lots

This contract is divided into lots: Yes

II.2) Description

II.2.1) Title

Mission 2

Lot No

1

II.2.2) Additional CPV code(s)

73000000 - Research and development services and related consultancy services

II.2.3) Place of performance

NUTS codes

• UK - United Kingdom

II.2.4) Description of the procurement

In March 2023, the government published the National Quantum Strategy, where it committed to publishing long-term quantum missions to galvanise technology development towards ambitious outcomes. The 5 Quantum Missions were published in November last year.

The Department for Science Innovation and Technology (DSIT) would like individuals or organisations with commercial and technical knowledge of the quantum technology sector to develop detailed road maps to support the design and delivery of the each Quantum Mission. Road maps for each Mission will be contracted out separately through individual lots given the specialist expertise required to deliver each one (ranging from quantum networking infrastructure to medical technology adoption pathways). Road mapping activity for Mission 1 on quantum computing is not in scope.

Alongside common evidence requirements for all lots (technology development timelines and underpinning requirements for priority use cases), there are specific requirements for each. These are detailed below but will be refined throughout the pre-market engagement process and with the successful bidder(s):

Lot 1: Quantum networking (Mission 2): technology and research milestones to materialise quantum networks, analysis of competing quantum networking components, underpinning classical infrastructure requirements

II.2) Description

II.2.1) Title

Mission 3

Lot No

2

II.2.2) Additional CPV code(s)

• 73000000 - Research and development services and related consultancy services

II.2.3) Place of performance

NUTS codes

• UK - United Kingdom

II.2.4) Description of the procurement

In March 2023, the government published the National Quantum Strategy, where it committed to publishing long-term quantum missions to galvanise technology development towards ambitious outcomes. The 5 Quantum Missions were published in November last year.

The Department for Science Innovation and Technology (DSIT) would like individuals or organisations with commercial and technical knowledge of the quantum technology sector to develop detailed road maps to support the design and delivery of the each Quantum Mission. Road maps for each Mission will be contracted out separately through individual lots given the specialist expertise required to deliver each one (ranging from quantum networking infrastructure to medical technology adoption pathways). Road mapping activity for Mission 1 on quantum computing is not in scope.

Alongside common evidence requirements for all lots (technology development timelines and underpinning requirements for priority use cases), there are specific requirements for each. These are detailed below but will be refined throughout the pre-market engagement process and with the successful bidder(s)

Lot 2: Quantum sensing for healthcare (Mission 3): high potential clinical use case identification, mapping of necessary activity through the NHS HealthTech adoption framework

II.2) Description

II.2.1) Title

Mission 4

Lot No

3

II.2.2) Additional CPV code(s)

73000000 - Research and development services and related consultancy services

II.2.3) Place of performance

NUTS codes

• UK - United Kingdom

II.2.4) Description of the procurement

In March 2023, the government published the National Quantum Strategy, where it committed to publishing long-term quantum missions to galvanise technology development towards ambitious outcomes. The 5 Quantum Missions were published in November last year.

The Department for Science Innovation and Technology (DSIT) would like individuals or organisations with commercial and technical knowledge of the quantum technology sector to develop detailed road maps to support the design and delivery of the each Quantum Mission. Road maps for each Mission will be contracted out separately through individual lots given the specialist expertise required to deliver each one (ranging from quantum networking infrastructure to medical technology adoption pathways). Road mapping activity for Mission 1 on quantum computing is not in scope.

Alongside common evidence requirements for all lots (technology development timelines and underpinning requirements for priority use cases), there are specific requirements for each. These are detailed below but will be refined throughout the pre-market engagement process and with the successful bidder(s):

Lot 3: Quantum position, navigation and timing (PNT) (Mission 4): market size estimates for core sub-component technologies such as compound semiconductors, MEMS vacuum cells, integrated photonics and advanced packaging

II.2) Description

II.2.1) Title

Mission 5

Lot No

4

II.2.2) Additional CPV code(s)

• 73000000 - Research and development services and related consultancy services

II.2.3) Place of performance

NUTS codes

• UK - United Kingdom

II.2.4) Description of the procurement

In March 2023, the government published the National Quantum Strategy, where it committed to publishing long-term quantum missions to galvanise technology development towards ambitious outcomes. The 5 Quantum Missions were published in November last year.

The Department for Science Innovation and Technology (DSIT) would like individuals or organisations with commercial and technical knowledge of the quantum technology sector to develop detailed road maps to support the design and delivery of the each Quantum Mission. Road maps for each Mission will be contracted out separately through individual lots given the specialist expertise required to deliver each one (ranging from quantum networking infrastructure to medical technology adoption pathways). Road mapping activity for Mission 1 on quantum computing is not in scope.

Alongside common evidence requirements for all lots (technology development timelines and underpinning requirements for priority use cases), there are specific requirements for each. These are detailed below but will be refined throughout the pre-market engagement process and with the successful bidder(s):

Lot 4: Quantum sensing for critical national infrastructure (CNI) (Mission 5): Current and future performance of sensing platforms, market size estimates for use cases such as gravity sensing in different sectors

II.3) Estimated date of publication of contract notice

13 January 2025

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: Yes

Section VI. Complementary information

VI.3) Additional information

The Department for Science, Innovation and Technology (DSIT) will be holding a premarket engagement event on the 30th of October 2024 at 9:00 - 11:00. In this session we will outline the requirement in more detail and host a Q&A session towards the end of the event.

The event will be hosted via Microsoft teams and the joining details are below:

https://eur02.safelinks.protection.outlook.com/ap/t-59584e83/?url=https%3A%2F%2Ftea ms.microsoft.com%2Fl%2Fmeetup-join%2F19%253ameeting_MjQyN2E5MzltMjRIYS00ODllLTlhZjYtMWVjMjA5MDlzYWM5%2540thread.v2%2F0%3Fcontext%3D%257b%2522Tid%2522%253a%2522cbac7005-02c1-43eb-b497-e6492d1b2dd8%2522%252c%2522Oid%2522%253a%2522cbac7005-02c1-43eb-b497-e6492d1b2dd8%2522%252c%2522Oid%2522%253a%25226d0c5f80-5434-4c16-8069-689a7e3f0934%2522%257d&data=05%7C02%7CPippa.Haslam%40dsit.gov.uk%7Cbd651538064544c165b208dcef7a4e2f%7Ccbac700502c143ebb497e6492d1b2dd8%7C0%7C0%7C638648555779327075%7CUnknown%7CTWFpbGZsb3d8eyJWljoiMC4wLjAwMDAiLCJQljoiV2luMzliLCJBTil6lk1haWwiLCJXVCl6Mn0%3D%7C0%7C%7C%7C&sdata=2Kycrkk0igGqagfu7Fyr6mDwVYtyLcWhtOBND%2Bg3%2Fag%3D&reserved=0

Meeting ID: 383 323 476 512

Passcode: hL2xLE