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Tender

Radio Frequency Cyber Penetration Test Facility for Future Wireless Connectivity

University of Bristol

F02: Contract notice

Notice identifier: 2022/S 000-010321

Procurement identifier (OCID): ocds-h6vhtk-032eee

Published 20 April 2022, 5:00pm

Section I: Contracting authority

I.1) Name and addresses

University of Bristol

4th Floor, Augustine's Courtyard, Orchard Lane

Bristol

BS1 5DS

Email

naomi.adams@bristol.ac.uk

Telephone

+44 01179289000

Country

United Kingdom

NUTS code

UKK1 - Gloucestershire, Wiltshire and Bristol/Bath area

Internet address(es)

Main address

www.bristol.ac.uk

I.3) Communication

The procurement documents are available for unrestricted and full direct access, free of charge, at

<https://tenders.bris.ac.uk/>

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

<https://tenders.bris.ac.uk/>

Tenders or requests to participate must be submitted to the above-mentioned address

I.4) Type of the contracting authority

Body governed by public law

I.5) Main activity

Education

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Radio Frequency Cyber Penetration Test Facility for Future Wireless Connectivity

Reference number

Lab-2204-102-PC_2206

II.1.2) Main CPV code

- 38000000 - Laboratory, optical and precision equipments (excl. glasses)

II.1.3) Type of contract

Supplies

II.1.4) Short description

Equipment to establish and maintain a 4G LTE or 5G NR connection with either a smart phone or data modem independent of the UK cellular network is sought. A cabled or galvanic RF connection from such equipment is required to establish and maintain connection with a user device, or via an over the air connection within a fully screened enclosure. Although not the intended use here, this equipment is often referred as a handset tester or basestation and network emulator.

The funding allocated for this equipment is circa £210,000 (ex VAT). Tenders received above this value may be discounted.

II.1.5) Estimated total value

Value excluding VAT: £210,000

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.2) Additional CPV code(s)

- 32000000 - Radio, television, communication, telecommunication and related equipment

II.2.3) Place of performance

NUTS codes

- UKK1 - Gloucestershire, Wiltshire and Bristol/Bath area

II.2.4) Description of the procurement

Wireless connectivity is an essential enabler for the networks that underpin modern life, providing communications for people, vehicles, machines, infrastructure, and the wide variety of devices that make up the Internet of Things (IoT). When deployed within critical infrastructure, disruption via cyber-attack could have catastrophic consequences, however, little attention has been given to such intrusions via the wireless interface, or the Open RF Attack Surface. Here, vulnerabilities of the wireless physical layer and lower layers of the protocol stack could be exploited. Hence the need for resilient, agile, and sustainable wireless technology for future communications systems. This is the focus of the SWAN Prosperity Partnership.

So far, the project has built a comprehensive penetration testbed using LoRaWAN as a candidate technology. The next step will be to extend the penetration testing capability of technologies to include commercial 4G/5G devices. This assessment needs to be conducted in isolation from public networks, avoid radio frequency (RF) emissions, and immerse such devices within a fully emulated network.

II.2.5) Award criteria

Price is not the only award criterion and all criteria are stated only in the procurement documents

II.2.6) Estimated value

Value excluding VAT: £210,000

II.2.7) Duration of the contract, framework agreement or dynamic purchasing system

Start date

1 June 2022

End date

31 July 2023

This contract is subject to renewal

No

II.2.10) Information about variants

Variants will be accepted: No

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

Section III. Legal, economic, financial and technical information

III.1) Conditions for participation

III.1.2) Economic and financial standing

Selection criteria as stated in the procurement documents

III.1.3) Technical and professional ability

Selection criteria as stated in the procurement documents

Section IV. Procedure

IV.1) Description

IV.1.1) Type of procedure

Open procedure

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

The procurement is covered by the Government Procurement Agreement: No

IV.2) Administrative information

IV.2.2) Time limit for receipt of tenders or requests to participate

Date

23 May 2022

Local time

12:00pm

IV.2.4) Languages in which tenders or requests to participate may be submitted

English

IV.2.7) Conditions for opening of tenders

Date

23 May 2022

Local time

12:00pm

Section VI. Complementary information

VI.1) Information about recurrence

This is a recurrent procurement: No

VI.4) Procedures for review

VI.4.1) Review body

University of Bristol

Bristol

Country

United Kingdom