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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): ocids-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](mailto: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](http://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

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## **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

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### **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

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## **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

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## **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