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Planning

## **Air cooling system for Particle Physics Research**

University of Bristol

F01: Prior information notice

Prior information only

Notice identifier: 2022/S 000-017707

Procurement identifier (OCID): ocds-h6vhtk-034bd1

Published 29 June 2022, 10:30am

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

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

University of Bristol

4th Floor, Augustine's Courtyard, Orchard Lane

Bristol

BS1 5DS

#### **Email**

[helen.warren@bristol.ac.uk](mailto:helen.warren@bristol.ac.uk)

#### **Telephone**

+44 01179289000

#### **Country**

United Kingdom

**NUTS code**

UKK11 - Bristol, City of

**Internet address(es)**

Main address

[www.bristol.ac.uk](http://www.bristol.ac.uk)

**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://tenders.bris.ac.uk/web/login.html>

**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**

Air cooling system for Particle Physics Research

Reference number

Lab-2205-126-PC\_2245

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

- 31600000 - Electrical equipment and apparatus

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

Supplies

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

A portable controlled-air system, to be delivered as soon as possible once funding becomes available on 1st October 2022.

The proposed system should have remote control via a suitable interface (eg: USB, GP IB, UDP IP, RS 232 or Ethernet). The unit needs to be portable, have a low noise while running and be energy efficient. It is required to provide a continuous airflow to a sample while regulating the flow rate, temperature and possibly humidity. These parameters should all be independently adjustable. The regulated airflow should be delivered via a thermally insulated hose or flexible duct that has the ability to be connected to a surface, providing an air tight seal.

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

Value excluding VAT: £33,000

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

This contract is divided into lots: No

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

## **II.2.2) Additional CPV code(s)**

- 38900000 - Miscellaneous evaluation or testing instruments

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

NUTS codes

- UKK11 - Bristol, City of

Main site or place of performance

University of Bristol

HH Wills Physics Laboratory

Tyndall Avenue

Bristol

BS8 1TL

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

The Bristol particle physics group is part of a number of collaborations that are working to develop new detector and other electronic systems. Such development programmes require the ability to test new electronic devices under a range of environmental conditions (temperature and humidity) for extended periods.

The purpose of this PIN is to engage the market to investigate solutions for a portable, controlled airflow system to provide dry air to a device under test. The system should be able to connect to a variety of bespoke vessels to provide a dry temperature regulated environment. This will allow us to increase our testing capacity, and give us the flexibility to test a much larger variety of systems. This includes testing devices too large to fit into the current chamber, and the ability to replicate the directed flow cooling often used in experiments.

Please see Short Description for the Overall Scope of Requirements.

The contract shall be on the University of Bristol Standard Terms and Conditions. A copy of this may be requested.

Essential Requirements

- Continuous, variable, airflow:- zero to 20 M3/h
- Variable, regulated, temperature:- -50°C to +150°C
- Remote control interface:- USB, GPIB, UDPIP, RS232, Ethernet or similar.
- Flow delivery via a flexible hose or ducting with an airtight connector or face seal.
- Portable:- unit should be on wheels making relocation easier.
- Condensation trap:- a method for collecting and disposing of condensation within the unit.

#### Desirable Requirements

- Variable, regulated, humidity:- 0% to 100%
- Low noise:- limited sound and vibration from equipment.
- External monitoring:- The ability to add aftermarket sensors to monitor downstream conditions.
- Locking articulation:- A way to fix the position of the delivery hose once a suitable path has been decided.
- Simple operation should be "plug-and-play" with minimal setup or commissioning.
- The equipment should comply with CE/UKCA Standards.

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

Interested providers are invited to respond to this PIN by sending a short email to [helen.warren@bristol.ac.uk](mailto:helen.warren@bristol.ac.uk) by close of business 29th July 2022.

The email should include: compliance to Essential & Desirable criteria and UK standards; Energy Usage and other Sustainability benefits; Delivery Lead-times; System Support & Frequency of service intervals; Training; Other relevant information.

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

29 June 2022

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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**

The contract shall be on the University of Bristol Standard Terms and Conditions. A copy of this may be requested.