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

Telephone

+44 01179289000

Country

United Kingdom

NUTS code

UKK11 - Bristol, City of

Internet address(es)

Main address

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

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 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

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

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