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Award

## **Superconducting Nanowire Single Photon Detector Arrays**

Heriot-Watt University

F15: Voluntary ex ante transparency notice

Notice identifier: 2021/S 000-006659

Procurement identifier (OCID): ocds-h6vhtk-02a174

Published 31 March 2021, 1:16pm

### **Section I: Contracting authority/entity**

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

Heriot-Watt University

Moyen House, Research Park North, Heriot-Watt University

Riccarton, Edinburgh

EH14 4AP

#### **Email**

[victoria.kulczycki@hw.ac.uk](mailto:victoria.kulczycki@hw.ac.uk)

#### **Country**

United Kingdom

#### **NUTS code**

UKM75 - Edinburgh, City of

#### **Internet address(es)**

Main address

<http://hw.ac.uk>

Buyer's address

[https://www.publiccontractsscotland.gov.uk/search/Search\\_AuthProfile.aspx?ID=AA00307](https://www.publiccontractsscotland.gov.uk/search/Search_AuthProfile.aspx?ID=AA00307)

#### **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**

Superconducting Nanowire Single Photon Detector Arrays

Reference number

HWU/2001

#### **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**

The University requires a 64-pixel superconducting nanowire single photon detector array operating at 1550nm housed in a custom, pulse-tube cryocooler with free-space access, and vacuum and remote control package. This is for the European Research Council (ERC) grant "PIQUaNT: Photonics for High-Dimensional Quantum Networking".

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

This contract is divided into lots: No

### **II.1.7) Total value of the procurement (excluding VAT)**

Value excluding VAT: 420,000 USN

## **II.2) Description**

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

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

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

NUTS codes

- UKM75 - Edinburgh, City of

Main site or place of performance

Riccarton Campus

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

The University requires a 64-pixel superconducting nanowire single photon detector array operating at 1550nm housed in a custom, pulse-tube cryocooler with free-space access, and vacuum and remote control package. Detector design and manufacturing will be subcontracted to the NASA Jet Propulsion Laboratory (JPL). System integration & electronics interfacing shall be performed by Photon Spot.

### **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: Yes

Identification of the project

ERC grant: PIQUaNT: Photonics for High-Dimensional Quantum Networking

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## Section IV. Procedure

### IV.1) Description

#### IV.1.1) Type of procedure

Negotiated without a prior call for competition

- The works, supplies or services can be provided only by a particular economic operator for the following reason:
  - absence of competition for technical reasons

Explanation:

Under Regulations 2015 33(1)(b)(ii) of the Public Contracts (Scotland) Regulations 2015, a contracting authority may award a contract without competition based on the following justification:

(ii) competition is absent for technical reasons

Superconducting nanowire single photon detector arrays are currently not commercially available and have only been the subject of very recent research studies carried out by the subcontractors (JPL) involved. This in contrast with single superconducting nanowire detectors that are commercially available from a few providers on the market. This is related to several technical reasons such as the device architecture involved, array fabrication, free-space access, device testing capabilities, etc. As such, competition for the equipment being ordered is absent for technical reasons.

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

The procurement is covered by the Government Procurement Agreement: Yes

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## **Section V. Award of contract/concession**

### **Contract No**

HWU/2001

A contract/lot is awarded: Yes

### **V.2) Award of contract/concession**

#### **V.2.1) Date of conclusion of the contract**

26 March 2021

#### **V.2.2) Information about tenders**

The contract has been awarded to a group of economic operators: No

#### **V.2.3) Name and address of the contractor/concessionaire**

Photon Spot, Inc.

142 W Olive Ave

Monrovia, CA

91016

Country

United States

NUTS code

- US - United States

The contractor/concessionaire is an SME

Yes

#### **V.2.4) Information on value of contract/lot/concession (excluding VAT)**

Total value of the contract/lot/concession: 420,000 USD

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## **Section VI. Complementary information**

### **VI.3) Additional information**

The University is entering into a voluntary 10 day standstill commencing 1 April 2021.

NOTE: To register your interest in this notice and obtain any additional information please visit the Public Contracts Scotland Web Site at

[https://www.publiccontractsscotland.gov.uk/Search/Search\\_Switch.aspx?ID=649158](https://www.publiccontractsscotland.gov.uk/Search/Search_Switch.aspx?ID=649158).

(SC Ref:649158)

### **VI.4) Procedures for review**

#### **VI.4.1) Review body**

Edinburgh Sheriff Court

27 Chambers Street

Edinburgh

EH1 1LB

Country

United Kingdom