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Tender

## **22/SJM/075 Automation Engineering Robots, Sensors, Controls, Manufacturing**

University of Portsmouth

F02: Contract notice

Notice identifier: 2023/S 000-012225

Procurement identifier (OCID): ocds-h6vhtk-03c4f1

Published 28 April 2023, 8:53am

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

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

University of Portsmouth

Winston Churchill Avenue Portsmouth Hampshire PO1 2UP

Portsmouth

#### **Contact**

Sarah McGrady

#### **Email**

[procurement@port.ac.uk](mailto:procurement@port.ac.uk)

#### **Country**

United Kingdom

#### **NUTS code**

UKJ31 - Portsmouth

## **Internet address(es)**

Main address

<https://in-tendhost.co.uk/port/asp/Tenders/Current>

## **I.3) Communication**

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

<https://in-tendhost.co.uk/port/asp/Tenders/Current>

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

<https://in-tendhost.co.uk/port/asp/Tenders/Current>

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**

22/SJM/075 Automation Engineering Robots, Sensors, Controls, Manufacturing

Reference number

22/SJM/075 Automation Engineering - Robots, Sensor

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

- 42997300 - Industrial robots

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

Supplies

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

Flexible manufacturing, Robotics, Sensors for teaching equipment and Control systems teaching equipment. The University of Portsmouth is seeking Teaching equipment for a newly established Robotics and Automation laboratory. This is to support delivery and practical work associated with various modules in the broader robotics and automation. The lab needs to be equipped with a range of contemporary industrial robots, with integrated controllers and variable degrees of freedom, as well as allowing students to have hands-on experience in control systems and sensor equipment. Also a flexible manufacturing system with high layout flexibility. Delivery and installation is anticipated to take place in approx January-March 2024. To Express an Interest in this project please register on the University of Portsmouth In-Tend webpage and express an interest in this project. Please find the weblink for our webpage below: <https://in-tendhost.co.uk/port>

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

Value excluding VAT: £800,000

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

This contract is divided into lots: Yes

Tenders may be submitted for all lots

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

**II.2.1) Title**

LOT 1 : Flexible manufacturing/automation system

Lot No

LOT 1 : Flexible manufacturing/automation system

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

- 38800000 - Industrial process control equipment and remote-control equipment
- 42000000 - Industrial machinery
- 38810000 - Industrial process control equipment
- 30237475 - Electric sensors
- 35125100 - Sensors
- 42997300 - Industrial robots

**II.2.3) Place of performance**

NUTS codes

- UKJ31 - Portsmouth

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

Flexible Manufacturing/Automation System - Advanced (automation and/or mechatronics) industrial training system, equipped with industry 4.0 technologies, multiple functions, and relevant software, including a digital twin is sought. Specification: Mandatory technical requirements Flexible Manufacturing/Automation system equipment must be: Representative of an advanced industrial automated manufacturing/production system Demonstrate a range of operations and functionalities to include some of the following: material flow, quality control, information flow, process control, etc. Able to demonstrate Industry 4.0 technology Be equipped with specialist software including digital twin Have a range of connectivity options A modular system occupying max floor area 2.5m x 5m When packaged (including any crates, pallets, beams or other supporting materials as well as necessary equipment to move the items) must fit through doorway: height 2000mm x width 1700mm See Specification for more details To Express an Interest in this project please register on the University of Portsmouth In-Tend webpage and express an interest in this project. Please find the weblink for our webpage below: <https://in-tendhost.co.uk/port/>

**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: £200,000

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

Duration in months

12

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: Yes

Description of options

Please see Tender documents

**II.2.13) Information about European Union Funds**

The procurement is related to a project and/or programme financed by European Union funds: No

**II.2) Description**

**II.2.1) Title**

LOT 2 - Robots/Robot arms

Lot No

LOT 2 - Robots/Robot arms

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

- 42997300 - Industrial robots
- 38810000 - Industrial process control equipment
- 35125100 - Sensors
- 30237475 - Electric sensors

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

NUTS codes

- UKJ31 - Portsmouth

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

Lot2: Robots/robot arms - either as standalone units or bench tops, minimum of 3 robots are needed to demonstrate a range of operations and functionalities of robotics applications in industry. Robots should be programmable and customizable and be able to support individual and group project work. We are looking for variety of Robots in terms of functionality and technical advantages and require sellers to propose options that meet the requirements below: Specification: Mandatory technical requirements Robotics equipment must: Include 3 different robots with different functionalities Each robot to be able to perform at least one of the following functionalities and operations: moving, handling, visual inspection, assembly, etc. to mimic essential industrial processes Three robots should have different max reach, but no higher than 1m Three robots should have different max payload, but no higher than 10kg Be equipped with advanced motion control systems Have a range of connectivity options Have different sizes and be able to fit all robots safely in space 5m x 2.5m When packaged (including any crates, pallets, beams or other supporting materials as well as necessary equipment to move the items) must fit through doorway: height 2000mm x width 1700mm See Specification for more details To Express an Interest in this project please register on the University of Portsmouth In-Tend webpage and express an interest in this project. Please find the weblink for our webpage below: <https://in-tendhost.co.uk/port/>

### **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: £250,000

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

Duration in months

12

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

## **II.2) Description**

### **II.2.1) Title**

LOT 3 - Sensors teaching equipment

Lot No

LOT 3 - Sensors teaching equipment

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

- 35125100 - Sensors
- 38810000 - Industrial process control equipment
- 30237475 - Electric sensors
- 42997300 - Industrial robots

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

NUTS codes

- UKJ31 - Portsmouth

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

Lot3: Sensors teaching equipment - sensor technology training system is required either as standalone units or bench top instruments, a minimum of 4 training stations are needed. Equipment should encompass different sensor types used in industry, for example: displacement, temperature, pressure, magnetic, flow rate, light, humidity. Sensors training equipment should be able to demonstrate some of the following: sensor's principle, static and dynamic characteristics of the sensors, signal conditioning and signal processing, uncertainty calculation of the measured values, and data presentation in time and frequency domains using transforms. Specification: Mandatory technical requirements Sensors equipment must be: Able to demonstrate at least three different functionalities, which may include some of the following: displacement, temperature, pressure, magnetic, flow rate, light, humidity, force, sound,. User friendly and intuitively sensors equipment is bench top kit, it must fit the area 100cm x 80cm area when used; if sensors equipment is standalone instrument it must not exceed the following dimensions 150cm x 120cm x 200cm If sensors equipment is bench top kit, it must not exceed 100 kg total weight When packaged (including any crates, pallets, beams or other supporting materials as well as necessary equipment to move the items) must fit through doorway: height 2000mm x width 1700mm Please see spec for full details To Express an Interest in this project please register on the University of Portsmouth In-Tend webpage and express an interest in this project. Please find the weblink for our webpage below: <https://in-tendhost.co.uk/port/>

#### **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: £100,000

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

Duration in months

12

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

## **II.2) Description**

### **II.2.1) Title**

LOT 4 - Control systems teaching equipment

Lot No

LOT 4 - Control systems teaching equipment

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

- 38810000 - Industrial process control equipment
- 35125100 - Sensors
- 30237475 - Electric sensors
- 42997300 - Industrial robots

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

NUTS codes

- UKJ31 - Portsmouth

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

Lot4: Control Systems teaching equipment - Control engineering training systems are required either as standalone units or benchtop instruments. A minimum of 4 training stations are needed. Equipment should encompass different control system technologies used in industry, for example: temperature, pressure, flow rate, level, etc. covering digital and/or analogue control elements. Specification: Mandatory technical requirements Control equipment must be: able to demonstrate at least two different control functionalities, which may include some of the following: temperature, pressure, flow rate, level User friendly and intuitively self control equipment is bench top kit, it must fit the area 100cm x 80cm area when used; if sensors equipment is standalone instrument it must not exceed the following dimensions 150cm x 120cm x 200cm If control equipment is bench top kit, it

must not exceed 100 kg total weightWhen packaged (including any crates, pallets, beams or other supporting materials as well as necessary equipment to move the items) must fit through doorway: height 2000mm x width 1700mmSee Specification for more detailsTo Express an Interest in this project please register on the University of Portsmouth In-Tend webpage and express an interest in this project. Please find the weblink for our webpage below:<https://in-tendhost.co.uk/port/>

#### **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: £75,000

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

Duration in months

12

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

## **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

30 May 2023

Local time

12:00pm

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

English

#### **IV.2.6) Minimum time frame during which the tenderer must maintain the tender**

Duration in months: 8 (from the date stated for receipt of tender)

#### **IV.2.7) Conditions for opening of tenders**

Date

30 May 2023

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 Portsmouth

Portsmouth

Country

United Kingdom