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Award

## **Legged mobile robot, capable of navigating stairs ways and oddly arranged terrain, facilitating safe traversal**

University of Strathclyde

F15: Voluntary ex ante transparency notice

Notice identifier: 2021/S 000-002987

Procurement identifier (OCID): ocids-h6vhtk-029312

Published 15 February 2021, 9:08am

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

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

University of Strathclyde

40 George Street, Procurement Department

Glasgow

G1 1QE

#### **Email**

[david.waddell@strath.ac.uk](mailto:david.waddell@strath.ac.uk)

#### **Country**

United Kingdom

#### **NUTS code**

UKM82 - Glasgow City

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

Main address

<http://www.strath.ac.uk/>

Buyer's address

[https://www.publiccontractsscotland.gov.uk/search/Search\\_AuthProfile.aspx?ID=AA00113](https://www.publiccontractsscotland.gov.uk/search/Search_AuthProfile.aspx?ID=AA00113)

## **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**

Legged mobile robot, capable of navigating stairs ways and oddly arranged terrain, facilitating safe traversal

Reference number

UOS-19645-2021

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

- 42997300 - Industrial robots

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

Supplies

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

The University intends to award a contract under the negotiated procedure without prior publication under the provisions of regulation 33.1.b.ii of the prevailing legislation.

#### **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: £75,000

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

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

NUTS codes

- UKM82 - Glasgow City

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

The University intends to award a contract under the negotiated procedure without prior publication under the provisions of regulation 33.1.b.ii of the prevailing legislation.

#### **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 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:

The equipment to be procured must be a legged mobile robot, capable of navigating stairs

ways and oddly arranged terrain, facilitating safe traversal. The identified system is evidenced to have a unique capability, as evidenced by the following patents: US9259838 - Systems and Methods for Ground Plane Estimation, US9804600 - Systems and Methods for Ground Plane Estimation, US9499219 - Touch-down Sensing for Robotic Devices, US9908240 - Ground Plane Compensation and US10528051 – Auto-height swing adjustment.

The system must also be able to navigate complex terrain and negotiate this terrain. The identified system is understood to be uniquely capable as evidenced by the following patents: US9586316 - Determination of Robotic Step Path, US10081104 - Determination of Robotic Step Path, US10239208 - Determination of Robotic Step Path and US10456916 – Determination of robotic step path.

We requires a legged robot AMR capable of adjusting to variations in the environment and the path it takes. This should include ability to contend with slips, trips, and other associated aspects of a dynamic environment. The identified system is considered to have unique capability as per patents US9387588 and US9789611).

The system has evidential capability in terms of recovering from slips and trips, in addition to identification of issues likely to indicate a slip, etc. Relevant patents related to this uniqueness are documented, below: US9925667 - Continuous Slip Recovery, US9618937 - Slip Detection using Robotic Limbs, US9387896 - Slip Avoidance, US9663165 - Slip Avoidance, US9926025 - Slip Avoidance, US9387588 - Handling Gait Disturbances with Asynchronous Timing and US9789611 - Handling Gait Disturbances with Asynchronous Timing.

The system must be support being affixed with a manipulator arm and potentially other dynamic loads. The identified system has been demonstrated to be capable of operating with such dynamic loads successfully, as indicated by the following patents: US10252427 – Flat gripper actuator and US10351189 – Whole body manipulation on a legged robot using dynamic balance.

#### **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**

UOS-19645-2021

A contract/lot is awarded: Yes

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

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

10 February 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**

Boston Dynamics, Inc.

200 Smith St, Suite 4100

Watham

02451

Country

United States

NUTS code

- 00 - Other NUTS code

The contractor/concessionaire is an SME

No

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

Total value of the contract/lot/concession: £100,000

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## **Section VI. Complementary information**

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

The University intends to enter into a contract on 1st March 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=644022](https://www.publiccontractsscotland.gov.uk/Search/Search_Switch.aspx?ID=644022).

(SC Ref:644022)

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

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

Glasgow Sherriff Court

Glasgow

Country

United Kingdom

#### **VI.4.3) Review procedure**

Precise information on deadline(s) for review procedures

An economic operator that suffers, or risks suffering, loss or damage attributable to a breach of duty under the Public Contracts (Scotland) Regulations 2015 (SSI2015/446) (as amended) may bring proceedings in the Sheriff Court or the Court of Session.