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Award

## **Autonomous wheelchair system**

University Of Edinburgh

F15: Voluntary ex ante transparency notice

Notice identifier: 2025/S 000-012576

Procurement identifier (OCID): ocds-h6vhtk-04fc24

Published 2 April 2025, 3:15pm

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

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

University Of Edinburgh

Charles Stewart House, 9-16 Chambers Street

Edinburgh

EH1 1HT

#### **Email**

[jpik2@ed.ac.uk](mailto:jpik2@ed.ac.uk)

#### **Telephone**

+44 1316502759

#### **Country**

United Kingdom

## **NUTS code**

UKM75 - Edinburgh, City of

## **Internet address(es)**

Main address

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

Buyer's address

[https://www.publiccontractsscotland.gov.uk/search/Search\\_AuthProfile.aspx?ID=AA00107](https://www.publiccontractsscotland.gov.uk/search/Search_AuthProfile.aspx?ID=AA00107)

## **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**

Autonomous wheelchair system

Reference number

NCA21327

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

- 33193000 - Invalid carriages, wheelchairs and associated devices

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

Supplies

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

The University of Edinburgh seeks to procure an autonomous wheelchair system to support research in autonomous mobility. The system must be an off-the-shelf, commercially available, and maintainable solution capable of full autonomous navigation, with the following key requirements:

##### **1. Base Wheelchair Requirements**

Motorized power wheelchair suitable for both indoor and outdoor environments

Stable and ergonomic design to ensure safe autonomous operation

Compatible with additional hardware/software for autonomous navigation integration

##### **2. Autonomous Navigation System**

Sensor Suite:

Odometry system for precise movement tracking

IMU (Inertial Measurement Unit) for motion sensing

Lidar-based environment mapping and real-time obstacle detection

Depth cameras for enhanced spatial awareness and localization

Onboard Computation & Interface:

High-performance computing unit capable of processing sensor data in real-time

User interface (e.g., touchscreen or equivalent) for system interaction and configuration

##### **3. Navigation Software & API Requirements**

Autonomous navigation software with the following capabilities:

Mapping & Localization – Ability to autonomously generate and use maps of the environment

Route Teaching & Execution – Manual input of custom paths and automated path following

Obstacle Avoidance & Safety Features – Intelligent real-time navigation ensuring safe

maneuverability

Configurable & Extendable API Access – The software must provide a documented API allowing for:

External control via custom-developed applications

Real-time access to navigation and sensor data

Integration with additional robotics frameworks if required

The software must support long-term usability, allowing for custom modifications, additional research integrations, and future feature expansions.

#### 4. Compliance & Maintainability

The system must be a commercially available product, not a prototype or experimental development

Must have long-term support and maintenance available in case of request from us

Hardware and software should be upgradeable to support evolving research needs

#### 5. Additional Considerations

Additional components and consumables such as batteries may be required

Solution must provide detailed technical documentation and demonstrate previous successful deployments

### **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: 106,800 USD

## **II.2) Description**

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

NUTS codes

- UKM75 - Edinburgh, City of

Main site or place of performance

Edinburgh

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

Specification for Requirement

The University of Edinburgh seeks to procure an autonomous wheelchair system to support research in autonomous mobility. The system must be an off-the-shelf, commercially available, and maintainable solution capable of full autonomous navigation, with the following key requirements:

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### **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**

Award of a contract without prior publication of a call for competition in the cases listed below

- The procurement falls outside the scope of application of the regulations

Explanation:

Following market research by subject matter specialist it is reasonably believed that there is only one supplier who is likely to be able to fulfil the requirement so competition is absent for technical reasons. The key issue is the combination of a system which is 'Out of the box' (i.e. a readily available commercial product), has the extensive advanced autonomous capabilities and sensing technology required, and, exposes its control systems and technologies via a documented, customer-accessible public API (for external control, real-time data access, integration with other robotic systems). It is also believed that owing to the low value of the opportunity that a full procurement exercise would not be proportionate.

The University provides this notice to inform of the market of its intentions and shall observe a 'Stand Still' period as set out in the regulations; should any supplier wish to challenge the University they should do so by contacting the individual named on the VEAT during the Stand Still and the University at its sole option may cancel the award.

#### **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**

A contract/lot is awarded: Yes

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

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

20 March 2025

### **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**

Cyberworks Robotics

3600 Steeles Ave, East, , none

Markham

L0L2L0

Telephone

+1 7053235055

Country

Canada

NUTS code

- CA - Canada

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: 106,800 USD



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## **Section VI. Complementary information**

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

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=793926](https://www.publiccontractsscotland.gov.uk/Search/Search_Switch.aspx?ID=793926).

(SC Ref:793926)

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

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

Edinburgh Sheriff Court

Edinburgh

Country

United Kingdom