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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

jpике2@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

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

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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5. Additional Considerations

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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

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

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

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.

(SC Ref:793926)

VI.4) Procedures for review

VI.4.1) Review body

Edinburgh Sheriff Court

Edinburgh

Country

United Kingdom