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Planning

## **Acoustic Vehicle Alerting System (AVAS) Retrofit Project**

Transport for London

F04: Periodic indicative notice – utilities

Periodic indicative notice only

Notice identifier: 2021/S 000-029712

Procurement identifier (OCID): ocds-h6vhtk-02fb81

Published 30 November 2021, 3:15pm

### **Section I: Contracting entity**

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

Transport for London

197 Blackfriars Road

LONDON

SE1 8NJ

#### **Contact**

Emma Milam

#### **Email**

[Emma.Milam@tfl.gov.uk](mailto:Emma.Milam@tfl.gov.uk)

#### **Country**

United Kingdom

#### **NUTS code**

UKI - London

**Internet address(es)**

Main address

<https://tfl.gov.uk>

Buyer's address

<https://tfl.gov.uk>

**I.3) Communication**

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

<https://procontract.due-north.com>

Additional information can be obtained from the above-mentioned address

**I.6) Main activity**

Other activity

Transport

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## **Section II: Object**

### **II.1) Scope of the procurement**

#### **II.1.1) Title**

Acoustic Vehicle Alerting System (AVAS) Retrofit Project

Reference number

DN584755

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

- 34000000 - Transport equipment and auxiliary products to transportation

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

Supplies

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

The Mayor's Transport Strategy (MTS) sets out the Vision Zero goal of zero people killed or seriously injured (KSIs) on London's roads by 2041. It includes targets for a 70% reduction in KSIs by 2021 and for no one to be killed on or by a bus by 2030. The Bus Safety Standard (BSS) was launched in 2018 to help achieve the Vision Zero goal for buses. The BSS mandates the use of safer vehicles and supports safer behaviours and speeds, specifying safety requirements that new buses entering service in London must meet.

An Acoustic Vehicle Alerting System (AVAS) is one of a number of the measures in the BSS. AVAS is a system to make quiet running buses (i.e. electric, hybrid or hydrogen) audible to pedestrians and cyclists, and other road users outside the vehicle.

The United Nations Economic Commission of Europe (UNECE) Regulation 138 has required AVAS on new electric and hybrid vehicles since July 2021. TfL committed to introducing this early and since September 2019 AVAS has been required on all new quiet running London bus models as part of the BSS. The UNECE regulatory requirements have also been exceeded for London Buses. This includes the development of a unique Urban Bus Sound, which along with moving the speakers to the front of the bus, aims to maximise the benefits of AVAS by making it easier for Vulnerable Road Users (VRUs) to distinguish the sound over typical city background noise and improve acoustic conspicuity compared to a diesel bus. A 'beacon' element has also been introduced which provides directionality to blind and vision-impaired persons (or anyone listening for the bus but not looking). In addition, a responsive AVAS system has more

recently been developed. Responsive AVAS will provide optimal volume levels for the sound dependent on the location of the bus. This will both optimise the potential effectiveness for casualty reduction but also minimise the impact on the London soundscape, and the possibility of complaints.

However, the requirement for new buses in London to have AVAS does not address existing or pre-2019 manufactured buses in the fleet. Therefore, to support our Vision Zero targets for no deaths on or by a bus by 2030 and for zero deaths or serious injury by 2041, we are developing a project to potentially retrofit AVAS onto existing quiet running buses in London (i.e. electric, hybrid or hydrogen buses). This retrofit will be of responsive and non-responsive AVAS, the type of AVAS chosen being determined in each instance by the model of bus being fitted, and whether that model is capable of supporting responsive AVAS or not.

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

This contract is divided into lots: No

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

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

NUTS codes

- UKI - London

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

TfL is conducting early market engagement to help identify organisations who have a product which meets (or is capable of meeting) TfL's specification for an AVAS system based on the performance specification which can be found in the associated Market Sounding Questionnaire (MSQ).

The MSQ can be accessed via TfL's e-tendering website ProContract (<https://procontract.due-north.com>). You will need to register on the portal to access the MSQ and once you have logged-in to ProContract you can search for the MSQ by using any one of the following key terms: 'Acoustic', 'Vehicle', 'Alerting or 'System'

Interested parties will be required to submit an MSQ response inclusive of relevant documentation including a technical specification, test methodology, reports and certifications to show how your product is able to meet (or has the potential to meet) our performance specification. A desk-based review will be undertaken by TfL on specific aspects of the submitted information (i.e. evidence to show UNECE Regulation 138 compliance, how frequency profile is achieved, that the system is 'E' marked for

automotive electromagnetic compatibility, where applicable evidence to show where it has been used in the automotive industry, dimensions, Ingress Protection (IP) rating, impedance, and power etc. This will help determine which products, on paper at least, could meet (or is capable of meeting) TfL's AVAS requirements.

MSQ Responses must be received via ProContract no later than 5pm on Tuesday, 21st December 2021

Should TfL proceed to a procurement exercise for this project, the evaluation of potential products would form part of that exercise, including the need for rigorous testing of the products in controlled conditions in order to demonstrate that the products meet the specification, and can be successfully integrated with on-bus systems, across a range of bus types.

### **II.3) Estimated date of publication of contract notice**

1 April 2022

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## **Section IV. Procedure**

### **IV.1) Description**

#### **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 expressions of interest**

Date

21 December 2021

Local time

5:00pm

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

English