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Not applicable

## **Railhead Adhesion**

Transport for London

F14: Notice for changes or additional information

Notice identifier: 2024/S 000-029826

Procurement identifier (OCID): ocds-h6vhtk-0489e0

Published 18 September 2024, 1:05pm

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

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

Transport for London

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LONDON

E201JN

#### **Contact**

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#### **Country**

United Kingdom

#### **Region code**

UKI - London

**Justification for not providing organisation identifier**

Not on any register

**Internet address(es)**

Main address

<https://tfl.gov.uk/>

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**Section II: Object**

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

**II.1.1) Title**

Railhead Adhesion

**II.1.2) Main CPV code**

- 60200000 - Railway transport services

**II.1.3) Type of contract**

Services

**II.1.4) Short description**

Transport for London's Open Innovation Team works with market innovators of all sizes to help solve some of the challenges that TfL faces where there is a need for more innovative solutions. Rather than prescribing solutions, we instead look to the market for creative, resourceful and novel approaches to problem solving to create new value for TfL by doing things better, quicker or cheaper.

Transport for London (TfL) relies on adhesion management to maintain a safe, reliable, and high-frequency railway system while preserving asset health. Both high and low friction levels at the wheel-rail interface can cause safety issues like delays, derailments, and asset damage. To address these, TfL uses various operational, procedural, and technical solutions.

During autumnal months, outdoor sections of the network (55% of the London Underground) face low adhesion due to fallen leaves mixing with iron oxides on rails. This

can lead to delays, cancellations, wheel flats, and even collisions or derailments. TfL's current solutions include vegetation management, rail adhesion trains, Traction Gel Applicators, seasonal timetables, and reduced brake rates.

Any new solution must consider the diverse infrastructure of TfL's network, which includes a mix of above-ground and underground stations with varying platform dimensions and designs. The network also features different rolling stock and signalling systems, some automated and others manually driven. Service intervals range from 22 to 36 trains per hour. Any proposed solution should ensure safety across these varied conditions without compromising service frequency or asset longevity.

Problem statement:

How might we target railhead contamination such that we retain optimal (or as near as feasible) levels of friction on the railhead; allowing us to run a high-frequency service year-round regardless of the weather?

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## Section VI. Complementary information

### VI.6) Original notice reference

Notice number: [2024/S 000-025420](#)

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## Section VII. Changes

### VII.1.2) Text to be corrected in the original notice

Section number

VI

Read

Date

3 October 2024