

This is a published notice on the Find a Tender service: <https://www.find-tender.service.gov.uk/Notice/023122-2021>

Planning

Innovation Design Contest - Rail Revolution

Network Rail Infrastructure Ltd

F04: Periodic indicative notice – utilities

Periodic indicative notice only

Notice identifier: 2021/S 000-023122

Procurement identifier (OCID): ocids-h6vhtk-02e1c5

Published 16 September 2021, 10:45pm

Section I: Contracting entity

I.1) Name and addresses

Network Rail Infrastructure Ltd

1 Eversholt Street

London

NW1 2DN

Email

catherine.burgess@networkrail.co.uk

Telephone

+44 1908781000

Country

United Kingdom

NUTS code

UK - United Kingdom

Internet address(es)

Main address

www.networkrail.com

I.3) Communication

Additional information can be obtained from the above-mentioned address

I.6) Main activity

Railway services

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Innovation Design Contest - Rail Revolution

II.1.2) Main CPV code

- 72000000 - IT services: consulting, software development, Internet and support

II.1.3) Type of contract

Services

II.1.4) Short description

Network Rail are running a Design Contest to procure Innovative solutions to our business problems. Representatives from our regions and members of wider industry selected 3 key challenge themes 1. Performance, 2. Customer Experience, 3. Asset Management. Based on criteria, the project team and participants then selected a range of challenge statements to take forward to be solved in an Innovation Design Contest. The challenge statements are as follows:

Station car parking - NR is looking to provide rail passengers with more information about car parking space availability at their chosen station in advance of their journey. The aim of the information is to enable effective decision making about using the car park as part of their rail journey. This would enable rail passengers to plan an element of their journey that can be unpredictable and stressful.

Station Facilities - NR is looking to bring together information about services and facilities. How might we bring together a number of disparate and unlinked datasets into one place? The data will include a mix of real-time automated datasets and manually updated inputs

Level crossing gates - NR is seeking a reliable means of preventing gates at a User Worked Crossings being left open or detecting when the gate has been left open by a user so that action can be taken to avoid or reduce the impact of a hazardous event.

Passenger Demand and service levels - NR are seeking ways to understand and model passenger demands in order to align planning activities more accurately, i.e. develop robust timetable and plan contingency for disruption. NR would like to produce a multi-disciplinary Digital Twin Model for use in Asset Management creating a 3D graphic virtual model of the

infrastructure.

Planning tool for infrastructure works - NR is looking for a planning tool that could provide a robust plan of work that is taking place on the infrastructure which would include GPS enabled possession and worksite boards.

We are unaware if suitable solutions already exist which solve our challenges, likewise we recognise that to realise these ambitions will require collaboration across the industry. Innovation will be essential, and best practice from other sectors should be embraced.

The purpose of this PIN is to:

- Understand if the market can meet the needs set out by the challenges proposed
- To assess the range of solutions that exist which may meet our ambition to tackle our challenges across 3 themes.

Therefore, we have key questions we want to test with the market

1. Which of the challenges can you provide a solution to?
2. Can you provide us the key details of your solution that has the potential to solve the identified challenge statements?
3. What risks do potential participants foresee and how could these be overcome?
4. Does your solution have clear benefits for passengers?
5. Is safety at the heart of your solution?

To obtain this feedback we invite suppliers to provide a short information note (providing considerations to the questions above). For more information on this and to receive the PIN supplemental please email to catherine.burgess@networkrail.co.uk by the 24th September 2021 We want a fast turn around of responses and expect submission of proposals by the 30/9/21.

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.2) Additional CPV code(s)

- 72200000 - Software programming and consultancy services
- 72400000 - Internet services
- 73000000 - Research and development services and related consultancy services
- 73100000 - Research and experimental development services
- 73200000 - Research and development consultancy services
- 73300000 - Design and execution of research and development

II.2.3) Place of performance

NUTS codes

- UK - United Kingdom

II.2.4) Description of the procurement

Network Rail are running a Design Contest to procure Innovative solutions to our business problems. Representatives from our regions and members of wider industry selected 3 key challenge themes 1. Performance, 2. Customer Experience, 3. Asset Management. Based on criteria, the project team and participants then selected a range of challenge statements to take forward to be solved in an Innovation Design Contest. The challenge statements are as follows:

Station car parking - NR is looking to provide rail passengers with more information about car parking space availability at their chosen station in advance of their journey. The aim of the information is to enable effective decision making about using the car park as part of their rail journey. This would enable rail passengers to plan an element of their journey that can be unpredictable and stressful.

Station Facilities - NR is looking to bring together information about services and facilities. How might we bring together a number of disparate and unlinked datasets into one place? The data will include a mix of real-time automated datasets and manually updated inputs

Level crossing gates - NR is seeking a reliable means of preventing gates at a User Worked Crossings being left open or detecting when the gate has been left open by a user so that action can be taken to avoid or reduce the impact of a hazardous event.

Passenger Demand and service levels - NR are seeking ways to understand and model passenger demands in order to align planning activities more accurately, i.e. develop robust timetable and plan contingency for disruption. NR would like to produce a multi-disciplinary

Digital Twin Model for use in Asset Management creating a 3D graphic virtual model of the infrastructure.

Planning tool for infrastructure works - NR is looking for a planning tool that could provide a robust plan of work that is taking place on the infrastructure which would include GPS enabled possession and worksite boards.

We are unaware if suitable solutions already exist which solve our challenges, likewise we recognise that to realise these ambitions will require collaboration across the industry. Innovation will be essential, and best practice from other sectors should be embraced.

The purpose of this PIN is to:

- Understand if the market can meet the needs set out by the challenges proposed
- To assess the range of solutions that exist which may meet our ambition to tackle our challenges across 3 themes.

Therefore, we have key questions we want to test with the market

1. Which of the challenges can you provide a solution to?
2. Can you provide us the key details of your solution that has the potential to solve the identified challenge statements?
3. What risks do potential participants foresee and how could these be overcome?
4. Does your solution have clear benefits for passengers?
5. Is safety at the heart of your solution?

To obtain this feedback we invite suppliers to provide a short information note (providing considerations to the questions above). For more information on this and to receive the PIN supplemental please email to catherine.burgess@networkrail.co.uk by the 24th September 2021.

II.3) Estimated date of publication of contract notice

1 October 2021

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