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Tender

Target 190plus Synthetic Environment for the Design & Test of Signalling Solutions (Phase 2 & 3)

Network Rail Infrastructure Ltd

F05: Contract notice – utilities

Notice identifier: 2025/S 000-001082

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

Published 13 January 2025, 4:44pm

Section I: Contracting entity

I.1) Name and addresses

Network Rail Infrastructure Ltd

Waterloo General Offices

London

SE1 8SW

Contact

Naomi Nortey

Email

DRTSProcurement@networkrail.co.uk

Telephone

+44 1908781000

Country

United Kingdom

Region code

UK - United Kingdom

National registration number

02904587

Internet address(es)

Main address

www.networkrail.co.uk

Buyer's address

<https://networkrail.bravosolution.co.uk/web/login.html>

I.3) Communication

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

<https://networkrail.bravosolution.co.uk/web/login.html>

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

<https://networkrail.bravosolution.co.uk/web/login.html>

Tenders or requests to participate must be submitted to the above-mentioned address

I.6) Main activity

Railway services

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Target 190plus Synthetic Environment for the Design & Test of Signalling Solutions
(Phase 2 & 3)

Reference number

35768

II.1.2) Main CPV code

- 72212517 - IT software development services

II.1.3) Type of contract

Services

II.1.4) Short description

Network Rail (NR) requires a digital solution to develop signalling scheme designs and facilitate the integration of that design into the operational railway providing interfaces to a target signalling system.

The Target 190plus Synthetic Environment (SE), part of the T190+ Programme, is a key enabler of the Future Control Command Signalling (FCCS) Strategy. It will provide a virtual representation of the rail network where designers and other stakeholders can develop and integrate designs and perform testing and validation, using simulation and emulation.

II.1.5) Estimated total value

Value excluding VAT: £20,000,000

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.2) Additional CPV code(s)

- 72212140 - Railway traffic control software development services
- 72212321 - Computer-aided design (CAD) software development services
- 72212517 - IT software development services
- 72262000 - Software development services
- 72317000 - Data storage services

II.2.3) Place of performance

NUTS codes

- UK - United Kingdom

II.2.4) Description of the procurement

The railway faces a major industry challenge, where the cost and volume of future signalling renewals is unsustainable. Over the next 15 years there is a need to deliver an increase of over 50% of the signalling renewals work at half the current price to achieve a sustainable, affordable railway that can meet customer needs and expectations.

Britain must have a reliable, high performing railway that's fit for the future, delivers financial value and provides operational performance in a safe and sustainable way. To reduce costs and increase access on the railway we are creating new ways of working and introducing new technology. The use of digital technology will improve the services to freight and passenger customers, causing less delays due to signalling failure and track closures for access to complete repairs and providing the opportunity for more trains to run where needed.

We're working across Industry to build a new approach for balancing research and development and engineering solutions with the needs of end users and customers.

The Target190Plus (T190Plus) Programme was set up to identify options to reduce the current average European Train Control System (ETCS) Signalling Equivalent Unit (SEU) cost of £315k to below £190k, without increasing whole life cost. The aim is to achieve this through applying the digital technology and process changes set out in the Future-Control, Command and Signalling (F-CCS) Strategy Document [R1]. The projects under the Programme focus on enhancements to the tools, processes, systems, and policies underpinning signalling renewals and asset management.

The Synthetic Environment (SE) is a key enabler of the F-CCS Strategy [R1]. It will provide a virtual representation of the rail network where designers and other stakeholders can develop and integrate designs and perform testing and validation, using simulation and emulation. The aim is to provide a more efficient overall design,

integration, test and validation process. The T190Plus SE system scope is to support all Design and Validation of an F-CCS system and support future user training needs.

Synthetic Environment Phase 1: concerned the development of detailed requirements for the SE, completed.

This procurement event will seek a suitable supplier to deliver Phase 2 and 3 of the Synthetic Environment Project:

Phase 2: Development of a Minimum Viable Product (MVP) for SE and shadow mode running

Phase 3: Development of the full SE v1.0 capable of delivering the technology and scope options for F-CCS projects

Detailed requirements within the published tender documents.

II.2.5) Award criteria

Price is not the only award criterion and all criteria are stated only in the procurement documents

II.2.7) Duration of the contract, framework agreement or dynamic purchasing system

Duration in months

48

This contract is subject to renewal

No

II.2.9) Information about the limits on the number of candidates to be invited

Maximum number: 4

Objective criteria for choosing the limited number of candidates:

Detailed requirements and scoring criteria within the published tender documents.

II.2.10) Information about variants

Variants will be accepted: No

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 III. Legal, economic, financial and technical information

III.1) Conditions for participation

III.1.2) Economic and financial standing

Selection criteria as stated in the procurement documents

III.1.3) Technical and professional ability

Selection criteria as stated in the procurement documents

Section IV. Procedure

IV.1) Description

IV.1.1) Type of procedure

Negotiated procedure with prior call for competition

IV.1.8) Information about the Government Procurement Agreement (GPA)

The procurement is covered by the Government Procurement Agreement: Yes

IV.2) Administrative information

IV.2.1) Previous publication concerning this procedure

Notice number: [2024/S 000-033059](#)

IV.2.2) Time limit for receipt of tenders or requests to participate

Date

28 April 2025

Local time

12:00pm

IV.2.3) Estimated date of dispatch of invitations to tender or to participate to selected candidates

13 January 2025

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

English

IV.2.6) Minimum time frame during which the tenderer must maintain the tender

Duration in months: 6 (from the date stated for receipt of tender)

Section VI. Complementary information

VI.1) Information about recurrence

This is a recurrent procurement: No

VI.3) Additional information

Previous publications concerning this procedure:

2023/S 000-021

Virtual procurement Launch event Monday 03rd February 2025, joining instructions will be shared with Participants.

Synthetic Environment Proof of Concept Discovery Day will be held wc 24th February 2025, further details will be shared with Participants.

VI.4) Procedures for review

VI.4.1) Review body

The High Court of England and Wales

The Strand

London

WC2A 2LL

Country

United Kingdom

VI.4.3) Review procedure

Precise information on deadline(s) for review procedures

In accordance with the Utilities Contracts Regulations 2016, Network Rail will incorporate a minimum 10 calendar day standstill period prior to concluding the award of any framework contracts pursuant to this notice.