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Opportunity

## **Provision of Train Driver Simulators**

NORTHERN TRAINS LIMITED

F05: Contract notice – utilities

Notice reference: 2021/S 000-024462

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

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

NORTHERN TRAINS LIMITED

YORK

#### **Contact**

Simon Aldridge

#### **Email**

[simona@fpaconsulting.co.uk](mailto:simona@fpaconsulting.co.uk)

#### **Telephone**

+44 1332604304

#### **Country**

United Kingdom

#### **NUTS code**

UK - United Kingdom

### **Internet address(es)**

Main address

[www.fpaconsulting.co.uk](http://www.fpaconsulting.co.uk)

### **I.3) Communication**

Access to the procurement documents is restricted. Further information can be obtained at

[www.fpaconsulting.co.uk](http://www.fpaconsulting.co.uk)

Additional information can be obtained from another address:

FPA Consulting Limited

1 St Andrews House, Vernon Gate

Derby

DE1 1UJ

### **Contact**

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

## **I.6) Main activity**

Railway services

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## **Section II: Object**

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

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

Provision of Train Driver Simulators

Reference number

NTL SIM

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

- 34940000 - Railway equipment

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

Supplies

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

Provision of Northern Train Driving Simulator

The intention of any driver training simulator is to:

1. Support learning by including 'immersion' into the classroom elements of training allowing the trainee to experience the normal and abnormal operations of a train on the UK rail network. Training should be learning, and learner focused and be as immersive and 'realistic' as practical to observe and develop NTS and natural reactions.
2. Support network and infrastructure development projects

3. Support new methods of work, i.e., ERTMS
4. Include a variety of routes and route building options

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

This contract is divided into lots: No

## **II.2) Description**

### **II.2.2) Additional CPV code(s)**

- 34152000 - Training simulators

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

NUTS codes

- UK - United Kingdom

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

The train simulators provided should support learning progressively at key stages throughout learning and build towards a full final assessment.

Small format simulators - PODs would be used in the classrooms to deliver these stages. These would build experiential learning elements into the training provided.

The pods should be realistic although do not require all the controls of the full-scale sim. The routes and operating characteristics should mirror those of the full sim and be developed as the net.

Compound sessions would be delivered on the immersive full-scale sim. These sessions would be simulator focused and may combine the isolated POD sessions previously experienced. These simulators should be as realistic as possible to provide for ongoing assessment of qualified drivers as well (subject to agreement). The display should be high resolution.

Route design should be realistic, modelling real or future routes as closely as possible. The ability to add, alter, remove route features should be included in the proposal, along with the support and or training to do this task at local level.

A method of recording and reviewing training and assessment should be possible, including

key learning points, communication examples, and playback/indication of controls for deeper understanding of the session observed. Observation of reactions should be a core principle in evaluation of training and learner's needs. Lesson design and function should consider Non-Technical Skills (NTS) and Performance Influencing Factors (PIF) responses in design.

Weather and associated driving techniques (i.e. low adhesion) should be modelled as realistically as possible.

The simulator should have the ability to add realistic faults and a method to investigate and rectify said faults. A 'technical rider' seat or in cab observation (slang - 2nd man's side) seat is to be included.

Engineering features are to be modelled based on the CAF engineering functions - to be provided by CAF at request. These will allow faults to be interrogated by engineers as per the design functions

A despatch station will be provided in the observation station, this to be considered as a train saloon fitted with type specific interior and fully functioning 'real' passenger door and despatch controls, including comms.

Unit Base should be modelled around a CAF CIVITY Class 195/331/BDMU.

Software should reflect real world combinations of units, i.e., 2 or 3 car units, coupled up to combination that includes max 4 units.

Unit functions should be included and updated as related type is modified or altered in the real world.

The full sims should replicate the immersive cab environment. Ideally 2 full sims to be provided per location (4 total) with associated operating terminal(s). Additional controls should be possible via tablet or remote control mirroring the control panel and allow 2 independent users to run simulations simultaneously.

The sim's design should be as immersive as possible from the driver's perspective as this will ensure NTS skills and reactions are related to real world operation.

Remote observation should be possible by other trainees. A feedback area should be provided with controls that allow step by step review.

The PODS should be provided in 2 banks of 6 per location and include a dedicated control station per 6, (2x2x6=24 pods, and 4 control stations). The software and scenarios should be self-contained as far as possible and not restricted to input from the control station.

It should be possible to monitor the condition of all versions of simulator from a remote location, and to provide support and maintenance in the same way to avoid unnecessary down time. Planned maintenance should also be included in the normal lifespan of the units.

Control panels, power supply, rackmount computers etc. will be placed in a convenient location and active cooling is to be considered as a part of the normal and automatic operation of the equipment.

Ongoing support contract to be established and agreed - costs to be specified and will include repair, maintenance, advice, training and other manufacturers recommended actions.

A design life expectancy should be at least 15 years, with options to upgrade and extend lie beyond - This to be aligned to real unit's expected life cycle.

Improvements and alterations to the real units will also be provided as software updates. Hardware changes and associated costs will represent the cost to fleet and should be noted in contract.

Additional units and associated costs may be included in any tender.

Intellectual property rights to be defined and should not limit the fair use by the end user. Use of the simulator will primarily be for training and evaluation with additional use for 'advertising', community engagement and development, amongst other promotional activities.

Future operations in terms of company title and ownership should not be prohibited in contract and all rights will pass along with the company ownership. In cases where a company will merge (i.e., Great British Railways) the owner operator will become that which is specified in the transfer of titles of the company and businesses.

### **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**

Start date

1 May 2022

This contract is subject to renewal

No

### **II.2.10) Information about variants**

Variants will be accepted: No

### **II.2.11) Information about options**

Options: No

### **II.2.12) Information about electronic catalogues**

Tenders must be presented in the form of electronic catalogues or include an electronic catalogue

### **II.2.14) Additional information**

Interested parties should contact the named person by email at Section I.1 to register interest and request the Prequalification Questionnaire which shall be required to be completed by the time limit for receipt of expressions of interest at Section IV.2.2

Scoring Matrix

The PQQ scoring will be as follows:-

#### **SCORE GIVEN - QUALITATIVE GUIDANCE - SHORT GUIDANCE**

0 - Question not answered or answer is irrelevant. - Not answered/irrelevant.

1 - Weak : Insufficient information to enable evaluation or contains major shortcomings or errors to make it non-complaint. - Worst in class/errors in submission.

2 - Below Satisfactory : partially complaint answer but with obvious deficiencies. Brief or incomplete answers with little or no supporting detail or wholly generic answer. - Below industry standard.

3 - Satisfactory : Answer meets the minimum requirements but lack convincing supporting detail to give confidence that they will meet requirements. Some attempt to provide relevant answers not generic. - In line with industry standard.

4 - Good : Thorough response with relevant supporting detail and evidence to give confidence that the requirements will be met. Tailored answers. - Above industry standard.

5 - Excellent : Comprehensive and well-structured response with excellent supporting evidence. Wholly bespoke for the protect and demonstrates exceptional understanding of the requirements. - Market leading.

## SCORING PROCESS

Where Yes is the required answer:

YES = PASS

NO = FAIL

NTL will assess additional information provided by the interested parties who select NO, but have additional information to justify their selection.



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## **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: No

### **IV.2) Administrative information**

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

Date

1 November 2021

Local time

4:00pm

#### **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)

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## **Section VI. Complementary information**

### **VI.1) Information about recurrence**

This is a recurrent procurement: No

### **VI.3) Additional information**

To register your interest in this Notice you should submit an expression of interest to the contact details shown within this Notice and request a copy of the Prequalification Questionnaire to be submitted by the date shown at IV.2.2

### **VI.4) Procedures for review**

#### **VI.4.1) Review body**

NORTHERN TRAINS LIMITED

YORK

Country

United Kingdom