

# **National Highways**

## Vehicle Telemetry Specification

### **National Fleet Vehicle Operations**

## Contents

1. Definitions .....	3
2. Background.....	3
3. Vehicles and Telemetry Requirements .....	4
4. Minimum Service Level Requirements - Operational Process .....	5
5. Ordering Process .....	6
6. Contract Management.....	7
Annex A – National Highways Fleet Vehicles .....	8
Annex B – List of National Highways Outstation & Asset delivery locations .....	10
Annex C – List of potential additional vehicle makes / models to fleet.....	12

## 1. Definitions

A list of definitions referenced throughout this document can be found below;

**Customer**

National Highways Limited.

**Supplier**

Appointed supplier

**Operator**

National Highways Limited.

**Contract**

The National Highways Vehicle telemetry replacement contract

**Traffic Officer Vehicle (TOV)**

A fully functional traffic officer vehicle supplied for operational use by National Highways company Limited.

**Asset Delivery Vehicle (AD)**

A fully functional Asset inspector or pool car vehicle for operational use by National Highways company limited

**Company car / personal user (PUS)**

A vehicle supplied to an employee to utilise for both business and personal use.

**National Highways National Fleet Team**

The customers team responsible for the delivery and management of all managed vehicles on behalf of National Highways Limited.

## 2. Background

National Highways (formerly Highways England) operate across the length and breadth of England and we are the government company which plans, designs, builds, operates and maintains England's motorways and major A roads, known as the strategic road network (SRN)

Functions in support of this require National Highways to operate vehicles that include Traffic Officer operational vehicles that patrol the road network, Asset delivery operational vehicles that inspect all assets such as roads and structures across England and company car / personal user scheme vehicles utilised by employees with a vehicle for their job needs contractually.

This document outlines the requirements for Vehicle Telemetry provision consists of purchased vehicles across the Traffic Officer Service (TOS), Asset delivery operations (AD) and Company car / Personal user scheme vehicles (PUS)

The specific contents of this document as detailed below may not be varied by suppliers without prior written confirmation from National Highways National Fleet Team.

The Supplier will ensure the Customer is present during all meetings and final sign off.

Suppliers may be required to work in association with and communicate regularly with 3rd party suppliers, such as the National Highways Fleet Management and Maintenance provider and Vehicle Manufacturers for technical information such as Workshop Manuals, Electrical Diagrams, Technical Bulletins, and Diagnostic Release Notes.

### 3. Vehicles and Telemetry Requirements

Currently, the National Highways fleet requires supply and fitting of vehicle Telemetry and for all TOV, AD and PUS fleet. A breakdown of the current vehicles is shown in Figure 1, with a full list including locations in [Annex A](#)

Figure 1

Make / Models	Totals
<b>BMW</b>	<b>56</b>
F45 225xe Sport Active Tourer	21
F45 225XE SPORT ACTIVE TOURER XB2 1.5i LCI	4
I01 i3 120Ah AC	1
X5 XDrive45e AC	30
<b>FORD</b>	<b>64</b>
FOCUS ZETEC ESTATE	61
Kuga PHEV	3
<b>KIA</b>	<b>26</b>
NIRO 3 PHEV S-A	13
NIRO PHEV 3	13
<b>LAND ROVER</b>	<b>67</b>
DISCOVERY 5 2.0 DSE	1
DISCOVERY 5 SDV6 3.0 DSE	66
<b>LEVC</b>	<b>1</b>
LEVC TRIAL VEHICLE	1
<b>MINI</b>	<b>5</b>
Countryman	5
<b>MITSUBISHI</b>	<b>205</b>
OUTLANDER PHEV COMMERCIAL	3
OUTLANDER PHEVS	18
RX4 OUTLANDER 4HS PHEV AUTO	34
RZ7 OUTLANDER PHEV AUTO	18
SHOGUN 3.2DI EL	94
SHOGUN SPORT	28
SHOGUN SPORT 4 AUTO QX4	10
<b>SSANGYONG</b>	<b>31</b>
MUSO REBEL AUTO	19
MUSO SARACEN AUTO	12
<b>VAUXHALL</b>	<b>5</b>
ASTRA 5DR SPORTS TOURER SRI NAV 1.6CDTI	5
<b>VOLVO</b>	<b>118</b>
XC40 INSCRIPTION T5 RECHARGE A	4
XC40 MOMENTUM PRO D3 AWD AUTO	41
XC40 R-DESIGN PRO T5 PHEV AUTO	1
XC90 T8 MOMENTUM AUTO	72
<b>Grand Total</b>	<b>578</b>

The customer retains the right to change these vehicles when required. The vehicle manufacturer, make and model of vehicles are variable throughout the contract.

Over the period of the contract many vehicles will be introduced within the National Highways fleet. This may affect the requirements through the life of the contract. Due to Global supply challenges exact figures cannot be quoted with certainty. Circa 150 additional vehicles are approximate measures of this currently for the next 12 months but is subject to change. A list of potential choices related to these can be found in [Annex C](#)

This contract will be for up to 500 AD Inspector vehicles, 250 AD Pool Cars, 500 TOV, 250 PUS fleet. The Supplier acknowledges and agrees that the full scope of the Buyer's fleet may include, but is not limited to leased, owned, daily rental, car club and grey fleet.

#### **4. Minimum Service Level Requirements - Operational Process**

The requirements of this service in support of our operations are that it must;

- A suitable device to be installed to the nominated National Highways vehicle. This must be robust, Tamper proof and not cause any interference with the operational systems of the vehicle that it is installed.
- Include provision for the ability to view vehicle live data. This should include but not limited to live vehicle location data, journeys taken information, detailed information related to previous locations visited, Odometer readings, Fuel usage reporting and have the capability for regional vehicle / type segregation in relation to the relevant reports.
- Include provision to enable accurate means of driver identification in relation to the vehicle being monitored and data recorded from.
- Provision for the use of automated reporting via a daily API type feed in support of National Highways fleet reporting facility.
- All data sets used must be able to distinguish the differences between those provided by an Internal Combustion Engine by comparison to an Electric or Plug in Hybrid power train vehicle. For example, when recording vehicle idling for a PHEV type vehicle, it is imperative to record when the Internal Combustion Engine is operating as opposed to EV mode, so Engine operational would record as an idling output.
- Training is to be provided to all relevant National Highways representatives relating to accessing the relevant data sources that relates to the above.
- All historic data retrieved from the Vehicle Telemetry devices is to be stored for the lifetime of the contract by the supplier on behalf of National Highways.
- The Vehicle Telemetry provider will be required to work in partnership with National Highways appointed contractors in relation to Vehicle fleet additions or relevant data sharing at the request of National Highways.
- A mobile service provision is required to facilitate defect repairs at any National Highways / home location indicated by appointment. The National Highways depots are listed in Annex B. These sites may increase and decrease periodically with notice given, however National coverage across the whole of England will be required.

- Repairs, Installation or removal of equipment must be completed within 5 working days of report. This is to ensure minimal vehicle downtime following any reported failure / repair required.
- Relevant risk assessments / safe working practices documented to ensure that compliance is managed in line with National Highways and operator safety legislation.
- As part of this contract it is agreed that there will be a monthly performance review meeting held between National Highways / suppliers representatives at a location to be advised as a rolling calendar invite. This frequency may only be varied in agreement with National Highways.
- Monthly M.I. reporting provided to detail measurements against any agreed KPI's upon implementation of the contract in support of Monthly performance reviews. This will be in collaboration with National Highways Collaborative Performance Framework (CPF) metrics.
- Access to enable defect reporting 24 / 7 / 365 days per year.

The Supplier shall ensure that vehicle downtime is minimised and acted upon to ensure that vehicle availability is optimised to reduce the impact for the Buyer and/or the driver of the vehicle. If it is deemed necessary to retain the vehicle beyond the forecasted downtime period, the Supplier shall ensure that the delay is communicated to the Buyer and/or driver of the vehicle within agreed timescales determined by the Buyer; and minimised as far as reasonably possible.

## **5. Ordering Process**

The orders for all Vehicles to be served by this contract would be received from the appointed National Highways contract manager(s) as a representative of the National Highways fleet team.

An order for device fitment or removal will be deemed as authority to action the necessary requirements to the appointed vehicle(s) identified.

Many orders will require the supplier to liaise with vehicle conversion specialists or repairers, the details of which will be supplied by National Highways upon order placement.

Monthly statements should be provided prior to invoices being raised to allow the amounts to be verified as applicable to each purchase order number or contract account and in turn approved financially by National Highways. Invoices are to be submitted calendar monthly quoting the purchase order number and receipt number provided by National Highways as applicable to each charge.

## **6. Contract Management**

The supplier shall provide a dedicated account manager to support the operation of this contract. The expectation being that this provision will allow for regular Monthly contract reviews. The prime contact for the dedicated support would be a representative from the National Highways fleet team.

The Supplier's Account Manager shall work proactively and with the Buyer to develop strategies and initiatives reviewing the possibilities to:

- secure cost savings
- deliver efficiencies relating to fleet operation, fleet profile or the procedures in place to manage the Buyer's account
- improve environmental efficiencies
- support the Buyer in meeting internal or Government policy standards (for example the Government Fleet Commitment)
- Review possible innovations that may be of benefit to National Highways. This includes but not limited to equipment such as camera recording equipment as an example.

The Supplier shall provide weekly updates (or other frequency specified by the Buyer) upon receipt of an Order, to the Buyer on the progress of the Order, which shall include the estimated date of delivery.

The Supplier shall provide a helpdesk facility to assist the Buyer's end users with queries regarding the services provided under the Contract.

The Customer must be kept informed of all such activities and outcomes.

The Supplier will hold a European Quality accreditation such as EN29000, ISO 9000 series or BS 5750. Proof of this must be provided with any bid proposal for this contract

No modifications shall be carried out by the Supplier or any of its sub-contractors which could adversely affect the original vehicle safety ratings or type approval.

No modifications shall be carried out by the Supplier or any of its sub-contractors which could adversely affect or invalidate the vehicle manufacturer's warranty

## Annex A – National Highways Fleet Vehicles

A breakdown of the locations for each of the 578 vehicles requiring supply and fit of telemetry devices can be found in Figure 4 below;

Figure 2

Type / Region or Area	Totals
<b>BMW</b>	<b>56</b>
AREA 1&2	3
AREA 12	2
EAST	5
EAST MIDLANDS	4
NORTH WEST	3
PUS	21
SOUTH EAST	4
SOUTH WEST	4
WEST MIDLANDS	6
YORKSHIRE NORTH EAST	4
<b>FORD</b>	<b>64</b>
AREA 1&2	10
AREA 13	6
AREA 14	12
AREA 3	2
AREA 4	1
AREA 6&8	11
AREA 7	18
AREA 9	1
PUS	3
<b>KIA</b>	<b>26</b>
AREA 10	5
AREA 12	3
AREA 4	5
PUS	13
<b>LAND ROVER</b>	<b>67</b>
EAST	11
EAST MIDLANDS	5
NORTH WEST	12
SOUTH EAST	16
SOUTH WEST	7
WEST MIDLANDS	8
YORKSHIRE NORTH EAST	8
<b>LEVC</b>	<b>1</b>
AREA 9	1
<b>MINI</b>	<b>5</b>
PUS	5
<b>MITSUBISHI</b>	<b>205</b>



AREA 1&2	9
AREA 10	3
AREA 12	15
AREA 13	5
AREA 14	5
AREA 3	7
AREA 4	12
AREA 4	1
AREA 6&8	9
AREA 7	5
AREA 9	2
EAST	21
EAST MIDLANDS	13
NORTH WEST	26
OCAT	4
SOUTH EAST	16
SOUTH WEST	12
TRAINING SCHOOL	6
WEST MIDLANDS	19
YORKSHIRE NORTH EAST	15
<b>SSANGYONG</b>	<b>31</b>
AREA 10	12
AREA 3	9
AREA 9	10
<b>VAUXHALL</b>	<b>5</b>
AREA 10	5
<b>VOLVO</b>	<b>118</b>
AREA 1&2	14
AREA 12	3
AREA 13	6
AREA 14	5
AREA 3	1
AREA 6&8	9
AREA 7	8
EAST	16
EAST MIDLANDS	5
NORTH WEST	6
SOUTH EAST	22
SOUTH WEST	4
TRAINING SCHOOL	1
WEST MIDLANDS	8
WEST MIDLANDS	2
YORKSHIRE NORTH EAST	8
<b>Grand Total</b>	<b>578</b>

## Annex B – List of National Highways Outstation & Asset delivery locations

NORTH WEST		
North West RCC	Knutsford Outstation	Samlesbury Outstation
Newton – Le – Willows	Knutsford Motorway Unit	Motorway Unit
Warrington	Northwich Road	Preston New Road
Cheshire	Tabley	Samlesbury
WA12 0DS	Cheshire, WA16 0TL	Preston, PR5 0UJ
Milnrow Outstation	Cumbria South outstation	Cumbria North Outstation
Milnrow Motorway Unit	Millness Depot	Lowhurst Motorway Unit
Elizabethan Way	Crooklands	Wreay
Rochdale	Milnthrope	Carlisle
Lancashire, OL16 4LG	Cumbria, LA7 7NR	Cumbria, CA4 0RH
NORTH EAST		
North East RCC	Tingley Outstation	Barton Outstation
Kestrel House	Motorway Compound	Barton Police post
Calder Business Park	Dewsbury Road	A1(M) Junction 56
Dale Road	Tingley	Barton
Wakefield, WF2 7UA	Leeds, WF3 1SW	Richmond, DL10 5NH
Carrville Outstation	Sprotbrough Outstation	West Cowick Outstation
Motorway Compound	Sprotbrough Depot	Maintenance Compound
A1 (M)Junction 62	Doncaster	Finnley's Lane
Meadow Lane	South Yorkshire	West Cowick
Durham, DH1 1TZ	DN5 7PY	Goole, DN14 9ED
EAST MIDLANDS		
East Midlands RCC	Felley Outstation	Shepshed Outstation
Eric Belfield House	Felley Motorway Compound	Motorway Compound
Nottingham business park	Mansfield Road	Ashby Road
Nottingham	Annesley	Shepshed
NG8 6PZ	Nottinghamshire, NGA5 0AS	Leicestershire, LE12 9DJ
Watford Gap Outstation	Stirling House (AREA 7)	Newark Depot
Motorway Compound	Lakeside Court	Stephenson Way
Watford Village	Osier Drive	Newark
Northamptonshire	Sherwood Business Park	NG24 2QT
NN6 7UZ	Nottingham, NG15 0DS	
Heath Depot	Felley Depot	Sandiacre Depot
A6075	Mansfield Road	Bostocks Lane
Heath	Annesley	Sandiacre
Chesterfield	Nottingham	Nottingham
S44 5SL	NG15 0AS	NG10 5ND
Shepshed Depot	Leicester Forest East Depot	Misterton Depot
Ashby Road	M1 J21 Service AREA	M1 Motorway Compound
Shepshed	N/B Baines Lane	Misterton
Loughborough	Leicester	Lutterworth
LE12 9BU	LE3 3GB	LE17 4HP

Rothersthorpe Depot  
M1 Motorway Compound  
J15A Northbound Service AREA  
Northampton  
NN4 9QS

Pytchley Depot  
Pegasus Court  
Kettering South Bus. AREA  
Northants  
NN15 6XS

**EAST**

East RCC & South Mimms  
St Albans Road  
South Mimms  
Hertfordshire  
EN6 3NP

Toddington Outstation  
M1 Motorway Depot  
Toddington  
Bedfordshire  
LU5 6HP

Whittlesford Outstation  
Motorway Maintenance Depot  
Station road east  
Whittlesford  
Cambridgeshire, CB22 4NL

Heston Outstation  
Heston Depot  
M4 Maintenance compound  
Heston  
Middlesex, TW5 9RY

Chieveley Outstation  
Motorway Services AREA  
Oxford Road  
Thatcham  
Berkshire, RG18 9XX

Milton Common Outstation  
London Road  
Milton Common  
Thame  
Oxfordshire, OX9 2UN

**SOUTH EAST**

South East RCC  
Fosterdown  
Godstone  
Surrey  
RH9 8BQ

Coldharbour Outstation  
Coldharbour PCO  
London Road  
Coldharbour  
Maidstone, ME 20 7SL

Weatherhill Outstation  
Weatherhill Depot  
Hathersham Close  
Smallfield  
Surrey, RH6 9JE

Easton Lane Outstation  
Maintenance Unit  
Winnal  
Winchester  
Hampshire, SO23 7TY

Dartford Crossing  
Dartford River Crossing  
South Orbital Way  
Dartford  
Kent, DA1 5PR

**SOUTH WEST**

South West RCC	Pridhamsleigh Outstation	Chelston Outstation
St Brendan's Court	Pridhamsleigh Depot	Motorway Compound
Avonmouth	Old Pridhamsleigh Quarry	Wellington
Bristol	Buckfastleigh	Somerset
BS11 9FB	Devon, TQ11 0JR	TA21 9PL
Almondsbury Outstation	Stanton St. Quinton Outstation	Tormarton Motorway Maintenance Depot
Motorway Maintenance Depot	Motorway Maintenance compound	Dodington Ash
Gloucester Road	Stanton St. Quinton	Chipping Sodbury Bristol
Almondsbury	Chippenham	BS37 6EJ
Bristol, BS23 4AG	Wiltshire SN14 6BD	
Eastington Motorway Maintenance Depot	Falfield Motorway Maintenance Depot	Edithmead Motorway Maintenance Depot
Fromebridge	Tortworth Road	Near Highbridge
Whitminster	Falfield	Bridgwater
Gloucester	South Gloucestershire	Somerset
GL12 7NJ	GL12 8EE	TA9 4HF

**WEST MIDLANDS**

West Midlands RCC & NTOC	Strensham Outstation	Longbridge Outstation
Quinton Business Park	Motorway Compound	Motorway Compound
1 Ridgeway	Hill View Road	Barsord road
Quinton	Upper Strensham	Longbridge
Birmingham, B32 1AF	Worcester, WR8 9LJ	Warwick, CV34 6RB
Ansty Outstation	Hilton Park Outstation	
Maintenance Depot	Motorway Compound	
Main Road	Shareshill	
Ansty	Wolverhampton	
Coventry, CV7 9JA	West Midlands, WV11 2AP	

**Annex C – List of potential additional vehicle makes / models to fleet.**

<b>Manufacturer</b>	<b>Model</b>
BMW	X1 xDrive25e PHEV xLine AT
BMW	X2 xDrive25e PHEV xLine AT
Ford	Transit Custom PHEV
Ford	Kuga zetec PHEV
Volvo	V90 T6 Recharge
LEVC	VN5
Hyundai	i30 tourer
Kia	Xceed PHEV
Hyundai	Kona