

**Attachment 1 Scope of Works ORT0115 Signs and Signals (AMI and VMS) Modernisation
& Refresh**

ANNEX 2

REQUIREMENTS, SUPPLIER DESCRIPTIONS, GOODS

LOT: 2

PART A: REQUIREMENTS

1. DESCRIPTION OF THE SERVICE

The Supplier shall provide the Service in accordance with this Requirements.

The Customer requires the Supplier to provide Signs on a Supply, Installation support, Commissioning and Warranty basis. The Customer may also require Installation Services directly managed by the Supplier. This requirement is for technology modernisation and refresh programme and as required by the Customer.

1.1 Identified and Defined Terms

In this Service Information, terms identified in the Contract Data are in italics and defined terms have capital initials. Other terms used with capital letters are defined in the Conditions of Contract or have the meaning given to them elsewhere.

Definitions:

Term	Notes
Customer	National Highways, Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ
Supplier	The Potential Provider with whom the Customer has concluded the Contract
Customer Relationship Manager	The Customer's representative in management of the Contract
Others	Received delegated authority from Customer Relationship Manager
Service Period	The duration for which the Contract is in operation
Service	Supply, install, commission and warranty roadside devices to an agreed programme

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Site	A part of the Affected Property
Sign (VMS)	A generic term for a device capable of displaying Text Messages and/or Pictograms or other Legends and which is connected to the Message Sign Sub-System. MS 2x12, MS3 and MS4 are designated as Signs, even though MS3 and MS4 also have a signal Aspect display capability.
Signal	A generic term for a device capable of displaying advisory or mandatory instructions, e.g. stop or 30 mph speed restriction, and connected to the Signal Sub-System. AMI are designated as a 'Signals', though MS3 and MS4 also have a signal Aspect display capability.
Aspect Bitmap Library	The electronic record of the bitmaps used as part of the Home Office Type Approval (HOTA) testing.
Commission Date	The day on which the Site Acceptance Test 1 (SAT1) (End to End) commissioning of a Sign is successfully completed.
Installation Work	Activities to install and commission Signs at a specified Site including the removal of existing signs where present.
PSU	Power Supply Unit.
MSP	The Maintenance Service Provider provides maintenance of the network from 7 regional centres distributed throughout UK.

2. Overall Objectives

2.1 The Customer is National Highways, the government company charged with operating, maintaining and improving national motorways and major A roads, including modernising and maintaining the highways. We also manage - and help prevent - incidents on national motorways through our Traffic Officer Service.

2.2 The Customer requires the Supplier to provide Signs on a Supply, Installation support, Commissioning and Warranty basis. The Customer may also require Installation Services directly managed by the Supplier. On which basis the service provided will be determined in conjunction with each scheme.

2.3 This requirement is for the Technology Modernisation and Refresh and other schemes as required by the Customer with quantities as specified in 3.1 Requirements of Service.

2.4 Signs will be supplied in accordance with Standards as noted in Customer's Requirements within Operational Technology Specifications Library (please contact

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TSSPR@nationalhighways.co.uk to get access) and as noted in clauses relevant to European Standards.

2.5 The Supplier will be required to deliver the Signs to a variety of locations within the UK and will be required to install and commission the Signs on the infrastructure at those locations.

2.6 The supplied Signs will be provided with a warranty where the Customer or their agents will provide first line maintenance. The intended service life of the Signs is 15 years and as such the Supplier must ensure that all parts or components of the Signs should be available throughout the intended service life of the Signs.

2.1 The objectives of this contract are:

2.1.1 To Provide the Service to supply, installation support and commission a quantity of roadside devices to locations around the country, the Customer may also require Installation Services directly managed by the Supplier,

2.1.2 To work with the Customer Relationship Manager and Others to plan supply and installation activities to ensure scheme deadlines are met,

2.1.3 To work with the Customer Relationship Manager and Others to ensure that Sign availability targets are met or exceeded.

3. DESCRIPTION REQUIREMENTS OF SERVICE

3.1 Requirements of service

Requirements of this service will be to supply, install, commission, and warranty a combination of roadside devices as noted in Table 1. National Highways requests batched pricing of equipment in quantities of 10, 20, 50 and 100 units, which should be populated within the Commercial Workbook.

The Plan:

Item Description	Volume	Delivery Date to Site	Installation to be completed by
AMI-0700-1-000 - Version 3 - Advanced Motorway Indicator [AMI] TR2656	242	31.03.2024	31.03.2025
Version 3 - Message Sign Mk3 [MS3x18] [TR2659] TR2658A	29	31.03.2024	31.03.2025
MS4-0700-1-000 - Version 3 - Motorway Signal Mk4 [MS4] TR2660A	174	31.03.2024	31.03.2025

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SIGNAL-0700-1-000 - Message Sign Controller Version 3 TR 2653A & TR2654A	450	31.03.2024	31.03.2025
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Table 1: The Plan - Estimated volumes, delivery and installation dates

Please refer to Annex 15 for Tender Queries ORT0115 Signs and Signals (AMI and VMS) 07.09.23 which includes additional details related to delivery start and end date (TQs: 11,55 and 66).

3.1.1 The requirements determine all types of equipment necessary. Quantities are only indicative and National Highways reserves the right to adjust quantities as indicated by scheme demands at a later date.

3.1.2 The dates in Table 1 are the dates for delivery to site and it is expected the Supplier will deliver before these dates.

3.1.3 The technical specifications relevant for this procurement for version 3 Signs and Signals are listed in the National Highways Operational Technology Specifications Library. In particular: TR2652A, TR2653A, TR2654A, TR2655, TR2656, TR2659A, TR2660A, TR2661A. Please email TSSPR@nationalhighways.co.uk to obtain access to the OTSL.

3.1.4 The Supplier ensures that all Signs are fully maintainable from a walkway on a manned access gantry where this exists. All components should be accessible without the need to remove the Sign itself. As such, all components intended to be maintained in situ can be safely removed by the maintainer without the use of specialist tools or breaching safe manual handling guidance.

3.1.5 The signs supplied are to satisfy the requirements of the schemes with **deliveries beginning in March 2024 and installation completing by 31st March 2025.**

3.1.6 Some of the responsibilities of the Customer Relationship Manager may be delegated. Any delegation of the responsibilities of the Customer Relationship Manager will be agreed with the Customer.

3.2 Warranty and Spares

3.2.1 The warranty and spares should be delivered in accordance with the process described within MCH 1349.

3.2.2 The Supplier shall carry out a Failure Mode and Effects Analysis (FMEA) based on the techniques, principles and procedures defined in BS EN IEC 60812 to be carried out as early as possible in the Contract to derive counter measures for any potential failure modes identified in the design resulting in non-operational malfunction of the product, as well as eliminating dormant failures as far as reasonably practicable as defined in TR1100.

3.2.3 It will be the Supplier's responsibility to ensure that sufficient spares are available to ensure a minimum availability requirement of 97%.

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3.2.4 The cost of spares, repair, or replacement, and cost of delivery to the National Technology and Logistics Centre (NTLC), is also to be included in the Commercial Workbook for the eventuality that spares are required due to reasons outside of the Supplier's control. The Service Manager will decide whether to call off the spares during the course of the contract. If required any additional spares requirements will be detailed through a Work Task Order.

The NTLC (National Technology and Logistics Centre) address:

GXO Logistics

Cat & Fiddle Lane

West Hallam

DE7 6HE

3.2.5 The Supplier will provide a warranty period of 7 years for the supplied Signs commencing from the Commission Date. For any Signs supplied to the NTLC, the warranty period will commence from delivery date to the NTLC.

3.2.6 The Supplier will repair or replace any faulty parts or Signs at no additional cost to the Customer and return them to the first line maintenance provider or NTLC within 15 working days from being received onto the Supplier's premises. For the avoidance of doubt, any type or level of fault on a Sign or component thereof will be covered by the warranty. Any faulty components which are returned for warranty repair which are faulty due to negligence, abuse, infestation or misuse should be identified to the Service Manager with evidence to demonstrate this and will be treated as a compensations event. Repaired modules shall be recorded by serial number and where three or more repairs indicates a recurrent problem, this shall be investigated by the Service Provider and the faulty module removed from the supply chain.

3.2.7 If the fault is caused by damage due to impact or circumstances outside of the Supplier's control, such as extreme weather events not covered by the Signs specifications or requirements, the repair or replacement will be classed as chargeable. Such repairs or replacements will be identified by the Service Manager through a work Task Order.

3.2.8 The warranty shall cover any issues caused by obsolescence of components, and any software or firmware changes associated with obsolescence issues, Highways England Service Information inherent defects or security upgrades. If the Customer requires non-obsolescence or security related changes to upgrade or add additional functionality then this will not be covered by the warranty.

3.2.9 The cost of the warranty should be broken down and itemised within the Commercial Workbook as an annual service charge for information. The overall charge

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will be payable as part of the supply, installation and commissioning cost and should be detailed in the included in the Commercial Workbook.

3.2.10 Warranty commences at successful completion of Site Acceptance Test 3 (SAT3) and as noted in MCH 1349. Handover will be determined following successful completion of SAT3 testing and following 14 days of 97% availability.

3.2.11 The Supplier will provide costs as detailed within the Commercial Workbook to provide maintenance services during this period which the Service Manager can call off if required.

3.2.12 Upon final successful Site Acceptance Testing of the installed Signs by the Service Manager, the first line maintenance of all Sign systems will be carried out by the Maintenance Service Provider.

3.3 Escrow

3.3.1 In the event of the Supplier ceasing trading, the Customer may require design and manufacturing details of the product. To enable this, the relevant details should be held in Escrow for the duration of the service (till the end of the warranty period). National Highways will incur the cost for the Escrow.

3.3.2 The Supplier shall ensure that multiple Escrow accounts, i.e. duplication, does not occur and that only one Escrow account exists for each discrete product type/ line.

3.3.3 The Escrow account will be a Single Licensee Agreement and entry level Verification based upon the Escrow services provided by NCC Group. The Customer Relationship Manager will accept alternative Escrow providers that give the equivalent level of protection to the Customer.

3.3.4 Suppliers can contact the account manager at NCC Group for detailed advice:

Jonny Hyde

Department for Transport & Executive Agencies Account Manager

NCC Group Plc

XYZ Building | 2 Hardman Boulevard | Manchester | M3 3AQ | United Kingdom

Mobile: +44 (0) 773 603 1060

Email: jonny.hyde@nccgroup.com

4. Electronic Motorway Display Equipment - Requirements

4.1 Colour Conformity and Aspect Displays

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4.1.1 See TR 2654 for equipment that will be used in conjunction with Enforcement Equipment (Speed/Red X) to be tested for compatibility with the Enforcement Equipment Home Office Type Approval (HOTA).

4.1.2 Aspect Bitmap Management

4.1.3 Colour Conformity

To ensure compliance with the BS EN 12966 colour classes required by TR2607 and over the life of the product, BS EN 12966 requires early and regular checking of colour conformity under production testing. TR2607 requires conformance with colour classes to be maintained over the expected operational life. Therefore, as part of the maintenance procedures required by TR2607 the Supplier should include for the regular recovery of one in-service display module from a working sign, as agreed by the Customer, and its replacement with another fully working module.

4.2 Training *(please refer to MCH1349)*

Training should be delivered and carried out in accordance with the MCH 1349 handover process.

4.3 Fault Reporting

4.3.1 The Supplier shall issue to the Customer Relationship Manager, a programme for any planned maintenance required to be undertaken by the MSP throughout the service. The programme shall detail the type and duration of operations required for maintenance. It is the Customer's aim to minimise roadside visits.

4.3.2 During the warranty period and in order to undertake repairs the MSP may request diagnostic information from the Supplier, who shall input the data to the remote monitoring system and provide it for MSP.

4.3.3 The Supplier shall inform the MSP of details of the fault and any relevant spares required to return the Sign to full operation in advance of their attendance. In addition to identifying active faults, the Supplier shall actively identify any potential pre-emptive maintenance activities which could prevent Sign failures. Any components showing Signs of degradation should be identified to the MSPs to be replaced at the next convenient time. This activity should reduce the number of unplanned visits to Signs due to component failures.

4.3.4 Once a faulty unit has been diagnosed, this will be returned to the Supplier by the MSPs via the NTLC. The NTLC will return items as and when they are received from the MSPs. The NTLC will log and dispatch the faulty unit to the Supplier.

4.4 Signs Availability and Reliability – Reporting

4.4.1 Once a Sign has been accepted by the Customer Relationship Manager reporting of Sign repairs shall commence.

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4.4.2 Within 5 working days of the start of the month the Supplier shall report the 'Availability' of all Signs (being monitored), new faults reported / diagnosed since the last report and faults rectified. This shall be provided electronically with supporting evidence to the Customer Relationship Manager.

4.4.3 The Supplier shall maintain their own logs of all the faulty units dispatched to them and repaired by them, regardless of whether they are a warranty repair or otherwise paid for under the Contract, including but not limited to:

Date of arrival at the Supplier's premises

Item description, part number, serial number and Oracle code number

Item hardware, firmware and software versions

Details of the fault as reported by the MSP, the fault diagnosed to Line Replaceable Unit level by the Supplier and the repair effected

Details of any upgrades effected

Date of return at the NTLC

4.4.4 The logs shall be maintained within a database to enable:

Failure rates to be monitored and referenced against predicted MTBF

A 6-12 month 'grace' period will apply for any initial failures whilst a burn-in period is in progress. The need for quality improvements to be considered

To track the number and nature of repairs per unit.

4.4.5 A template can be provided to record this information in a common format.

4.4.6 This reporting forms part of the Project Management of the Task Order and shall not be charged separately.

4.5 General constraints on how the Supplier Provides the Service *(please refer to MCH1349)*

4.6 Management Information Bases (MIB)

4.6.1 The Supplier will be provided with the Customer's "Management Information Bases" (MIBs) and be expected to produce their own to cover any monitoring. It is currently envisaged that MIBs will monitor the following aspects:

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4.6.6.1 The current Signs and Signals reporting requirements have been identified within the Technical requirement document for each sign. Please refer to Table 1 The Plan - Estimated volumes, delivery and installation dates for the list of TR references.

4.7 Deliveries

4.7.1 In Providing the Service the Supplier shall identify from the Customer Relationship Manager the Site-specific policies and procedures relevant to each Task Order and comply with these.

4.7.2 The Customer Relationship Manager may request Signs are to be delivered to the NTLC or a satellite depot. If this is the case the Signs will be inspected by ITD delegate and if presented with complete FAT documentation and showing no physical damage, will be deemed to have been accepted.

4.7.3 Should installation be required the Supplier will install at the cost supplied in the Commercial Workbook. Loading/unloading at the Supplier's premises will be undertaken at no cost to the Customer.

4.7.4 There may be a period of delay between completing manufacture and installation. During this period, if the Signs are not requested to be delivered to the NTLC, the Supplier shall be responsible for the safe storage, insurance and protection of Signs at no additional cost to the Customer.

4.7.5 Should the installation of the Signs following manufacture not be scheduled within two months of the dates specified in Table 1, the Supplier should provide upon request safe storage, insurance and protection of Signs. The monthly charge for this service should be itemised within the Commercial Workbook.

4.7.6 Prior to delivery to Site from storage, all Signs shall be checked by the Supplier to ensure that they are in a good condition and fully functional including soak testing for a period not less than 1 week with 96 hour 'on-load' test cycle as defined by TR1100. Software and firmware shall be updated to the approved release current at that time.

4.7.7 Where it is agreed Signs items shall be manufactured and stored at Supplier's premises until required at site a vesting certificate will be produced. The vesting certificate is a stock management process between Customer and Supplier.

4.7.8 The Customer reserves the right of access to the storage facility and to reinspect the Signs after a period of storage prior to the delivery to Site. The Supplier shall be given two days' notice of, and shall facilitate, these inspections.

4.7.9 When delivered to the NTLC, any ancillary items shall be supplied palletised on standard pallets. Signs should be provided with feet which will allow the Sign to stand of its own accord and with removable wheels. Pallets will become the property of the Customer. Sign feet and wheels will remain the property of the Supplier but will be loaned until no longer required, at no additional cost, upon request to the Customer.

4.7.10 The unit charge for delivery in the Commercial Workbook shall be fully inclusive of all Supplier costs. For the avoidance of doubt this shall include all associated labour, subsistence and insurance for the full value of the Signs being transported.

4.8 Supply, installation and commissioning

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4.8.1 The Supplier will be responsible for site survey before commencement, to ensure that all risks have been addressed and that the site is suitable and accessible for the commencement of work.

4.8.2 The Supplier will receive a task order for supply, with Signs installation support at locations nominated by the Customer. Details of Sign quantities, locations for delivery and installation support will be defined through Task Orders agreed with the Customer Relationship Manager.

4.8.3 Signs supplied under this service shall be accompanied by a structural design statement, in accordance with CG 300 DMRB: "Highway Structures and Bridges", and design and certification check covering the Sign enclosure. It shall also consider CD 350 DMRB: "Design of Highway Structures" which will be supplied to the scheme for approval 1 month prior to installation.

4.8.4 The Supplier shall submit to the build classes for (but not limited to): wind load, dynamic snow pressure, deflection by bending, torsion deflection and point load. Scheme approval is required prior to installation at the specific Sites.

4.8.5 Prior to the commencement of installation of message signs, the infrastructure necessary for the installation of the system will have been installed and prepared throughout the Site by Others. It shall be the responsibility of the Supplier to satisfy themselves that the infrastructure required for the installation of the Signs is safe and meets the necessary Standards.

4.8.6 It is therefore the responsibility of the Supplier to ensure that where the signs are to be mounted onto new infrastructure that the installed infrastructure is suitable and ready for the sign to be installed. Should the infrastructure not have been designed and built in line with the specifications then the Supplier's responsibility will only be to identify this and detail what modifications will be required to allow the signs to be installed. For the avoidance of doubt, any costs involved in the modification of structures which have not been built in line with the mounting requirements detailed in the V3 specification will not be the responsibility of the Supplier.

4.8.7 It is the responsibility of the Supplier, at no additional cost to the Customer, to liaise with the Customer Relationship Manager, to ensure that all infrastructure supplied by Others that is required for their Signs to function correctly is present and correct. The Supplier should arrange to attend Site and carry out any inspections and surveys necessary to ensure all infrastructure is present prior to attending Site to install the Signs. Any costs incurred by delays to installation, or commissioning, due to infrastructure not being present or suitable shall be the responsibility of the Supplier unless evidence is presented demonstrating that the failure is outside of their control.

4.8.8 The Supplier shall be responsible for the design, type approval, compatibility, correct integration and operation of all Signs of their supply with associated infrastructure and equipment as well as with the Customer's traffic management systems including HADECS3 however all costs associated with the venue, 3rd party contractors are the responsibility of the Customer.

4.8.9 Not Used

4.8.10 The location and arrangements of all Signs, cables and materials shall be to the approval of the Customer Relationship Manager.

4.8.11 The Supplier shall implement the requirements of the Task Order and provide all suitably qualified labour, materials, equipment and transport to enable all aspects of installation support and commissioning.

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4.8.12 The Signs may be required to be installed during the daytime, night time, or weekends on the Customer's network, which may be open to traffic, as directed by the Customer Relationship Manager. The charges included in the Commercial Workbook for installation shall be fully inclusive. Separate charges shall be provided for two x time periods: standard time and non-standard time. Standard time hours are defined as 8am to 6pm Monday to Friday excluding Bank Holidays. Non-Standard time hours shall be all other hours outside this period. If the installation is part standard time and part non-standard time, the total charge applied will be prorata the two charges. A third charge will be when the work can be completed remotely from the operational Site such as scheme assembly facilities or gantry fabricators premises. The Supplier is to note that on the approach to and over bank holidays traffic management may not be allowed on the network.

4.8.13 In order that the Customer Relationship Manager may satisfy themselves that the work described in the Task Order is being properly carried out, the Supplier shall make available without further charge, the full use of their vehicles, crew and other plant and labour as may be required by the Customer Relationship Manager, to enable supervisory inspections to be made whilst work is in progress or immediately after completion of the said work. This charge shall be included in the installation charges in the Commercial Workbook.

4.8.14 The Supplier shall provide an optional Equipment Configuration Plug (AKA Address Plug) programming service, as part of the installation costs and itemised individually in the installation cost breakdown.

5. Environmental Requirements

Please refer to TR1100 Environmental performance and service requirements.

5.1 Maintenance Handover

5.1.1 The Supplier shall comply with the requirements of MCH 1349 and provide detailed in the Task Order with all the necessary supporting documentation electronically to support successful handover of all Signs into maintenance prior to acceptance by the Customer Relationship Manager.

5.2 Rescheduled Works

5.2.1 If the Customer Relationship Manager provides notice to the Supplier that Installation Work under a Task Order is rescheduled with less than 72 hours' notice, then this shall be treated as a compensation event. Should notification be given with more than 72 hours' notice then this shall not be treated as a compensation event but a planned change to the Task Order programme.

5.2.2 If the Police or a National Highways Traffic Officer order all Installation Work to stop, and the offside lanes or hard shoulders re-opened to traffic, and the Customer Relationship Manager confirms that there are no alternative areas of work available to the Supplier then this shall be a compensation event.

5.2.3 During any stop the Supplier shall remain on Site, available for a resumption of work, unless it is confirmed by the Customer or Customer Relationship Manager that no further work will be possible.

5.2.4 The Supplier shall follow the guidelines defined in the Control of Pollution (Amendment) Act - Changes due to Exit from EU yet to be embodied. Code of practice for noise and vibration control on construction and open sites.

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BS 5228-2 – Vibration

6. Protection of Work on the Affected Property

6.1 The Supplier carries out the specific requirements for the protection of work on the Affected Property. It shall be the responsibility of the Supplier to identify and adhere to these requirements as detailed by the Customer Relationship Manager.

7. Condition Survey

7.1 The Supplier carries out condition surveys and any associated reinstatement works.

7.2 New and existing Structure/Gantry Interface

7.2.1 Where the Signs are to be installed on new structures/gantries, it shall be the Supplier's responsibility to ensure that the product fits and all the required approvals are in place prior to installation.

7.2.2 The scheme designer is responsible for providing all designs for gantry enclosure plates.

7.2.3 Where the Signs are to be installed on legacy structures/gantries the Supplier shall not be responsible for any modifications to the structure, but must collaborate with the scheme(s) to ensure efficient and correct installation on a first-time basis.

7.2.4 It shall be the Supplier's responsibility to ensure that the Customer Relationship Manager has been provided with all requirements for the mounting and installation of the relevant Signs in line with the agreed delivery plan.

7.2.5 The Supplier carries out Condition surveys and any associated reinstatement works. The Supplier shall be responsible for the repair of any damage caused by his works to Customer's infrastructure. This includes but is not limited to, cables, carriageway, drainage works and gantry structure.

8. Consideration of Others

8.1 The Supplier is to restrict work to avoid disturbance to the general public or occupiers to adjacent premises including Affected Property

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8.2 The Supplier is to adhere to any scheme requirements to restrict work to avoid disturbance to the general public or occupiers to adjacent premises including Affected Property

9. Cleanliness

9.1. The Supplier shall be responsible for identifying, and complying with, any Site-specific requirements for keeping work areas clean and tidy from the Customer Relationship Manager.

10. Waste Materials

10.1 The Supplier shall be responsible for the removal and disposal of any waste generated by their works. The Supplier shall ensure that all recyclable materials are recycled.

11. Deleterious and Hazardous Materials

11.1 The Supplier shall be responsible for identifying, and complying with, any Site-specific requirements or restrictions for the use of deleterious and hazardous materials.

12. Supplier's Design

12.1 The Supplier shall be responsible for the design, compatibility, correct integration and operation of all goods of their supply with associated infrastructure and equipment as well as with the National Highways control systems. This includes the design of any modification to existing structures, where this is necessary. The Supplier shall provide detailed requirements for any modifications necessary to these existing structures to allow the installation of the signs. The modifications and costs associated with these modifications will not be the responsibility of the Supplier.

12.2 The Supplier shall be responsible for the provision and installation of enclosure plates where required and as determined by task orders to suit designs. The costs associated with these modifications will not be the responsibility of the Supplier.

13. Customer's Requirements

13.1 The Supplier shall Design, Install, Commission and Warranty (as required) the roadside devices to be compliant with the Standards as noted in Annex 10.

13.2 All current versions of these documents are available on the OTSL (Operations Technology Specifications Library). It shall be the responsibility of the Supplier to ensure that they are working to the current issue of the relevant documents.

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13.3 Some of the referenced Standards have been produced prior to the change from the Highways Agency/Highways England to National Highways. As such any reference within the documents to the "Highways Agency/Highways England" should be read as National Highways.

13.4 The Supplier shall provide detailed requirements traceability documentation detailing how each of the requirements of the Standards listed is to be met by the roadside devices. This documentation will be kept updated during the life of the service to include all updates to the roadside devices, including but not limited to; any software updates, additional functionality or changes in components.

14. Quality Statement (*please refer to MCH1349*)

15. Quality Management System

15.1 The Supplier provides the Customer Relationship Manager, within the period stated in the Contract Data, with a quality plan for acceptance. The quality plan complies with the requirements stated in the Service Information.

15.2 The Supplier complies with an instruction from the Customer to the Supplier to correct a failure to comply with the quality plan.

15.3 The Supplier Provides the service under a quality management system which complies with ISO 9000 and ISO 9001 certification (included within MCHW0100 series).

- incorporates an environmental management system consistent with ISO 14001 and ISO 14000 family of Standards, or internationally recognised equivalent.
- has third party certification from an accreditation body approved by the applicable national member of the European Co-operation on Accreditation or is operating in preparation for accreditation within 12 months of the Contract Date; and
- includes processes for delivering continual improvement following the guidance in BS EN ISO 9004 or any equivalent standard which is generally recognised as having replaced it and
- complies with good industry practice.

15.4 The quality plan incorporates the proposals in the Quality Statement and is sufficiently detailed to demonstrate how the Supplier will achieve each of the commitments in the Quality Statement and meet the Customer's objectives for the contract.

15.5 The Customer notifies the Supplier if he considers that the quality plan does not comply with the requirements of this contract. Following such notification, the Supplier reviews the quality plan and reports to the Customer setting out their proposed changes. If the Customer accepts the proposals the quality plan is changed.

15.6 The Customer may carry out audits of the Supplier's quality management system from time to time. The Supplier allows access at any time within working hours to any place where they or any Sub Supplier carries out any work that relates to this contract for

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the Customer to carry out audits, to inspect work and materials and generally to investigate whether the Supplier is performing their obligations under this contract. The Supplier provides all facilities necessary to allow such audits and inspections to be carried out.

15.7 Following notification of a Defect, the Supplier submits to the Customer for acceptance the corrective and preventative action that are proposed to deal with the nonconformity. The Supplier does not take action to deal with the nonconformity until the Customer has accepted these proposals.

15.8 Within one week of the Supplier submitting the proposed corrective and preventative action for acceptance, the Customer either accepts the proposal or notifies the Supplier of reasons for not accepting it. A reason for not accepting the proposed action is that it does not take action required to ensure that nonconformities do not recur, or it does not comply with the Service Information.

15.9 If the Customer does not accept the proposed action, the Supplier submits a revised proposal to the Customer for acceptance within one week.

15.10 The Supplier corrects nonconformities and takes action to eliminate the causes of actual or potential nonconformities within a time which minimises the adverse effect on the Customer or Others and in any event before carrying out any operation the same or similar as that in respect of which the nonconformity occurred.

15.11 The Supplier notifies the Customer when the proposed actions have been taken and provides a notification verification that the defective part of the service has been corrected.

15.12 Except where otherwise directed; all materials, workmanship, designs and assessments are to comply with the Customer's Standards and procedures current at the Contract Date or, for Supplier designed elements, the time the relevant design certificate is signed.

15.13 If a standard or procedure subsequently changes, the Supplier complies with the revised standard or procedure if instructed to do so by the Customer Relationship Manager.

16. Customer Relationship Manager or Others to be Provided by the Supplier

16.1 The Supplier shall make available to the Customer Relationship Manager the full use of their vehicles, crew and other plant and labour as may be required by the Customer Relationship Manager to enable supervisory inspections to be made whilst work is in progress or immediately after completion of the contract.

17. Services and Other Things for the use of the Customer

17.1 The Customer will arrange for the Supplier to have access to a couple of desks within the main scheme compound facility. The Supplier will be required to comply with the required safety inductions prior to using the facility.

18. Health and Safety

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18.1 The Signs supplied, installed, commissioned, and warranted under this service are to be installed on or adjacent to live Motorways and trunk roads operated by Customer in accordance with the requirements of this Service Information. Not all Sites have vehicle hard-standing adjacent to the hard-shoulder. It is emphasised that the Supplier will be working in a hazardous environment. The Supplier should make themselves familiar with GG115 in DMRB Guidance for Works on the Hard Shoulder and Road Side Verges on high speed dual carriageways.

19. Health and Safety Requirement

19.1 The Supplier shall comply with DMRB Volume 0 Section 2 GG128, General principles and scheme governance, General Information, Requirements for reporting incidents, events and undesirable circumstances: health, safety, wellbeing, structural and environmental or its later update or replacement, including any time periods required. If no time period is specified the period of reply applies unless agreed otherwise by the Customer Relationship Manager.

19.2 If any incident occurs that the Supplier considers is not as specified in DMRB Volume 0 Section 2 GG128 then the Supplier:

- notifies the Customer Relationship Manager of the incident and
- reports the incident as specified in DMRB Volume 0 Section 2 GG128.

19.3 Any document that would otherwise fall to be disclosed by the Supplier to the Customer may be withheld by the Supplier provided the Supplier's legal advisor confirms to the Customer Relationship Manager that the document is:

- a confidential communication between the Supplier and its legal advisor for the purposes of seeking or giving legal advice that the legal advisors would normally expect to be given legal privilege in the normal course of its business with the Supplier or
- a confidential communication between the Supplier or its legal advisers and third party where the communication came into existence with the dominant purpose of being used in connection with contemplated, pending or actual litigation in adversarial proceedings (as opposed to investigations or fact finding enquiries).

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ANNEX 9

TESTING

Tests to be Achieved in order to Achieve the ATP Milestone

Test	Pre-conditions *	Test Success Criteria
<p>Security penetration testing by external CHECK certified body</p>	<p>Security penetration testing shall be undertaken at the Suppliers premises on all systems that will be connected to the NRTS network including all external interfaces.</p>	<p>The security penetration tests shall demonstrate compliance with the National Highways security requirements defined in Annex 11 of the Task Order.</p>
<p>Factory Acceptance Testing (FAT)</p>	<p>The Supplier shall undertake FAT tests at the Suppliers chosen test facilities prior to progression to HOTA testing.</p> <p>The FAT tests shall subject each system and device to a schedule of controlled and documented tests in accordance with the approved test specification and test procedures.</p>	<p>The FAT tests shall demonstrate the full functionality of the systems and devices utilising representative loading</p> <p>The FAT tests shall demonstrate all software, firmware and algorithms that are specific to the project.</p> <p>The FAT tests shall demonstrate compliance with all relevant clauses in the Technical and Works Specification.</p>
<p>Home Office Type Approval Testing</p>	<p>The Supplier shall undertake Home Office Type Approval Testing at the Home Office's chosen test facility</p> <p>The HOTA tests shall subject each system and device to a schedule of controlled tests to verify the integrity and performance of the system.</p>	<p>The HOTA tests shall demonstrate the full functionality of the enforcement portion of the system.</p>
<p>Production Acceptance Testing (PAT)</p>	<p>The Supplier shall production test each and every piece of equipment prior to its dispatch for use at the roadside.</p> <p>The Production Tests shall include a 'burn-in' test period that powers and exercises each device as if in</p>	<p>The production tests shall provide reasonable confirmation that the equipment is fully functional. Records of all production tests shall be kept and made available to the Customer upon request.</p> <p>Records of burn-in tests shall be kept and made</p>

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	operation for 100 hours.	available to the Customer upon request.
Site Acceptance Testing (SAT)	<p>The Contractor shall perform and record a SAT for each installation to confirm:</p> <ul style="list-style-type: none"> ● compliance with all system requirements; ● integration testing; ● system security and resilience; ● full functionality and correct end-to-end operation. 	<p>The Supplier shall plan the SAT testing in accordance with the operational requirements of the Strategic Road Network and shall submit the SAT testing plan to the Employer for approval no later than 3 months prior to the commencement of the SAT testing.</p>

Note: *The Pre-Conditions are that e.g. the Success Criteria for the previous Tests must be satisfied before the ATP Milestone tests are commenced.*

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ANNEX 10

STANDARDS

1. The following standards shall be added to the list which shall be "Standards" for the purposes of this Agreement:
 - 1.1. TR2653A Requirements for Interface to Discontinuous Variable Message Signs – NMCS2 over RS485
 - 1.2. TR2654A Requirements for Interface to Discontinuous Variable Message Signs – NMCS2 over IP
 - 1.3. TR2656A Requirements for Discontinuous Variable Message Signs – AMI
 - 1.4. TR2659A Requirements for Discontinuous Variable Message Signs – MS3 3x18
 - 1.5. TR2660A Requirements for Discontinuous Variable Message Signs – MS4
 - 1.6. TR2652A Requirements for Discontinuous Variable Message Signs
 - 1.7. TR2652B Requirements for Discontinuous Variable Message Signs
 - 1.8. ~~TR2657A Requirements for Discontinuous Variable Message Signs – MS 2x12~~
 - 1.9. TR2658A Requirements for Discontinuous Variable Message Signs – MS3 2x16
 - 1.10. TR2661A Requirements for Discontinuous Variable Message Signs – MS4R
 - 1.11. MCH 1349 Process for Commissioning and Handover of Roadside Operational Technology
 - 1.12. Design Manual for Roads & Bridges (DMRB) includes: GG128, GG155

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ANNEX 11

SECURITY

Part 1 APPICABLE SECURITY SCHEDULE

Schedule 4A (Assurance) applies.

Non-compliance with these requirements will be considered an out of tolerance risk by National Highways.

Part 2 ADDITIONAL SECURITY REQUIREMENTS

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ANNEX 12

RECORDS

2. Records to be kept by the Supplier

1.13. Pursuant to paragraph 3.1 of Schedule 12 (Reports and Records Provisions) of the Call-Off Terms, the additional records to be kept by the Supplier are:

1.1.1 The Supplier shall keep a daily record in duplicate on drawings of all work carried out as it proceeds. One copy shall be kept available for the use of the Customer Relationship Manager, during the Installation and shall upon completion of the Task Order be handed to the Customer Relationship Manager in electronic format for record purposes.

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ANNEX 15



Tender Queries
ORT0115 Signs and

Query Ref	Tenderer's Query	NH Response
1	We are struggling to provide a HOTA approved AMI sign in the timescales available. Does this therefore preclude us from bidding, given that our understanding that National Highways are looking to award to one supplier.	If you are unable to satisfy any of the requirements within the Confirmation section of the ITT, the response to it will be marked as FAIL and if you fail any of the PASS/FAIL questions, you will be excluded from the competition and your Tender Submission will not be evaluated. We will tell you that your tender has been excluded.
2	Can you please confirm, following Contract award when National Highways will issue the Task Order detailing their equipment requirements (including quantity of each variant etc).	National Highways will issue detailed Task Order within 2 weeks from the Call-Off effective date.
3	Can you please confirm whether it Is National Highways intention to issue a single Task Order for the equipment followed by subsequent Task Orders for Installation.	Yes, that is correct.
4	Within "OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0" the following is stated, For the purposes of clause 6.5.5 (Goods), there are specified warranty requirements. The following shall be required: Compliance with TR1100. Can you please confirm where the reference "Clause 6.5.5" can be found?	Please refer to Framework Schedule 13 (Call-Off Terms) Clause 6.5.5

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5	<p>4. Within "OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0" the following is stated,</p> <p>4.1 For the purposes of clause 6.5.5 (Goods), there are specified warranty requirements. The following shall be required: Compliance with TR1100. TR1100 states the following,</p> <p>The Supplier and Sponsor shall agree the minimum warranty period, and the warranty coverage. That is, Back-to-Base, depot, or site, and level of repair: component, module, or product. This shall be defined in the 'Technical File' and support documentation. As a minimum This shall cover:</p> <p>a) The length of warranty: The length of warranty shall meet the requirement that 'at least' 2/3rds of the total population survives 'fault-free'. For example, an MTBF of 15-years would equate to a warranty period of 7-years.</p> <p>b) The warranty period starts: This is normally the point-of-delivery. Either: installation at the roadside, or into the NTLC stores.</p> <p>c) The scope of warranty:</p> <p>c)1. Parts; and</p> <p>c)2. Labour.</p> <p>d) Back-to-base turnaround times.</p> <p>e) What constitutes a 'warranty repair' and or 'replacement'.</p> <p>Therefore can you please confirm what level of warranty should be included/ within the pricing."</p>	<p>Warranty period should cover 7 years. Commercial Workbook has been amended to reflect this change and 5 years and 10 years options have been removed. Please refer to version 2.0 of the Commercial Workbook.</p>
6	<p>Within 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0', there are references to both Installation Support and Installation Services. Please can you confirm what the difference between Installation Support and Installation Services are? Can you also please confirm if both requirements are covered by the installation tab on the Commercial Workbook?</p>	<p>These are the same activities</p>
7	<p>Can you please confirm if the Customer Relationship Manager will be a direct employee of National Highways?</p>	<p>We are not in the position to confirm this at this moment of time. If it happens that contractor is employed for the CRM role, they will be obliged to sign an NDA.</p>
8	<p>To ensure best Value for National Highways, Can National Highways please consider setting minimum order quantities for each piece of equipment? Currently quantities are only indicative. Minimum order quantities will give tenderers a baseline to offset one-off manufacturing and overhead costs etc. against. This will assist in a reduction in unit costs.</p>	<p>The minimum order quantities will be 2/3 of the quantities included within Table 1 'The Plan' page 11 of Draft Task Order.</p>
9	<p>Is there a possibility that National Highways will order in excess of the quantities stated in The Plan?</p>	<p>Any increase to the quantities included within Table 1 'The Plan' page 11 of the Draft Task Order will be in line with changes allowed by</p>

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		the Procurement Contract Regulations PCR2015.
10	Within Table 1 plan included in "The Plan" The Message sign Controller Version 3 is stated as being compliant with TR2653A and TR2654A. However within the commercial workbook TR2607 is stated, can you please confirm which is correct?	All 3 are correct and relevant to the Message sign Controller Version 3 but for consistency, the description has now been amended within the Commercial Workbook version 2.0 to align with description within Table 1 'The Plan'.
11	Within Table 1 included in "The Plan", the delivery date to site is stated as the 31/03/2024. However Clause 3.1.2 states that it expected that the supplier will deliver before these dates. This would appear to suggest that all equipment is required by the the 31/03/2024. However Clause 3.1.5 states that deliveries begin in March 2024. Can you please confirm the quantity of equipment required by the 31/03/2024?	All equipment is not required by 31st March 24. This is the earliest date that National Highways would like to start receiving deliveries. The exact quantities will be confirmed by the separate Works Task Order, which you will receive within 2 weeks from the call- off commencement date. However, you should work with the quantities provided within the tender pack.
12	Clause 3.3.1 states that ESCROW is required for the duration of the Service. Can you please confirm what the duration of the Service, National Highways are referring to?. (Service Period, end of warranty period etc.?)	The ESCROW is required till the end of the warranty period.
13	Can you please confirm if the cost of the ESCROW agreement is to be the responsibility of the Supplier or National Highways. If this is the Supplier can National Highways please confirm where the cost for the ESCROW agreement is to be included?	National Highways will cover the cost
14	Clause 4.1.3 of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0' regularly refers to TR2607, can you please confirm if this is correct?	Yes, TR2607 is relevant to all VMS and signals
15	Can you please provide the template specified in clause 4.4.5 of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0'?	The clause 4.4.5 has been removed. National Highways will be happy to use supplier's template as long as it confirms with the clause 4.4 of the Task Order.
16	Can you please clarify clause 4.7.7 of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0' as the wording does not appear to be complete and therefore doesn't make sense	The Clause 4.7.7 has been updated. Please refer to version 2.0 of the Task Order.
17	For the avoidance of doubt, can you confirm that clause 4.8.1 of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0' will only be required by the supplier if a Task order covering installation is received?	NH confirms the statement
18	Can you please confirm where the cost for "Commissioning" stated in clause 4.8.2 and 4.8.9 of	Clauses 4.8.2 and 4.8.9 have been amended and reference to 'commissioning' has been removed.

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	'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0' shall be inputted?	
19	Can you please confirm the approval timeframes for SES to review and approve "Structural Design Statements" noted within clause 4.8.3 of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0'?	<p>SES structures group has a general service level commitment to aim to review technical submissions relating to CG300 within 42 days of receiving them. Approval timescales will depend on the quality of the submitted documents and whether they then require follow-up resubmission and additional review.</p> <p>A Structural Design Statement will likely cover equipment that will be installed in a multitude of locations (potentially anywhere on the network) so might require additional consideration to other CG300 structural approvals which are typically for a single structure at a single location. This may affect review and approval timescales.</p>
20	Can you please confirm what additional approval process is to be used by the Schemes noted in clause 4.8.4 of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0'?	Please refer to TR1100
21	In regards to clause 4.8.8 of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0', can you please confirm the requirements of the supplier in relation to the HADECS3 type approval? Historically it is for the supplier to supply and control their equipment during HADECS3 testing, however all costs associated with the venue, 3rd party contractors etc is the responsibility of National Highways.	The clause 4.8.8 has been amended to read that supplier to supply and control their equipment during HADECS3 testing, however all costs associated with the venue, 3rd party contractors etc is the responsibility of National Highways.
22	Can you please confirm the approval process in relation to clause 4.8.10 of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0'?	Please refer to TR1100
23	Can National Highways please re-consider clause 5.2.1 of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0'? Given the nature of the installation works is on a nationwide basis and includes significant planning and logistics, there will have been significant cost incurred by the supplier of cancelling works at only 24 hours notice and may be for reasons outside of the suppliers control. Therefore please can National Highways consider amending to a 72 hour notice period?	Clause 5.2.1 has been amended to 72 hours. Please refer to version 2.0 of the Task Order
24	As noted in clause 12.1. of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0'; the design of any modifications to the existing structure is the responsibility of the supplier, however the costs associated with these modifications are not.	Yes, this is correct.

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	Therefore will any modifications design requirements be deemed as a Compensation Event?	
25	In relation to clause 12.2 of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0', can you please confirm that any closure plate provision/installation requirements will be carried out via a Compensation Event?	Yes, this is correct.
26	"Annex 5 of 'OT-Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) v1.0', states the following, "Supplier to provide a detailed programme of works within 21 days of call-off effective date which aligns with 'The Plan' included in Table 1 in Annex 2." However in Question 4, Standards in the Invitation to Tender it states that Task Orders will be raised up to ""Call-Off effective date plus 1 month"". In order for the supplier to provide a detailed programme of works the requirements of the Task Order must be known. Currently there may be the situation where the 21 days falls before receiving the Task Order. Can you please advise?	This has been amended in version 2.0 of the Task Order to read that supplier is to provide detailed programme of works within 2 weeks from the Task Order receipt.
27	The title page of the Invitation to Tender refers to "repair" can you please confirm where further details of the repair element of the contract can be found?	Please refer to Clause 4.4 and 7.2.5
28	We note that electronic component procurement, required to manufacture the internal hardware of the equipment to be supplied for this tender, will require engagement with our supply chain across Europe and the globe. However, many of these companies are currently on their summer shutdowns. Therefore, please can we request a 2 week extension to the tender return deadline. This will ensure that National Highways are receiving best value in terms of pricing.	National Highways understand difficulties in obtaining information during the holiday period but taking into consideration the timescales and the fact that all the equipment will have to be installed and commissioned by 31/03/2025, the extension of 1 week has been added to the timeline within the ITT document.
29	Within Table 1 plan included in "The Plan" The Message sign Controller Version 3 is stated as being compliant with TR2653A and TR2654A. It is our understanding that National Highways do not have an intention of Version 3 equipment being controlled/connected to NMCS2 over RS485 (other than a direct connection to an MS1. there is no MS1 included within this Tender) Therefore can you please confirm that the Message Sign Controller Version 3 is not required to be compliant with TR2653	This is correct the Message Sign Controller Version 3 is not required to be compliant with TR2653.
30	Within the commercial workbook Instruction 1. states that the charge is to include delivery to site, however instruction 3. States the cost of the sign must include	The cost of the sign must include one delivery to site or to NTLC. Delivery from NTLC to site for installation is not to be covered by the supplier. This is now

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	<p>delivery to the NTLC, can you please confirm which is correct?</p>	<p>amended within Commercial Workbook version 2.0.</p>
31	<p>Within the commercial workbook (Sign Charges tab) instruction 2. states the following,</p> <p>The total sign charge will be included in the financial assessment. If additional infrastructure is required for implementation of your solution, including any cabling or connectivity, this must be included in the cost of the sign.</p> <p>For the avoidance of doubt can you please confirm this is only if the suppliers equipment has connections, mounting arrangements etc. outside of the National Highways specifications?</p>	<p>This is correct and only if deviating from NH specification.</p>
32	<p>Within the commercial workbook (Installation Tab) instruction 7. states that the "Suppliers must price for returning two signs per night"</p> <p>However Instruction 8 states that "Removal and return to NTLC should be calculated at normal working hours rate"</p> <p>Can you please confirm which instruction is correct?</p>	<p>Instruction 8 "Removal and return to NTLC should be calculated at normal working hours rate" was removed. Please refer to version 3.0 of the Commercial Workbook.</p>
33	<p>Within the commercial workbook (Installation Tab)</p> <p>Can you please confirm what the relevance of "Existing Sign Removal & Return to NTLC" (Y/N) has on the overall calculation/assessment?</p>	<p>This was designed for the internal use only, but it has now been removed. Please refer to version 2.0 of the Commercial Workbook.</p>
34	<p>Within the commercial workbook (Installation Tab)</p> <p>Instruction 7 states suppliers are to price for returning two signs per night. However the total charge for "Existing Sign Removal & Return to NTLC calculates on a per unit basis, essentially one per shift.</p> <p>Can you please advise?</p>	<p>The calculations within Installation tab were amended. Please refer to version 3.0 of the Commercial Workbook.</p>
35	<p>Within the commercial workbook (Warranty Tab)</p> <p>Can you please confirm what is meant by "supporting infrastructure"?</p>	<p>Ancillaries, mounting arrangements, cabling, any hardware associated with installation and operation of the sign.</p>
36	<p>Within the commercial workbook (Warranty Tab)</p> <p>In regards to Instruction 3, can you please confirm if it your intention to modify the warranty arrangement during a warranty period, essentially extending a warranty?</p>	<p>No, the warranty period is 7 years. Please refer to Warranty worksheet in version 2.0 of the Commercial Workbook.</p>

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37	Within the commercial workbook, Please can you confirm the difference between Spares and Ancillary items?	Spares are for repair and maintenance while ancillary items are accessories such as mounting brackets, modifications, closure plates etc.
38	Please provide a copy of the referenced IAN162 document which appears to define the setup of flashers for power consumption figures.	Please refer to www.standardsforhighways.co.uk for more details.
39	4.1.2 is just a Heading - is there some missing text?	Please refer to TR2654 for more details.
40	To enable full governance of this multi-million pound tender issued during the planned summer holiday season, we request a 2 week extension to the return date which will not materially impact on Award and Plan dates.	NH understands difficulties in obtaining information during the holiday period but taking into consideration the timescales and the fact that all the equipment will have to be installed and commissioned by 31/03/2025, the extension of 1 week will be added.
41	Note 6 for Spares states "As detailed in the Task Order", please confirm that that all Task Orders for signs require a spares provision as part of the sign supply and that the Spares worksheet is for additional spares over and above those provided with the signs	The Spares worksheet is for suppliers to list and itemise the spares associated with each sign type. Each spare component can then be priced and the number of spares associated with the sign given and broken down.
42	We note that the Assessment total uses the full quantity values for both Standard and Non-Standard pricing which has the effect of double counting. Is this intended?	Yes, this is for total price comparison purposes only.
43	We note in the Summary Table that the Installation unit charge is picking up the Total quantity value from the Installation worksheet.	Yes, this is correct.
44	Instructions-1 states rate to include storage until delivery to site – Clause 4.7.5 in Annex 2 Task Order states 2 months are to be assumed; please clarify what is to be priced	Please provide pricing for 2 months of storage.
45	What quantity of signs should be assumed to calculate the Spares provision which we note are only to be ordered in addition to the spares provided with each sign supplied	The quantity that is listed in the Commercial Workbook.
46	Please clarify what this worksheet is to be used for as it is structured the same as the Spares worksheet, or confirm what Ancillary items are required to be included	The Ancillary worksheet is for suppliers to list and itemise the ancillary items associated with each sign type. Each ancillary item can then be priced and the number of ancillary items associated with the sign given and broken down.
47	Please clarify what is to be selected from the drop down in Cell E9	Please refer to version 2.0 of the Commercial Workbook. This has now been modified.

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48	MS(2x12) and MS(2x16) Energy Calculation tabs in the Commercial Work Book are incorrectly titled on the sheets as "MS3 (3x18) Energy Cost Calculation",	This has now been amended in version 2.0 of the Commercial Workbook
49	Can you please confirm that the existing sign removal will be programmed to be in the same shift as the new sign installation as this has a significant affect on the costs.	Yes, this is correct.
50	The commercial workbook has a section for remote site installation, can you please confirm given the nature of these works whether this will be required. If yes can you please confirm locations in order that we can properly cost for mobilisation	This will not be required. The section relating to remote site installation has been removed from the Commercial Workbook. Please refer to version 2.0.
51	The commercial workbook requests pricing for either 1 AMI per session or 2 AMIs per session, can you please confirm that the works will be programmed to only allow such small quantities; or amend to allow pricing for 3 and 4 per shift.	A 'session' is installing up to 2 AMIs
52	Given the subjectivity of the scoring of the quality question and the potential for different personnel having slight differing of opinions, is the 3 point difference between a good and excellent answer safe as the answers may be much closer than this in reality with the scorer not having the option to close the gap.	The Scoring Matrix included within the ITT document is an integral part of the OTCF and is used on all OTCF call - offs, therefore to remain consistent with scoring across all tenders, we are following the same way of scoring.
53	Can you please confirm what the Supplier's role is under CDM Regulations	Could you please confirm which section of the ITT do you refer to?
54	Please confirm the intention behind "Installation support" and "Installation Services" and whether Installation could be deemed to be an optional activity within this Contract.	Correct: NH 23.08.2023 After further consideration, as much as NH would like suppliers to provide installation services for all the signs and signals, on some occasions, NH may also require flexibility and be able to put some of the signs into the storage to install at a later date. This will be discussed and agreed with supplier in advance. Incorrect: NH 14.08.23: Installation is a mandatory part of the contract and it can not be deemed as optional activity. Please consider "Installation support" and "Installation Services" to be the same activities.
54	<i>This duplicate was removed, please refer to query 54 below</i> Please confirm the intention behind "Installation support" and "Installation Services" and whether Installation could be deemed to be an optional activity within this Contract.	<i>This duplicate was removed, please refer to query 54 below</i> Installation is a mandatory part of the contract and it can not be deemed as optional activity. Please consider "Installation

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		<i>support" and "Installation Services" to be the same activities.</i>
55	The table identifying The Plan identifies a delivery date of 31.03.2024, can you please confirm this is an error and the delivery date will be subject to an agreed programme to coincide with the installation dates of the signs.	Delivery date is subject to agreed programme, however to ensure that all signs and signals are installed by the deadline of 31.03.2025, deliveries of signs will have to start the latest on 31.03.2024.
56	To assist with efficiency of managing timescales and to reduce costs, can you please confirm that as all signs are built structurally identically, that the structural design statement will only need to be submitted in a generic format once for each sign type to be delivered under this entire tendered requirement.	One SDS is required for each product unless modified to a point where it is structurally different or it has gone through departure from standards.
57	As the supplier is responsible for surveying every site prior to installation to approve the suitability of the infrastructure and as we will have to install the signs at these locations, can you please provide all "scheme" locations in order that we can calculate the costs of the surveys and sign deliveries.	Please refer to the new document ' List of Schemes' which was issued via CCFT on 15.08.2023
58	Due to the logistics of mobilising for this type of works, 24 hours is insufficient notice as prior to this period our plant and labour will be committed to these works and it will not be adequate enough time to redeploy them to other chargeable works. Therefore, we request that this time is extended to 72 hours.	Clause 5.2.1 has been amended to 72 hours. Please refer to version 2.0 of the Task Order
59	The signs all have standard mounting arrangements as defined in the relevant specifications and the infrastructure and ancillary equipment is also standard, therefore please confirm that it is the Designer's responsibility to ensure that their designs are correct	That is correct, however some sites may have different mounting arrangements and will need redesigning as per CE.
60	Please confirm that this should be the responsibility of the Principal Contractor as the safety and necessary Standards would need to be checked against the structural requirement as the sign supplier will not be qualified to carry out and report on.	The supplier will have to submit structural design statements to SES
61	a) Can you please confirm the number of and locations where enclosure plates will be required in order that we can factor in the cost of installation and effect on resource required at these locations. b) As we are down for the provision (supply) of closure plates but not the responsibility for the costs, can you please confirm how we reclaim the cost of the supply and how many locations we need to provision for.	a) National Highways do not have this information b) National Highways do not have this information. Closure plates will be required on individual basis

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62	PAC acceptance requires a significant level of resource and time of both the supplier and National Highways and their technical advisors, can you please confirm that National Highways will have the necessary resource available to meet the timescales referenced in the question.	Yes, National Highways will have resource for this
63	In order that we can accurately and efficiently provide costs for the installation works, can you please confirm the details of all locations/schemes and provide the number and type of sign at each location.	National Highways is unable to provide this information at this moment of time.
64	a) Can you please confirm the signs types and quantities that will be required delivered to NTLC and those to a satellite depot as the cost may be different dependant upon location. b) There is nowhere in the Commercial Workbook to input a delivery price for when we are to deliver to a location for others to install or for us to install at a later date; how do we present these rates?	a) National Highways do not have this information b) One delivery charge (either to a satellite depot or to NTLC) should be included within the cost of the sign.
65	The table identifying The Plan states 'Delivery Date to Site'. Please confirm where the equipment described in The Plan is to be delivered to.	The equipment is to be delivered either NTLC or to agreed location as per the installation Task Order.
66	The table identifying The Plan in clause 3.1 states 'Delivery Date to Site' with all entries dated 31.03.2024. Clause 3.1.5 states 'The signs supplied are to satisfy the requirements of the schemes with deliveries beginning in March 2024'. If deliveries of the signage are to start in March 2024, please could you clarify when deliveries to site are to be completed?	This information will be provided as per installation task order as and when required. However, all the signs will have to be installed by 31.03.2025.
67	Please confirm that KPI 6 should refer to Factory Acceptance Test (FAT) rather than Site Acceptance Test (SAT).	We had checked this and can confirm that KPI6 should refer to SAT as stated within the Task Order document.
68	The revised commercial workbook received has errors on the installation tab. The formula in column E from 'MEWP' to 'ECP Configuration' is picking up the incorrect reference cell. Also, the number format in column D is set as currency rather than a number.	The error was corrected in version 3.1 of the Commercial Workbook
69	Can you please confirm, as it is out of our control, that cancellations due to adverse weather rendering the works unsafe to complete will be treated as a compensation event in accordance with Clause 5.2.1 of the Framework Schedule.	This is correct and cancellation due to adverse weather will be treated as a compensation event.
70	Please confirm our understanding that the Ancillary sheet is for us, the Supplier, to identify any Sign specific items (Brackets and closure plates) to aid with the installation of the sign and that single items only are required as the quantity is very much site dependent.	This is correct. For further details please refer to queries: 36 and 47.

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71	<p>Tender query 6 and 54 The answer to TQ6 states that both installation support and installation services are the same and TQ54 that installation is mandatory; however the Framework Schedule clearly states that installation support is part of the Service and installation services are optional –</p> <p>2.2 The Customer requires the Supplier to provide Signs on a Supply, Installation support, Commissioning and Warranty basis. The Customer may also require Installation Services directly managed by the Supplier. On which basis the service provided will be determined in conjunction with each scheme.</p> <p>4.7.3 Should installation be required the Supplier will install at the cost supplied in the Commercial Workbook. Loading/unloading at the Supplier's premises will be undertaken at no cost to the Customer.</p> <p>Could you please confirm the position regarding installation and whether it is mandatory that we offer a complete installation service (including commissioning) but that National Highways may choose others to install and commission the signs, noting there isn't a rate for commissioning only.</p>	<p>Response to Query 54 was amended, please refer to the amended response. Please note that it is mandatory for each Tenderer to provide pricing for installation within the Commercial Workbook. As part of the contract, successful Tenderer will be required to provide installation services however, on very rare occasions, National Highways may require that supplier delivers only signs/signals. The main reason for that is to ensure that the entire project is delivered within the required timescales.</p>
72	<p>Tender query 38: IAN162 is Withdrawn (archived) in www.standardsforhighways.co.uk, can you please confirm whether it applies to this tender/service.</p>	<p>IAN162 was the "Highways Agency policy for the use of Variable Signs and Signals (VSS)" so the latest version has been shared with you via CCFT.</p>
73	<p>We have been informed by National Highways on multiple occasions that there would be no further procurement of MS2x12 and that the MS4R would replace it going forward, can you please confirm that the MS2x12 requirement is correct or whether it should be MS4R.</p>	<p>Please note that MS2 2x12 and MS3 2x16 were removed from the Commercial Workbook. MS4Rs will be purchased via a separate procurement at a later date. Please refer to version 4.0 of Commercial Workbook</p>
74	<p>Warranty and Spares points to MCH1349. As MCH1349 does not reference warranty please confirm that DTO Annex 1 Clause 4 on Warranty applies and that as detailed in TR1100 "point-of-delivery" is in accordance with DTO Annex 2 Clause 4.7.2 as either NTLC or a satellite depot.</p>	<p>Please refer to Clause 3.2 Warranty and Spares which has been expanded on.</p>
75	<p>Please confirm that Draft Task Order Annex 2 Clause 1 Definition for Commission Date is SAT1 in compliance with MCH1349.</p>	<p>This is correct.</p>
76	<p>We note several references to Traffic Management and potential restrictions; please confirm that pricing for Installation of all sign types is to exclude Traffic Management as the responsibility for providing TM is outside of the remit of the Supplier.</p>	<p>This is correct.</p>

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77	Please confirm that the requirements of this clause are time bound by the length of the warranty period.	This is correct.
78	We understand that, as described, this activity is currently undertaken by the Regional Maintenance Contractors with their technical support teams using National Highways' provided access to RMAS and ServiceNow. We suggest therefore that this clause should be removed from the Task Order, or please provide a clearer definition of the requirement above that which is currently provided by the RMCs.	This clause will be discussed with National Highways on contract commencement date.
79	Following National Highways amended response to Tender Query 54 that states that installation shall be deemed an optional activity. Can you please clarify how National Highways are going to evaluate the commercial workbook given that the Installation tab feeds into the overall summary tab which is used for the assessment?	All Tenderers must provide costings for installation and complete all the yellow cells within the Commercial Workbook. National Highways requires provision of signs/signals as well as installation services. However, on some very rare occasions, National Highways may need signs/signals to be delivered into storage. If this option is required, it will be discussed and agreed with the winning Tenderer with sufficient notice.
80	Design - The Task Order has elements of design (see 4.8.3, 4.8.8, 7.2.2, 12.1, 13.1 and 15.12 of OT - Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS)). Please confirm that the call off terms do not imply any fitness for purpose obligations. We are not insured for "fitness for purpose" terms and require the design standard to be expressly subject to us exercising reasonable skill and care.	National Highways does not require the supplier to provide a fitness for purpose warranty. The required standard is reasonable skill and care.
81	Fitness for Purpose - To ensure there is no "fitness for purpose" provision please insert as Annex 2 Part A paragraph 20 the following, based on NEC4 X15.1 entitled "Design Standard": The Contractor is not liable for a defect which arose from its design unless it failed to carry out that design using the skill and care normally used by professionals. designing similar works to this Call-Off. Notwithstanding anything stated to the contrary within this Call-Off or the Framework Agreement, the Contractor is under no obligation that any design carried out under this Call-Off is fit for purpose.	As set out in the previous answer there is no fitness for purpose requirement contained in the tender. Accordingly, there is no need to add the proposed wording into Annex 2 of the Task Order.
82	Planning Permissions or Approvals – Under clause Z48 of the Framework we provide the service in compliance with all permissions, consents and approvals. Please confirm that there are no consents, approvals or permissions required for us to carry out the service.	We are unable to identify clause Z48 within the Framework terms or Call-off terms. Could you please review your question and resend with the correct clause number?
83	Inflation - During this high inflationary period we would request an inflation adjustment clause akin to clause X1 NEC4 permitting monthly price	National Highways will not be including price indexation as part of this contract.

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	adjustments. This would allow for us to remove risk from pricing during this tender.	
84	Defect Correction Period – Please confirm the duration of the defect correction period under this Call Off.	The defect correction period will be agreed with the National Highways on the case by case basis.
85	Parent Company Guarantee - Please confirm a PCG as set out in square brackets in Annex 14 of OT - Framework Schedule 5 (Task Order) Signs and Signals (AMI and VMS) is not required.	This information will be provided as soon as financial verification is completed on the winning tenderer.
86	Historically National Highways have requested and used MTBF calculations/data to assess the quality and reliability of the suppliers equipment. Quality questions were weighted in a way that the most reliable equipment was therefore awarded the highest scoring. As MTBF calculations have not been requested as part of this tender can National Highways please confirm that reliability and overall quality of the equipment is no longer foremost in the assessment process? In absence of this information can National Highways please confirm how the quality of the products is to be assessed at tender in a clear and transparent way?	The quality of a tenderer’s proposed solution will be assessed by evaluating the responses given to the quality questions, as explained in the Invitation to Tender document. The products offered must be compliant with the standards listed in Annex 10 and Annex 2 of the Task Order.
87	Following National Highways response to Query 73 regarding future procurement of MS2x12 and the subsequent potential change to the use of the MS4R, it appears that National Highways have provided a supplier involved in this tender with information that has not been shared with other message sign suppliers and therefore potentially gives them a competitive advantage, not only in this tender but for future procurement through this framework. Can National Highways please provide details of the information/discussions that have been shared with the supplier(s) which advises them of this change in message sign procurement strategy as well as any other information that could be used to potentially gain a competitive advantage?	It was an oversight on National Highways to include MS2x12 in the original tender pack as this product is obsolete. No information related to this tender has been selectively shared with certain Tenderers and not others.
88	Other than warranty duration (7 years), no details of the level of warranty required has been issued. Warranty levels/agreements are not determined within TR1100. Without this clarification can you please confirm how National Highways are going to evaluate the warranty elements of the tender submission, including prices in a clear and transparent way?	Please refer to Clause 3.2 Warranty and Spares which has been expanded on.

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89	<p>Following National Highways amended response to Tender Query 54 that states that installation shall be deemed an optional activity. Can National Highways please confirm that all suppliers must include prices for installation. Therefore it is optional for National Highways to call off installation services and not optional for the successful tenderer to choose to carry out installation services/support?</p>	<p>This is correct, all tenderers must include prices for installation services within the Commercial Workbook. It is also correct that National Highways may require, in a very rare circumstances, flexibility on having signs installed by another installer.</p>
90	<p>Following the tender amendment issued yesterday (31/8/2023), we note the large increase in the number of signs to be procured through this tender exercise (from a combined 296 signs and 300 RSCs to 445 signs and 450 RSCs). This volume increase of around 50% without any modification to the delivery schedule will have a large impact on our resource planning, production and deployment approach. In order for us to appropriately engage with our supply chain and provide an achievable project delivery programme, and competitive commercial offer, we request a 2-week extension to the tender deadline.</p>	<p>For the purpose of response to the quality questions, as well as for resource planning, production and deployment approach, please work with original volumes included in version 4.0 of the Commercial Workbook or 2/3 of the new volumes. However, please quote for the increased volumes by completing Version 5.0 of the Commercial Workbook, bearing in mind that the minimum order quantity is 2/3rds of the new volumes.</p> <p>For your information, the quantities were increased to provide National Highways with contingency.</p> <p>We are unable to grant more time to this tender at this stage.</p>
91	<p>It doesn't appear that 4. Annex 2, Clause 3.1 Table 1 – has had the change in quantities applied.</p>	<p>The changes which re included in the version 3.0 of the Task Order document are as follow:</p> <ol style="list-style-type: none"> 1. AMI-0700-1-000 - Version 3 - Advanced Motorway Indicator [AMI] TR2656 (Task Order Version 2.2: 116, Task Order Version 3.0: 242) 2. Version 3 - Message Sign Mk3 [MS3x18] [TR2659] TR2658A (Task Order Version 2.2: 19, Task Order Version 3.0: 29) 3. MS4-0700-1-000 - Version 3 - Motorway Signal Mk4 [MS4] TR2660A (Task Order Version 2.2: 116, Task Order Version 3.0: 174) 4. SIGNAL-0700-1-000 - Message Sign Controller Version 3 TR 2653A & TR2654A (Task Order Version 2.2: 300, Task Order Version 3.0: 450)

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92	Please can National Highways clarify that in their response to query reference 8, where it is stated that the minimum order will be 2/3 of the quantities included in table 1, it means that each line item will be guaranteed 2/3 of that quantity i.e. 116 of 174 MS4s and not 2/3 of the total 895 items of equipment listed? Please can you confirm our understanding on the proposed minimum quantities is correct as this will help ensure best value can be delivered across each item of equipment	This is correct, the minimum order quantity is per line so for MS4s 2/3 will be 116.
93	Further to the 50% increase to the volume of equipment required, please can National Highways confirm whether if it will be extending the date when installation will be completed by from the 31.03.2025 date currently stated in the plan.	Delivery date will not be extended, therefore please refer to response to query 90.

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