

NATIONAL HIGHWAY SECTOR SCHEMES FOR QUALITY MANAGEMENT IN HIGHWAY WORKS

SCHEME 8

Particular Requirements for the Application of ISO 9001:2015

for

The Overseeing and / or Installation and / or Maintenance of Highway Electrical equipment and supporting works

Published by the Sector Scheme Advisory Committee for NHSS 8

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Publishing information

This document is published by Lantra on behalf of the National Highway Sector Scheme Committee for NHSS8.

This document supersedes NHSS 8 Issue 1 dated April 2020 which is withdrawn.

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DOCUMENT CONTROL

Issue Statement

Current Issue	Amendments
Issue 2	Formatting changes and removal of NHSS0 specific guidance throughout
[9001:2015]	Minor text changes to rationalise spelling of organization throughout
Oct 2022	Updates to organisation names in abbreviations
	Highways England replaced with National Highways throughout
	DRDNI replaced with Department for Infrastructure (Roads)
	CBQ-NVQ replaced with NVQ throughout
	Introduction text changes
	Terms, Definitions & Abbreviations - Approved Person / Approved Person Manager definition changed
	Clauses 7.1.2 (ii) 3a and 7.1.2 (iv) text changed for clarity
	Appendix B item 9 title corrected
	Appendix C - Inclusion of Occupations and Competency Matrix together with
	preceding explanatory text as Clause 1.1 and subsequent notes from the HERS
	Handbook. Competency and Occupations Matrix - Mandatory requirement to undertake Traffic & Pedestrian Control Principles and Traffic Controller
	Fundamental Principles for Approved Persons in the Traffic Signal specialist
	sector deleted. Found 07 added to Approved Persons under revised Note 6; Note
	7 now not used. Deletion of mandatory elements Inst03, Rep02, COM05,
	VMS03, ME04, ME05, CAM03, CAM06 for Highways Electrician / Service
	Operative
	Appendices J1 to J3 replaced with new Appendix J (as per NHSSLC
	requirement) and text in Introduction clause 12 amended accordingly
	Appendix N – NHSS 9B text amended as now published
	Appendix O – retitled and reworded to reflect UKAS CertCheck and Lantra
	Schedule of Suppliers changes (as per NHSSLC requirement). Text changed
	accordingly in Introduction clause 11 (deleted), 4.4.2, App C1 1.2, App G 4.3,
	App G 6 (deleted), App G 7 (now 6) (d), App G1 2B 4.4, App H 2.3 (deleted), App
	L 2.8 (deleted), App L Checklist first item
	Appendix Z – update and inclusion of historical information

Previous issues of SSDs are shown in Appendix Z

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Composition of the Sector Scheme Advisory Committee, Exclusion of Liability, Copyright and Selection of Certification Body

Composition of Sector Scheme Advisory Committee

a) Member Organisations

ADEPT - Association of Directors of Environment, Economy, Planning and Transport

APSE - Association of Public Service Excellence

ARTSM - The Association for Road Traffic Safety and Management

CECA – Civil Engineering Contractors Association

Certification Bodies - See Appendix F

DfT - Department for Transport

HEA - Highway Electrical Association

IHE - Institute of Highway Engineers

ILP - Institution of Lighting Professionals

Lantra Awards

National Highway Sector Scheme Certification Body Group

National Highways

TSG - Traffic Systems Group

b) Corresponding Member Organisations

Department for Infrastructure (Roads) HCTA – Highways and Construction Training Association SCOTS

Transport Scotland

TAG - Technical Advisory Group

UKAS - United Kingdom Accreditation Service

UKCG - UK Contractors Group

Welsh Assembly Government

Exclusion of Liability

The Sector Scheme Advisory Committee for this SSD

- has and accepts no liability whatsoever for any failure of any system or systems assessed under this Sector Scheme Document or for the quality, fitness for purpose, or safety of any product or service which is the subject of such assessment,
- does not provide any representation or warranty as to any aspect of any such system, product or service, and
- hereby expressly excludes all and any liability or responsibility (however alleged to arise) for or in connection with the provision of any service or product or any use of any product, all and any such liability or responsibility attaching exclusively to the producer (or user as the case may be) thereof.

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Selection of Certification Body

It is important to note that due to the specific requirements for assessor competence required by this Sector Scheme a technical expert may be appointed by the NAB following advice from the Sector Scheme Advisory Committee to assist the NAB in the assessment of Certification Bodies (CB) as described in Appendix G.

Prospective companies seeking registration under this scheme should ensure that they engage a Certification Body accredited by the NAB to assess against the requirements of this SSD.

Specifiers, consultants, engineers etc. that require confirmation of compliance with the Contract Specification in respect of the supply of products/materials should confirm the current status of the quality management system certificate issuer and that specific reference is made to this Sector Scheme on the Certificate of Registration (See Appendix K).(also see Appendix L – Guidance to Clients)

Implementation

This issue of the SSD is to be implemented immediately from the date of publication on the Schedule of Suppliers website for assessments unless specified otherwise below. Existing assessments will continue to be valid until the following assessment carried out by the accredited Certification Body.

Note 1: Following publication of the document the organization should implement the changes in time for their next assessment visit by the Certification Body.

Note 2: The Certification Body should assess the organization against the latest edition of the existing scheme within fourteen months of date of implementation.

Note 3: The NHSS document is date specific; however, the organization shall have procedures in place to ensure that the latest version is always available. Organizations should be aware that utilization of internet search engines may result in out of date references being identified/called up.

Introduction

- This Sector Scheme Document (SSD) sets out to identify particular specific requirements of ISO 9001:2015 for organizations and certification bodies engaged in the sector, and the minimum qualifications that an assessor/auditor requires. The document shall be read in conjunction with ISO 9001:2015
- 2. This Sector Scheme is one of the series of National Highway Sector Schemes (NHSS's), which have been developed as bespoke integrated management schemes within an ISO 9001 framework to provide particular requirements / applications for ISO 9001:2015 as applicable to a particular infrastructure related activity/industry.
- 3. Separate Sector Scheme Advisory Committees (SSACs) for each activity within the sector provide advice to the United Kingdom National Accreditation Body or any recognised European National Accreditation Body or any equivalent International Accreditation Forum (IAF) Multi-Lateral Agreement (MLA) signatory and expert representation is drawn from all sides of industry. Each SSAC determines the particular requirements for ISO 9001 in relation to the requirements of their particular activity and comes to a consensus on the minimum levels of workmanship, services, products, testing, and the training and competency of personnel, as appropriate, required to meet specification requirements as well as identified requirements in respect of environmental and health & safety and other aspects. The details are contained in the individual Sector Scheme Documents (SSDs). Following the publication of

a revised ISO 9001, the committees will review their documents to ensure alignment with the revised ISO 9001 to ensure that the SSD do not conflict with the international standard.

- 4. The individual NHSS technical advisory committees are overseen by the National Highway Sector Scheme Liaison Committee (NHSSLC). This Committee provides a forum for discussion on the effectiveness of the Sector Schemes and co-ordinates developments so that they can be uniformly taken forward by each of the NHSS technical advisory committees. It is also the venue where dialogue with the United Kingdom National Accreditation Body or any recognised European National Accreditation Body or any equivalent International Accreditation Forum (IAF) Multi-Lateral Agreement (MLA) signatory and the Certification Bodies on the application of the Sector Schemes takes place.
- 5. NHSS documents together with ISO 9001 are designed to:
 - a. Provide an industry benchmark
 - b. Identify risks and opportunities
 - c. Ensure that all processes are planned
 - d. Provide a basis for continuous improvement
 - e. Focus on quality as an objective
 - f. Reduce costs for Client and organization
 - g. Provide and maintain a properly trained and competent workforce
 - h. Involve all sides of industry in scheme ownership within a partnership framework
 - i. Provide the basis for the technical knowledge and experience that Certification Body auditors will use in the sector concerned
 - j. Promote confidence in quality management systems through provision of a robust transparent system
- 6. This Sector Scheme shall apply where specified by the Client in their Contract Documents
- 7. In using this Sector Scheme users are required to use best practice such as specifying any other relevant NHSSs as appropriate to the nature of the work being undertaken. Where traffic management is required companies should either employ a relevant National Highway Sector Scheme registered company or, where applicable, have skilled registered traffic management personnel qualified to meet the requirements of NHSS12D, as agreed with the NHSS 12D Committee, relevant to contract requirements and risk assessments. For work carried out on high speed dual carriageways and motorways the organization installing temporary traffic management measures should always be registered to NHSS 12A/B and/or 12C
- 8. The use of the SHW as the basic document for procuring highway works by other highway authorities would normally automatically call up compliance with ISO 9001 and this SSD within SHW Appendix A. It should also be noted that this SSD is mandatory for National Highways contracts and suppliers within the supply chain shall demonstrate compliance with the requirements of ISO 9001 and this SSD as part of their continual improvement within their ISO 9001 registration. The use of the Specification for Highway Works as the basic document for procuring highway works by other highway authorities would normally automatically call up compliance with ISO 9001 and this SSD. Other owners of infrastructure may also require their suppliers to comply with this Sector Scheme, as may other authorities.
- 9. The SSD is a live document and date specific with the SSAC reviewing it at least once per year. Those using the document shall ensure that they have the current version of the document. The SSD may currently be obtained by visiting the Lantra website (https://www.lantra.co.uk/schedule-suppliers) from where the document can be downloaded. Organizations should be aware that utilisation of internet search engines may result in out of date references being identified/called up
- 10. The Secretary of the SSAC NHSS8 maintains a list of registered Organizations through the HEA as administrator of the Highway Electrical Registration Scheme on the HERS web-site at www.thehea.org.uk/hers. The Secretary can be contacted at the address given below in 14.

11. Scheme Feedback

Any observations, complaints or feedback relating to the operation of this document and the scheme should be addressed using the procedures given in Appendix J..

12. Scheme Contact

The Secretary
Sector Scheme Advisory Committee for NHSS8 c/o
Highway Electrical Association (HEA)
HERS Administrator
Highdown House
Littlehampton Road
Ferring
West Sussex
BN12 6PG

Email: contact@thehea.org.uk

The Sector Scheme Advisory Committee has established a Standards and Training Committee as a sub-committee to the NHSS 8 committee. This sub-committee assists in the development and maintenance of national training and competency assessment requirements for this Sector Scheme as necessary for the industry and reports to the NHSS 8 committee.

Particular Requirements for the Application of ISO 9001:2015

1. SCOPE

The scope of this SSD together with ISO 9001:2015 covers the quality management system requirements to be established by organizations providing overseeing and / or installation and / or maintenance of Highway Electrical equipment and supporting works including, but not limited to, the following:

- · Traffic Control equipment
- Variable Message Signs
- · Communications equipment
- · Environmental and Monitoring equipment
- Cameras
- Ramp Metering
- Highway Lighting columns, posts and other street furniture
- Cables
- · Slot cutting and the laying of cables
- · Highway Lighting and illuminated Traffic Signs
- Un-illuminated Traffic Signs
- · Electrically connected bus shelters and/or advertising equipment
- · Electric vehicle charging points and other on street highway electrical equipment
- Electrical and other equipment in tunnel bores and associated surrounds

Organizations carrying out excavation and reinstatement works and / or the installation of ducts may be registered to this Sector Scheme and the associated Highway Electrical Registration Scheme (HERS) or may register their employees to the New Roads and Street Works Act register at the appropriate level, ensuring they are in possession of the relevant CSCS (CSR in Northern Ireland) or ECS card together with other evidence to show compliance with relevant criteria of Health and Safety legislation.

Any organization carrying out works which involve entering items of highway electrical street furniture or connecting cables or carrying out electrical testing to obtain electrical values falls within the scope of NHSS 8 and HERS.

The scope covers both temporary and permanent works, other than temporary portable traffic signals. Where appropriate the design of the electrical installation also forms part of the scope of the quality management systems of an Organization.

The design of the foundations for the associated structural supports is not included. Where the foundation is constructed as part of the highway electrical works by an organization, they would be included within the scope of NHSS8. Where foundations are separately constructed by organizations carrying out only excavation, foundation construction, and / or reinstatement, then the requirements are as per organizations carrying out only excavation or reinstatement.

This document provides particular requirements for the application of this scheme additional to the requirements of ISO 9001:2015 for this industry and shall be compliant with that standard. The SSD applies to the organization or that part of the organization complying with this SSD (see Appendix K)

This scheme is not intended to replace other management system requirements or other contractual requirements.

2. NORMATIVE REFERENCE

The following normative documents contain provisions which constitute provisions of ISO 9001 Quality Management Systems – Requirements:

- ISO 9000:2015 Quality Management Systems Fundamentals and Vocabulary
- ISO 9001:2015 Quality Management Systems Requirements and normative references within it
- ISO 9004:2018 Quality management -- Quality of an organization -- Guidance to achieve sustained success
- NHSS 0 Templates for National Highway Sector Scheme Documents (with and without guidance)

3. TERMS AND DEFINITIONS

3.1 For the purpose of this Sector Scheme Document the terms and definitions given in ISO 9000:2015 and NHSS 0 apply (some terms from ISO 9000:2015 are reproduced below; the full list in ISO 9000:2015 should be referred to) with additions listed in the table below:

Term	Definition
12A Installation	The installation, maintenance and removal of Static Temporary Traffic Management measures on motorways and high-speed dual carriageways for schemes incorporating contraflow operations and/or temporary road markings.
12B Installation	The installation, maintenance and removal of Static Temporary Traffic Management measures on motorways and high-speed dual carriageways for schemes NOT incorporating contraflow operations and/or temporary road markings.
Administrator	The person/organisation appointed by the NHSS 8 Committee to administer this scheme. Currently this is the HEA
Approved Person / Approved Person Manager	A Competent Person authorised by the Organization not to carry out practical works other than accessing enclosures such as lighting columns, feeder pillars, controllers and other cabinets to view the interior or to access the data port where this exists to plug in a laptop or handheld device for the purposes of design, assessment or validation. The occupational title of Approved Person / Approved Person Manager is intended to be used by those in a client, overseeing or managerial capacity, or for assessment or validation (e.g. SCOOT validation, MOVA assessment or validation) or commissioning where the latter is undertaken only in the presence of the appropriately competent employees of the installing organization and shall not be used for operatives
Associated Sector	A sector of the construction industry where technical knowledge and skills of employees are similar to the Highway Electrical sector.
Audit Authorised Person	See ISO 9000:2015 A Competent Person authorised by an Organization's Authorisation Officer to carry out specific elements of work appropriate to his/her level of competency as defined in the Highway Electrical Registration Scheme Handbook.
Authorising Officer	A person appointed by the Organization to review and recommend authorisation of the competency of individuals nominated for appointment as Competent Persons therefore recommending them for authorisation by the Responsible Manager. Shall be HERS Registered in their own right.

Client	The ultimate body or agent for the body for which the work is being carried out e.g. National Highways, Police Force or Highway Authority. (Often the owner or managing authority of the asset). (Required due to CDM Regulations – see also "Customer"; this supersedes the definition in ISO 9000)
Competence	See ISO 9000:2015
Competent Person	A person assessed as having the necessary education, training, skills, experience and technical knowledge, to undertake work and avoid danger within the scope of work outlined in clause 1 scope of the NHSS 8 document.
Compliance Manager (NHSS 8 & 22)	The person named in the organization's Quality Plan as having responsibility for the development, review and continuous improvement of policies and procedures necessary to meet the criteria for activities carried out within this Sector Scheme.
Components	All elements which are necessary to complete the product
Construction Skills Register	Equivalent CSCS card issue in Northern Ireland
Contract	See ISO 9000:2015
Contracting Office / Depot (NHSS 8)	The organization's office from which work, which is carried out by Authorised Persons, is issued, managed and controlled.
Customer	The body engaging the organization for the purpose of the work described in this SSD. (Required due to CDM Regulations – see also "Client")
Defect	See ISO 9000:2015
Designer	The person / body responsible for converting requirements into design output in the form of for example drawings, specifications, plans, instructions.
External Provider	See ISO 9000:2015
Highway Electrical equipment and supporting works	the scope of this document and as set out in Appendix K, including non-electrical items such as posts and columns but excluding works which are only excavation and reinstatement. It specifically includes any works which require entry into an item of highway electrical street furniture.
Highway Electrical Training Specification	A specification, developed by the Standards and
	Training Committee, which specifies the training requirements of employees carrying out work outlined in Clause 1 Scope and in line with the underpinning knowledge requirements for the appropriate level and unit(s) of the NVQ (formerly N/SVQ) where relevant
Highway / Road Tunnel	requirements of employees carrying out work outlined in Clause 1 Scope and in line with the underpinning knowledge requirements for the appropriate level and unit(s) of the NVQ
Highway / Road Tunnel Impact Protection Vehicle (IPV) (NHSS 12A, 12B & 12C)	requirements of employees carrying out work outlined in Clause 1 Scope and in line with the underpinning knowledge requirements for the appropriate level and unit(s) of the NVQ (formerly N/SVQ) where relevant A subsurface highway structure with enclosed roof and sides not less than 150m in length the normal purpose of which is to enable vehicular traffic to use the highway

Industrial Coating (NHSS 6 & 19A)	A single protective coat or a series of manually applied protective or aesthetic coats, which may include pretreatments, thermally sprayed metal coats, paints, and aesthetic finish coats, applied to provide corrosion protection to a substrate. NOTE: Hot-dipped galvanized coatings and thermally sprayed coatings applied by an automated process are within the scope of this document (and also NHSS 19A).
Infrastructure Assets (NHSS 20)	Includes but is not limited to highway and rail bridges, gantries, masts, columns, signal posts, electrification masts, station structures, buildings and toll booths. Does not include traffic signs to BS EN 12899 Pt 1, or vehicle restraint systems to BS EN 1317.
Installation	The process of assembling, putting in place and as applicable testing the items and /or components in accordance with manufacturer's instructions and the requirements of a contract.
Interested Party	See ISO 9000:2015

Inspection	See ISO 9000:2015
Lead Certification Body (CB)	A CB which has been appointed by collective agreement of the CB Liaison Group, to take responsibility to ensure that CB representation is maintained at designated SSAC's meetings.
Management	See ISO 9000:2015
Management System	See ISO 9000:2015
Management System Minor Structures (NHSS 6)	Column and mast products with similar form or features that are manufactured using a standard lighting column or mast as the main structure. This includes: • lighting columns • cantilever masts for traffic signals and/or safety cameras • closed circuit television (CCTV) masts • fixed vertical road traffic sign/signal posts • high mast lighting • antenna masts and • generator masts, or • other derivative column and mast products with similar form or features that are manufactured using the standard lighting column or high mast as the main structure.
	Minor structures exclude variable message sign supports on motorways and also excludes gantries and other structures covered by NHSS 20. The body responsible for carrying out the work or the activities as set out in the Scope of this SSD
Mobile Carriageway Closure Technique	The temporary closure of a carriageway created by a number of closure vehicles, travelling at low speed in line abreast across the carriageway.
MLC Block Vehicle (NHSS 12C)	A vehicle in accordance with the requirements of Chapter 8 (10.7.6) equipped with a lorry mounted crash cushion. (All seats must be fitted with head restraints and 3-point inertia reel belts) All drivers must be fully qualified to supervisor status whether in charge of the convoy or not.

MLC Traffic Management	The deployment of mobile traffic signs, static warning
Module Achievement (NHSS 12D)	signs and lorry mounted crash cushion (LMCC). Confirms the successful completion of the training course and assessment criteria, i.e. the person is qualified and card carrying
Moving Works (NHSS 12D)	Works with ongoing movement such as grass cutting, hedge trimming, etc and will also include works that remain static for no more than 15 minutes e.g. gully emptying, street lighting, road marking, etc. (Where contractual requirement stipulates the use of mobile lane closures 12C requirements will apply).
National Accreditation Body (NAB)	UKAS - the United Kingdom National Accreditation Body - or any recognised European National Accreditation Body or any equivalent International Accreditation Forum (IAF) Multi-Lateral Agreement (MLA) signatory (NAB)
Nonconformity NVQ	See ISO 9000:2015 Level 2 NVQ (formerly N/SVQ and QCF) "Highway Electrical Systems" and/or Level 3 NVQ (formerly N/SVQ and QCF) "Servicing Highway Electrical Systems" or "Commissioning and Servicing Highway Electrical Systems"
Occupation	The job roles carried out by a competent person as described in Appendix C
Operation and Maintenance Manual	Documents that contain all the information necessary for the safe and effective operation and maintenance of the asset, systems and asset / system components so as to optimise their useful working life.
Organization	See ISO 9000:2015
Organization's Manager	The person named in the organization's Quality Plan as having managerial responsibility for the Sector Scheme activity.
Overseeing (NHSS 8)	In this document, the term overseeing is intended to cover those organizations and persons carrying out investigative work or the direction or checking of work as or on behalf of the client. It is not intended to cover the normal contractor / sub-contractor relationship. (It should be noted that the definition of overseeing in this document is different to that used by the Secretary of State for Transport)
Permanent Road Traffic Sign (NHSS 9)	A traffic sign intended to be fixed to a structure or support for more than six months complying with BS EN 12899:2007 parts 1, 4 and 5
Portfolio of Evidence	A file prepared by the Organization containing evidence which supports the competence of an Authorised Person.
Positive Traffic Control (NHSS 12D)	The use of signs and signals for controlling traffic where clear instructions are provided for example priority signals, stop and go and stop works signs, temporary traffic signals etc
Procedure	See ISO 9000:2015
Process	See ISO 9000:2015
Provider	See ISO 9000:2015. This term is the preferred term used in ISO 9001:2015 in place of "supplier", which was used in ISO 9001:2008. The terms are synonymous,

Qualified Supervisor	A person(s) having responsibility, training and experience to supervise electrical and/or non-electrical operations and who shall have responsibility, on a day to day basis, for the safety, quality and technical standard of work carried out by all Authorised Persons under his supervision. As such they are responsible for gathering suitable competency evidence and submitting same to Authorising Officer within the HERS Competency Portfolio of Evidence. Shall be HERS Registered in their own right.
Quality Plan	See ISO 9000:2015
Register	The Register of Authorised Persons working in the Highway Electrical Industry.
Registered Authorised Person	An Authorised Person whose name has been entered on to the Register with the Highway Electrical Registration Scheme following an application by a Registered Organization.
Registered Organization	An Organization registered with the Highway Electrical Registration Scheme.
Registration Card	An HERS card issued under the Electrotechnical Certification Scheme by the JIB following registration by the Administrator that the holder of the card has been assessed as Competent by their employing Organization to carry out work at the appropriate competency level as defined in the Training Specification.
Repair	See ISO 9000:2015
Responsible Manager	The person employed by the Organization having managerial responsibility for the relevant in scope activities. The Responsible Manager shall be an employee of the Organization.
Road Traffic Sign	An illuminated or non-illuminated traffic sign fixed to a structure or support complying with the Construction Products Regulations (BS:EN 12899 Parts 1, 4 and 5) or BS8442 and complying with the TSRGD

Rural & Urban Roads	Roads (other than motorways and dual carriageway roads with a speed limit of 50mph or greater). The majority of which will be under the control of a Local Authority.
Scheme	The Highway Electrical Registration Scheme.
Sector Scheme	Sector scheme document 8 for the Overseeing and / or Installation and / or Maintenance of Highway Electrical equipment and supporting works.
"Shall"	The term "shall" is used in this document to indicate a requirement strictly to be followed in order to conform to the standard and from which no deviation is permitted. (See ISO Directives Part 3:1997, Annex E)" (reference "guidance on terminology used in ISO 9001 and ISO 9004".)
"Should"	The term "should" is used in this document to indicate recognised means of meeting the requirements of the standard (ISO 9001/NHSS document). An organization can meet these in an equivalent way provided this can be demonstrated to a Conformity Assessment Body (CAB)

	(Certification).
	(continuation).
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Single vehicle working (NHSS 12D)	Work from or with a single vehicle which will be
	continually moving or stopping at very close intervals (as
	in Moving works). (Where contractual requirement stipulates the use of mobile lane closures, 12C
	requirements will apply.)
Standards and Training Committee (NHSS	A sub-committee of the Sector Scheme advisory
8)	committee responsible for formulating proposals to the
0)	committee on training and competence
Static Temporary Traffic Management	The deployment of temporary traffic signs, temporary
(NHSS 12A/B)	road markings, and temporary traffic delineators
Static Works (NHSS 12D)	Works lasting longer than 15 minutes in one location.
Sub-contracting Individual	Self-employed person providing service(s) to the
	organization under the supervision and control of the
	organization. The organization must ensure the
	Individual is appropriately trained and qualified in
	accordance with the relevant SSD
Sub-contractor / Sub-contracting	An organization registered to the relevant NHSS
organization	providing services and / or materials to the organization
	awarding the work
Sub-contracting Specialist	An Individual or a GG102 (previously GD02) (or
	equivalent) registered Consultancy organization
	registered to the relevant NHSS, providing specialist
0.1.1.1.(0.11.10.0.0.10.)	supervision and/or consultancy services.
Substrate (NHSS 6 &19)	The metal base itself, the metal coating (such as
	galvanising applied to a ferrous base) or existing sound
	industrial coatings, over which the new industrial coating is to be applied.
"Supply"	Make available parts or services in accordance with the
Саррту	requirements of the contract
Technical Audit	An audit carried out by a person deemed competent to
	do so and appointed by the HEA as Administrator of the
	Scheme
Temporary Traffic Management (TTM)	The deployment of temporary traffic signs (and cones),
(NHSS 12D)	which may include temporary road markings, traffic
	delineators and temporary traffic control systems.
Temporary Traffic Management (TTM)	A card provided by Lantra on behalf of the Sector
Registration Card	Scheme Committee denoting the holder of the card has
	completed training and assessment and has been
	signed off as qualified to undertake works as detailed on
	the card.
Temporary Traffic Management (TTM)	A certificate provided by Lantra on behalf of the Sector
Certificate	Scheme Committee denoting the holder of the certificate
	has completed training ONLY and is working towards full
	qualification NB the holder can only work as a trainee
Toot	within gang whilst working towards full qualification. See ISO 9000:2015
Test Top Management	
Top Management	See ISO 9000:2015
Traffic Control Equipment	Traffic signals normally utilizing signal controllers in accordance with Specification TR2210 or equivalent.

	A person who holds a valid FISS/CSCS VRS Blue card in accordance with this SSD
Worker	Person performing work or work-related activities which are under the control of the organization

3.2 For the purpose of this Sector Scheme Document the abbreviations in the NHSS 0 Template shall apply with additions listed in the table below:

Arboricultural Association Arboricultural Association Approved Contractor Association of Directors of Environment, Economy, Planning and Transport (ADEPT) formerly County Surveyors' Society (CSS)
Association of Directors of Environment, Economy, Planning and Transport
(ADEI 1) formerly County Surveyors Society (CSS)
Arboriculture and Forestry Advisory Group (HSE)
Association of Fencing Industries
Association of Landscape Contractors of Ireland
Alliance of Sector Skills Councils
Association for Public Service Excellence
American Association of Heating, Refrigeration and Air-Conditioning Engineers
British Association of Landscaping Industries
(not an acronym) Is an independent standard setting and auditing organisation for the pesticide, fertiliser and allied industries
British Electrotechnical and Allied Manufacturers Association
Department for Business, Energy and Industrial Strategy
British Geological Survey
Building Research Establishment Ltd.
British Standard
British Standards Institution
City and Guilds incorporating National Proficiency Tests Council
Certification Body (Conformity Assessment Body) (Accredited by a NAB)
Certification Body (Liaison) Group
The Construction (Design and Management) Regulations.
Civil Engineering Contractors Association
Construction Environmental Management Plan
Certified GeoExchange Designer
Chapter 8 of the Traffic Signs Manual
Chartered Institute of Ecology and Environmental Management
Construction Industry Training Board
Certificate of Registration
Crop Protection Association
Certificate of Professional Competence for lorry, bus and coach drivers.
A Driver Certificate of Professional Competence (CPC) card is issued once the driver
has qualified. This is sometimes called a 'driver qualification card' or 'DQC'
Construction Plant Competence Scheme
Chemicals Regulation Directorate (Division of HSE)
Construction Skills
Construction Skills Certification Scheme
Construction Skills Register (Northern Ireland)
Formerly 'County Surveyor's Society'
Department for Infrastructure (Roads)

DfT	Department for Transport
DMRB	DfT Design Manual for Roads and Bridges, (The Highways Agency, Transport
DWIND	Scotland, Welsh Assembly Government, Department for Regional Development
	Northern Ireland, TSO)
EA/SEPA	Environment Agency/Scottish Environmental Protection Agency
EAC	European Co-operation for Accreditation
EBS	Environmental Barriers (Structural)
ECS	Electrotechnical Certification Scheme
EFIA	European Fencing Industry Association
EMS	Environmental Management System
EN	European Standard (European Committee for Standardization)
ESFF	Electric Security Fencing Federation
EU	European Union
FAO	Federation of Awarding Organisations
FISS	Fencing Industry Skills Scheme
FISS/CSCS	Fencing Industry Skills Scheme/Construction Skills Certification Scheme. Joint
	national skills card registration scheme
GD 02	(Standard for) quality management systems for highway design
(superseded by GG102)	(command var) quanty management systems for high rate grades
GG102	(Standard for) quality management systems for highway design
GG 104	Standard for Safety Risk Assessment on the Strategic Road Network
GF	Ground Forum
GSHPA	Ground Source Heat Pump Association
HCTA	Highways & Construction Training Association
HEA	Highway Electrical Association
HERS	Highway Electrical Registration Scheme
HESA	Highway Electrical Skills Academy
HPA	Heat Pump Association
HSE	Health and Safety Executive
HS&E	Health Safety & Environment – the current assessment that must be taken by all
TIOUL	those who require a CSCS card (or equivalent H&S assessment for ECS Card).
HTA	Horticultural Trades Association
IAF	International Accreditation Forum
ICE(CofC)	Institution of Civil Engineers (Conditions of Contracts)
IEEM	Institute of Ecology and Environmental Management - See CIEEM above
IGSHPA	International Ground Source Heat Pump Association
IOG	Institute of Groundsmanship
IOSH	Institution of Occupational Safety and Health
IRRRS	Interim Requirements for Road Restraint Systems
ISO	International Standard (International Organisation for Standardization)
ITT	Initial Type Testing
JCT	Joint Contract Tribunal, Minor Works Building Contract
LISS	Landbased Industry Skills Scheme
LOLER	Lifting Operations and Lifting Equipment Regulations
MCCT	Mobile Carriageway Closure Technique
MCHW	DfT Manual of Contract Documents for Highways Works
MCS	Microgeneration Certification Scheme
MLA	Multi-Lateral Agreement
MLC	Mobile Lane Closure
MPA	Mineral Products Association
NAAC	National Association of Agricultural Contractors

NAB	National Accreditation Body (see Definitions)
NB	Notified Body approved by their Member State and notified to CEN and other
112	Member States (Also see NoBo below)
NCDTSSAC	The Natural & Conferred Durability of Timber Sector Scheme
	Advisory Committee – also known as SS4AC
NEBOSH	National Examination Board in Occupational Safety and Health
NEC	New Engineering and Construction Contracts
NR	Network Rail
NHSS	National Highway Sector Scheme
NHSSLC	National Highway Sector Scheme Liaison Committee
NoBo	Notified Body (assesses compliance with harmonised European Standards e.g.
	factory production control) – (Also see NAB, NB above)
NPSBS	Non-Proprietary Safety Barrier Systems (TCB, OBB, DROBB, UCB and RHS)
NPTC	National Proficiency Tests Council now part of C&G
NSS	National Sector Scheme
N/SVQ	National/Scottish Vocational Qualification for Signmaking Level 2 and Level 3
NVQ	National Vocational Qualification - are work based awards in England, Wales and
	Northern Ireland that are achieved through assessment and training. In
	Scotland they are known as Scottish Vocational Qualification (SVQ). To achieve an
	NVQ, candidates must prove that they have the ability (competence) to carry out
	their job to the required standard. NVQs are based on National Occupational
	Standards that describe the 'competencies' expected in any given job role.
NVQ/SVQ	National Vocational Qualification/Scottish Vocational Qualification
OFGEM	Office of Gas and Electricity Markets
Ofqual	the Office of Qualifications and Examination Regulation (England (general and
Olquai	vocational qualifications) and vocational qualifications in N. Ireland)
ORAS	Operatives Refresher and Assessment Scheme (7)
PAS	Publicly Available Specification (British Standards Institution)
PPE	Personal Protective Equipment
PUWER	Provision and Use of Work Equipment Regulations
QCF	Qualifications and Credit Framework Ofqual, together with its partner regulators in
Q 0.	Wales (DCELLS) and Northern Ireland (CCEA), is responsible for regulation of the
	Qualifications and Credit Framework (QCF). The QCF is a system for recognising
	skills and qualifications.
RLTMO	Registered Lead Traffic Management Operative (NHSS 12D)
ROLO	Register of Landbased Operatives, managed and administered by BALI
RPE	Respiratory Protective Equipment
RSDA	The Road Surface Dressing Association, now a sector of the RSTA
RSMA	Road Safety Markings Association
RSTA	Road Surfacing Treatment Association Ltd formed in January 2008 on the merger
	of the Road Surface Dressing Association with the Slurry Surfacing Contractors
	Association and the High Friction Surfacing Association. It also has two other
	Sectors representing 'Specialist Treatments' and 'Geosynthetics & Steel Meshes'
SCOTS	Society of Chief Officers of Transportation in Scotland
SHW	Specification for Highway Works – (Volume 1 of the Manual Contract Document for
	Highway Works) published by The Stationery Office for National Highways
	(previously Highways England), The Scottish Executive Development Department,
	The Welsh Assembly Government and The Department for Regional Development, Northern Ireland on behalf of the DfT.
S/NVQ	Scottish/National Vocational Qualification
SoS	Schedule of Suppliers
SQA	Scottish Qualification Authority
SSAC	Sector Scheme Advisory Committee
SSCA	The Slurry Surfacing Contractors Association, now a sector of the RSTA
000A	The Surry Surracing Contractors Association, now a sector of the NSTA

SSD	Sector Scheme Document
SSR	Small Scale Repairs (NHSS 23)
STANSPEC	RSMA Standard Specification Document
SVQ	Scottish Vocational Qualification - a vocational qualification approved by the Scottish
	Qualification Authority (SQA)
TAIT	Type approval installation trial. TAITs are the means by which a producer
	demonstrates the ability to design and install a group or family of surface treatments meeting the required performance characteristics for a given road type as described
	in BS EN 12271 (Surface Dressing), EN 12273 (Slurry
	Surfacing) and PD 6689. TAITs can also be used as the basis for CE marking if
	required by regulation.
TMCA	Traffic Management Contractors Association
TPO	Tree Preservation Orders
TSO	The Stationery Office
TSRGD	The Traffic Signs Regulations and General Directions
TTM	Temporary Traffic Management
UKAS	United Kingdom Accreditation Service (The United Kingdom National Accreditation
	Body) or any recognised European Union National Accreditation Body or any
	equivalent International Accreditation Forum (IAF) Multi-Lateral Agreement (MLA)
	signatory with a scope which includes a (UK) National Highway Sector Scheme.
UKFPA	United Kingdom Forest Products Association
UKSA	UK Steel Association
VRMA	Vehicle Restraint Manufacturers Association
VRS	Vehicle Restraint System (to include VRS products covered by BS EN 1317 as
	defined in the SSD)
VRS/RRS	Vehicle Restraint Systems/Road Restraint Systems
WAG	Welsh Assembly Government (Welsh Government)
WDA	Well Drillers Association
WPA	Wood Protection Association
WRAP	Waste and Resources Action Programme

Note: The terms and definitions given in ISO 9000:2015 remain applicable.

SECTIONS 4 TO 10: Quality Management System Requirements

Particular Requirements ISO 9001:2015

This document shall be read in conjunction with the requirements of ISO 9001:2015

Clause/Paragraph numbers in this section reference appropriate paragraphs of ISO 9001:2015. The requirements of ISO 9001:2015 are deemed to apply unless specific additions are required. Where 'No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification' is recorded under an ISO 9001:2015 clause heading this means that it is not considered necessary to provide a particular requirement for that clause.

The particular requirements given below are to assist in the clarification of the ISO 9001:2015 text for the relevant activity, no inference should be made that ISO 9001:2015requirements are diluted or deleted because of this particular requirement.

4 Context of the organization

4.1 Understanding the organization and its context

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

4.2 Understanding the needs and expectations of interested parties

Interested parties shall include the Customer, Client and other contractors, and those that interact with or use the Client's infrastructure e.g. the general public including travelling public, emergency services and other relevant organisations and stakeholders.

4.3 Determining the scope of the quality management system

- (i) The scope of the quality management system shall cover the range of specific services that the Organization is competent to supply and for which they are registered or seeking registration.
- (ii) Consideration shall be given to outsourced services and how those outsourced services are controlled.

See also Appendix K

4.4 Quality management system and its processes

- 4.4.1 The organization shall operate a quality management system to ISO 9001:2015 and this SSD
- The organization shall notify and provide evidence of their Certificate of Registration to this scheme to the HEA, as HERS administrator, so that the list of registered organizations held on the HERS web-site may be maintained

5 Leadership

5.1 Leadership and commitment

5.1.1 General

Top management shall demonstrate commitment to applicable NHSS's

5.1.2 Customer focus

- (i) Processes for determining customer requirements shall consider the interaction with other works and interested parties. Interested parties shall include the Customer, Client and other contractors, and those that interact with or use the Client's infrastructure e.g. the general public including travelling public, emergency services and other relevant organisations and stakeholders. This will include processes to minimise disruption and inconveniences.
- (ii) Safe working methods shall be documented and any deviation from these methods shall be notified to the Client/customer/ relevant interested parties as required.
- (iii) A copy of all relevant working methods and risk assessments for undertaking the works shall be available on site.

5.2 Policy

5.2.1 Establishing the quality policy

The organization's quality policy statement shall include a statement of commitment to this National Highway Sector Scheme and expanded to include all applicable NHSS(s).

5.2.2 Communicating the quality policy

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

5.3 Organizational roles, responsibilities and authorities

Where a quality plan is required by the contract, relevant organizational roles, responsibilities and authorities shall be included (see Clause 7.5.1 and Appendix A)

The organization shall define who is responsible for the roles defined by this sector scheme document

6 Planning

6.1 Actions to address risks and opportunities

- **6.1.1** The Organization shall take into account the risks and opportunities relating to this NHSS
- **6.1.2** No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

6.2 Quality objectives and planning to achieve them

6.2.1

The quality objectives shall include a commitment to meet Customer and Client requirements with respect to the activities within the scope of this SSD

6.2.2

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

6.3 Planning of changes

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

7 Support

7.1 Resources

7.1.1 General

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

7.1.2 People

(i) Management Resources, Responsibilities and Qualifications

The Organization shall appoint the following personnel. Guidance on their roles and responsibilities is detailed in Appendix L.

- 1. Responsible Manager(s)
- 2. Compliance Manager(s)
- 3. Authorising Officer(s)
- 4. Qualified Supervisor(s). The number of Qualified Supervisors shall be appropriate to the range, scale and geographical spread of the work undertaken from each Contracting Office.
- 5. A person nominated as Authorising Officer or Qualified Supervisor shall also be a Registered Authorised Person holding a current HERS Card.
- 6. A Responsible Manager shall not act as an Authorising Officer for a given employee except where the Responsible Manager is the Managing Director or Chief Executive of the organization in such a case the Responsible Manager may elect to also act as either an Authorising Officer or a Qualified Supervisor (but not both). An Authorising Officer shall not act as a Qualified Supervisor for a given employee. All other combinations are permitted.
- (ii) Qualifications, Training Requirements and Assessment of Competence

The Organization shall meet the following requirements at each Contracting Office.

- 1. Quality System Familiarisation shall include
 - a. Induction Training
 - b. Organization's operating procedures and safe systems of work
- 2. Qualifications and Training shall be in accordance with Appendix C
- 3. Assessment of competence for Authorised Persons by the Organization's Authorising Officer(s)
 - a. Each employee shall be assessed by the Organization's Responsible Manager with recommendations provided by the Authorising Officer(s) in accordance with the requirements contained in the HERS Handbook to ensure that they are competent to carry out the work they are required to perform to the appropriate competencies for the roles identified in Appendix C and at the level required by the relevant NVQ (in addition to all other training requirements)
 - b. Once the Authorising Officer/Responsible Manager(s) is satisfied that the employee is a Competent Person he shall issue a certificate of authorisation to carry out work which shall be signed by the Responsible Manager, register them with the Highway Electrical Registration Scheme (HERS), and issue them with

- their HERS card. The appropriate level of authorisation shall be shown on the certificate.
- c. The Organization shall have procedures, which specify how the Authorising Officer(s) shall ensure the continuing competence of employees. As a minimum the following employee competence reviews shall take place:
 - i. A desk top review every year, which will take into account the results of the biennial third party audit, when appropriate.

The requirements for qualifications and experience for Competent Persons, Qualified Supervisors and Authorising Officers are given in Appendix C.

(iii) Employee Register

The Organization shall register their Authorised Persons with the Highway Electrical Registration Scheme (HERS). An HERS registration card, which shall be carried at all times whilst at work, shall be issued under this scheme to each Authorised Person.

The Organization may also be required by some of its Customers to register their employees in accordance with the CSCS - Construction Skills Certification Scheme (CSR in Northern Ireland) or another card registration scheme recognised by this scheme. It should be noted that the HERS Registration card provides automatic affiliation to the CSCS.

Further information on the registration process may be found at https://thehea.org.uk/hershesa/hers-card/

Information on National Highways's Workforce Registration/Skill Card requirements for suppliers may be found at www.gov.uk/the-highways-agency-skills-card-and-registration-requirements-forsuppliers

(iv) Record of Practical Experience and Continuous Professional Development

The Organization shall maintain a portfolio of the practical experience gained by its employees. This portfolio shall contain evidence of relevant experience with reference to the competency areas in Appendix C and the appropriate training courses contained in the Highway Electrical Training Specification at the level required by the relevant NVQ and include the relevant NVQ Certification once gained

The Organization shall have a planned programme for the continuing professional development of its employees, which shall include refresher training at intervals of not greater than five years.

(v) Operational Requirements

- 1. Employees who are undergoing training can carry out work for which they have not been authorised as competent only under the direct supervision of a Registered Authorised Person who has been authorised at the appropriate level of competence as defined in the HERS Handbook.
- 2. New employees who have evidence that they are Registered Authorised Persons from a previous employer or who have evidence of transferable competence from a previous employer (e.g. from an associated industry) may carry out work immediately prior to registration as a Registered Authorised Person leading to the issue of a full HERS card (which is valid for three years) only if:
 - a. The Authorising Officer(s) shall satisfy themselves that the new employee is competent to carry out any work assigned to them, shall document the employee's competency areas and the rationale and evidence used to meet these requirements, and shall issue them with written authority to carry out work in the areas required.
 - b. An application is made either:
 - within three months of the date of employment, for the new employee to be registered as a Registered Authorised Person and issued with an Interim HERS card. (Which is valid for one year only and is not renewable)or
 - within three months of the date of employment, for the new employee to be registered as a Registered Authorised Person and issued with a Standard HERS card

- c. Within one month of employment the Qualified Supervisor(s) shall commence the evidence gathering process for the completion of the employee's competency portfolio. Prior to the expiry of any HERS Interim card, the portfolio must be completed and submitted to the Authorising Officer(s).
- d. An application is submitted, in sufficient time prior to the expiry of any HERS Interim card, for the employee to be registered as a Registered Authorised Person and be issued with a standard HERS Registration card which is valid for 3 years.
- 3. Agency workers who are not registered may work only under the direct supervision of a Registered Authorised Person competent in that work
- 4. Employees who do not have the required evidence of competence shall be directly supervised by a Registered Authorised Person(s)
- 1. As part of the process for ensuring that competence, training and awareness is appropriate and relevant, the organization shall include the process for the technical audit either as part of the documented Internal Audit process (see clause 9.2), or as part of the process for monitoring and reviewing competence, training and awareness. If it is included within 7.1.2, then the following clauses apply:
 - 1.1In accordance with the Highway Electrical Registration Scheme, a third-party technical audit shall be carried out to validate the assessment of Authorised Persons carried out by the Organizations Authorising Officer(s). The period between audits shall be no greater than every two years per Contracting Office.
 - 1.2Where the organization is under a single Quality Management system, with access to that system from all Contracting Offices, with a nominated individual responsible for ensuring and monitoring compliance with NHSS 8 and having all its registrable employees registered only under an Approved Person category, then the third party technical audit may take place at the main Contracting Office only as nominated by the organization and agreed by the Scheme Administrator.
 - 1.3Where the organization is under a single Quality Management system with access to that system from all Contracting Offices, with a nominated individual responsible for ensuring and monitoring compliance with NHSS 8, including carrying out internal technical audits covering those areas which would have been included within the third party biennial audit, then the third party technical audit may take place at the main Contracting Office and such other Contracting Offices as are included within the organization's registration fee as nominated by the Scheme Administrator. In this instance such third party technical audits will include audits of the organization's internal technical audits.
 - 1.4The organization shall carry out internal technical audits of its own staff on site to ensure compliance with clause 7.1.2. All staff shall be audited on site over a period of 24 months. The results of these audits shall be made available to the third-party technical auditor.

Note: There is no requirement to have undergone the Technical Audit prior to initial third-party certification by the Organization's Certification Body. However in order to achieve third party certification by the Organization's Certification Body, the organization shall be registered to the Highway Electrical Registration Scheme and the organization shall have registered its employees to the Highway Electrical Registration Scheme which shall have included an assessment of employees' portfolios by the Organization's Authorising Officer(s) and an audit of at least 10% of the portfolios by the HERS Administrator, the HEA.

7.1.3 Infrastructure

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

7.1.4 Environment for the operation of processes

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further

7.1.5 Monitoring and measuring resources

7.1.5.1 General

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification (See Appendix E)

7.1.5.2 Measurement traceability

Manufacturer's guidance for the maintenance, servicing and calibration of equipment shall be taken into account within the quality management system. (See Appendix E)

7.1.6 Organizational knowledge

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification (see Appendix B)

7.2 Competence

The training and assessment of competency of personnel required by this scheme is aimed primarily at technical competence for this scheme's personnel. It is intended to enable/assist and support employees to carry out work in a safe manner however it remains the responsibility of the organization to determine and implement safe systems of work.

Requirements

- (i & ii) Training and assessment of competence shall be carried out in accordance with Appendix C
 - (iii) The organization shall create and maintain a record of training and practical experience and assessment of competence for each relevant employee and worker.
 - (iv) Employees shall carry at all times whilst working an identification/skills/registration card for this SSD. This card will include an identification photograph and where appropriate the name of the organization.

7.3 Awareness

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

7.4 Communication

The relevant quality plan and standard operating documented information shall be communicated to all relevant employees

7.5 Documented information

7.5.1 General

- (i) When specified in the contract documents or requested, the organization shall prepare a quality plan or alternative document as defined in the Contract Specification and if required submit this for acceptance or approval by the Client, as appropriate, prior to commencement of work (See section 8 and Appendix A).
- (ii) The organization shall have in place auditable processes to identify publication of relevant new documents/standards and implementation requirements (See Appendix B, note 2)

7.5.2 Creating and updating

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

7.5.3 Control of documented information

7.5.3.1

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

7.5.3.2 Control of Documented Information

The organization shall have in place processes to ensure that the latest versions of relevant Standards and Documents are available (See Appendix B)

ISO 9001:2015 requirements include the following documented information to be controlled and retained:

Contract specific documents e.g. drawings, schedules, as listed in the quality plan for a particular scheme, including

- a. Correspondence
- b. Enquiry/Tender and Quotation
- c. Contract documentation and Client Order
- d. Pre-Construction Information Client drawings, service drawings, risk assessment records.
- e. Quality Plan (including H&S and risk assessment by organization). Method statement for controlling the works to include health and safety, and environmental requirements. f. Instructions to relevant site staff
- g. Calibration and maintenance records of plant and equipment (including testing equipment).
- h. Completion Report
- i. Relevant plant and equipment list
- j. Operatives training records
- k. Plant and Equipment maintenance service records
- I. Purchase records
- m. Sales Invoices

8 Operation

8.1 Operational planning and control

- (i) The quality plan shall address the topics listed in Appendix A of this schedule and where applicable the requirements contained in the Specification for Highway Works (SHW) and associated contract documents.
- (ii) The Quality plan may be a largely standard document as indicated in Appendix A of this schedule supplemented by contract specific information.

The quality plan should not be considered in isolation. An integrated approach may be taken ⁽ⁱⁱⁱ⁾ which links to other relevant plans (e.g. H&S plan).

Note 1:- The Quality Plan describes the management strategy that sets clear and sustainable performance objectives, delegates' responsibility and establishes lines of communication. The objective being to manage the various management schemes within an overall management scheme within an organization.

Note 2: Client duties under CDM require the provision of known information and cooperation and coordination with the principal/main contractor.

The organization shall, in order to reduce the need for waste disposal, minimise the generation

(iv) and environmental impacts of wastes arising during the contracted works and shall maximise opportunities for the re-use and recovery of wastes. The organization shall document its arrangements for the identification, segregation, handling, storage and disposal of the different

types of wastes arising from the contracted works to maximise opportunities for the re-use and recovery of wastes.

8.2 Requirements for products and services

8.2.1 Customer communication

The quality plan shall identify what and when relevant information is passed on to the Customer and Client (see Appendix A).

Note: Where required by the contract/ legislation the Customer and Client needs to be informed about the products, i.e., they require detailed information as appropriate regarding materials, components, manufacturing details etc. for the purposes of:

- (a) as-built records for maintenance/health and safety requirements and asset management.
- (b) their own monitoring of the effectiveness/performance of the product.

8.2.2 Determining the requirements for products and services

Requirements of ISO9001:2015 shall be supplemented by the scope of this SSD.

8.2.3 Review of the requirements for products and services

8.2.3.1

- (i) The organization shall have a recorded process in place to carry out reviews of expressions of interest, pre-qualifications and tender submissions with a view to ensuring that the Certificated Scope or intended Certificated Scope of the organization is not being misrepresented or could be misleading. Clients shall be made aware of any activities requested that are not covered by the Certificated Scope or intended Certificated Scope. Reference shall be made to the organization's Highway Electrical Registration Scheme registration certificate showing the scope of registration.
- (ii) The organization shall have a recorded process in place to ensure, so far as is reasonably practicable, that work activities are assigned only to those that are competent in that activity. The process shall make reference to the Authorisation Certificate (see clause 7.2.1)
- **8.2.3.2** No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

8.2.4 Changes to requirement for products and services

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

8.3 Design and development of products and services

8.3.1 General

Where highway electrical design or development is undertaken the quality plan shall identify the competent personnel involved with their qualifications/experience appropriate for design. This shall include those involved with design verification and approval. Reference shall be made to the requirements of GD02/08 in determining the appropriateness of qualifications and experience

8.3.2 Design and development planning

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

8.3.3 Design and development Inputs

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

8.3.4 Design and development controls

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification processes shall include information to demonstrate compliance with the contract specification irrespective of whether the customer expressly requests it or not.

8.3.5 Design and development outputs

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

8.3.6 Design and development changes

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

8.4 Control of externally provided processes, products and services

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

8.4.1 General

The Organization shall establish vetting procedures based on the following guidance for the employment of sub-contractors:

Sub-contractors shall be accredited to this Sector Scheme and / or shall register their employees to the Highway Electrical Registration Scheme with the exception of the following:

- The Organization shall establish vetting procedures for the employment of subcontractors. Sub-contractors carrying out works included within the scope of this document (See Clause 1 - Scope) shall be certified to this Sector Scheme and / or shall register their employees to the Highway Electrical Registration Scheme
- 2. Labour only sub-contractors need not be registered to this Sector Scheme but their employees shall register to the Highway Electrical Registration Scheme either directly or as if they were a direct employee of the Organization.
- Non-compliant or non-registered sub-contractors and their employees must be directly supervised on site by Registered Authorised Persons on a continuous and one to one basis until such time as they meet the requirements in full.

Delivery documentation shall be inspected by a competent person to verify that the delivery satisfies the purchase requirements.

The organization shall identify and plan the supply and installation processes. The control procedures shall verify that suppliers of incoming materials, equipment and services are capable of providing the required quality and adequate supplies in order to maintain the planned rate and quality of production of the installation (e.g. pavement repair).

- (i) For highway use, appropriate products shall be conformity assessed complying with the relevant designated Standard.
- (ii) Where the provision of ancillary activities such as road marking or temporary traffic management are procured only suppliers with Certification to the relevant NHSS shall be used.

Materials, products and services shall be selected in accordance with the contract (specification) documents including compliance with other relevant NHSS. (See appendix A of the SHW).

8.4.2 Type and extent of control

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

8.4.3 Information for external providers

The specification and tolerances for incoming materials, equipment and services (including records and/or personnel training requirements for any services) to be procured shall be established and communicated to suppliers by appropriate traceable and confirmable means (e.g. emailed or written instructions, and recorded or transcribed telephone messages).

8.5 Production and service provision

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

8.5.1 Control of production and service provision

Monitoring of quality of the installed works shall be carried out. The number of checks carried out shall be sufficient to demonstrate the works have been constructed in accordance with the contract.

- a) An agreed procedure for carrying out emergency repairs including health and safety requirements.
- b) when the organization is the main contractor, location and identification of underground and over ground services and structures including installed systems together with the names, addresses and telephone numbers of persons responsible for them.
- c) when the organization is a sub-contractor, the taking of all reasonable steps to ensure this information is available from the main contractor and is suitable to the extent that the organization is satisfied it is safe to carry out the sub-contract works

Works orders, risk assessments and quality plans shall be approved by the relevant designated personnel and retained in accordance with legal and contractual requirements. They will also be submitted to the Client if requested.

8.5.2 Identification and traceability

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification (See also Appendix E)

8.5.3 Property belonging to customers or external providers

The quality management system shall include a procedure where materials are supplied by the Customer, an identified agent or the Client (if required in the contract specification), to ensure that the property or material is safeguarded from damage, deterioration or misuse. This is particularly important where those products are not installed by the organization itself e.g. third-party subcontract organisations such as ground workers, drainage contractors

8.5.4 Preservation

Systems shall be in place to inspect and maintain all goods returned from site before their subsequent use.

8.5.5 Post-delivery activities

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

8.5.6 Control of changes

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

8.6 Release of products and service

The organization shall retain records to show that the person authorizing the release of products and

services had the necessary authority and competence to do so

8.7 Control of nonconforming outputs

Non-conforming components shall not be used unless written approval has been received from

8.7.1 the Client.

Any material and /or work not conforming to the specification shall either be reworked to conform to the specification or must formally be accepted in writing by the customer. The materials and/or work shall otherwise be considered as rejected and precluded from use as originally intended. The quality management system documentation shall identify the control procedures to be taken when non-conformity in materials, preparation or undertaking of works.

Note: Some inconsistencies and/or irregularities may not initially be reasonably evident e.g. as a result in delays in receipt of test results on a component or within the control of the organization . The organization may seek concessions from the customer with regard to acceptance or repair as a result of such factors.

8.7.2 The organization shall implement and retain documented information such that any work not conforming to the contract specification shall be rejected and precluded from use, reworked to conform to the specification, or formally accepted under concession in writing from the Client.

9 Performance evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

This includes the ongoing impact on other works including congestion and traffic flows

9.1.2 Customer satisfaction

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

9.1.3 Analysis and evaluation

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

9.2 Internal audit

- **9.2.1** No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification
- 9.2.2 The quality plan shall state the frequency of internal audits. Internal audits of the quality management system shall include the scope of this SSD and include site activities at least every twelve months.

Note: Where the organization does not have contracts which provide continuous working throughout a full year, visits shall be conducted on a pro-rata basis to ensure a consistent approach across site activities.

9.3 Management review

9.3.1 General

(i) The organization shall review the quality management system no less frequently than once every twelve months to ensure its continuing suitability and effectiveness to conform to this NHSS.

9.3.2 Management review inputs

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

9.3.3 Management review outputs

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

10 Improvement

10.1 General

No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

10.2 Nonconformity and corrective action

The corrective actions and risk assessment processes shall include analysis of incidents including accident statistics

- (i) Complaints received via the HEA, as administrator of HERS, or via the SSAC shall be investigated and corrective action completed as soon as practicable and no later than six months from the date of being advised of the complaint
- (ii) Corrective action following HEA Technical Audits shall be completed as soon as practicable and no later than six months from the date of the audit
- **10.2.2** No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification

10.3 Continual improvement

Continual improvement processes shall include analysis of near miss reporting

Appendix A: Requirements for Quality Plans

The quality plan shall include (but not be limited to) the following items.

1.0 General requirements

- 1.1 Definition of the product (or service) to be provided.
- 1.2 The structure of the organization describing the line of command and stating the names of the organization's Manager responsible for the contracted work.
- 1.3 Identification of the relevant parts of the organization's documented quality management system relevant to the product or service being provided.
- 1.4 The control of team selection including special requirements for skilled personnel e.g. training of site staff.
- 1.5 The control of equipment.
- 1.6 Any environmental conditions impacting upon the specified works.
- 1.7 Location of site for the contract and means of access
- 1.8 Specification and/or Contract Documents
- 1.9 Extent of the works and the commencement and completion dates of the contract
- 1.10 Details of the work (as appropriate)
- 1.11 Details of existing materials (as applicable)
- 1.12 Disposition of documented information

2.0 Contract specific information

- 2.1.1 The Customer's nominated Quality Manager, project manager and/or other representatives through whom communication is to be made throughout the contract.
- 2.1.2 Names of the staff involved with the contract including the contact details for these staff.
- 2.2 Details of the contract specific equipment to be used and any certification required to be issued to the Customer/Client.
- 2.3 Name and contact details of Customer/Client contact(s).
- 2.4 Details of the communications required between the organizations staff and the Customer/Client or any other party.
- 2.5 Work programme and details of deliverables.
- 2.6 Liaison with the Police and the Highway Authority or other competent authority.
- 2.7 Materials storage details and location
- 2.8 Method statements for application/installation, maintenance and removal of products and services covered by the scope of this SSD and the detailed drawing(s) to be supplied.

- 2.9 Inspection and testing regime to be adopted covering frequency, methods of test, responsibility for testing and acceptance criteria.
- 2.10 Control of non-conforming product.
- 2.11 How performance requirements are to be achieved.
- 2.12 All relevant contract specific information in respect to speed restrictions, safety requirements, environmental requirements, existing conditions and site conditions.
- 2.13 Any client-specified testing requirements and responsibility for testing including the supply of test equipment.

2.14 Risk Assessments

NOTES:

- 1. Where certain aspects of this information cannot be obtained or, is not provided, this fact shall be noted in the quality plan against the appropriate section.
- 2. The organization should also be aware that there may be further general requirements for quality plans within a contract, .e.g. Appendix 1/24 of the Manual of Contract Documents for Highway Works, SHW Appendix H which may also need to be addressed.
- 3 See ISO 10005 (Quality management systems Guidelines for quality plans) for further information

Appendix B: Reference and Associated Documents (Bibliography)

NOTE: The listing is not comprehensive; other documents may be required to fulfil the requirements of the contract. Organizations shall ensure that they have a working knowledge of and access to all the relevant documents including amendments required by the contract and specification

Organizations shall ensure they are working to current reference or associated documents appropriate to work in their sector.

The list of standards and documents below are date specific, however, the organization shall have processes in place to ensure that the latest version is always available. organizations should be aware that utilisation of internet search engines may result in out of date references being identified/called up.

1.Reference Documents

- 1 Manual of Contract Documents for Highway Works: Volume 1 Specification for Highway Works (SHW), and amendments
 - (www.standardsforhighways.co.uk/ha/standards/mchw/index.htm)
- 2 Manual of Contract Documents for Highway Works Volume 2 Notes for Guidance on the Specification for Highway Works (NGSHW), and amendments.
 - (www.standardsforhighways.co.uk/ha/standards/mchw/index.htm)
- 3 ISO 9000:2015 Quality Management Systems Fundamentals and Vocabulary
- 4 ISO 9001:2015 Quality Management System Requirements
- 5 ISO 9004 Quality Management Systems Managing for the sustained success of an organization. A quality management approach.
- 6 Energy Networks Association G39/3 Model Code of Practice covering electrical safety in the planning installation commissioning and maintenance of public lighting and other street furniture.
- 7 Highway Electrical Registration Scheme (HERS) Handbook (https://thehea.org.uk/hers_resources_categories/hers-handbook-and-training-specification/).
- The Highway Electrical Training Specification (https://thehea.org.uk/hers_resources_categories/hers-handbook-and-trainingspecification/).
- 9 IET HEA Code of Practice Electrical Safety Management in the Highway Electrical Sector
- 10 HS(G) 47 Avoiding danger from underground services.
- 11 GS 6 Avoidance of danger from overhead electrical power lines.
- 12 BS 7671 Requirements for Electrical Installations, IET Wiring Regulations and relevant Guidance Notes
- 13 PD CEN/TR 13201 Road lighting

- 14 BS 5489
- 15 BS EN 12767 Passive Safety of Support structures for road equipment
- 16 BS EN 12899
- 17 Safety of Street Works and Road Works: A Code of Practice (TSO)
- 18 Code of Practice for Traffic Control and Information Systems for All-Purpose Roads (TA 84 (TSO)
- 19 Local Transport Note 1/94: Design and use of Directional Informatory Signs
- 20 Local Transport Note 1/98- The Installation of Traffic Signals and Associated Equipment
- 21 Local Transport Note 2/95: The Design of Pedestrian Crossings
- 22 TD 23 Trunk Roads and Trunk Road Motorways, Inspection and Maintenance of Road Lighting. (TSO)
- TD 24 All Purpose Trunk Roads, Inspection and Maintenance of Traffic Signals and Associated Equipment. (TSO)
- 24 TD 35 All Purpose Trunk Roads MOVA System of Traffic Control At Signals
- TCUG Guidance Note 1, Inspection and Testing of Low Voltage Power Supplies and Cabling for Traffic Control Systems
- 26 Manual Handling Regulations / Manual Handling Operations Regulations (Northern Ireland)
- 27 Traffic Signs Regulations and General Directions, (TSO) / Traffic Signs Regulations Northern Ireland
- Traffic Signs Manual (TSO), Chapter 1: Introduction, Chapter 3: Regulatory Signs, Chapter 4: Warning Signs, Chapter 5: Road Markings, Chapter 7: Design of Traffic Signs 2003, Chapter 8: Traffic Safety Measures and Signs for Road Works and Temporary Situations, Chapter 14: Miscellaneous Matters
- 29 Department for Transport Network Management Advisory Leaflet: Provision of Temporary Traffic Signs to Special Events
- 30 Traffic Advisory Leaflets:

TAL 02/09: Integration of pedestrian traffic signal control within SCOOT-UTC systems

TAL 01/09: Compact MOVA

TAL 01/02 The Installation of Puffin Pedestrian Crossings

TAL 01/01 Puffin Pedestrian Crossing

TAL 16/99 The Use of Above Ground Vehicle Detectors

TAL 04/97 Rising Bollards

- 31 Puffin Good Practice Guide
- 32 MCS 206 List of drawings, specifications and instructions (https://tssplansregistry.highwaysengland.co.uk/login.asp)

- 33 MCF2331 Motorway and Trunk Road Communications Maintenance Service Specification
- 34 MCH1540 Specification for the Installation of Detector Loops on Motorways and All-Purpose Trunk Roads
- Other Sector Schemes where relevant and in particular NHSS 12A to D (https://www.lantra.co.uk/schedule-suppliers)

2. Associated Documents - Bibliography

- 1 GG102 Quality Management Systems for Highway Design (Design Manual for Roads and Bridges https://www.standardsforhighways.co.uk/dmrb/search/745cf41e-48c1-4096-972a-5a65cc48981
- 2 GG 104 Requirements for safety risk assessment (DMRB) https://nationalhighways.co.uk/suppliers/health-safety-and-wellbeing/home-safe-and-well/requirements-for-safety-risk-assessment

Note 1: This list of standards and documents include those that are date specific, however, the organization shall have procedures in place to ensure that the latest versions are always available. (See clause 7.5.3.2).

Note 2: National Highways may issue Interim Advice Notes (IANs) as a prelude to inclusion in the MCHW (Vol 1 and 2), the DMRB and/or Chapter 8. Organizations must have auditable processes in place to identify when these documents are issued and their implementation date(s). An index of Interim Advice Notes (IANS) is available on the internet (www.dft.gov.uk/ha/standards/ians/index.htm).

Note 3: Every effort has been made to update web sites, but the committee cannot provide any guarantees that the sites will continue to exist or if they do that they will maintain access to the documents identified above.

Appendix C: Training and Assessment of Competence

1. Training and competency qualifications

Training and competency requirements set out in this Appendix include agreed equivalences.

The organization shall ensure that their employees shall have undergone suitable training and competency assessment that will cover aspects of the work to be undertaken as follows and as set out in the HERS Handbook, Highway Electrical Training Specification and relevant Site Assessment Forms and training and competence assessment set out therein.

1.1. Areas of Competency

1.1.1 Areas of Competence are defined in the Competency & Occupations Matrices below

Where competency areas are repeated in the specialist areas (e.g. 7B is repeated in Traffic Signals, Motorway etc. Communications, VMS incl. Information Signs and Environmental & Monitoring Equipment), and the scope of the employee's work covers more than one of these areas, it is not intended that the competency area should be repeated, providing the scope of the competency assessment is sufficient to cover the required areas of work. Underpinning knowledge provided by training is as defined in the Highway Electrical Training Specification prepared by the NHSS8 Standards and Training Committee.

- 1.1.2 The occupational title Night Time Monitoring (Appendix C) is intended to cover those employees who are or may be carrying out work on site (e.g. replacing doors; making safe) and is not intended to cover those employees who solely carry out the identification and recording of faulty units with no other work carried out.
- 1.1.3 Ramp metering, which covers a number of the areas of competency, shall be dealt with by using Appendix C.
- 1.1.4 The occupational title of Tunnel Operative is intended to be for the use of personnel carrying out the activities set out in the relevant section(s) of Appendix C only within road tunnel bores and associated access areas. This occupational title should not be used if the person concerned is also carrying out works under the scope of NHSS8 on other roads / highways. This is to avoid confusion over occupational titles and scopes of competence.
- 1.1.5 The over-riding principle of the Competency Matrices, is that if a given employee carries out work which falls under any Competency Element, then the element becomes "mandatory" for them, and there shall be evidence to support the claim of competency in that area. Employees shall at all times at work have valid HERS cards.

	NHSS8/HERS Competency & Occupation	ns Mat	rix –	All S	Secto	rs –	Com	bine	d Pa	rt Or	ne – (Comi	mon	Area	ıs		
Competency Element Number	Competency Element Description	Competency Element included in NVQ Certification (Y / N)	Trainee	Installation Operative	Installation Operative (Crane)	Lead Inst. Operative	Routine Mtce Operative	Mtce Op – Fault Repair	Mtœ & Inst. Operative	Painting Operative	Night-time Monitor	Structural Tester	Highways Electrician / Service Operative	Tunnel Operative	Supervisor	Approved Person	Approved Person - Manager
Found01	Basic Health & Safety (incl. ECS HE H&S assessment) + M.T.		М	М	М	М	М	М	М	М	М	М	М	М	М	М	М
Found 01/1	Work in Confined Spaces + M.T.		Х														
Found02	Lorry mounted crane – Slinger / Signaller + M.T.		Х														
Found03	Lorry mounted crane – Operator + M.T.		Х		М												
Found04	Power Tools including hand tools + M.T. (PowerTools)		Х	М	М	М	2	М	М	М			М				
Found05/1	Mobile Elevating Work Platform + M.T.		Х					3	3	М							
Found05/2	Use of steps and ladders + M.T.		Х														
Found05/3	Erection of Scaffold Towers + M.T.		Х														
Found05/4	Accessing fixed structures at height (other than MEWPS, steps, ladders and scaffold towers) + M.T.		Х														
Found06	Temporary Traffic Management + M.T.		Χ		1		1	1	1	1		1	1		1		
Found07	Working in the vicinity of DNO/IDNO Equipment + M.T.		Χ		М			М	М	М			М		3	6	6
Inst01	Excavate, backfill & reinstate + M.T.		Χ		М				1								
Inst05	Install underground cables		Χ														
Inst06	Terminate and joint cables		Χ							Χ	Χ	Χ				Х	
Inst07	Avoiding danger from underground services + M.T.		Χ		М	М			1	Х	Х						
Main04/1	Emergency Inspection Procedures		Χ														
Main07	Underground Cable test and repair		Χ							Х	Х	Χ					
4A	Electrical safety in Non-energised testing		Χ							Х	Х	Χ					
6A	Maintenance of Poles, Lanterns & Brackets (Equipment spec)		Х				10										
6E	Maintenance of supply tails & earthing		Х														
Test01 (4C)	Initial Electrical Inspection and Testing – initial + M.T.		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	М	Х		Х	
Test02 (6I)	Periodic Electrical Inspection and Testing + M.T.		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	М	Х		Х	
Test07	Inspection and Testing for the Addition or Alteration to an Installation + M.T.		Х														
Sup01	Supervise teams on site		Х							Х	Х	Х			М		
Sup02	Set teams to work & supervise Quality, Safety & Productivity		Х							Х	Х	Х					
8/Sup05	CDM Awareness + M.T.		Х														М

	NHSS8/HERS Competency & Occupations Matrix – All Sectors – Combined Part Two – Specialist Areas																
Competency Element Number	Competency Element Description	Competency Element included in NVQ Certification (Y / N)	Trainee	Installation Operative	Installation Operative (Crane)	Lead Inst. Operative	Routine Mtce Operative	Mtce Op – Fault Repair	Mtce & Inst. Operative	Painting Operative	Night-time Monitor	Structural Tester	Highways Electrician / Service Operative	Tunnel Operative	Supervisor	Approved Person	Approved Person - Manager
Public Light	ting – Specialist Areas		Sco	pe S	electe	ed:											
Inst02	Erect, remove and realign columns and other street furniture		Χ		М				М								
Inst03	Install electrical equipment and wiring only		Χ														
Inst04	Install high mast lighting		Χ														
Main01	Painting of structures + M.T.		Χ							М							
Main02	Routine General Maintenance		Х				М	М	М								
Main03	Remove and replace components		Х					М	М								
Main04/2	Emergency Work		Χ														
Main05	Operate raising and lowering columns		Χ														
Main06	Maintaining high mast lighting		Χ														
Rep01	Identify and replace faulty components		Χ					М	М								
Rep02	Diagnose fault on equipment and replace faulty component		Х	Х			Х	Х	Х	Χ	Х	Х				Χ	Χ
Rep03	Locate faults on underground cables		Χ	Χ			Χ	Χ	Χ	Χ	Χ	Χ					
Insp01	Visual Inspection Optical Structural & Electrical		Χ					М	М				М				
Insp02	Night-time monitoring		Χ								М						
Test03	Periodic structural testing		Χ									М					
Test04	Photometric performance testing		Χ														
Traffic Sig	gn non-electrical works / unlit signs		Sco	pe S	electe	ed:											
Inst02	Erect, remove and realign columns and other street furniture		X	9		М			М								
Main01	Painting of structures + M.T.		Χ														
Main02	Routine General Maintenance		Χ						М								
Main04/2	Emergency Work		Χ														
S203	Appreciation of Traffic Sign Products & associated legislation and guidance		Χ			М				Χ	Х	Χ			М		М
S301.7	Excavate & install in Embankments		Х							Χ	Χ	Х					
S501	Erect Columns and Brackets (Posts) over 140mm dia. In multi-post foundations / Erect passively safe columns and posts		Х							X	Х	Х					
S501.1	Installation of passively safe structures and equipment		Х							Χ	Х	Х					
S512.1	Install sign assembly up to 3 sq. m - sign plate and sign lighting unit only (excluding connection)		Х	9		М			М	Х	Х	Х			-		
S512.2	Install sign assembly 3-15 sq. m - sign plate and sign lighting unit only (excluding connection)		Χ							Χ	Х	Χ					
S512.3	Install sign assembly over 15 sq. m - sign plate and sign lighting unit only (excluding connection)		Χ							Χ	Х	Χ					
S513	Install sign assembly on gantries & overhead structures		Χ							Χ	Χ	Χ					
S707	Traffic Sign performance inspection and testing		Х							Χ	Х	Χ					
Slot Cutting	j – Specialist Areas		Sco	pe S	electe	ed:			ı		ı		ı				
SC01	Cut slot to specification		Х	4		М				Χ	Χ	Χ					
SC02	Lay Cable & seal		Х	5		М				Χ	Х	Х					
SC03	Repair Faulty Cable		Χ							Χ	Χ	Х					
SC04	Access to cabinet through ducts etc.		Χ							Χ	Χ	Χ					

NHSS8/HERS Competency & Occupations Matrix – All Sectors – Combined Part Two – Specialist Area							ıs										
Competency Element Number	Competency Element Description	Competency Element included in NVQ Certification (Y / N)	Trainee	Installation Operative	Installation Operative (Crane)	Lead Inst. Operative	Routine Mtce Operative	Mtce Op – Fault Repair	Mtce & Inst. Operative	Painting Operative	Night-time Monitor	Structural Tester	Highways Electrician / Service Operative	Tunnel Operative	Supervisor	Approved Person	Approved Person - Manager
Traffic Sign	als - Specialist Areas		Sco	pe S	electe	ed:											
3A	Traffic & Pedestrian Control Principles		Χ				М			Χ	Χ	Х	М		М		
5A	Installation Techniques		Χ	8						Χ	Χ	Χ					
5B	Access to cabinet through ducts etc.		Χ							Χ	Χ	Χ					
6B	Traffic Controller Fundamental Principles		Χ							Χ	Χ	Х	М				
6C	Detector Fundamental Principles (Standard)		Χ							Χ	Χ	Χ	М				
6F	Urban Traffic Fundamental Principles		Χ							Χ	Χ	Х					
6G	Monitoring & Control Fundamental Principles		Χ							Χ	Χ	Χ					
6H	Traffic Controller Maintenance		Χ							Χ	Χ	Х					
6J	Detector Maintenance		Χ							Χ	Χ	Х					
7A	Commissioning Procedures		Χ							Χ	Χ	Х					
7B	Transmission System & Techniques Fundamentals		Χ							Χ	Χ	Х					
7C	Signal Configuration		Χ							Χ	Χ	Х					
7D	Advanced Traffic Principles		Χ							Χ	Χ	Χ					
7E	Advanced Detector Techniques		Χ							Χ	Χ	Χ					
7F	Ancillary Control & Monitoring Equipment Units		Χ							Χ	Χ	Χ					
7G	Monitoring Equipment Skills		Χ							Χ	Χ	Χ					
7H	Microprocessor Optimised Vehicle Actuated Mtce		Χ							Χ	Χ	Х					
71	Road Transport Passenger Information Systems		Χ							Χ	Χ	Х					
Communica	ations – Specialist Areas		Sco	pe S	electe	ed:											
COM01 (6B)	Communications. Control Fundamental Principles		Х				М			Х	X	Х	М				
COM02 (6C)	Comms. Detector Fundamental Principles		Х							Χ	Х	Х					
COM03A	Comms. Installation Technique – infrastructure		Χ							Χ	Χ	Х					
COM03B	Comms. Installation Technique – non-infrastructure		Χ	9						Χ	Χ	Х					
COM04	Mtce of Underground cables for Comms		Х							Χ	Χ	Х					
COM05	Maintenance of specialist Comms equipment (equipment specific)		Х							Х	Χ	Х					
COM06	Commissioning Procedures – Comms		Χ	Χ			Χ			Χ	Χ	Х					
7B	Transmission System & Techniques Fundamentals		Χ							Χ	Χ	Χ					
7G	Monitoring Equipment Skills (equipment specific)		Χ							Χ	Χ	Χ					
Electric Vel	hicle Charging Points		Sco	pe S	electe	ed:											
EV1	Install EV Charging Point		Х							Х	Х	Х					
EV2	Connect and/or Commission EV Charging Point		Х							Χ	Χ	Х					
EV3	Maintain EV Charging Point		Х							Χ	Χ	Х					
	reet Highway Electrical Equipment/Terminals and by other sections)		Sco	pe Se	electe	ed:											
HET1	Install Other Highway Electrical Terminal (define)		Х							Χ	Х	Х					
HET2	Connect and/or Commission Other Highway Electrical Terminal (define)		Х							Х	Х	Х					
HET3	Maintain Other Highway Electrical Terminal (define)		Х							Х	Х	Х					
.11.10			_ ^			<u> </u>	<u>l</u>		l	_^_	_^		<u> </u>	<u> </u>			

	NHSS8/HERS Competency & Occupation	s Matr	ix – /	All S	ector	's – (Coml	oinec	l Par	t Tw	o – S	peci	alist	Area	as		
Competency Element Number	Competency Element Description	Competency Element included in NVQ Certification (Y / N)	Trainee	Installation Operative	Installation Operative (Crane)	Lead Inst. Operative	Routine Mtce Operative	Mtce Op – Fault Repair	Mtce & Inst. Operative	Painting Operative	Night-time Monitor	Structural Tester	Highways Electrician / Service Operative	Tunnel Operative	Supervisor	Approved Person	Approved Person - Manager
VMS incl. In	formation Signs – Specialist Areas		Sco	pe S	electe	ed:									ı		
6C	Detector Fundamental Principles (Standard)		Χ							Χ	Χ	Χ					
6G	Monitoring & Control Fundamental Principles		Χ							Χ	Χ	Χ					
6J	Detector Maintenance		Χ							Χ	Χ	Χ					
VMS01	Installation Techniques – VMS / Info signs – Infrastructure		Χ							Χ	Χ	Χ					
VMS02	Installation Techniques – VMS / Info signs – non- Infrastructure		Χ	9						Χ	Χ	Χ					
VMS03	Mtce of specialist VMS equipment (equipment specific)		Χ							Χ	Χ	Χ					
VMS04	Commissioning Procedures (VMS) (equipment specific)		Χ	Х			Χ			Χ	Χ	Χ					
7B	Transmission System & Techniques Fundamentals		Χ							Χ	Χ	Χ					
7E	Advanced Detector Techniques		Χ							Χ	Χ	Χ					
7F	Ancillary Control & Monitoring Equipment Units		Χ							Χ	Χ	Χ					
7G	Monitoring Equipment Skills (equipment specific)		Χ							Χ	Χ	Χ					
71	Road Transport Passenger Information Systems		Χ							Χ	Χ	Χ					
Environmer Areas	ntal & Monitoring Equipment - Specialist		Sco	pe S	electe	d:											
ME01 (6B)	Monitoring Equipment Fundamental Principles		Χ				М			Χ	Χ	Χ	М				
ME02	Env. & Monitoring Equip't Installation Technique - Infrastructure		Х							Х	Х	Χ					
ME03	Env. & Monitoring Equip't Installation Technique – non- Infrastructure		Χ	9						Χ	Χ	Χ					
ME04	Mtce of underground cables for Env. & Monitoring equip't		Χ							Χ	Χ	Χ					
ME05	Mtce of specialist Env. & Monitoring Equipment (equipment specific)		Х							Х	Х	Х					
ME06	Commissioning Procedures - Environmental & Monitoring Equipment		Χ	Х			Χ			Χ	Χ	Χ					
7B	Transmission System & Techniques Fundamentals		Χ							Χ	Χ	Χ					
7G	Monitoring Equipment Chills (services of sec. 18.5)											Χ					
Camaraa	Monitoring Equipment Skills (equipment specific)		Χ							Χ	Χ						
Carrieras -	Monitoring Equipment Skills (equipment specific) Specialist Areas			pe S	electe	ed:				Х	Х	^					
Main05				pe S	electe	ed:				X	X	X					
	Specialist Areas		Sco	ppe So	electe	ed:											
Main05	Specialist Areas Operate raising and lowering columns		Sco	pe S	electe	ed:				Х	Х	Х					
Main05 CAM01	Specialist Areas Operate raising and lowering columns Installation Techniques – Infrastructure		X X	ppe So	electe	ed:				X	X	X					
Main05 CAM01 CAM02	Operate raising and lowering columns Installation Techniques – Infrastructure Installation Techniques – Terminate & Joint Cables Installation Techniques – Non-Infrastructure Camera		X X X		electe	ed:	M			X X X	X X X	X X					
Main05 CAM01 CAM02 CAM03 CAM04 (6A-	Operate raising and lowering columns Installation Techniques – Infrastructure Installation Techniques – Terminate & Joint Cables Installation Techniques – Non-Infrastructure Camera Equipment		X X X X		electe	ed:	M			X X X	X X X	X X X					
Main05 CAM01 CAM02 CAM03 CAM04 (6A-M601a)	Operate raising and lowering columns Installation Techniques – Infrastructure Installation Techniques – Terminate & Joint Cables Installation Techniques – Non-Infrastructure Camera Equipment Routine Optical Mtce of cameras Maintenance of cameras Maintenance of underground cables (incl. data cables) for		X X X X		electe	ed:	M			X X X X	x x x x	x x x x					
Main05 CAM01 CAM02 CAM03 CAM04 (6A-M601a) CAM05 (6A)	Operate raising and lowering columns Installation Techniques – Infrastructure Installation Techniques – Terminate & Joint Cables Installation Techniques – Non-Infrastructure Camera Equipment Routine Optical Mtce of cameras Maintenance of cameras		X X X X X		electe	ed:	M			x x x x x	x x x x x	x x x x x					
Main05 CAM01 CAM02 CAM03 CAM04 (6A-M601a) CAM05 (6A) CAM06	Operate raising and lowering columns Installation Techniques – Infrastructure Installation Techniques – Terminate & Joint Cables Installation Techniques – Non-Infrastructure Camera Equipment Routine Optical Mtce of cameras Maintenance of cameras Maintenance of underground cables (incl. data cables) for Cameras		X X X X X X		electe	ed:	M			x x x x x	x x x x x	x x x x x					
Main05 CAM01 CAM02 CAM03 CAM04 (6A-M601a) CAM05 (6A) CAM06 CAM07 (6J)	Operate raising and lowering columns Installation Techniques – Infrastructure Installation Techniques – Terminate & Joint Cables Installation Techniques – Non-Infrastructure Camera Equipment Routine Optical Mtce of cameras Maintenance of cameras Maintenance of underground cables (incl. data cables) for Cameras Detector Maintenance Commissioning Procedures – Inspection, Setup &		X X X X X X X		electe	d:	M			x x x x x x x x x x x x x x x x x x x	x x x x x x	x x x x x x x x x x x x x x x x x x x					

Competency Element Number	Competency Element Description d Tunnels (tunnel bore infrastructure &/or immed										Night-time Monitor	Structural Tester	Highways Electrician / Service Operative	Tunnel Operative	Supervisor	Approved Person	Approved Person - Manager
	 For Tunnel traffic signs, VMS, SOS, Wayfinder For Tunnel road loops – use Slot Cutting section For Tunnel traffic control signals – use Traffic Sommers For Emergency Roadside Telephones (ERT) – For CCTV, Vehicle Accident Incident Detection 	For Tunnel lighting, Electrical / Emergency Distribution Points (EDP) - use Public Lighting section For Tunnel traffic signs, VMS, SOS, Wayfinder signs – use Public Lighting / Traffic Sign / VMS sections as appropriate For Tunnel road loops – use Slot Cutting section For Tunnel traffic control signals – use Traffic Signal section For Emergency Roadside Telephones (ERT) – use Communications section For CCTV, Vehicle Accident Incident Detection (VAID), Radar – use Cameras and / or Comms sections as appropriate															
Record fo	7. For Environmental controls (e.g. visibility, pollu	tants) –		=nviro	nmer	ital &	Moni	toring	section					I	I		
each tunne	I Tunnel Specific Induction		Χ							Х	Х	Х		M			
T1	Cathodic Protection (active) - Installation Techniques		Χ							Χ	Χ	Χ					
T2	Cathodic Protection (active) - Commissioning Procedures		Χ							Χ	Χ	Χ					
T3	Cathodic Protection (active) - Maintenance		Χ							Х	Χ	Х					
T4	Cross Passage Doors (non-manual) - Installation Techniques		Χ							Χ	Χ	Χ					
T5	Cross Passage Doors (non-manual) - Commissioning Procedures		Χ							Х	Χ	Χ					
T6	Cross Passage Doors (non-manual) - Maintenance		Х							Х	Х	Х					\vdash
T7	Jet Fan Control Panels - Installation Techniques		Χ							Χ	Χ	Χ					
T8	Jet Fan Control Panels - Commissioning Procedures		Χ							Х	Х	Χ					
T9	Jet Fan Control Panels - Maintenance		Χ							Х	Χ	Χ					
T10	Photometer - Installation Techniques		Χ							Х	Χ	Χ					
T11	Photometer - Commissioning Procedures		Χ							Х	Χ	Χ					
T12	Photometer - Maintenance		Χ							Х	Х	Χ					
T13	Public Address System - Installation Techniques		Χ							Х	Х	Χ					
T14	Public Address System - Commissioning Procedures		Χ							Х	Х	Χ					
T15	Public Address System - Maintenance		Χ							Х	Х	Χ					
T16	Pumps (in bore infrastructure) - Installation Techniques		Χ							Х	Х	Χ					
T17	Pumps (in bore infrastructure) - Commissioning Procedures		Х							Х	Х	Х					
T18	Pumps (in bore infrastructure) - Maintenance (excluding major overhauls)		Χ							Х	Х	Х					
T19	Radio Interrupt - Installation Techniques		Χ							Х	Χ	Х					
T20	Radio Interrupt - Commissioning Procedures		Χ							Х	Х	Χ					
T21	Radio Interrupt - Maintenance		Χ							Х	Χ	Χ					
T22	Smoke Control panel - Installation Techniques		Χ				l			Х	Χ	Χ					
T23	Smoke Control panel - Commissioning Procedures		Χ							Х	Х	Χ					
T24	Smoke Control panel - Maintenance		Χ				l			Х	Χ	Χ					
T25	Ventilation - Installation Techniques		Χ							Χ	Χ	Χ					
T26	Ventilation - Commissioning Procedures		Χ							Х	Χ	Χ					
T27	Ventilation - Maintenance		Χ							Χ	Χ	Χ					
Bus Shel	ters – Specialist Areas		Sco	pe S	electe	ed:											
BS1	Install Bus Shelter		Χ							Х	Χ	Χ					
BS2	Connect and/ or Commission Bus Shelter		Χ							Χ	Χ	Χ					
BS3	Maintain Bus Shelter		Χ							Χ	Χ	Χ					

M = Mandatory; X = Not available as an option. All blanks are available as additions. "+ M.T." = plus mandated training. Note that where training is not mandated under HERS, this does not mean that no training is required; it is the employer's responsibility to determine what training is required for each of their employees for each competence element. Refer to the heading and the last page of the relevant site assessment form for the course reference and to the Highway Electrical Training Specification for details of the courses and accepted alternatives.

The over-riding principle of these Competency Matrices is that if a given employee carries out work which falls under any Competency Element, then the element becomes "mandatory" for them, and there must be evidence to support the claim of competency in that area. Employees must at all times at work have valid HERS cards.

Key to cells containing numbers (this applies to all pages of the "Appendix C" combined matrix):

- Mandatory for Public Lighting, Traffic Signals, except where work under Found06 is entirely subcontracted to contractors registered to NHSS 12AB, C or D as appropriate
- 2. Mandatory for Traffic Signals, Communications, VMS incl. Information Signs, Env. & Monitoring Equip't unless installing underground cable only
- 3. Mandatory for Public Lighting
- 4. Mandatory for Slot Cutting operatives carrying out slot cutting
- 5. Mandatory for Slot Cutting operatives carrying out backfilling
- 6. Mandatory for Approved Persons accessing the interior of feeder pillars, lighting columns or cabinets
- 7. Not used
- 8. Mandatory for Traffic Signal operatives carrying out pole, cabinet or signal head installations
- 9. Mandatory unless installing underground cable only
- 10. Mandatory for Public Lighting and Traffic Signals

SC01 – Cut slot to specification would include, for example, Induction, Weight in Motion, Piezo and also includes the cutting of slots for Extra Low Voltage supplies to illuminated street furniture on the highway (e.g. centre islands).

Training for Authorised Persons: For Authorised Persons (i.e. Competent Persons authorised by the Organization to carry out specific elements of work appropriate to their level of competency), a degree of training will be required, unless this has already been carried out prior to registration under this scheme as required under the Highway Electrical Training Specification and the Approved Training Organization / Approved Trainer process. Up-dating or refresher training may also be required. Such training shall follow nationally agreed guidelines, and all training shall at least be in accordance with the requirements of the Electrical Training Specification https://thehea.org.uk/hers_resources_categories/hershandbookand-training-specification/ developed by the Standards and Training Committee which reports to the NHSS8 Committee. The various occupational titles and associated areas of competency are defined in https://thehea.org.uk/hers resources categories/hers-handbook-and-trainingthe HERS Handbook specification/

Competence of Trainers: The Standards and Training Committee is concerned that not only shall employees be assessed as competent to the level required by the Organization and subject to third party audit, but also trainers shall be assessed as competent and subject to third party audit. To this end, the Highway Electrical Skills Academy, originally in partnership with Lantra Awards, has set up a system for the assessment of trainers, through the Approved Training Organization and Approved Trainer scheme https://thehea.org.uk/hers-hesa/approved-trainers/. Approved Training Organizations are issued with HESA certificates, Approved Trainers are issued with HESA registration cards. Approval for Approved Training Organizations and Approved Trainers automatically lapses after 31st March of each year, unless a reapplication is received. This goes some way to ensuring that the under-pinning knowledge of Approved Trainers is kept up to date.

It should be noted that any training not carried out in accordance with the Highway Electrical Training Specification by HESA Approved Trainers and appropriately certificated (by Lantra Awards in partnership with the HESA or by the Highway Electrical Skills Academy alone) or not specifically identified within the Highway Electrical Training Specification as agreed alternative training provision will be deemed as not meeting the knowledge requirements of this Sector Scheme and the associated Highway Electrical Registration Scheme.

<u>Competence of Authorised Persons:</u> For the assessment of competence, after the assessment of competency in accordance with HERS, the NVQ (formerly N/SVQ) Highway Electrical qualification, currently either at Level 2 or Level 3 shall be achieved.

The relevant NVQ qualifications currently are:

- Level 2 NVQ Certificate in Highway Electrical Systems Qualification No. 603/1948/3
- Level 2 NVQ Diploma in Highway Electrical Systems Qualification No. 603/1949/5
- Level 3 NVQ Diploma in Servicing Highway Electrical Systems Qualification No. 603/1866/1
- Level 3 NVQ Diploma in Servicing and Commissioning Highway Electrical Systems Qualification No. 603/1822/3

(Previously the relevant NVQ / SVQs were Installing Highway Electrical Systems Level 2 and Electrotechnical Services (Installing highway electrical systems) Level 3)

The NVQs are designed to apply to a wide range of work across all the highway electrical sub-sectors. However, where the scope of works is such that it is not possible to achieve the NVQ qualifications above, then the relevant units applicable to the works shall be achieved (typically this would be the mandatory units)

In any event, the scope of the NVQ assessment shall be mapped against the requirements of the Highway Electrical Registration Scheme to ensure the scope of the competency is maintained, and any areas of competence not covered by the NVQ assessments augmented by assessments carried out by the Qualified Supervisor(s). This shall be carried out by an occupationally competent Qualified Supervisor and authorised by a competent Authorising Officer.

Exceptions from the requirement to gain NVQs: The requirements to gain a Level 2 or 3 NVQ in Electrotechnical Services (Highway Electrical Systems) do not apply to Approved Persons or Approved Person Managers. If the Standards and Training Committee determines that the NVQ is not appropriate for other specific occupations or a particular scope of work, additional guidance and information will be made available.

NHSS 8 Training and Competence Assessment Requirements

Authorised Person

In order to attain Authorised Person status for electrical work, persons shall be required to be trained in accordance with the Highway Electrical Training Specification covering all appropriate modules relevant to the occupation of the Authorised Person and obtain the relevant NVQ qualification in Highway Electrical Systems (see Appendix C clause 1), at the appropriate unit and level commensurate with their designated occupation. The NVQ qualification shall be gained within two years of commencing employment with the organization. Exceptions to this requirement are as follows:

- a. Trainees who have three years to gain the NVQ, therefore allowing additional time for training.
- Apprentices on a government funded apprenticeship or government funded Trailblazer Apprenticeship who have the period stipulated within the standards to achieve the apprenticeship (typically up to four years)

Note 1: As additional occupational areas progress towards the implementation phase, industry accreditation routes and dates shall be determined accordingly. This would also apply to any new NVQ qualifications which are deemed appropriate.

In order to attain Authorised Person status for work having no electrical content, persons shall be required to be trained in accordance with the Training Specification covering all appropriate modules relevant to the occupation of the Authorised Person and obtain the NVQ qualification in Highway Electrical Systems, for the appropriate units and at the level commensurate with their designated occupation. The NVQ qualification shall be gained within two years of commencing employment with the organization. Exceptions to this requirement are as follows:

a) Trainees – who have three years to gain the NVQ, therefore allowing additional time for training

Note 1: As additional occupational areas progress towards the implementation phase, industry accreditation routes and dates shall be determined accordingly. This would also apply to any new NVQ qualifications which are deemed appropriate.

Note 2: The core units in the NVQ Level 2 in Highway Electrical Equipment together with relevant Assessor Guidance should permit persons to gain these units providing they successfully demonstrate the knowledge and performance objectives required for their tasks. This would include limited electrical works (e.g. excavating in the highway).

Note 3: Equivalent relevant qualifications shall also be deemed acceptable (Currently no list of equivalent qualifications exists. Therefore, equivalence shall be considered upon application).

Qualified Supervisor

A Qualified Supervisor can supervise work within the scope of their own knowledge and competence.

MINIMUM TECHNICAL QUALIFICATIONS		Qualified Supervisor								
QUALITICATIONS		Experience Levels								
NVQ/SVQ Level 2 or 3, NVQ Level 2 or equivalent in Highway Electrical Systems plus successful completion of the HERS Administrator's (HEA) Qualified Supervisor's course and required updates. NVQ/SVQ Level 2 or 3, NVQ Level 2 or equivalent in Highway Electrical Systems plus successful completion of the HERS Administrator's (HEA) Qualified	Route 1	Sufficient Initial and Continuing Professional development to show competence (This does not have a minimum time period, as it is the outcome which is measured. It would be unusual however for anyone with less than three years' experience to have attained the breadth and depth of competence required) Sufficient Initial and Continuing Professional development to show competence (This does not have a minimum time period, as it is the outcome which is measured. It would be unusual however for anyone with less than two years post qualification experience to have attained the breadth and depth of competence								

Supervisor's course and required updates.		required) and holding a qualification at a higher level than the required entry level.
Appropriate qualifications received from current or previous employer leading to assessment of competence by the Authorising Officer plus successful completion of the HERS Administrator's (HEA) Qualified Supervisor's course and required updates	Route 3	Sufficient Initial and Continuing Professional development to show competence (This does not have a minimum time period, as it is the outcome which is measured. It would be unusual however for anyone with less than three years' experience to have attained the breadth and depth of competence required) but having no evidence of formal training to the underpinning knowledge requirements of NVQ Level 2/3 or equivalent but able to provide evidence of attending recognised courses appropriate to the work undertaken.

Authorising Officer

Authorising Officers shall act within the scope of their own competency, including reliance on specialist advice from Qualified Supervisors

MINIMUM TECHNICAL	Authorising Officer
QUALIFICATIONS	Experience Levels
NVQ Level 3 or 2 or equivalent in Highway Electrical Systems plus successful completion of the HE Registration Scheme Administrator's (HEA) Authorising Officers Course and required updates, instead of or as well as the Qualified Supervisor's Course.	Sufficient Initial and Continuing Professional development to show competence (This does not have a minimum time period, as it is the outcome which is measured. It would be unusual however for anyone with less than three years' experience to have attained the breadth and depth of competence required) Sufficient Initial and Continuing Professional development to show competence (This does not have a minimum time period, as it is the outcome which is measured. It would be unusual however for anyone with less than two years post qualification experience to have attained the breadth and depth of competence required) and holding a qualification at a higher level than the required entry level.
Appropriate qualifications received from current or previous employer leading to assessment of competence by the Responsible Manager plus successful completion of the HE Registration Scheme Administrator's (HEA) Authorising Officers Course and required updates, instead of or as well as the Qualified Supervisor's Course.	Sufficient Initial and Continuing Professional development to show competence (This does not have a minimum time period, as it is the outcome which is measured. It would be unusual however for anyone with less than two years' experience to have attained the breadth and depth of competence required)

2. Health and Safety

Organizations are reminded of the legal requirements to provide Health and Safety training for all personnel as appropriate in accordance with the Health and Safety at Work Act 1974, the Management of Health and Safety at Work Regulations 1999 and all equivalent legislation within Northern Ireland.

The training and assessment of competency of personnel required by this scheme is aimed primarily at technical competence in their field of work. It is intended to provide awareness to carry out work in a safe manner; however, it remains the responsibility of the organization to determine and implement safe systems of work.

If they are working adjacent to live highways it is a requirement that personnel pass the specialist test questions for Highway Works included in the CSCS or the ECS Highway Electrical version Health & Safety touch screen test.

3. Temporary traffic management

Highways organizations are reminded of the requirements for temporary traffic management on all highways including high speed dual carriageways and motorways.

For work on high-speed dual carriageways and motorways, other than short duration works on hard shoulders or verges, such works shall be carried out by an organization registered to NHSS 12A/B as appropriate. For works on mobile lane closures NHSS 12C applies.

For works on other roads NHSS 12D applies and organizations need to ensure that they have appropriately skilled and registered operatives to set out the necessary temporary traffic management measures. Guidance is given in Appendix M of NHSS 12D.

For NHSS 8 personnel, the following requirements for the Training and Assessment of Competence of Highway Electrical Registered Authorised Persons carrying out Temporary Traffic Management apply:

- This section is intended to clarify temporary traffic management requirements carried out in association with the installation and maintenance of Highway electrical equipment and associated activities in line with the guidance in Appendix N. Specifically the training and assessment requirements set out in 6.3 below are intended to be used where the temporary traffic management is an incidental part of the works carried out under the scope of NHSS8
- 2 Temporary traffic management on motorways and highspeed dual carriageways carrying unrestricted traffic shall be designed and installed by a TTM organization registered to NHSS 12A/B and / or 12C as appropriate.
- For temporary traffic management on rural and urban roads, where the Organization has a dedicated in-house temporary traffic management division, they must be registered to NHSS12D.
- Where the Organization does not have a dedicated in-house temporary traffic management division registered to the appropriate NHSS 12 scheme, the Organization needs to assess and identify its requirements for trained and competent temporary traffic management operatives within its workforce. The Organization's management shall review the contract requirements in order to ascertain the requisite levels of resource needed and as part of the review shall record that such resources will be available throughout the contract period.
- All temporary traffic management (TTM) schemes shall be designed on the basis of a sitespecific risk assessment except where the repetitive nature of the work justifies the use of a generic risk assessment. The provisions for temporary traffic management shall be fully documented.
- The requirements for the training and assessment of competence in respect of temporary traffic management carried out by Highway Electrical Authorised Persons are as follows:
 - 6.1 All Registered Authorised Persons requiring to undertake traffic management, must undergo training to the 302.1 (and 302.2 where required) course together with the relevant training assessments and competency assessments prior to being permitted to carry out temporary traffic management. This requirement applies irrespective of whether the employee is assessed to the NRSWA Unit 2 and / or Unit 10. (Note this does not mean that every Registered Authorised Person must undergo such training and assessment providing that, for one person working, that person shall be so trained and assessed; for a team of

two- three on site there is not more than one un-trained person; and for a team of four-six on site there are not more than two un-trained persons.)

- 6.2 Trainers carrying out this training must be HESA Approved Trainers for the module(s) which includes satisfying the additional requirements of for Trainers for 302.1 / 302.2.
- 6.3 The implementation of temporary traffic management by suitably trained and assessed employees using training courses 302.1 / 302.2 and the subsequent site assessments shall be limited to those aspects covered by the training course(s) and site assessments undertaken together with any further limits set by the organization itself. Any temporary traffic management beyond that specified in the foregoing shall be carried out by a registered NHSS12D organization.
- 6.4 Where employees have, as an alternative to 302.1 or 302.1 and 302.2, relevant NHSS 12D training, assessment and NHSS 12D cards these will be deemed to satisfy the requirements of NHSS8 for the particular areas of temporary traffic management covered

Further information

NHSS 8 personnel carrying out surface coatings of ferrous materials shall comply with the training requirements of NHSS19A as particularised for NHSS 8.

4. Fraudulent certificates/cards

Action in the Case of Suspect Certificates / Cards – the following advice is given:

Suggested Action by the Organization

On being presented with a suspect certificate/card (check logo, print quality, colour, layout, spelling, likeness of photograph):

- Take possession of certificate/card.
- Call a member of the body that issued the certificate/card in this case the HEA office as HERS
 Administrator on behalf of the Highway Electrical Skills Academy. A member of the team will help
 you confirm your suspicions or otherwise. If the certificate/card appears to be fraudulent:
- Retain the certificate/card if possible
- Make photocopies of front and back
- Record certificate/cardholder's name and address
- · Ask certificate/cardholder where the certificate/card was obtained from
- · Call the local police and report the matter
- Refuse access to site (subject to company rules).
- Forward copies of all evidence to the body who issued the certificate/card marked "SUSPECTED FRAUDULENT CERTIFICATE/CARD" with any crime number given by local police.

Note: The body should in the majority of cases fully support any prosecution with technical and factual evidence.

This should help to maintain the integrity of the Highway Sector Schemes.

Enquiries

For further information and details please contact the Principal of the Highway Electrical Skills Academy: Highway Electrical Association

Highdown House Littlehampton Road Ferring, W. Sussex BN12 6PG

Tel: 01903 705140; Email: contact@thehea.org.uk

Appendix C1: Sample Skills Card

This appendix is intended to provide the reader and assessors with information on the style and layout of current competency/identity/registration (NHSS) cards recognised by the SSAC as deeming to satisfy the requirements of this scheme.

1. HERS Registration Certificate

- 1.1. The HERS Registration Certificate is issued annually by the HEA as the administrator of HERS, to each registered organization.
- 1.2. HERS Certificates are required to show initial and ongoing compliance with this SSD.
- **1.3.** The sample certificate shown would have:
 - **1.3.1.** the organization name where it states "An Organization";
 - **1.3.2.** the scopes of work where it states "{Scopes inserted here from the detail in Appendix K}";
 - 1.3.3. a unique HERS organization registration number ("SSRnnn" where "nnn" are numerals);
 - 1.3.4. the signature of the HEA Chief Executive where it states "Signature inserted here";
 - **1.3.5.** the date of issue (where it says "Date dd mm yyyy")
 - **1.3.6.** the date of expiry approximately twelve months after the date of issue
- 1.4. The HEA maintains a database of registered organizations showing the date of issue of the certificate

2. HERS Registration Cards

- 2.1. Cards may be Interim Cards (valid for one year only) or Standard Cards (valid for three years) further details can be found in the HERS Handbook, available for download from https://thehea.org.uk/hers_resources_categories/hers-handbook-and-training-specification/
- 2.2. HERS Cards are issued by the JIB under the Electrotechnical Certification Scheme

The following cards are available under this NHSS:





Where applicants hold other cards or qualification (e.g. from a state other than England, Scotland, Wales and N. Ireland), it will be necessary to establish the competency equivalence of such qualifications and advice should be sought from the appropriate Sector Skills Council or issuing/awarding body of recognised qualifications or the administrator of the embedded skills scheme as to the equivalence of the qualification to meet the described competency and knowledge described in the sector scheme document.



Appendix D: Example Register of Personnel Attainments

Not Used

Appendix E: Guidance for the Control of Monitoring and Measuring Equipment

Example of a typical requirement for NHSS:

Item No	Equipment	Purchase Specification	Calibration Control	Calibration Frequency
1	Digital Multimeter	Accuracy - All specified accuracies are at 23°C ± 5°C <75% RH for 1 year Temperature Coefficient - 0.1 x (specified accuracy) per °C (0 to 18°C, 28 to 50°C)	Calibration traceable to National Standards	Annually
2	Digital RCD Tester	Operating Voltage – 230Vac, 50Hz +10% to -15% Operating Temperature – 0°C to +40°C	Calibration traceable to National Standards	Annually
3				
4				

Notes

- The table does not represent an exhaustive list of monitoring and measuring devices and therefore
 equipment not included but employed by the organization should be calibrated to an acceptable
 standard and be documented.
- 2. Visual daily checks of items 1 and 2 shall be carried out on site to confirm that the equipment is working correctly and is not damaged. Records of the daily checks shall be kept.
- 3. If in-house calibration equipment is used for the calibration of items 1 and 2 it shall not be used for any other purpose and shall itself be calibrated traceable to national standards at intervals not exceeding two years.
- 4. If in-house calibration equipment is used for the calibration of item 3 it shall not be used for any other purpose and it shall itself be calibrated traceable to national standards at intervals not exceeding five years.
- 5. Records of all equipment in use, their calibration status and calibration or verification checks undertaken shall be implemented and maintained.

Appendix F: Certification Bodies Accredited for this Sector Scheme

Reference should be made to NHSS 0. However information on certification bodies accredited against this scheme can be found currently on the UKAS website www.ukas.com. The search facility is not guaranteed to return accurate results and details may be found at https://www.ukas.com/find-an-organisation/browse-by-category/?cat=2620

Note 1: This process will not identify certification bodies that do not have "sector scheme No X" in their scope, but which may have only "NHSS X" or "sector scheme X". To complete the full list of accredited CBs it will be necessary to repeat the process (at least twice) by typing in "nhss X" or "sector scheme X" as appropriate at bullet point 3. This should then list the certification bodies who are accredited to the scheme and their details can be found by clicking on the appropriate links.

Note 2:Advice on the current accreditation status of certification bodies to assess against this document should be sought from UKAS (Tel 01784 429000 or Email info@ukas.com).

Note 1: This process will not identify certification bodies that do not have "sector scheme No X" in their scope, but which may have only "NHSS X" or "sector scheme X". To complete the full list of accredited CBs it will be necessary to repeat the process (at least twice) by typing in "NHSS X" or "sector scheme X" as appropriate at bullet point 3. This should then list the certification bodies who are accredited to the scheme and their details can be found by clicking on the appropriate links.

Note 2: Advice on the current accreditation status of certification bodies to assess against this document should be sought from UKAS (Tel 01784 429000).

Appendix G: The Role of Certification Bodies and Auditor Qualifications

1. Role of certification bodies

- 1.1. The independent assessment of conformity of organizations to the requirements of ISO 9001:2015 and this SSD rely upon the assessment expertise, competence and capability of accredited certification bodies.
- 1.2. The certification body role is to ensure, through assessment, that organizations have management systems in place which address the enhanced ISO 9001:2015 requirements detailed in this SSD. The scope of the organization's management system should cover the evidence for the range of services that the organization is competent to supply and for which they are seeking registration including consideration of outsourced services and how those outsourced services are controlled within the overall scope of the relevant NHSS(s). This may include some or all of the activities set out in the scope of this SSD.
- 1.3. Certification bodies shall ensure they are all represented by at least one nominated individual lead certification body (or deputy) who will represent all certification bodies at meetings of this Sector Scheme Advisory Committee. This does not preclude other certification bodies from attending, as appropriate.
- 1.4. Certification bodies shall be represented at the National Highway Sector Scheme Liaison Committee.

2. Certification body accreditation

2.1. To ensure consistency and to demonstrate independent capability certification bodies are required to be accredited against the requirements of ISO 17021 by a NAB for assessment and registration of ISO 9001:2015 quality management systems in accordance with the particular requirements of this NHSS.

3. Assessor and assessment team competence.

3.1 The certification body must be able to demonstrate to NAB that it possesses and can maintain the necessary assessor experience and technical understanding of the activities covered in the scope of this Sector Scheme.

These assessment areas shall include, but not be limited to the following:

- i) knowledge, understanding and application of this SSD (See Appendix G1).
- ii) knowledge of the manufacture and supply in the industry covered by the scope of this SSD, including the methods and techniques sufficient to understand the processes employed and the controls necessary to ensure delivery of conforming product and services. Typically, this would include knowledge of the product and processes [including connections to different systems]. (Conveyance of this knowledge to auditing teams will be determined by the certification body and will be audited by the NAB)
- iii) maintenance of demonstrable technical highway engineering background, capable of reading and understanding specifications and drawings, including knowledge of the SHW and design standards requirements for this SSD
- iv)ability to demonstrate that they have ongoing suitable health and safety training which shall include appreciation of the risks involved in the manufacture, supply and installation in the specific aspects of the scheme as appropriate.
- v) preferably knowledge of constituent components and their properties

- 3.2 The certification body must also ensure that assessors have sufficient knowledge of health & safety requirements related to working on live highways where appropriate, knowledge of temporary traffic management, working in confined spaces and working at height for assessment of guidance provided in this document.
- 3.3 Guidance to Certification Bodies on assessor competence related to this Sector Scheme is given in the certification body guidance document –NHSS 0 Governance
- 3.4 The certification body is responsible for ensuring that the assessment teams possess demonstrable expertise in the assessment areas detailed above as they relate to the scope of client activities under assessment.
- 3.5 Minimum assessor qualifications and competence for assessment of this NHSS, which may reside in a single individual, or in an assessment team are as follows:
 - i) NAB accepted Lead Auditor qualification or certification body equivalent and demonstrable expertise in leading assessment teams.
 - ii) ISO 9001:2015 assessment experience iii) technical assessment competence in the scope of activities covered by this NHSS
 - iv) knowledge, understanding and application of this SSD.
 - v) knowledge of the manufacture and supply within the industry covered by this SSD, including the methods and techniques sufficient to understand the processes employed and the controls necessary to ensure delivery of conforming product. (conveyance of this knowledge to auditing teams will be determined by the certification body and will be audited by the NAB).
 - vi) demonstrable technical highway engineering background, capable of reading and understanding specifications and drawings, including knowledge of the SHW and design standards requirements for this SSD
 - vii) ability to demonstrate that they have ongoing suitable health and safety training which includes appreciation of the risks involved in these sector scheme activities
 - viii) preferably knowledge of [constituent components and their properties]

4. Conduct of Assessments.

- 4.1 Certification Bodies shall ensure that an adequate proportion of the initial and continuing assessment duration is devoted to assessing operational activities at locations where activities covered by the scope of this Sector Scheme are being undertaken from.
- 4.2 Certification Bodies shall make all reasonable endeavours to ensure that during a three-year certification cycle there is evidence of assessment of all execution activities covered by the organization's scope of registration. Certification bodies shall undertake surveillance visits at intervals no greater than one year.
- 4.3 There may be occasions when a CB encounters an organization that wishes to expand and the scope is not included in the relevant NHSS. This may be due to the introduction of new technology or innovation. In such instances, the CB shall advise the SSAC of this and ask them to consider an extension of scope within the SSD.

5. Format and Content of Registration Certificates.

- 5.1 Certificates of registration issued by Certification Bodies, which include within the scope of registration reference to compliance with this Sector Scheme, shall be in a format and contain the content detailed in Appendix K of this SSD.
- 5.2 The National Highway Sector Scheme Logo shall be included in any Certificate of Registration which has this Sector Scheme detailed in the Scope of Registration. The logo shall only be used and applied in the manner detailed in any conditions of use within NHSS 0

6. Reporting on Sector Scheme Performance.

- 6.1 Each Lead certification body shall report to the Chairperson of the SSAC including as appropriate
- a) observations and comments on the implementation and assessment findings related to the Sector Scheme including any omissions or deficiencies in its scope.
- b) recommendations for improving/clarifying the SSD
- c) feedback on deficiencies against contract documentation
- d) the number of organizations whose scope of registration includes this Sector Scheme
 - Note 1: This is to be issued to the Chairperson of this Sector Scheme Committee.

Appendix G1: Guidance to Assessors' and Other Auditors' Competencies Requirements

Section 1 - General Information

The information contained in this appendix has been collated by the NHSS committee to provide CB assessors with the background information that is considered appropriate for carrying out an assessment against ISO 9001:2015 and these NHSS documents. During the development of the Appendices it was realised that this information would also provide useful guidance for first- and second-party auditors of the system.

Section 2 - Requirements

This section of the guidance is divided in three parts namely 2A, 2B & 2C.

2A General

Assessors and auditors shall be familiar with the requirements of this NHSS and the contents of this SSD as well as any relevant documents referenced. For example, assessors and auditors should have knowledge of relevant international, European and British standards for the scope of work covered by this NHSS; in particular those relating to product conformity, type testing and their requirements; familiarity with SHW, notes for guidance for the SHW, (including when these are updated), the Design Manual for Roads and Bridges and Interim Advice Notes issued by National Highways.

- i) NHSS 8 was developed in response to National Highways requirement for such a scheme and as a response to the Construction Summit 2001 setting out targets to reduce accidents and ill health in the construction industry. It was originally entitled NHSS 8 ,9B and 10.
- ii) The scheme applies to all those carrying out work on site under the scope of Highway Electrical and supporting Works as detailed in the Scope of this SSD and Appendix K
- iii) Further advice and guidance can be obtained from the Secretary of NHSS 8 or the HERS Administrator (the HEA) on 01903 705140 or by email to contact@thehea.org.uk
- iv) The scheme applies generally to the overseeing and / or installation and / or maintenance of any items of highway equipment which are connected to a source of electricity together with some non-electrical works such as cabling and the installation of posts, columns and cabinets.
- v) The scheme is a contractual requirement on all National Highways, Transport Scotland, Welsh Assembly Government, DRD(NI) contracts and usually any contract which uses National Highways Specification for Highway Works. It may also be used in other contracts.
- vi) The specific types of works that the scheme applies to are set out in Appendix K and covers overseeing activities, installation works, maintenance works, term maintenance works and PFI works. Each organization will have a current organizational certificate of registration to the Highway Electrical Registration Scheme which sets out their specific scope of works
- vii) Definitions and terminology that are particular to the scheme are set out in Section 3 of this document, the associated Highway Electrical Registration Scheme Handbook and NHSS 0
- viii) Training and Competency requirements are set out in Appendix C and in the HERS Handbook. In order to allow flexibility, organizations define the scope of competency of each employee by reference to the Competency and Occupations Matrix within the HERS Handbook. Confirmation of this is shown by the existence of the organization's certificate of registration, the employee's Registration Card, the employee's Authorisation Certificate (effectively their Competency and Occupations Matrix) and their portfolio. (Note the technical auditing of the content of HERS portfolios is carried out by the Administrator of the Scheme the HEA)

- ix) Key documentation applicable to the scheme includes:
 - BS EN ISO 9001
 - NHSS 8
 - · Highway Electrical Registration Scheme Handbook
 - · Highway Electrical Training Specification
 - Site Assessment Forms
 - Other documents as deemed relevant by the organization, examples of which are given in Appendix B of NHSS 8
- x) Relevant international, European and British Standards are set out in Appendix B
- xi) Relationships with other NHSS's are set out in Appendix N

2B Summary of where the scheme interprets sections 4 to 10 of ISO 9001:2015

The summary provides a list of those clauses where particular requirement has been provided. These are indicated by "Y" in the table.

Assessors and auditors shall obtain objective evidence to support compliance with the relevant clauses

Section/Clause	Particular requirement Yes/No	Comment/Requirement
4. Context of the organization		
4.1 Understanding the organization and its context	N	Check annually that the organization has determined issues relevant to its purpose and strategic direction and has monitored and reviewed the information. Especially check relating to external context.
4.2 Understanding the needs and expectations of interested parties	Y	Check annually that the organization has determined interested parties, their requirements and is monitoring and reviewing the data.
4.3 Determining the scope of the quality management system	Υ	Check that the organization has reviewed the scope of the relative elements of the latest applicable issue of the NHSS that the organization considers appropriate
4.4 Quality management system and its processes. (4.4.1 & 4.4.2)	Y	Check annually by the CB Auditors and other Auditors that the scope of the organization's ISO 9001 certificate reflects the organization's activities accurately
5. Leadership		
5.1 Leadership and commitment	-	
5.1.1 General	Y	Check policy documented information includes this NHSS Ensure that policy is being correctly implemented and communicated.

5.1.2 Customer focus	Y	Ensure that the organization has determined all necessary applicable statutory and regulatory requirements for contract compliance. This may include supplementary services such as recycling, final disposal, equipment inspection, licensing requirements for driving (HGV), animal including wildlife handling
		etc. Check that organization is meeting and maintaining customer requirements

Section/Clause	Particular requirement Yes/No	Comment/Requirement
5.2 Policy		
5.2.1 Establishing the quality policy	Y	Ensure requirements are covered in quality plan and in policy documented information
5.2.2 Communicating the quality policy	N	Ensure that policy documented information is available as necessary and is being communicated and implemented.
5.3. Organization roles, responsibilities and authorities	Υ	Ensure there is an organization plan which covers responsibility/authority in accordance with the requirements of the SSD. Seek evidence. Ensure that personnel with contract specific responsibilities and authorities have been identified and are recorded. Ensure that the organization management have appointed a nominated person or persons with the appropriate responsibility and authority. Seek evidence.
6. Planning		
6.1 Actions to address risks and opportunities.	Υ	Check that documented information is in place to address risk and opportunities and is operational.
(6.1.1 & 6.1.2)		
6.2 Quality objectives and planning to achieve them (6.2.1 & 6.2.2)	Y	Check documented information is in place and meets requirements. Check that quality planning is in place and evaluated. See Appendix A
6.3 Planning of changes	N	
7. Support		
7.1 Resources	N	
7.1.1 General	N	Ensure contract/tender review is in place. Review provisions of resources to confirm they are suitable and include providing the defined personnel for contracts
7.1.2 People	N	See Appendices A, C and D and the HERS Handbook. Check evidence for 7.2.1 (iii) if applicable. Check organizational policy for assessing and meeting temporary traffic management needs. Check existence of employee portfolios, valid HERS cards. Check existence of 302.1 or 302.1 and 302.2 Lantra Awards or HESA training certificate or NHSS 12D certificate and card where temporary traffic management carried out as agreed with NHSS 12D. Check employee registered with NVQ Centre in accordance with Appendix C timescale
7.1.3 Infrastructure	N	Review facilities, processes and equipment to confirm they are suitable for the scope of registration.
7.1.4 Environment for the operation of processes	N	In process audit. Checks to include environmental condition records, plant maintenance sheets, access equipment certification and induction records.

7.1.5 Monitoring and measuring		
resources		
7.1.5.1 General	N	See Appendix E
7.1.5.2	Y	See Appendix E
Measurement		
Traceability		
7.1.6 Organizational	N	See Appendix B
knowledge		

Section/Clause	Particular requirement Yes/No	Comment/Requirement
7.2 Competence	Υ	Review copies of training certificates, qualifications and identity cards and forward-looking training plans. Ensure that these are in accordance with the requirements of the sector scheme documents Check sample of identity cards. See Appendices C and D
7.3 Awareness	N	
7.4 Communication	Y	Check internal and external communication processes have been established.
7.5 Documented information		
7.5.1 General	Y	Check processes are in place to ensure that organization maintain up to date information on documented information. See Appendix B
7.5.2 Creating and updating	N	Ensure that all required contract specific documents are in place.
7.5.3 Control of documented information. (7.5.3.1 & 7.5.3.2)	Υ	Ensure that all required contract specific documents are in place. Check appropriate processes are in place for the retention and disposition of documented information
8. Operation		
8.1 Operational planning and control	Y	Check quality plan is in place and complies with 7.5. See Appendix A Check appropriate processes are in place for the retention and disposition of documented information
8.2 Requirements for products and services		
8.2.1 Customer communication	Y	Check effectiveness of communication arrangements
8.2.2 Determining the requirements for products and services	Y	Ensure that the organization has determined all necessary specified statutory and regulatory requirements for contract compliance. This may include supplementary services such as recycling, final disposal, equipment inspection, licensing requirements for driving (HGV) etc. Check the organizations ability to meet defined contract requirements
8.2.3 Review of the requirements for products and services. (8.2.3.1 & 8.2.3.2)	N	Ensure contract tender review is in place with an appropriate timescale and assessment of availability of resources.

8.2.4 Changes to requirements for products and services	N	
8.3 Design and development of products and services		
8.3.1 General	N	Check that contract/tender review is in place
8.3.2 Design and development planning	N	
8.3.3 Design and development inputs	N	
8.3.4 design and development controls	N	
8.3.5 Design and development output	N	

Section/Clause	Particular requirement Yes/No	Comment/Requirement
8.3.6 Design and development changes	N	
8.4 Control of externally provided processes, products and services	N	
8.4.1 General	Υ	Check that documented information is in place for externally provided product and services to meet specified requirements. Check process for ensuring sub-contractors meet clause 8.4.1
8.4.2 Type and extent of control	N	Check that documented information and effective controls are in place.
8.4.3 Information for external providers	Y	Check that purchasing requests are adequate
8.5 Production and service provision	N	
8.5.1Control of production and service provision	Y	Check as part of in process audit Refer to Appendix E
8.5.2 Identification and traceability	N	Cover during procedure review that relevant documented information is in place
8.5.3 Property belonging to customers or external providers	Υ	Check that documented information is in place.
8.5.4 Preservation	Y	Check process.
8.5.5 Post-delivery activities	N	
8.5.6 Control of changes	N	Check documented information is in place

8.6 Release of products and service	1	has been implemented in line with the current contract specification.
8.7 Control of nonconforming process outputs, products and services. (8.7.1 & 8.7.2)	Y	Ensure processes are in place and has been implemented in line with contract specification. Check documented information.
9 Performance evaluation		
9.1 Monitoring, measurement, analysis and evaluation		
9.1.1 General	Υ	Check planned results. Check that monitoring and measuring process documentation has been implemented in line with the current contract specification. Review copy of annual management review. Ensure this contains continuous improvements to the relevant sector scheme
9.1.2 Customer satisfaction	N	Check that organization is meeting customer requirements.
9.1.3 Analysis and evaluation	N	Check processes are achieving planned results Check analysis of data has provided information to demonstrate effectiveness of QMS and evaluation of continued improvement
Section/Clause	Particular requirement Yes/No	Comment/Requirement
9.2 Internal audit (9.2.1 & 9.2.2)	Y	Check internal audits are being carried out and ensure corrective actions have been made. Check existence of the HEA Technical audit and action(s) arising if any
9.3 Management review		
9.3.1 General	Y	Review minutes of management review. Ensure this contains reference to the relevant sector scheme.
9.3.2 Management review inputs	N	
9.3.3 Management review outputs	N	Check that the output and actions are considered by top management at regular intervals
10. Improvement		
10.1 General	N	Check effectiveness of improvement
10.1 General	17	
10.1 General 10.2 Nonconformity and corrective action (10.2.1 & 10.2.2)	Y	Check that documented information is in place and operational. Check actions arising from HEA audit(s) and complaints, if any, are closed out internally within maximum of six months (or are on target to be so)

Check that monitoring and measuring process documentation

2C - Overview of this NHSS in terms of industry requirements and working practices.

In addition to an assessor/auditor having a general appreciation of the requirements and processes required by ISO 9001:2015 (latest issue), a CB assessor or internal auditor should be aware of the following when completing an audit: -

C1 - Safe Working Practices

C2 – Training, qualifications and assessment of competence

- C3 Maintenance of equipment
- C4 Public protection
- C5 Environment
- C6 Testing/inspection/workmanship
- C7 Health and Safety
- C8 Equal Opportunities
- C9 Other

C1 – Safe Working Practices

- Correct Personal Protective Equipment Worn
- Equipment approved and suitable for use
- Personnel to be fully aware of their H&S obligations
- Must be able to read and understand their job sheet, risk assessment and other relevant documents; understand English.
- Method Statements/work procedures.
- Risk Assessment.
- · Induction card/skills card.
- Vehicles/loads are inspected and drivers are qualified
- · Site visit including assessment of installation (if possible) and techniques verified.
- Awareness of relevant H&S requirements
- Awareness of current best practice including temporary traffic management measures (including site arrangements).
- HERS Registration Certificate for the organization showing scope and expiry date
- Procurement Process for sub-contractors who, if not carrying out just excavation and reinstatement
 works and / or the laying of ducts, are required to be registered as organizations and have their
 employees registered to the Highway Electrical Registration Scheme
- C2 Training, Qualifications and Assessment of Competence
 - Have achieved appropriate training evidenced by appropriate certification
 - Have been assessed as competent within their scope of works (e.g. scheme specific assessment/ N/SVQ)
 - Been inducted on specific equipment (by employer) or if appropriate (i.e. under training) is supervised by a qualified person.
 - Aware of and understand the relevant requirements of this NHSS.
 - Aware of and understand the provisions for implementation of training in this NHSS.
 - Been inducted on site specific H&S issues.
 - · Hold the relevant skills card.
 - Register of employees with HERS Registration cards, Authorisation Certificates and portfolios.

C3 Maintenance of Equipment

- Relevant personnel are aware of LOLER and PUWER requirements
- Maintenance checklists are available and have been completed as required
- C4 Public Protection (Note: Public in this instance includes personnel employed by the customer/client)
 - Personnel are aware of the need to protect public during installation operations
 - Relevant personnel have been trained to carry out a visual site risk assessment to ensure that the public will not be put at risk during installation/maintenance operations
 - Where appropriate relevant personnel are aware of the Traffic Officer role
 - Personnel have identification

C5 Environment

Auditors should be sufficiently competent to make general observations on the effectiveness of the organization's provisions in respect of the environment and in particular management of waste and its reduction.

C6 Inspection/ Testing/Workmanship

Auditors should be aware of the importance of inspection and testing of the product and have knowledge of the relevant tests and the information provided by the tests.

C7 Health and Safety

Auditors should be aware of the Health and Safety at Work etc Act 1974 and associated Health and Safety Legislation, as it applies to this sector scheme.

C8 Equal Opportunities

Assessors/auditors should be aware of and understand the need for effective diversity management, including the implementation of equal opportunities and avoidance of disability discrimination as it applies during the provision of services. Assessors/auditors should understand what is involved and how it can be encapsulated in company procedures.

Appendix H: Organization Acceptance and Guidelines for New Entrants

1.0 Organization Acceptance

- 1.1 For work carried out on roads managed by National Highways, the Welsh Government, Transport Scotland and Department for Infrastructure (Roads)
- , only those organizations holding a valid Certificate of Registration for work within the scope of this SSD will be accepted as complying with Clause 104 and Appendix A of the SHW.
- 1.2 For work carried out by other highway authorities or other clients, acceptance of the organization will depend on the requirements of the contract.
- 1.3 In the absence of assessment including a site visit over a 3-year period then evidence must be provided of site activity (e.g. site records, video recording) to ensure that registration can be maintained.

2.0 Guidelines for New Entrants - Requirements

- 2.1 Organizations must have the required experienced and qualified personnel and management who meet the requirements of this Sector Scheme. Organizations will need to demonstrate that their equipment and systems meet the requirements of this Sector Scheme.
- 2.2 Organizations must have applied for registration with a certification body that is accredited by their NAB to audit against this Sector Scheme. Organizations will have to demonstrate that they have been audited for office-based activities and site based capability.

2.3

3. Interim Arrangements for Initial Implementation of this Sector Scheme

3.1 None

4. Trade Associations

4.1 Membership of a trade association or other similar body is not a requirement of this Sector Scheme, however, the following organisations support this Scheme along with the training and competency routes discussed in Appendix C. Their details are included here for information.

HEA - The Highway Electrical Association

Appendix J: Feedback

1. Guidance

To be used for observations and/or feedback including:

- 1. Feedback to the Sector Scheme Advisory Committee(s) (SSAC) relating to the content of the SSD and/ or the processes including scheme administration
- 2. Feedback to the Certification Body relating to certification matters including where the receiving organization considers the product and/or service provided is deficient and not in accordance with this scheme should in the first instance be taken up with the organization
- 3. Feedback to the Client relating to implementation and auditing of National Highway Sector Schemes registration matters in respect of alleged contractual mismanagement/oversights or alleged omissions in contract requirements by client organisations, their management agents or principle contractors where contracts can be or may have been awarded to organisations not registered to this National Highway Sector Scheme, or where contracts are alleged to have omitted requirements for compliance with this National Highway Sector Scheme

The Feedback form should include the following

- NHSS No. <enter NHSS no.>
- Type of feedback: 1.Document Feedback; 2 Feedback to Certification Body or 3. Feedback to the Client
- Name*
- Organization*
- Address*
- Contact details (Email and telephone number)*
- Date
- Observation(s): as much detail as possible including who, what, where, why, when, and how
- Potential corrective action(s) if any

*Unless raising through the Certification Body or Trade Association and wishing to remain anonymous

Email or send the form by other means including the above details as follows:

- 1. For Feedback to the Sector Scheme Advisory Committee(s) (SSAC):
 - a. to the Chair and / or the Secretary of the identified SSAC using the contact details in the current SSD, or
 - b. to the Certification Body, or
 - c. to a Trade Association
- For Feedback to the Certification Body to the Certification Body with a copy to the Chair or Secretary of the NHSS Committee using the contact details in the SSD either directly or through a Trade Association
- 3. For Feedback to the Client to the Client with a copy to the Chair or to the Chair or Secretary of the identified SSAC using the contact details within the SSD or to the Certification Body or a Trade Association

1.2 Actions

- 1. On receipt of an Appendix J Form, an acknowledgement shall be provided to the sender, if practicable to do so (i.e. if not anonymised) by the relevant secretariat within 10 working days.
- 2. Dependent on the nature of the observation(s) made, the Appendix J form may be responded to without the need for it to be considered by the entire Sector Scheme Advisory Committee (SSAC)).
- 3. If the Appendix J form requires more detailed consideration, it will be addressed at the next

- meeting of the SSAC, in addition to any SSAC's ongoing document review activity.
- 4. f the Appendix J form contains information that is critical, then an exceptional action can be taken prior to the meeting by the appropriate SSAC Chair; for instance, calling an extraordinary meeting of the SSAC.
- 5. The secretariat will advise the originator of the Appendix J form when the next meeting is expected to be held.
- 6. The Appendix J Form's observations and any related comment or action will be minuted at the next SSAC meeting
- 7. A decision, or where it is not possible to make a decision in the timeframe -the action of the SSAC will be communicated to the originator within 20 working days of acknowledgement of the feedback. If an action is communicated, then a timescale will be advised for reaching and communicating the decision.
- 8. The originator has the right of appeal regarding the SSAC decision, see NHSS0

If the originator wishes to remain anonymous, they may ask their Certification Body or a Trade Association to forward on the form on their behalf or may raise the issue verbally with their Certification Body after the closing off meeting at their surveillance visit or raise through their trade association if they are a member of one.

2. Appendix J Form

Email or send the form by other means as follows:

- 1. For Feedback to the Sector Scheme Advisory Committee(s) (SSAC):
 - a. to the Chair and / or the Secretary of the identified SSAC using the contact details in the current SSD, or
 - b. to the Certification Body, or
 - c. to a Trade Association
- 2. For Feedback to the Certification Body to the Certification Body with a copy to the Chair or Secretary of the NHSS Committee using the contact details in the SSD, either directly or through a Trade Association
- 3. For Feedback to the Client to the Client with a copy to the Chair or to the Chair or Secretary of the identified SSAC using the contact details within the SSD or to the Certification Body or a Trade Association

NHSS No.	Type of feedback (delete those not applicable)	1.Document Feedback, or2 Feedback to Certification Body or3. Feedback to the Client
Name*		
Organization*		
Address*		
Contact details (Email and telephone number)*		
Date		
Observation(s): as much detail as possible including who, what, where, why, when, and how		
Potential corrective action(s), if any		

^{*}Unless raising through the Certification Body or Trade Association and wishing to remain anonymous

Appendix K: The Interpretation of Certificates Issued by Certification / Inspection Bodies

A valid National Highway Sector Scheme (NHSS) CoR is only issued by a CB accredited by a NAB against the relevant NHSS.

A valid CoR will contain the following information in accordance with ISO 17021 (reproduced here for clarity):

- The management system standard and/or other normative document, including indication of issue status (e.g. revision date or number) used for audit of the certified client and the scheme title e.g. "National Highway Sector Scheme XX Sector Scheme for the prescribed activity". The NHSS SSD title must use the same wording as set out on the cover page of the relevant NHSS SSD. Where ISO 9001 certification is provided by a suitably accredited CB different to the CB carrying out the NHSS assessment, the latter's certificate must reference the ISO 9001 certifying CB name, their NAB reference and certificate number.
- The scope of certification with respect to the type of activities, products and services as applicable at each site without being misleading or ambiguous (including any applicable categories with associated typical sub-categories where applicable). The scope of the management system should cover the range of services that the organization has evidence to show it is competent to supply and for which they are seeking registration including consideration of outsourced services and how those outsourced services are controlled within the overall scope of the relevant NHSS(s). This may include some or all of the activities set out in the scope of the SSD. The scope(s) and any sub-scopes must use the same wording as set out in NHSS 0 Suite of Scopes, or in Appendix K of the NHSS SSD. Note that where the NHSS SSD wording differs from that in NHSS 0 (e.g. where the NHSS SSAC has introduced a new sub-scope and this is not yet reflected in NHSS 0), the wording in the NHSS SSD Appendix K shall take precedence.
- The expiry date or recertification due date consistent with the recertification cycle (generally 3 years for management system auditing and 1 year for system inspection)
- A unique identification code
- The name, address and certification mark of the certification body; other marks (e.g. accreditation symbol, client's logo) may be used provided they are not misleading or ambiguous. The NHSS mark and the associated accreditation mark must be used
- Any other information required by the standard and/or other normative document used for certification
- In the event of issuing any revised certification documents, a means to distinguish the revised documents from any prior obsolete documents

*Note where an organization has an extension to scope to include for this NHSS, the expiry date of the certificate remains as 3 years after their initial assessment/or triennial assessment and not 3 years after obtaining the extension to their certificate i.e. the validity of the certificate will not be reset following their NHSS assessment.

Categories currently in NHSS 8 are:

	Activity	Primary Category (select)	Secondary Category (select)	Tertiary Category (select)
The	Overseeing of	Highway electrical	traffic control equipment &	In
1116	Overseeing or	equipment and supporting	associated apparatus	accordance
	Installation of	works	variable message signs &	with National
	installation of	Works	associated apparatus	Highway
	Maintenance of	1	communications equipment &	Sector
	Walitorianoo oi		associated apparatus on	Scheme 8
			motorways and other highways	
			environmental monitoring &	
			associated apparatus	
			cameras & associated apparatus	
			Ramp metering & associated	
			apparatus	
			non-illuminated traffic signs &	
			associated apparatus	
			highway lighting columns and	
			posts and other street furniture	
			cables in trenches and ducts, and	
			the excavation of trenches / laying	
			of ducts, where required	
			inductive loop or power cable	
			slots and laying of induction loop	
			and other cables for traffic signal	
			and other highway electrical	
		-	equipment	
			highway lighting and illuminated traffic signs	
			Bus shelters and/or advertising	
			structures connected to a source	
			of electrical energy and	
			associated apparatus	
			Electrical and other named	
			equipment (see HERS Handbook)	
			in or associated with tunnel bores	
		-	and associated access roads	
			Electric vehicle charging points	
			and other on-street highway	
			electrical equipment, terminals	
		-	and supporting works	

(Note: These lists are not exhaustive and the description of the categories and sub-categories may vary from time to time.)

Typical Certificate / Appendix to Certificate layout

The following shows a typical Certificate / Appendix to Certificate with the key required elements therein:

[Certification Body Name / Logo]*

Certificate of Registration

[ORGANIZATION NAME]*

[Organization Address]*
[Town]*
[County]*
[Post Code]*

[Certification Body Name] issues this certificate to the above named company after assessing the company's quality management system and finding it in compliance with

BS EN ISO 9001:2015 AND THE FOLLOWING NATIONAL HIGHWAY SECTOR SCHEMES

For the following scope of registration*
[List of appropriate highways related works]*

National Highway Sector Schemes*

[Sector Scheme number, Title and Organizational Scope]*
[Sector Scheme number, Title and Organizational Scope]*
[Sector Scheme number, Title and Organizational Scope]*

Certificate Number: [Certificate Number]

Issue Date [date]
Renewal Date [date]

Signature

[Name & Title of Certification Body Official]

[Certification Body standard footer: Name / Logo / UKAS Logo/NHSS Logo etc.]*

Note: * denotes that this element may appear on an Appendix to a Certificate

Appendix L: Guidance for Clients

1 General

It is recommended that Clients acknowledge the requirements of this sector scheme as a contract requirement.

This guidance is primarily of relevance to Clients and their supervisory staff.

2. Specific Guidance

- 2.1. Reference should be made to Appendix M before deciding whether to specify that organizations should be registered to this NHSS, as registration to other NHSSs may include relevant requirements for the scope of works in whole or in part covered by this NHSS.
- 2.2. This NHSS was originally conceived as a document for use by Clients to specify the minimum standards for quality, training and competence of organizations used by them for the scope of works covered by this NHSS
- 2.3. The implementation of the NHSS and development of training and competency requirements is intended to provide:
 - a) A competent workforce
 - b) Requirements to evaluate risks and develop processes and the production of an associated comprehensive quality plan for each contract.
 - c) An obligation on the registered organization to review the work instructions issued by the Client and verify that they meet the technical requirements included in the Client's specification and that the Client's objectives for the works will be met.

During the introductory period for this NHSS Clients may take into consideration, in the quality assessment of an organization's tender, their commitment to compliance with this NHSS. This may be demonstrated through the extent to which the organization has introduced a qualified and demonstrably skilled workforce for undertaking works within the scope of this SSD.

- 2.4. It is necessary for the Client to ensure that all those involved in carrying out the scope of works under this NHSS are appropriately trained, skilled and competent, whether or not they are directly employed. The training and assessment of competency schemes described in this SSD are designed to cater for the range of skills within the overall process.
- 2.5 In using this Sector Scheme users are required to use best practice such as specifying any other relevant NHSSs as appropriate to the nature of the work being undertaken. Where traffic management is required companies should either employ a relevant National Highway Sector Scheme registered company or, where applicable, have skilled registered traffic management personnel qualified to meet the requirements of NHSS12D, as agreed with the NHSS 12D Committee, relevant to contract requirements and risk assessments. For work carried out on high speed dual carriageways and motorways the organization installing temporary traffic management measures should always be registered to NHSS 12A/B and/or 12C
- 2.6. Clients and Customers that require confirmation of compliance with the Contract Specification in respect of the supply of services, products or materials should confirm that the quality management system certificate issuer is accredited by a NAB and that specific reference is made to relevant NHSS on certificates.
- 2.7. For the NHSS to achieve its objectives it is essential that Clients, either directly or via the agents and individuals they employ, ensure that the requirements of this document are complied with. This includes ensuring that sub-contractors employed directly or indirectly, are registered to the NHSS. Supervisory staff must be instructed to carry out spot checks of identification/skills cards.

2.9 Client check list

The following can be used to assess the validity of contracting organization claims for compliance with this SSD:

No	Item	Yes / No
1	Is the organization listed on the UKAS CertCheck website	
2	Is the organization listed on the HEA web-site (https://thehea.org.uk/hers-hesa/hersregistered-organisations/) for the scope of work required and marked as Green or Amber?	
3	Is there an ISO 9001 certificate present?	
4	Has the ISO 9001 certificate been extended to cover this NHSS?	
5	Is the Certification Body that issued the certificate accredited by a NAB for ISO9001?	
6	Is the Certification Body that issued the certificate accredited to a NAB for assessments to this NHSS?	
7	If the answer to 4 or 5 is No – is the accrediting body equivalent to a NAB and accepted as such by a NAB?	
8	Does the scope of works of the ISO 9001 certificate, covered by the extension for this NHSS cover the actual works intended to be covered by the contract?	
9	Is there an in date, valid certificate i.e. HERS (Highway Electrical Registration Scheme) certificate?	
10	Does the scope of works on the certificate cover the intended works and does it align with the ISO9001 certificate (where issued)?	
11	Is there an audit or surveillance visit report from the Certification Body?	
12	If the answer to 11 is No – when is it due?	
13	If the answer to 11 is Yes – are there any action points outstanding which should have been completed within six months?	
14	Is there a biennial technical audit report from the HEA?	
15	If the answer to 14 is No – when is it due?	
16	If the answer to 14 is Yes – are there any action points outstanding which should have been completed within six months?	
17	Do the named employees to be used on the works have portfolios of evidence with information in the competence portfolio (including AO's documented rationale and evidence used for declaration of competence for interim Cards where relevant) and signed Authorisation Certificates as set out in Appendix C?	
18	Do the named employees to be used on the works have valid in date HERS Cards?	
19	Is the scope of the works within the competency scope of the employees?	
20	Is the organization intending to sub-contract any of the works within the scope of this NHSS or necessary for the works covered by this NHSS?	
	answer to 20 is Yes – repeat Q1-19 for that organization as relevant and if necessary, replacing	g this

NHSS number with the relevant NHSS (e.g. for temporary traffic management, etc.)

3 **Road Death Investigation**

Attention is drawn to the Police Road Death Investigation Manual, which indicates that in the advent of a collision or other road incident particularly one where there has been a fatality, the police may ask the relevant highway authority to provide information on the state of the road.

In respect of this National Highway Sector Scheme information that is likely to be sought includes the following:

- High level general policy statements a)
- b) Specific local maintenance policies and standards
- Authority procedures c)
- d) Works records including the results of any test carried out
- The quality of systems for traffic management e)
- Skidding resistance testing f)

An Authority may be required to present data to the Police at short notice in case of a fatality on the network. It should ensure that it has, or can obtain, the relevant information from the Contractor.

4 Corporate Manslaughter and Corporate Homicide Act 2007

Advice from HSE regarding corporate manslaughter and corporate homicide is available on the HSE web-site, the following extract has been copied from the HSE web-site.

"The Corporate Manslaughter and Corporate Homicide Act 2007 is a landmark in law. For the first time, companies and organisations can be found guilty of corporate manslaughter as a result of serious management failures resulting in a gross breach of a duty of care.

The Act, which came into force on 6 April 2008, clarifies the criminal liabilities of companies including large organisations where serious failures in the management of health and safety result in a fatality.

• The Ministry of Justice leads on the Act and more information is available on its Corporate Manslaughter and Corporate Homicide Act 2007 webpage.

HSE welcomes and supports the Act. Although the new offence is not part of health and safety law, it will introduce an important new element in the corporate management of health and safety.

Prosecutions will be of the corporate body and not individuals, but the liability of directors, board members or other individuals under health and safety law or general criminal law, will be unaffected and the corporate body itself and individuals can still be prosecuted for separate health and safety offences.

The Act also largely removes the Crown immunity that applied to the previous common law corporate manslaughter offence. This is welcome, and consistent with Government and HSE policy to secure the eventual removal of Crown immunity for health and safety offences. The Act provides a number of specific exemptions that cover public policy decisions and the exercise of core public functions.

Companies and organisations should keep their health and safety management systems under review, in particular, the way in which their activities are managed and organised by senior management. The Institute of Directors and HSE have published guidance for directors on their responsibilities for health and safety. 'Leading health and safety at work: leadership actions for directors and board members' (INDG417)

For specific questions about the act and guidance:

Ministry of Justice

For health and safety information and answers to specific health and safety questions contact HSE Infoline:

HSE Infoline"

Appendix M: Guidance for Organizations

1. Sections of Organizations carrying out non-electrical works

Some Organizations, including local authority direct services organizations, that carry out works included in the scope of this sector scheme, may use other sections of their Organization to undertake some of the works. Such sections of Organizations may have followed a CSCS route to show competency. The Scope clause of this document provides exemptions for such cases where organizations are carrying out excavation and reinstatement works (including the installation of ducts) only.

Organizations carrying out non-electrical works on traffic signs as part of their wider scope covered by NHSS 8 are deemed to be covered for these activities by NHSS 8.

Organizations who were registered to NHSS 8 9B and 10 carrying out only non-electrical installation and / or maintenance work on traffic signs may maintain their registration under NHSS 8.

2. Role of Responsible Manager, Authorising Officer, Qualified Supervisor

The Sector Scheme and the Highway Electrical Registration Scheme have no defined role for the Qualified Supervisor, although their role and responsibilities are defined within the delivery of the Qualified Supervisor Courses. These guidelines provide information on the role of the Qualified Supervisor and the work required of them in the Competency Assessment process. They also provide guidance on the role of the Responsible Manager, Authorising Officer and Compliance Manager.

The competency requirements of the Sector Scheme are based on the principle that an Organization must ensure that its employees are competent to carry out the work that is issued to them. This is a fundamental requirement of Health and Safety legislation and the Sector Scheme reflects this in requiring an Organization to use an occupationally competent person to act as the Qualified Supervisor and take on the responsibility for gathering and presenting evidence to indicate the scope of competence of the employees to whom work is issued.

The Authorising Officer need not be an employee of the Organization because their role is one of validating the evidence presented to them, but this would be preferred and shall be if the organization employees more than 5 employees. The Responsible Manager must be an employee of the Organization and takes overall responsibility for the competency assessment process; therefore the Responsible Manager must be at least equal in status to the Authorising officer within the organization. The Compliance Manager is defined in the Sector Scheme as having responsibility for the development, review and continuous improvement of policies and procedures. As a defined role the Compliance Manager has no direct involvement in the assessment of competence, but the Sector Scheme allows this role to be carried out by the Responsible Manager, Authorising Officer or Qualified Supervisor.

Specific guidelines for the role of the Qualified Supervisor are as follows:

- a. The Qualified Supervisor is the person who should know the ability and competence of each employee under their supervision. They shall oversee the gathering of evidence, the preparation of portfolios and the submission of the portfolios to the Authorising Officer for the desk-top and/or on-site assessment of competence.
- b. The Qualified Supervisor must attend a HESA Qualified Supervisors Course.
- c. For Organizations with one or two employees, they need not have an Authorising Officer.

 They will still need to have a Qualified Supervisor, which they can obtain from another Organization such as their main client
- d. For Organizations employing fewer than 5 people they need not directly employ a Qualified Supervisor but can use the services of a Qualified Supervisor employed by another Organization.
- e. Organizations do not have to use their Qualified Supervisor to directly build portfolios, but they must oversee this process and sign off each piece of evidence and take ownership of it for those employees that are under their supervision.

i. For Organizations who employ more than 5 people they Must use an employee of the Organization to carry out the role of the Authorising Officer.

Local Authority Clients and Consultants having one or two employees shall be treated as Organizations having one or two employees as above. Local Authority Clients and Consultants having more than two employees shall be treated as Organizations having fewer than 5 employees as above irrespective of the number of employees

Manufacturers and Product Suppliers having one or two employees falling within the categories of Approved Persons shall be treated as Organizations having one or two employees as above. Manufacturers and Product Suppliers having more than two employees falling within the categories of Approved Persons shall be treated as Organizations having fewer than 5 employees as above irrespective of the number of employees

The Authorising Officer(s) and the Qualified Supervisor(s) shall be a Registered Authorised Persons in accordance with the Highway Electrical Registration Scheme.

3. Registration of employees transferred under the Transfer of Undertakings (Protection of Employment) Regulations or recruited from another Organization

Employees registered under the TUPE Regulations or recruited from another Organization are to be considered as new employees in respect of re-assessment and re-registration as specified in clause 7.1.2 of this SSD. The original route to registration of the employee may be maintained (e.g. if registered originally under Industry Accreditation, this route may be kept after the employee has transferred, providing the original timescale of 10 years from the first date of registration to gaining the NVQ has not been exceeded). This timescale would remain as at the first date of registration and would not "start again" on re-registration of the transferred employee

4. Registration Cards

For details on the types of Registration Cards, reference shall be made to Appendix K1 and the HERS Handbook. In particular it should be noted that Interim HERS Registration Cards are available for appropriate employees, which are then replaced with Standard HERS Registration Cards.

5. Historical Note

NHSS 8 was formerly NHSS 8 9B and 10. Whilst the individual numbers had a significance in the early part of the development of this document, the introduction of the detailed scope in Appendix K rendered this redundant. NHSS 8 therefore covers all the scope previously covered by NHSS 8 9B and 10.

Appendix N: Guidance on the Relationship between this NHSS and other NHSS's

NHSS 9 (Part B) – Installation of permanent road traffic signs (excluding electrical elements) Those organizations registered to NHSS 8 will not need to register to NHSS 9 (Part B).

NHSS 12D - Installing, maintaining and removing temporary traffic management on rural and urban roads

Where traffic management is required companies should either employ a National Highway Sector Scheme approved company or where applicable have skilled registered traffic management operatives qualified to meet the competency requirements of NHSS 12D relevant to contract requirements and risk assessments – noting that there may be particular specific arrangements for organizations registered to another NHSS. For work carried out on high speed dual carriageways and motorways the organization installing Temporary Traffic Management measures should always be registered to NHSS 12A/B and/or 12C.

Registration to NHSS 8 means that registration to NHSS 12D is not required. Appendix L of NHSS 12D states that "Specific attention is drawn to Appendix M which states that it is not intended that Organizations registered under another NHSS should also be registered to SS 12D". Appendix M of NHSS 12D states that "It is not intended that Organizations registered under another NHSS should also be registered to SS 12D, but rather that the NHSS Committee considers the available options and provides appropriate advice to Organizations on what they need to do to meet their individual specific requirements and work commitments in respect of temporary traffic management for their field of operations". The NHSS 8 Committee has considered the requirements of NHSS 12D as it affects the Highway Electrical sector, and the agreed method of dealing with this is detailed in Appendix C – Clause 3 of NHSS8 together with the appropriate parts of the HERS Handbook and the Highway Electrical Training Specification.

Where portable temporary traffic control equipment which is self-contained (e.g. is supplied from a generator) is used, there is no requirement for organizations registered to NHSS 12 to also be registered to NHSS 8.

Where portable temporary traffic control equipment requires to be connected into an item of highway electrical equipment, or the use of the portable temporary traffic control equipment requires personnel to gain access to an item of highway electrical equipment for some other reason (e.g. to switch off permanent traffic control equipment), then the organization carrying out the work shall be either registered to NHSS 8 and / or the Highway Electrical Registration Scheme or, if they are already registered to the appropriate part(s) of NHSS 12 they must meet the competency assessment and training requirements of NHSS 8 and be issued with a Highway Electrical Registration Scheme card.

Employees trained under the standard NHSS 12D training and assessed as competent with NHSS 12D cards are deemed to meet the training and initial assessment requirements of NHSS 8 for temporary traffic management on rural and urban roads as specified within the scope of NHSS 12D

NHSS 19A - For corrosion protection of ferrous materials by industrial coatings

Registration to NHSS 8 means that registration to NHSS 19A is not required. However, the training requirements of NHSS 19A, as particularised by the NHSS 8 Committee, will be required. This has now been agreed, subject to any final amendments and is available for implementation

NHSS 22 - Management, Operation and Maintenance of Road Tunnels

It is intended that NHSS 22 will acknowledge other relevant NHSS's including NHSS 8. Relevant equipment within tunnel bores and in associated access areas are included within NHSS8 and HERS

Appendix O - How to Register on UKAS CertCheck

As from 16 June 2022, the process for registering on the Schedule of Suppliers has been superseded by UKAS CertCheck. No new certificates are accepted by Lantra after 16 June 2022.

Lantra continues to display National Highway Sector Scheme published documents on the current Schedule of Suppliers website: https://www.lantra.co.uk/schedule-suppliers

UKAS CertCheck: https://certcheck.ukas.com

What are the principal functions of UKAS CertCheck?

- To provide a centralised service that gives further confidence to people who rely upon the assurance provided by UKAS accredited certification.
- To assist in the combatting of fraudulent claims of UKAS accredited certification or organisations who attempt to portray non-accredited certification as holding the same value as accredited certification.

How will UKAS CertCheck work?

CertCheck is a verification database and works by allowing users to verify that a claim of holding UKAS accredited certification, for all certification; including the National Highway Sector Scheme (NHSS), is valid. This is done by searching for the certificate number or registered trading name of the certified organisation. This will result in the details of the certification held being displayed; including the scope of certification, date issued, locations covered and the awarding Certification Body

Note: CertCheck has a daily search limit of three, but may be extended by UKAS to relevant stakeholders

Who is responsible for uploading NHSS certificates to UKAS CertCheck?

All Certification Bodies accredited by UKAS to ISO/IEC 17021-1:2015 will be required to provide and keep updated data on their certified clients. Certification Bodies must recognise any additional approval requirements (i.e., a HERS certificate if registering for NHSS 8) has been checked and also uploaded before approving the registration.

UKAS CertCheck became operational from 16 June 2022 and as stated above replaces the requirement for individual companies to upload their own certificates to the Lantra Schedule of Suppliers website; however, Lantra continues to host the NHSS Sector Scheme Documents **only**, on the Schedule of Supplier website: https://www.lantra.co.uk/schedule-suppliers

NHSS Certification and the organization's scope

When discussing the organization's scope with their certification body auditor, organizations shall ensure that their scope(s) align(s) with the relevant scope(s) contained in **Appendix K** of the relevant sector scheme. This is important as the certificate posted to CertCheck should include the agreed NHSS scope.

Where an organization has certificates relating to a number of sector schemes or a number of allocations, the organization shall ensure that both the locations and scopes relating to each place of work shall be notified to their certification body and the business correctly identified on the certificate. Any mismatches or changes in scope (reductions) shall be notified to the certification body, who should immediately take corrective action.

Organizations need to review their registration at least annually to ensure currency and accuracy. Where a change is identified, the organization shall immediately notify their certification body(ies).

Appendix P: Other Guidance

Not Used

Appendix Z: Document Control (Previous Issues)

Previous SSD (non-current) Issue Statement

Issue No. and Date	Amendments
Issue 1 to UKAS	2 March 2004
Issue 2 to UKAS	• 28 October 2004
Issue 3 5 May 2005	Definition -Qualified Supervisor; Clause 7 4 (iii) 1 Include CSCS and ECS cards; Appendix C Allow for non electrical training requirements; Appendix F New arrangements for determining accreditation bodies; Appendix J1 New arrangements for feedback and complaints; Appendix K Example of Certificates; Appendix L Guidance
Issue 4 10 March 2006	Title; Implementation; Introduction; Interpretation; Quality Management System Requirements Clauses 4, 4.1, 4.2.1, 5.2, 6.2.2(iii), 7.1, 7.3, 7.4(iii), 7.5.3, 7.6(ii); Appendices A, B, C, F, G, H, J1, K, L
Issue 5 24 July 2006	 Definition – Designer – modified to remove "etc."; Responsible Manager must be an employee of the Organization Clause 6.2.2 (i) Responsible Manager, Authorising Officer, Qualified Supervisor allowed as singular or plural Clause 6.2.2 (iii) – allows for ASLEC registration card issued prior to ECS card being available Clause 6.2.2 (iv) – refresher training at intervals not greater than five years Clause 6.2.2 (iv) – refresher training at intervals not greater than five years Clause 6.2.2 (iv) – clarification - commencement of assessment within two weeks, completion of assessment and registration of employee within four months Clause 7.4 (iii) 1 – sub-contractors carrying out excavation and reinstatement to provide evidence of competency in temporary traffic management where they also carry this out Clause 7.5.1 (iv) – organizations to have access to and working knowledge of relevant documents as appropriate in Appendix B Clause 7.6 (i) 1 – mandatory requirement to hold specified electrical test equipment removed Clause 8.2.2 2 – clarification on Technical Audit not being a pre-requisite for certification to NHSS 8, 9B and 10 by the Organization's Certification Body Appendix B – Clarification that this appendix contains reference documents relevant to this Sector Scheme which should be identified as appropriate or not by the Organization and documents updated. Appendix C – Introduction - clarification on prior training; replacement of reference to specific Industry Accreditation date with reference to appropriate date in Appendix K; modification to minimum technical qualifications for Authorising Officers; clarification on training and assessment requirements of NHSS 8, 9B and 10 Committee. Appendix G – Clarification that the assessment of Portfolios is carried out by the third party technical auditor and therefore does not fall within the scope of
	also be registered to NHSS 12D. Relationship between NHSS 8, 9B and 10 and other NHSS documents
Issue 6 6 February 2007	 Contents – "Example" inserted before "Register" Composition of the Sector Scheme Advisory Committee – "The County Surveyors Society" replaced with "County Surveyors' Society (CSS)"; "Scottish Executive" replaced with "Transport Scotland"; "National Assembly for Wales" replaced with "Welsh Assembly Government"

- Introduction "Motorway communications" changed to "Communications equipment on Motorways and other highways"; reference to Secretary of Sector Scheme Advisory Committee replaced with ASLEC
- Scope expanded to list those areas included within the scope as detailed in Appendix K
- Definitions Qualified Supervisor definition "direct" deleted to permit peripatetic working arrangements; reference to Appendix L added
- Clause 4 Quality Management System Requirements 2nd paragraph "clause" replaced with "clause or sub-clause"
- Clause 6.2.2 (i) "Authorising Officer" added to text as required to be Registered **Authorised Person**
- Clause 6.2.2 (iii) reference to the HEA website and the HA web-site added
 Clause 7.5.1 (ii) "the Qualified Supervisor" replaced with "all relevant personnel"
- Clause 7.5.4 "Quality System" changed to "quality management system"
- Clause 7.5.5 (iii) replace "significant deterioration or damage" with "deterioration or damage which adversely affects their performance or life"
- Clause 8.2.2 1 "twelve month" replaced with "twenty four month"
- Appendix B Items 10, 15, 22 document titles corrected and PD6547 added
- Appendix C clarification on training being delivered to the Training Specification by HEA Approved Trainers with exceptions listed; experience requirements for Authorising Officer and Qualified Supervisor modified; Qualified Supervisor (Associated Highway Works) Route 3 corrected to NVQ/SVQ Level 2; clause 4 email address - individual name replaced with title
- Appendix F AFAQ-EAQA Ltd. added
- Appendix G Clause 2b "installation and maintenance of electrical apparatus, associated structural supports and cabling in the highway electrical industry" changed to "installation and maintenance of highway electrical and / or highway electronic equipment and / or associated highway works as detailed in Appendix K and"; new clause 2c added to identify where further advice or training can be obtained
- Appendix H "National Assembly for Wales" replaced with "Welsh Assembly Government"
- Appendix J2 "Complaints" changed to "Feedback"
- Appendix K "Motorway communications and associated apparatus" changed to "Communications equipment and associated apparatus on motorways and other highways"; The installation and maintenance of ramp metering equipment and associated apparatus added for clarity; clarification that validity of ISO 9001 certificate is 3 years
- Appendix L clause 3d "with less than 5" replaced with "employing 3 to 5"; new clause 4 added to give guidance on employees transferred under the TUPE Regulations, existing clause 4 re-numbered to 5; new clause 6 added regarding the Police Road Death Investigation Manual

Issue 7 25 July 2007

- Implementation of issue UKAS 7 references to Issue numbers updated
- Clause 6.2.2(v) second paragraph replaced to cover the twelve month period by which new employees who have evidence of competency need to be registered, and to include the requirement for interim cards in this period
- Clause 7.4(iii) the exemption for specialist sub contractors carrying out excavation and reinstatement works to be accredited to this Sector Scheme or registered to the Highway Electrical Industry Scheme for the Registration of Authorised Persons extended to include the installation of ducts
- Clause 7.5.1 (iii) additional clause covering equipment on parapets
- Appendix A new item 9 Processes to identify where equipment (e.g. cameras, signs) might be being installed on parapets conforming to BS EN 1317 and methods to ensure the integrity of the parapet is not compromised; previous items 9-20 re-numbered as 10-21.
- Appendix C headings added to the Introduction for clarification; specific exemptions from the requirement to carry out training in accordance with the Training Specification by HEA Approved Trainers and appropriately certificated (through Lantra Awards) moved to the Training Specification and referenced accordingly; new paragraph added at the end of the Introduction covering Approved Persons exemption to gain a Level 2 or 3 N/SVQ in Electrotechnical Services (Highway Electrical Systems); reference to HEA courses changed to HE Registration Scheme Administrator (ASLEC); "required updates" added to Authorising Officer's and Qualified Supervisor's requirements.
- Appendix L Clause 2 re-worded to align more closely with 7.4(iii); Clause 4 re-worded to clarify the position on new employees; new Clause 5 referring to

	Registration Cards and specifically interim Cards; Previous clauses 5, 6 renumbered as 6, 7.
Issue 8 4 Dec 2007	 Implementation: Implementation of issue UKAS 8 – references to Issue numbers updated; Wording "Certification Bodies should advise their customers and / or clients of this revision" deleted Introduction – deletion of reference to specific working groups. Clause 7.2.2 – new sub-clauses (i) and (vi); existing sub-clauses re-numbered Clause 7.4. (iii) 1 – "the subcontractor is under the management control of the Organization and" deleted Clause 8.2.2 - sub-clause 2 re-worded to permit audits at one contracting office location only under defined circumstances Appendix C – Clause 2 - amendment to period by which employees falling within the scope of Industry Accreditation require to gain an N/SVQ Appendix G – Addition to clause 2 (c) to refer to Assessor Training slide presentation prepared at the request of the NHSS Liaison Committee; new clause 2 (d) drawing assessors' attention to the latest issue of NHSS 8 9B and 10 and the Implementation clause. Appendix K – deletion of scopes dealing with work in tunnels - now in NHSS 22; addition of 30/9/08 Industry Accreditation date for Northern Ireland Appendix L – reference to NHSS 19A updated; reference to NHSS 22 added
Issue 9 3 June 2008	 Appendix L – reference to NHSS 19A updated; reference to NHSS 22 added Implementation: Implementation of issue UKAS 9 – references to Issue numbers updated Definitions-Authorised Person - "Training Specification" replaced with "Highway Electrical Registration Scheme Handbook" Throughout - "permanent" deleted before "traffic control equipment"; Highway Electrical Industry Scheme for the Registration of Authorised Persons renamed to Highway Electrical Registration Scheme (HERS); Clause 4.1 amended to refer to Schedule of Suppliers Clause 6.2.2(i) last paragraph re-worded for clarity Clause 6.2.2 (ii) 3a - "Training Specification" replaced with "Highway Electrical Registration Scheme Handbook" Clause 6.2.2 (iv) – re-worded for clarity Clause 7.1 – "for delivery" added in third paragraph for clarity Clause 7.2.2 (i) - Reference made to the organization's Highway Electrical Registration Scheme registration certificate showing the scope of registration. Clause 7.6 (i) – reference to specific test equipment deleted Clause 8.2.2 re-formatted for clarity; reference to "Compliance Manager" replaced with "nominated individual"; new clause (ii) 3 added Appendix A – Clause 2 – "(including delivery strategy and clear and sustainable performance objectives)" added Appendix B – item 8 updated Appendix B – item 8 updated Appendix C – reference to 30 September 2008 and 1 October 2008 changed to 30 September 2009 and 1 October 2009 respectively Appendix G – Guidance for Assessors and other Auditors - added Appendix K – bus shelters and advertising equipment added Appendix L – new clause 1 – Guidance for Clients; old clause 6 moved to Appendix M; old clause 7 re-numbered as clause 6 Appendix M added Appendix M added
Issue 10 25 Nov 2008	• "ISO 9001:2000" replaced with "ISO 9001:2008" throughout; clause titles changed to suit • "NHSS 8 9B and 10" renumbered as "NHSS 8" throughout • "Highway Electrical and/ or Associated Highway Works and / or Highway Electrical works" replaced with "Highway Electrical works" throughout • "Training Group" replaced with "Standards and Training Group" throughout • "Training Specification" replaced with "Highway Electrical Training Specification" throughout • Clause 6.2.2 (i) 6 amended to permit a Responsible Manager who is also the Managing Director or Chief Executive of the organization to elect to also act as either an Authorising Officer or Qualified Supervisor • Clause 7.4 (iii) 1 re-worded to include organizations carrying out cable pulling / cable laying and to reference CDM2007 Regulations • Appendix F - updated • Appendix G1 – changes to reflect the changes in the rest of the document

Appendix L – reference to Appendix G1 Clause C – Key Points to Good Practice – added

Appendix M – NHSS 9B added

Issue 11 23 July 2009

- Title, Scope and document changed throughout to add Overseeing to document
- Document changed throughout to re-accommodate Traffic Signs
- Composition of Sector Scheme body BSI deleted and replaced with NHSS Certification Body Group
- Selection of Certification Body amended to include Notified Bodies
- Implementation -historical text deleted
- Introduction reference to list of certification bodies in Appendix F deleted
- Clause 6.2.2 (ii) 3 b wording amended to clarify the registration of employees
- Clause 6.2.2 (iii) reference to ASLEC registration card deleted; "whilst at work" added to the requirement to carry the Registration Card at all times
- Clause 7.4 (ii) addition of "services"
- Appendix B "subject to amendment" added to reference to TCUG GN1
- Appendix C changes to wording in Clause 2 in respect of Industry Accreditation for clarity
- Appendix F deletion of individual certification body names; updating search information to align with new UKAS web-site layout
- Appendix G re-worded to align with proposals for NHSS 0 for greater clarity
- Appendix G1 new statement included at the end of the Introduction for further clarification; Clause A sub-clause (viii) amended to align with the modification to Appendix G Clause 2
- Appendix H re-worded to align with proposals for NHSS 0; clause 2.3 amended to clarify that as a minimum all registrable employees should be registered and be in possession of an ECS HERS Interim card
- Appendix L new opening statement about the change in numbering from NHSS 8 9B and 10 to NHSS 8; additional last paragraph to clause 1 to reference the Institute of Highway Incorporated Engineers and the Institution of Lighting Engineers and their requirements; change to wording regarding use of competent person other than QS to remove restriction on organization size; addition to clause 3 to clarify that the Responsible Manager must be at least equal in status to the Authorising Officer within the organization.
- Appendix M re-wording of clause on NHSS 9B for clarification

Issue 12 14 Apr 2010

- Change to title to better reflect intent and scope of document and throughout document
- Editorial changes to document to more closely align with NHSS 0 Part 3 November 2009, including reference to BS EN ISO 9001 clauses where no specific interpretation has been made.
- Changes to ASLEC/HEA email addresses throughout; CSS changed to ADEPT;
 IHIE changed to IHE throughout; structural review changed to audit
- Introduction re-worded to align with NHSS 0
- Scope amended to clarify that it covers both temporary and permanent works, other than temporary portable traffic signals; terminals added to bus shelters
- Clause 3.1 definition of overseeing added; definition of highway electrical equipment and supporting works added for clarity
- Clause 3.2 abbreviations added to align with NHSS 0
- Clause 4.1 amended to require notification and provision of evidence of organizational registration to the HERS on an annual basis to the Schedule of Suppliers via Lantra Awards
- Clause 5.1 added
- Clause 6.2.2 (v) 2 amended for clarity and to include a three month period for the
 application for a standard registration card; 3 added to cover agency workers; 4
 added to cover employees without the required evidence of competence (vi) added
 —wording taken from previous clause 8.2.2 (ii) to permit internal technical audit to be
 dealt with under this clause rather than 8.2.2
- Clause 7.1 sub-clause (iv) added
- Clause 7.2.3 (i) and (ii) added
- Clause 7.4.1 (iii) added to confirm non-compliant sub-contractors and their employees must be directly supervised on a continuous basis until they are fully compliant
- Clause 7.5.3 (i) added; previous clause 7.5.3 (i) now clause (ii)
- Clause 7.5.5 (ii) re-worded to align with NHSS 0
- Clause 8.2.2 (ii) re-worded to permit the internal technical audit to be referenced under 6.2.2 or under 8.2.2

	 Clause 8.5.2 (i) added including a requirement to carry out corrective action within a maximum timescale of six months Appendix G Clauses 8.1-8.4 re-worded as NHSS 0 Appendix G1 – Reference to checklist in Appendix L added; Section 2A, clause (iv) "non-electrical works such as the installation of posts, columns and cabinets" added for clarity; Section 2B amended and comments added; Appendix H – clause 3 added to align with NHSS 0 Appendix J1 re-worded to align with NHSS 0 Appendix J2 re-worded to align with NHSS 0 Appendix J3 added Appendix K – re-wording of scope covering bus shelters to include terminals Appendix K1 added Appendix L – addition of clauses 1.1, 1.2.1 and 1.2.2; 1.2.11 Checklist for assessing compliance added Appendix M changed to Appendix N to align with NHSS 0 Appendix N – Clause 1.0 added for NHSS 7; clause 2.4 added to clarify that where employees have been trained, assessed for competence and issued with NHSS 12D cards, that they are deemed to meet the training and initial assessment requirements of NHSS 8 in respect of temporary traffic management within the scope of NHSS 12D
Issue 13 18 Feb 2011	 Composition - Change from ILE to ILP Change to ASLEC and Highway Electrical Academy address and contact numbers throughout; replace www.highwayelectrical.org.uk/hea with www.highwayelectrical.org.uk/hers throughout; change from N/SVQ to CBQ / NVQ (formerly N/SVQ) throughout "and/ or the laying or pulling through of cables " deleted throughout to bring such operations into scope Clause 1 Scope amended to include the relevant wording previously in clause 7.4.1 (ii) amended in the first paragraph to delete "and/ or the laying or pulling through of cables "to bring such operations into scope together with re-wording for clarity; second paragraph amended to align Clause 6.2.2 (vi) 1.3 – "covering those areas which would have been included within the third party biennial audit" added for clarity Clause 7.4 (ii) Re-worded to reference the scope Appendix B – items 38a, 38b internet addresses changed Appendix C – Clause 3 – new subclause 3.4 added to clarify that training, assessment and the issuing of cards under NHSS 12D may also be used to satisfy the requirements Appendix G1 – Clause 4.1 – requirement to notify ASLEC as HERS administrator added to align with text; Clause 6.2.2 – additional direction for alignment with NHSS 12D where relevant; Clause 7.4.1 "checked" replaced with "validated"; clauses C1, C3, C6 – deletions to align with 7.4 (ii) Appendix K – first clause re-worded to remove categories no longer used; table reformatted to align with proposed wording on CB certificates and sample certificates re-worded to align
Issue 14 22 Mar 2011	Definitions: Correction to Highway Electrical Equipment to remove exclusion of "the laying of cable or pulling through of cable"
Issue 15 30 Jun 2011	 Implementation – clarification that Issue 14 and Issue 15 are to be implemented by 31st December 2011 for those organizations carrying out the installation of cable not previously registered to NHSS8 Scope – amendment to the last paragraph to provide further clarification on the construction of foundations Appendix J1 – email address added for email form J1
Issue 16 26 Jun 2012	 ASLEC changed to HEA throughout; Highway Electrical Academy(HEA) and associated abbreviations only changed to Highway Electrical Sector Academy (HESA) and associated abbreviations only throughout; ECS card changed to ECS HERS card or HERS Card as appropriate throughout Terms and Definitions - Approved Person / Approved Person Manager added; addition of note to Overseeing to confirm that the definition used in NHSS8 is different to that used by the Secretary of State for Transport Clause 6.2.2 (v) 2 b 1 Period for applying for an Interim Card changed from one month to three months Appendix C, Clause 1, final paragraph – deletion of "Approved Persons Cabinet Access and Approved Persons Equipment Access" as these occupational titles no longer exist; inclusion of Approved Person Manager

	 Appendix C Clause 2 – addition of two year time frame to gain CBQ-NVQ and amendment to following text by moving clause b to clause c and adding new clause b to clarify the current position in respect of previously registered persons through the Experienced Persons route and clause d for trainees Appendix O – includes relevant information on Schedule of Suppliers
Issue 17 5 August 2013	National Highways Sector Scheme changed to National Highway Sector Scheme throughout. Standards and Training Group replaced by Standards and Training Committee throughout
	 Selection of Certification Body / Notified Body and Implementation – amended to align with the Construction Products Regulations Terms, Definitions and Abbreviations: title changed to align with NHSS0; Road Traffic Sign definition amended to aligned with the CPR; "should" added; CBQ-NVQ
	 added to abbreviations Changes to align with NHSS0 – in particular to: Copyright, Introduction, Scope (first paragraph), Normative reference, Clauses 4, 4.1, 4.2.1, 6.3, 7.1, 7.2, 7.2.3,
	 Appendices B, G, G1, H, J1, J2, J3 Clause 62.2 (v) 2a and Appendix L Checklist item16 amended to require a written statement from the AO regarding the assessment of competence for Interim Cards
	 Appendix A Item 7 amended to clarify requirements for CE marked products Appendix B Items 4, 11, 34 updated Appendix C clause 3 re-formatted and amended to aid clarity; Appendix G1 updated against 6.2.2
Issue 18 31 Jan 2014	Appendix C amended for clarity and to modify requirements for all personnel registered through the Experienced Persons route to gain the relevant CBQ-NVQ by 1st Oct 2014
Issue 19 10 Oct 2014	 Definitions: "supply" added Clause 7.3.1 – amended to make specific reference to GD02/08 Clause 7.4.3 – amended to include reference to NHSS 3 Appendix C Clauses 1.0, 2.0, 3.6 amended for clarity and to set out revised timetables for registration to and gaining the relevant NVQ Appendix G1 Clause 2b amended to reference registration to NVQs Appendix H Clause 2.3 amended to reflect changes in Appendix C Appendix N Clause 4 amended to reflect that ICATS produced training for NHSS8 is now available
Issue 20 16 Nov 2015	 Change from Highways Agency to Highways England and relevant website addresses changed; from Highway Electrical Sector Academy to Highway Electrical Skills Academy; from www.highwayelectrical.org.uk to www.thehea.org.uk from CDM 2007 to CDM 2015 / relevant Health and Safety legislation; from core competence criteria to relevant criteria / capability and competence throughout Implementation – addition of bus shelters, electric vehicle charging points and other on street highway electrical equipment, electrical and other named equipment in tunnels and associate access areas Introduction clause 9 – change to text to reflect changes to NHSS8 ToR Scope – electric vehicle and other on street electrical equipment; equipment in tunnel bores and associated access areas added Clause 6.2.2 (i) 6 – "may" replaced with "shall" for clarity Appendix C Clause 1 wording changed to clarify certification for Highway Electrical Training Specification training Appendix C Clause 2 – Apprentices, including Trailblazer Apprenticeships added Appendix K – additional scopes added for bus shelters, electric vehicle and other on street highway electrical equipment and electrical and other named equipment in tunnel bores and associated access areas added with eighteen month implementation period Appendix N Clause 5.0 updated to include reference to inclusion of relevant equipment in road tunnel bores and associated areas.
Issue 21 14 th Dec 2016	 Editorial correction in Document Control for Issue 12 Amendment to Appendix F to reflect changes in the UKAS website Amendment to Appendix O to reflect changes in the Schedule of Suppliers website Amendment to Schedule of Suppliers URL and UKAS address throughout
Issue 1 [9001:2015] 8 th June 2016	First Issue This Sector Scheme is one of the series of NHSSs, which are bespoke integrated management schemes within an ISO 9001:2015 framework that

	 have been developed to interpret ISO 9001:2015 as it applies to a particular activity/industry within the United Kingdom. Note: This document has been produced to supersede the UKAS Issue 20 version (which relates to BS EN ISO 9001:2008), however the UKAS Issue 20 version (or an updated version of this) will continue to have validity until September 2018 when the 2008 version of BS EN ISO 9001 will become obsolete.
Issue 2 [9001:2015] 27th Nov 2018	 Amended throughout to clarify Authorising Officers employment status within the HERS Organization Amended throughout to clarify Qualified Supervisor employment status within the HERS Organization
Issue 1 [9001:2015] April 2020 (including Transition Document December 2019 to March 2020 (Not Issued))	 New document including: Terminology ECS HERS Cards revised throughout the document to read HERS Card Section 3 – Terms, Definitions and Abbreviations; Authorising Officer and Qualified Supervisor shall be registered in their own right Section 3 – Terms, Definitions and Abbreviations; Responsible Manager SHALL have managerial responsibility for the relevant in scope activities All links to HEA website refreshed to reflect current HEA Website All references to past CBQ-NVQ deadline dates removed throughout the document Clause 7.1.2.5 to reflect AO's & QS's shall hold a current HERS Card Appendix C Clause 1 penultimate paragraph - This must be carried out by an occupationally competent Qualified Supervisor and authorised by a competent Authorising Officer added Appendix C Clause 3 The Management of Health & Safety at Work Regulations 1999 and all equivalent legislation within Northern Ireland added