

NATIONAL HIGHWAY SECTOR SCHEMES FOR

QUALITY MANAGEMENT IN HIGHWAY WORKS

SCHEME 20

Particular requirements for the application of ISO 9001:2015

FOR

THE EXECUTION OF STEELWORK IN TRANSPORTATION INFRASTRUCTURE ASSETS

Published by the Sector Scheme Advisory Committee for the Execution of Steelwork (SSACS)

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Issue 6 [9001:2015]

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Previous issues of this SSD are shown in Appendix Z.

Current Issue	Amendments		
Issue 6 [9001:2015]	Document Control – Issue 6 [9001:2015] details added.		
	Implementation of Issue 5 [9001:2015] amended for Issue 6 [9001:2015]		
	Contents: Appendix J and Appendix O titles updated.		
	'Highways England' replaced with 'National Highways' throughout the document.		
	'Lloyds Register Quality Assurance' changed to 'LRQA' throughout the document.		
	Dates of standards BS EN ISO 3834 and BS EN ISO 9712 updated throughout the		
	document.		
	Selection of Certification Body – updated to reflect NHSS 0 12/2022 update including		
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	Introduction Section 14 updated to reflect new Appendix J.		
	Amendments to Introduction Section 13, Clause 4.4.2, Appendix G Clause 4.3, Section		
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	relating to the change from the Schedule of Suppliers to UKAS CertCheck.		
	8.5.1 (i) – new requirement added describing FPC surveillance inspection frequency.		
	Appendix F: Alcumus ISOQAR Ltd details deleted		
	Appendix J: New common Appendix J added relating to feedback.		
	Appendix K, Table K1: In Note 2 and Note 4 'services' changed to 'activities' to be		
	consistent with the use of the term 'activities' in Notes 3 and 4.		
	Appendix N: Reference to 'NHSS 9A' replaced by 'NHSS 9'.		
	Appendix O: New common Appendix O added relating to UKAS CertCheck.		

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COMPOSITION OF SECTOR SCHEME ADVISORY COMMITTEE

MEMBER ORGANISATIONS

British Constructional Steelwork Association – BCSA National Highways LRQA Steel Construction Certification Scheme – SCCS (Lead Certification Body) Transport for London –TfL (to include London Boroughs) Transport Scotland

CORRESPONDING MEMBER ORGANISATIONS

Dfl Northern Ireland Welsh Government

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SELECTION OF CERTIFICATION BODY

Where the adopted legislation for Construction Products Regulations (CPR) apply and Conformity Assessment Marking is a requirement, this can only be applied following successful evaluation of the factory production control process by an Approved Body. In Great Britain, the relevant authority for notification under the adopted legislation for CPR is the Department for Levelling Up, Housing and Communities (DLUHC). For Northern Ireland, the Notified Bodies are appointed by the relevant authority, in a Member State of the European Union and notified to the European Commission.

It is important to note that due to the specific requirements for assessor competence required by this Sector Scheme, the NAB may appoint a technical expert following advice from the SSAC 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.

Note: Specifiers, consultants, engineers and contractors etc., that require confirmation of compliance with the Contract Specification in respect of the supply of services, 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 ISSUE 6 [9001:2015]

This issue of the SSD is to be implemented immediately from the date of publication on the Lantra website for assessments.

Existing assessments will continue to be valid until the following assessment carried out by the accredited Certification Body.

Following publication of the document the Organisation shall implement the changes in time for their next assessment visit by the Certification Body.

The Certification Body shall assess the Organisation against the latest edition of the scheme within 14 months of date of implementation.

The NHSS document is date specific; however the Organisation shall have processes in place to ensure that the latest version is always available. Organisations should be aware that utilisation of internet search engines may result in out of date references being identified/called up.

INTRODUCTION

1 This Sector Scheme Document (SSD) relates to the quality management system requirements for the execution of steelwork in transportation infrastructure assets for the supply of new steelwork and for work on existing steelwork in new and existing assets. It sets out to identify particular specific requirements of ISO 9001:2015 for Organisations 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 (NHSSs), which have been developed as bespoke integrated management schemes within an ISO 9001 framework to provide particular requirements 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 NAB 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 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 does not conflict with the national standard prior to withdrawal of the previous edition of the standard.

4 The individual NHSS SSACs 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 SSACs. It is also the forum where dialogue with the NAB and the Certification Bodies on the application of the Sector Schemes takes place.

5 NHSSs together with ISO 9001 are designed to:

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- Provide an industry benchmark
- Identify risks and opportunities
- Ensure that all processes are planned
- Provide a basis for continuous improvement
- Focus on quality as an objective
- Reduce costs for Client and Organisation
- Provide and maintain a properly trained and competent workforce
- Involve all sides of industry in scheme ownership within a partnership framework
- Provide the basis for the technical knowledge and experience that Certification Body auditors will use in the sector concerned
- Promote confidence in quality management systems through provision of a robust transparent system

6 The Sector Scheme shall apply only where specified by the Client in their Contract Documents for the execution of steelwork in transportation infrastructure assets for the supply of new steelwork and for work on existing steelwork in new and existing assets.

7 In using this Sector Scheme users shall use best practice such as specifying any other relevant NHSSs as appropriate to the nature of the work being undertaken e.g. NHSS 19A for the corrosion protection to ferrous materials in transportation infrastructure assets using industrial coatings.

8 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 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 organisation installing temporary traffic management measures should always be registered to NHSS 12A/B and/or 12C.

9 The use of the Specification for Highway Works as the basic document for procuring highway works by highway authorities would normally automatically call up compliance with ISO 9001 and this SSD. It should also be noted that NHSSs are mandatory for National Highways contracts, and suppliers within the supply chain are required to demonstrate compliance with the requirements of ISO 9001 and this SSD as part of their continual improvement within their ISO 9001 registration. Other owners of infrastructure, for example Network Rail, may also require their suppliers to comply with this Sector Scheme, as may other authorities. Separately the document may be called up in specific contracts as necessary.

10 For contracts involving steelwork undertaken to the Specification for Highway Works Series 1800 – Structural Steelwork; Organisations are required to have an appropriate independently certified quality management system in place which can be demonstrated through being registered to this SSD. In addition, Organisations are required to demonstrate that they have the necessary technical capability and competence, which can be achieved through being registered to the Register of Qualified Steelwork Contractors (RQSC) Bridgeworks Scheme for the type and value of work to be undertaken. Where Series 1800 is adopted as the specification for the execution of structural steelwork it is essential that Clients, either directly or via the agents and individuals they employ to supervise contracts, ensure that the two requirements relating to registration to this SSD and registration to RQSC are rigorously complied with (See Appendix L).

11 **The Register of Qualified Steelwork Contractors (RQSC);** is a competence assessment scheme that provides an assessment by industry experts of an Organisation's ability to undertake steelwork. RQSC provides a categorisation for registered Organisations in terms of the work they have been assessed as being capable of undertaking technically and a classification in respect of the maximum size of contract they can handle. RQSC has two registers, one for buildings and one for bridgeworks. Details of the RQSC scheme, including listings of registered Organisations, can be found at www.steelconstruction.org/member-directories/.

12 The SSD is a live document and date specific with the SSACS reviewing it at least once a year. Those using the document are required to ensure that they have the current version of the document.

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The SSD may be obtained by visiting the Lantra website (www.lantra.co.uk/schedule-suppliers) from where the document can be freely downloaded. Organisations should be aware that utilisation of internet search engines may result in out of date references being identified/called up.

13 UKAS hosts a database (UKAS CertCheck) of certificated Organisations on their website (https://certcheck.ukas.com/). UKAS CertCheck is a verification database and works by allowing users to verify that a claim of holding UKAS accredited certification for all certifications, including the National Highway Sector Scheme (NHSS), is valid. All Certification Bodies accredited by UKAS to ISO/IEC 17021-1:2015 are required to provide and keep updated data on their certified clients. For more details on UKAS CertCheck see Appendix O.

Note that the UKAS CertCheck does not provide the register of Organisations that have achieved registration to the RQSC Schemes described above. A list of organisations registered to the RQSC Schemes can be found at www.steelconstruction.org/member-directories/.

14 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. Appendix J can be used for general feedback on the scheme to the Sector Scheme Advisory Committee, for feedback to certification bodies on certification matters, and to clients on matters relating to application of the scheme in contracts.

15 Scheme Contact

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Particular Requirements for the Application of ISO 9001:2015

1. SCOPE

The scope of this SSD together with ISO 9001:2015 (see ISO 9001:2015 clause 4.3) covers the quality management system requirements to be established by Organisations undertaking the execution of steelwork in transportation infrastructure assets.

This SSD is based on the requirements of BS EN 1090-1:2009+A1:2011 for conformity assessment of manufacturing operations, BS EN 1090-2:2018 as the specification for the execution of steel structures and BS EN ISO 3834-2:2021 and BS EN ISO 3834-3:2021 as the basis for the welding quality requirements.

This SSD is applicable to the supply of new steelwork and to work on existing steelwork in new and existing assets. It covers the design, fabrication, installation, erection, dismantling and modification of steelwork. It is applicable to the execution of steelwork undertaken in the workshop and on site and includes all the associated processes required for the execution of steelwork. The Sector Scheme shall support and be supported by appropriate sustainability criteria and the associated health and safety and environmental controls.

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 Organisation or that part of the Organisation complying with this SSD (see Appendix K).

Organisations may achieve registration/approval to this Sector Scheme for specific services that they are competent to supply (e.g. welding, fabrication) within the overall process of the execution of steelwork in transportation infrastructure assets. The Certificate of Registration shall record the full scope of registration. (See Appendix K)

This Sector Scheme excludes the corrosion protection of ferrous materials by industrial coatings which is covered by NHSS 19A. Organisations undertaking this type of work will need to have this covered separately if relevant, by registration to NHSS 19A (see Appendix K).

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

Organisations registered to another NHSS for activities that include the execution of steelwork should refer to Appendix N for guidance on compliance with this Sector Scheme.

2. NORMATIVE REFERENCE

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

- BS EN ISO 9000:2015 Quality Management Systems Fundamentals and vocabulary
- BS EN ISO 9001:2015 Quality Management Systems Requirements
- BS EN ISO 9004:2018 Quality Management Quality of an organisation Guidance to achieve sustained success.
- BS ISO 10005:2005 Quality Management Systems Guidelines for quality plans.
- NHSS 0 Governance of National Highway Sector Schemes.

3. TERMS, DEFINITIONS AND ABBREVIATIONS

3.1 For the purpose of this Sector Scheme Document the terms and definitions given in ISO 9000:2015 and NHSS 0 apply with additions and exceptions listed in the table below.

Bolting Coordinator*	being responsible and comp	recorded by the Organisation as betent to coordinate those bolting ies listed on the Organisation's 7.2)
Certificate of Registration:	certifying that the holder of	B accredited Certification Body operates a Quality Management 9001: 2015 and this SSD. (See
Client:	The owner or manager of asset.	the transportation infrastructure
Contract Specification:	The specification for the exe the contract.	ecution of steelwork included in
Customer:	The body engaging the Org work described in this SSD.	anisation for the purpose of the
Foreperson:*	Organisation as being resp	lentified and recorded by the ponsible for the supervision of a I process of the execution of
Inspector:*	Organisation as being res	entified and recorded by the ponsible for the inspection of with specific requirements. (See
Manager:*	Plan for a contract as be	ned in the Organisation's Quality ing responsible for the overall icution of steelwork for that
Operative:*	Foreperson and is directly in overall process of the ex-	vorks under the supervision of a nvolved with a process within the ecution of steelwork. This may s working towards becoming ee 7.2)
Organisation:	any other related contractu	the execution of steelwork and al obligations and who will be by the Certification Body. See
"shall":	followed in order to conform no deviation is permitted.	dicate a requirement strictly to be to the standard and from which . (See ISO/IEC Directives Part e "guidance on terminology used)
Skills/Identification Card	the level of competency a	ed authority, which demonstrates chieved by the holder. In some as a registration card and as an
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	identity card.
Sub-contractor:	An organisation, or individual providing a service(s) or material(s) to the Organisation and where relevant also registered to this scheme or associated National Highway Sector Scheme where they exist.
Supply	The making available of the necessary information, services, products and/or materials to meet the requirements specified in the contract.
Technical Manager:*+	A competent person identified and recorded by the Organisation as being responsible for ensuring that specific technical requirements are met. (See 7.2)
Technical Manager (Design):+	A competent person identified and recorded by the Organisation as being responsible for design and development activities. (See 7.2)
Transportation Infrastructure Assets:	As defined in the Contract Specification. May include but not limited to bridges, parapets, gantries, masts, columns, signal posts, electrification masts, station structures, level crossing equipment, buildings and toll booths.
Welding Coordinator:*	The person identified and recorded by the Organisation as being responsible and competent to coordinate those welding and welding related activities listed on the Organisation's scope of registration. (See 7.2)
* + Note	Roles may be combined where appropriate.

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

NHSS	National Highway Sector Scheme		
QMS	Quality Management System		
RQSC	Register of Qualified Steelwork Contractors (see www.steelconstruction.org/member-directories/)		
SSAC	Sector Scheme Advisory Committee		
SSACS:	Sector Scheme Advisory Committee for the Execution of Steelwork.		
SSD	Sector Scheme Document		
NAB (National Accreditation Body)	UKAS - The United Kingdom Accreditation Body or any recognised European National Accreditation Body or any equivalent International Accreditation Forum (IAF) Multi- Lateral Agreement (MLA) signatory		

4 to 10 QUALITY MANAGEMENT SYSTEM REQUIREMENTS

Particular Requirements ISO 9001:2015

Introduction

This document shall be read and implemented 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 9001:2015 requirements are diluted or deleted because of this particular requirement.

4 **Context of the Organisation**

4.1 Understanding the Organisation 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 Organisation is competent to supply and for which they are seeking registration/approval, within the overall process of the execution of structural steelwork in transportation infrastructure assets.
- (ii) Consideration shall be given to outsourced services and how those outsourced services are controlled. See also 8.4.1.

4.4 Quality management system and its processes

- **4.4.1** The Organisation shall operate a quality management system to ISO 9001:2015 and this SSD.
- **4.4.2** (i) The Organisation shall have a process in place to check their registration/approval to this sector scheme on the UKAS CertCheck website (https://certcheck.ukas.com/) immediately following confirmation of their certification/re-certification to the sector scheme from the certification body and at least annually to ensure currency and accuracy. (See Introduction paragraph 13 and Appendix O for more details about UKAS CertCheck).

(ii) The Organisation shall notify their certification body immediately when they identify an error in their sector scheme registration details on UKAS CertCheck.

5 Leadership

5.1 Leadership and commitment

5.1.1 General

Top Management shall demonstrate commitment to applicable NHSSs.

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, the 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 method statements and risk assessments for undertaking the works shall be available at the work site.

5.2 Policy

5.2.1 Establishing the quality policy

The Organisation's quality policy statement shall include a statement of commitment to applicable National Highway Sector Schemes.

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 Organisation roles, responsibilities and authorities

- (i) Where, a quality plan is required by the contract, relevant organisational roles, responsibilities and authorities shall be included. (See 7.5.1 and Appendix A)
- (ii) The Organisation shall define who is responsible for the roles defined by this SSD. (See Section 3)
- (iii) The Organisation shall ensure that those personnel with contract specific responsibilities and authorities are identified and recorded. (See 7.1.2)

6 Planning

6.1 Actions to address risks and opportunities

- 6.1.1 The Organisation 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

The Organisation shall be able to demonstrate that it has the necessary financial resources to meet its contractual commitments.

7.1.2 People

- (i) The Organisation shall provide a Manager for all contracts.
- (ii) The numbers of trainee personnel shall be appropriate to the activity being undertaken and shall have an appropriate level of supervision.

7.1.3 Infrastructure

- (i) The Organisation's infrastructure in terms of facilities and process equipment shall be suitable for the scope of registration/approval being sought (e.g. welding processes).
- (ii) The Organisation shall determine, provide and maintain sufficient supporting services necessary to deliver the range of specific services within the scope of registration/approval being sought.

7.1.4 Environment for the operation of processes

The Organisation shall ensure that all necessary access, plant, services and equipment are available and maintained to enable the execution of steelwork to be carried out effectively. In particular, the Organisation shall monitor the work environment with respect to its acceptability for carrying out the execution of steelwork effectively.

Note: The BCSA's Safe Site Handover Certificate provides a benchmark of acceptability.

7.1.5 Monitoring and measuring resources

7.1.5.1 General

The Organisation shall establish and maintain a record of the monitoring and measuring devices used in the execution of steelwork. (See Appendix E)

7.1.5.2 Measurement traceability

- (i) Manufacturer's guidance for the maintenance, servicing and calibration of equipment shall be taken into account within the quality management system. (See Appendix E)
- (ii) Where no standard exists, monitoring and measuring devices shall be calibrated in accordance with the manufacturer's instructions.

7.1.6 Organisational knowledge

See Appendix B.

7.2 Competence

General

- (i) The training and assessment of competency of personnel required by this scheme is aimed primarily at technical competence for those personnel involved with the execution of steelwork and with the inspection of those works. It is intended to enable/assist and support employees to carry out work in a safe manner however it remains the responsibility of the Organisation to determine and implement safe systems of work.
- (ii) The Organisation shall implement and maintain processes for the training, development and use of competent personnel in accordance with this SSD.
- (iii) Those personnel with contract specific responsibility and authority for execution work shall have a working knowledge of the relevant parts of the Contract Specification that are applicable to the work being undertaken.
- (iv) Those personnel with contract specific responsibility and authority for design and development work shall have a working knowledge of relevant standards and specifications that are applicable to the work being undertaken.

Requirements

(i) Competence and Training

The Organisation shall ensure that its personnel are suitably competent. The Organisation shall ensure that their personnel have appropriate experience and have undergone suitable training and assessment that shall cover aspects of the work to be undertaken.

Trainees shall be under the direct supervision of a nominated competent person.

Appendix C lists certain occupations for which the Organisation needs to mobilise specifically qualified personnel. In addition, the Organisation needs to be satisfied that personnel are suitably competent for the specific tasks allocated.

(ii) Records and Identification Cards

The Organisation shall maintain appropriate records of competence assessments and supporting training that has been undertaken. If appropriate an employee shall carry a record card of successful completion of an approved training course.

Employees shall carry at all times whilst working at construction sites a Skills/Identification card for this SSD. This card will include an identification photograph and where appropriate

the name of the Organisation.

7.3 Awareness

With respect to special situations or requirements that occur on a specific contract, the Organisation shall ensure that all affected personnel are made aware of the applicable implications by means of contract-specific briefings. Arrangements for briefings shall address the need for periodic updates as necessary.

7.4 Communication

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

7.5 Documented information

7.5.1 General

- (i) A quality plan shall be prepared for all contracts. When specified in the contract documents or requested, the Organisation shall submit a quality plan or alternative document as defined in the Contract Specification for acceptance or approval by the Client, as appropriate, prior to commencement of work. (See Section 8 and Appendix A)
- (ii) The Organisation shall have in place auditable processes to identify publication of relevant new standards and documents, and implementation requirements (See Appendix B).

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** (i) The Organisation shall have processes in place to ensure that the latest versions of relevant standards and documents are available (See Appendix B).

(ii) Control of Documents

In addition to the Organisation's own quality documents, the following contract specific documents shall typically be controlled:

- a) Correspondence including concessions.
- b) Delivery notes and certification of materials and workmanship where required.
- c) Training records/certificates.
- d) Contract documentation and Client order.
- e) Instructions to Operatives, Supervisors and Inspectors.
- f) Relevant standards and specifications, including this document.
- g) Method statements and risk assessments for controlling the works to include relevant health and safety, and environmental requirements.
- h) Design information, including calculations and drawings.
- i) Execution drawings and schedules.

With specific respect to welding documentation see PD CEN ISO/TR 3834-6:2007.

(iii) Control of Records

In addition to the Organisation's own quality records, the following contract specific records shall typically be kept:

- a) Contract Specification and any variations.
- b) Supply chain records.
- c) Design information, including calculations and drawings, and records described in 8.3.
- d) Instructions to Operatives, Supervisors and Inspectors.
- e) Experience and training record of all personnel.
- f) 'As built' records identifying any agreed changes arising during implementation.
- g) Records of materials used.
- h) Details of any accidents or incidents including near misses (known to the Organisation).
- i) Maintenance, calibration and test records of the equipment used.
- j) Product data sheets and health and safety data sheets.
- k) Contract records e.g. temperature, sampling and testing.
- I) Records to enable Operative traceability as required.
- m) Concerns and feedback

With specific respect to welding documentation see PD CEN ISO/TR 3834-6:2007.

(iv) Records shall be kept for a minimum of six years unless otherwise required to be retained for a longer period in the contract. Records shall be made available to the Customer and/or Client as requested.

8 Operation

8.1 Operational planning and control

- (i) The quality plan shall address the topics listed in Appendix A of this SSD and where applicable the requirements contained in associated contract documents.
- (ii) The quality plan may be a largely standard document as indicated in Appendix A of this SSD supplemented by contract specific information.
- (iii) The quality plan should not be considered in isolation. An integrated approach may be taken 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 Organisation.

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

(iv) The Organisation shall, in order to reduce the need for waste disposal, minimise the generation and environmental impacts of wastes arising during the contracted works and shall maximise opportunities for the re-use and recovery of wastes. The Organisation shall document its arrangements for the identification, segregation, handling, sto rage 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

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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: The Customer and/or Client may require detailed information relating to the execution of steelwork for the purpose of:

- as built records for maintenance/health and safety requirements and asset management.
- their own monitoring of the effective performance of the steelwork.

8.2.2 Determining the requirements for products and services

- (i) This SSD should be taken into account when determining the requirements.
- (ii) Where required in the contract agreement the Organisation shall undertake relevant risk assessments in accordance with the Client's standards and processes (for example National Highways Standard GG 104 provides a method for undertaking risk assessment on their network). See also 5.1.2.

8.2.3 Review of the requirements for products and services

8.2.3.1 (i) The Organisation shall review in a timely manner the order for the works to verify that product requirements are defined and that they are able to meet the technical requirements included in the Customer's Specification including the relevant parts of the Client's Contract Specification. The review shall include a review of the availability of all the required resources including personnel.

(ii) During the progress of the product realisation process the Organisation shall review:

- a) The risks associated with product realisation including delivery timescales; and
- b) Opportunities for control of risks and performance improvement.

(iii) Where omissions, irregularities or inconsistencies with the Contract Specification, health and safety requirements, environmental or other issues are encountered these shall be brought to the attention of the Customer for resolution at the earliest opportunity.

(iv) During the progress of the product realisation process the Organisation shall develop its plans for work on site in accordance with the overall construction phase plan for health and safety.

(v) Matters of a significant nature, which arise during the determination and review of requirements shall be referred to the Customer for clarification.

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 requirements 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

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- (i) Design and development may address all associated processes required for the execution of steelwork including but not limited to temporary works, erection, access and protection of the works and environment.
- (ii) Design and development is excluded on those items where the Customer is required to supply fully developed design information.
- (iii) Where design and development activity is undertaken by the Organisation, the requirements of 8.3.2 to 8.3.6 inclusive shall apply. For highway works these requirements may be satisfied through the Organisation working in accordance with GG 102.

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.

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

8.4.1 General

- (i) Delivery documentation shall be inspected by a competent person to verify that the delivery satisfies the purchase requirements.
- (ii) The Organisation 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 works.
- (iii) Where the provision of ancillary activities such as temporary traffic management are procured only suppliers with Certification to the relevant NHSS shall be used.
- (iv) Materials, products and services shall be selected in accordance with the contract (specification) documents including compliance with other relevant NHSS.
- (v) Where services are outsourced and not controlled under the Organisation's quality management system, the supplier of the services shall have relevant NHSS registration/approval. The Organisation shall maintain a collated list of all outsourced

services, which shall include details of how those outsourced services are controlled. See also 4.3.

(vi) The Organisation shall maintain records to demonstrate that all materials, suppliers and sub-contractors conform to the Contract Specification.

8.4.2 Type and extent of control

- (i) The Organisation shall implement and maintain processes that are suitable for providing, to the Customer and/or Client, details of the source of supply of all materials used in the execution of steelwork, as requested.
- (ii) The Organisation shall have processes that match purchased steel products with the welding procedure specifications to be used in production.
- (iii) Organisations shall implement and maintain processes that are suitable for ensuring that purchased constituent product meet specified purchase requirements. Such processes may include:
 - a) Obtaining objective evidence of the quality of the product from the supplier and verifying the authenticity of accompanying documentation.
 - b) Review of the product documentation to confirm relevance, accuracy and completeness.
 - c) Inspection and sample testing of the product upon receipt.

For mechanical fasteners this requirement may be satisfied by Organisations obtaining mechanical fasteners from a supplier that is registered to NHSS 3.

For structural steel products this requirement may be satisfied by Organisations obtaining structural steel products from a supplier that is registered to NHSS 3B.

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**

8.5.1 Control of production and service provision

- The intervals between surveillance inspections of an Organisation's Factory Production Control (FPC), as required by BS EN 1090-1:2009+A1:2011, B.4.2, shall be at least yearly.
- (ii) The Organisation shall have in place inspection and test processes for quality control that address the requirements of BS EN 1090-2:2018 and the relevant Execution Class for the components being produced.
- (iii) Operational personnel shall be issued with appropriate work instructions or method statements supported by risk assessments. Where applicable, these documents shall address requirements identified in the contract-specific quality plan. See also 5.1.2.
- (iv) With respect to welding processes, the Organisation shall have a valid BS EN ISO 3834 certificate issued by a certification body accredited for that standard by a NAB. The certified Welding Quality Management system shall be in accordance with BS EN ISO 3834-3:2021 for Execution Class 2 and BS EN ISO 3834-2:2021 for Execution Class 3

and 4, implemented using the guidance given in PD CEN ISO/TR 3834-6:2007.

(v) The Organisation shall implement and maintain a process for reporting to the Customer and Client any unexpected conditions or factors encountered that may affect the execution of steelwork, and work with the Customer and Client to mitigate such conditions or factors.

8.5.2 Identification and traceability

- (i) The Organisation shall implement and maintain documented processes to ensure that retained documents and records can be clearly identified and traced.
- (ii) The Organisation shall implement and maintain documented processes to ensure that personnel allocated to the work are identifiable.
- (iii) With respect to materials, the processes shall be in accordance with BS EN 1090-2:2018 and the relevant Execution Class for the components being produced.

8.5.3 Property belonging to customers or external providers

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

8.5.4 Preservation

(i) The Organisation shall implement and maintain documented processes for the appropriate transportation, handling, storage, packaging and disposal of materials. These processes shall be in accordance with BS EN 1090-2:2018 and the relevant Execution Class for the components being produced.

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 services

- (i) The Organisation shall implement and maintain documented monitoring and measurement processes that comply with the Contract Specification.
- (ii) The organisation shall retain records to show that the person authorising the release of products and services had the necessary authority and competence to do so.

8.7 Control of nonconforming outputs

- **8.7.1** The Organisation shall implement and maintain documented processes such that any materials or 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.
- **8.7.2** No specific particular requirement; the requirements are as stated in ISO 9001:2015 without further qualification.

9 **Performance evaluation**

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

- (i) The impact of the execution of steelwork on other works and the operation of the related infrastructure shall be considered.
- (ii) The Organisation shall identify and set targets for improvements in the execution of structural steelwork.

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** (i) Internal audits shall be carried out at sufficient frequency and by a suitable technically competent person/s to ensure a robust assessment of the compliance of the product.

(ii) Internal auditors shall have a working knowledge of the execution of steelwork. Internal audits shall be carried out by the nominated quality manager or a designated competent person.

(iii) The quality plan shall state the frequency of internal audits. Internal audits of the quality management system against this SSD shall include the following:

- a) Six monthly office-based audits of the processes associated with the execution of structural steelwork.
- b) In addition audits of the execution of structural steelwork being carried out in the shop or on-site, at least twice a year; these are to include at least one on-site audit where site works is undertaken.

Where the Organisation 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, but at least one visit per contract must be made.

9.3 Management review

9.3.1 General

The Organisation 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

The output and actions from the management review shall be considered by Top Management at regular intervals throughout the year.

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

- **10.2.1** The corrective actions and risk assessment processes shall include analysis of incidents including accident statistics.
- **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 be developed using the list of recommended items in Annex C of BS EN 1090-2:2018 for guidance and the following:

1. General requirements

- 1.1. Definition of the product (or service) to be provided
- 1.2. The Organisation's management strategy for undertaking the execution of steelwork, including clear and sustainable performance objectives.
- 1.3. Identification of the relevant parts of the Organisation's documented quality management system relevant to the product or service being provided.
- 1.4. Frequency of internal audits (see 9.2)

2. Customer and Client information

- 2.1. Name and contact details of Customer and/or Client contact(s).
- 2.2. The Customer's nominated quality manager, project manager and/or other representatives through whom communication is to be made throughout the contract.
- 2.3. Details of the communications required between the Organisation's staff and the Customer and/or Client or any other party including liaison with the Police, the Highway Authority, the Rail Authority, adjoining landowners and other organisations or individuals as appropriate.
- 2.4. Names and contact details of the staff involved with the contract including as a minimum the Manager.

3. Contract specific information (as applicable)

- 3.1. Location of site for the contract and means of access.
- 3.2. Specification and/or Contract Documents.
- 3.3. Extent of the works and the commencement and completion dates of the contract.
- 3.4. Details of the work (as appropriate).
- 3.5. Details of the contract specific equipment to be used and any certification requirements.
- 3.6. Details of the information that is to be passed to the Customer and Client, and when it is to be passed to them (see 8.2.1).
- 3.7. Work programme and details of deliverables including risk assessments, COSHH assessments and method statements.
- 3.8. All relevant contract specific information in respect to safety requirements, environmental requirements, existing conditions and site conditions.
- 3.9. Any environmental conditions impacting upon the specified works.
- 3.10. Reference to method statements, risk assessments and other relevant contract specific documents relating to undertaking the works.

4. BS EN 1090-2:2018, Annex C

- 4.1. With respect to Clause C.2.3.3 of Annex C of BS EN 1090-2:2018, the execution records listed are not necessarily exhaustive.
- 4.2. With respect to Clause C.2.3.4 of Annex C of BS EN 1090-2:2018, documentary records shall be maintained for the legally-required period if greater than 10 years (e.g. 12 years for contracts executed as deeds).

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 Organisation should also be aware that there may be further general requirements for quality plans within a contract, for instance Appendix 1/24 of the Manual of Contract Documents for Highway Works, 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:-

- 1. The listing is not comprehensive; other documents may be required to fulfil the requirements of the contract. Organisations shall ensure that they have a working knowledge of and access to all the relevant documents including amendments required by the contract and specification
- 2. Organisations shall ensure they are working to current reference or associated documents appropriate to work in their sector.
- 3. The list of standards and documents below are date specific, however, the Organisation shall have processes in place to ensure that the latest version is always available. Organisations should be aware that utilisation of internet search engines may result in out of date references being identified/called up.

REFERENCE DOCUMENTS

Reference should be made to the Customer/Client's Contract Specification for specific reference documents.

See Section 2 for Normative References.

General Reference Documents

BS EN 1090-1:2009+A1:2011 Execution of steel structures and aluminium structures – Part 1: Requirements for conformity assessment of structural components.

BS EN 1090-2:2008+A1:2011 Execution of steel structures and aluminium structures – Part 2: Technical requirements for steel structures (Note that this version of BS EN 1090-2 has been withdrawn by BSI but remains referenced in specifications).

BS EN 1090-2:2018 Execution of steel structures and aluminium structures – Part 2: Technical requirements for steel structures.

BS EN ISO 3834-2:2021 Quality requirements for fusion welding of metallic materials – Part 2: Comprehensive quality requirements.

BS EN ISO 3834-3:2021 Quality requirements for fusion welding of metallic materials – Part 3: Standard quality requirements.

BS EN ISO 4063:2010 Welding and allied processes – Nomenclature of processes and reference numbers.

BS EN ISO 9606-1:2017 Qualification test of welders - Fusion welding. - Part 1: Steels

BS EN ISO 9712:2022 Non-destructive testing – Qualification and certification of NDT personnel

BS EN ISO 14731:2019 Welding coordination - Tasks and responsibilities.

BS EN ISO 14732:2013 Welding personnel. Qualification testing of welding operators and weld setters for mechanised and automatic welding of metallic materials

BS EN ISO/IEC 17021-1:2015 Conformity assessment. Requirements for bodies providing audit and certification of management systems

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PD CEN ISO/TR 3834-6:2007 – Quality requirements for fusion welding metallic materials. Guidelines on implementing ISO 3834

GG 102 – Quality Management Systems for Highway Works (Design Manual for Roads and Bridges – Volume 0, Section 2, Part 1 – http://www.standardsforhighways.co.uk)

GG 104 – Requirements for safety risk assessment (Design Manual for Roads and Bridges – Volume 0, Section 2, Part 3 – http://www.standardsforhighways.co.uk)

Guidance Documents

BCSA Publication 34/02 - Steel Bridges

BCSA Publication 38/05 - Guide to the Erection of Steel Bridges

BCSA Publication - Safe Site Handover Certificate

BSI Publication PD 6705-2: 2020 – Structural use of steel and aluminium Part 2: Execution of steel bridges conforming to BS EN 1090-2 - Guide

CIRIA Publication C664 – Iron and Steel Bridges – Condition Appraisal and Remedial Treatment

SCI Publication P185 – Steel Bridge Group Guidance Notes on Best Practice in Steel Bridge Construction

SCI Publication P382 – Steel Bridge Group: Model Project Specification for the Execution of Steelwork in Bridge Structures

Note1: This list of standards and documents include those that are date specific, however, the Organisation shall have procedures in place to ensure that the latest versions are always available (See 7.5.3.2).

Note 2: 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

Training and Competency Assessment Requirements

Reference should be made to Appendix N for guidance relating to Organisations registered to another NHSS undertaking work covered under the scope of this Sector Scheme.

The table shows specific competence levels for activities undertaken by an Organisation. Personnel without demonstrated competence by means of independent assessment may be assessed by industry accreditation schemes, or in agreed circumstances by the Organisation itself provided suitable management processes are in place.

Activity	Operatives	Forepersons ⁽¹⁾	Inspectors	Technical Managers	
For work on	In accordance with site specific requirements.				
site					
Welding ⁽²⁾	BCSA Craft or equivalent ⁽³⁾ and Welders according to BS EN ISO 9606-1:2017 Welding operators according to BS EN ISO 14732:2013	BCSA Craft or equivalent ⁽⁴⁾	Certificated to Level 2 in accordance with BS EN ISO 9712:2022 for each NDT technique used ⁽⁵⁾	Welding Coordinator according to BS EN ISO 14731:2019	
Fabrication	BCSA Craft or equivalent ⁽⁴⁾	BCSA Craft or equivalent ⁽⁴⁾	BCSA Craft or equivalent ⁽⁴⁾	Welding Coordinator according to BS EN ISO 14731:2019	
Craneage	Crane Operator	Crane Supervisor (Banksman) ⁽⁶⁾	n/a	Appointed Person Certificate	
Preloaded	BCSA Scheme L1	BCSA Scheme L2	BCSA Scheme L2	BCSA Scheme L3	
Bolting ⁽⁷⁾	Bolting Practitioner or specific training ⁽⁸⁾	Bolting Inspector	Bolting Inspector	Bolting Coordinator	
Design and		Design): Membership o	of appropriate professional	engineering institution	
Development	(e.g. MIStructE or MICE), Registered with the Engineering Council as a Chartered Engineer (CEng).				
Corrosion Protection	Refer to NHSS 19A				
NOTES	 (1) Including all supervisory roles in chain of command on site (2) Welder qualification appropriate to processes and materials being used (3) BCSA CRAFT Certification as Welder, Fabricator or Fabricator Welder as appropriate (www.steelconstruction.org). Equivalence: An industry body or nationally recognised training scheme, with equivalence for a specific welding operative role to be agreed with the certification body. Implementation: 75% of workforce to be certified by 31st December 2020. (4) BCSA CRAFT Certification as Welder, Fabricator or Fabricator Welder as appropriate (www.steelconstruction.org). Equivalence: An industry body or nationally recognised training scheme, with equivalence to be agreed with the certification body. Implementation: 75% of workforce to be certified by 31st December 2020. (5) Certificates for NDT provided by CSWIP, PCN or AWS are suitable. (6) Or Appointed Person Certificate (7) See BCSA Standard – Competence in Preloaded Bolting (www.steelconstruction.org) (8) Provided by preloaded fastener supplier where use is restricted by tightening method. (Tightening methods: Torque, Combined/Part Turn, HRC, DTI, other (to be specified)) 				

Health and Safety

Organisations 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 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 Organisation to determine and implement safe systems of work.

It is a requirement that personnel attending construction sites pass the health, safety and environment test associated with a relevant occupation card. 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. It is a requirement that management staff pass the CITB Management Health and Safety test.

Railways – Organisations are reminded of the requirements for a safe system of work to be set up by persons with relevant track safety certification. Organisations' and sub-contractors' employees are required to have a current personnel track safety certification. Requirements are given in the relevant Railway Group Standards and company standards.

Temporary traffic management

Highways organisations 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 Organisation registered to NHSS 12A/B as appropriate.

For works on mobile lane closures NHSS12C applies.

For works on other roads NHSS 12D applies and organisations 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.

APPENDIX D: EXAMPLE REGISTER OF PERSONNEL ATTAINMENTS

Not used

APPENDIXE: GUIDANCE FOR THE CONTROL OF MONITORING AND MEASURING EQUIPMENT

Example Record of Monitoring and Measuring Devices

Equipment & Unique Reference Number	Equipment/ Test Specification	Calibration Control	Calibration Frequency	Date of Calibration	Date Next Calibration Due.	Calibration Certificate Ref.

<u>Note</u>

- 1. 'In house' calibrations to be in accordance with procedure(s) described in the equipment's operating manual. Separate records are to be kept on method(s) used and results of calibration.
- 2. All Calibrations (other than 'in house') shall be certified by accredited/registered Inspection Bodies providing certification of calibration traceable to national standards wherever possible / practical.
- 3. 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

Information on certification bodies accredited against this sector scheme can be found on the UKAS website www.ukas.com. To identify the certification bodies on the website:

- From the UKAS home page
- Left click in the blue 'Search UKAS Accredited Organisations' box on the page; this will open the 'Search Accredited Organisations' page
- In the 'Search' box type in 'sector scheme No X', where "X" represents the scheme number (see Note 1 below)
- Left click Search
- Under 'Organisation Type' select 'Certification Bodies'

This then lists the certification bodies that are accredited to NHSS X and their details can be found by clicking on the appropriate links.

Note 1: This process will not identify certification bodies that do not have "sector scheme No X" in their scope, but have other sector scheme descriptions such as "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 other sector scheme descriptions such as "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 3: Certification Bodies interested in being accredited by UKAS for this Sector Scheme should contact UKAS (Tel 01784 429000 or Email <u>info@ukas.com</u>).

Note 4: Organisations currently registered to ISO 9001 with a NAB accredited certification body that does not hold registration to this NHSS may wish to consider the following option. Continuing to be registered with their existing Certification Body but having the interpretation of the NHSS carried out by and in conjunction with a NAB accredited certification body for this scheme

Note 5: The following Certification Bodies are accredited by UKAS to this Sector Scheme at the time of preparing this issue of the SSD. 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).

BSI Assurance UK Limited	www.bsigroup.com
LRQA	www.lrqa.com
Ocean Certification Limited	www.ocean-cert.com
Steel Construction Certification Scheme Limited (Lead Certification Body)	www.steelconstruction.org

APPENDIX G: THE ROLE OF CERTIFICATION BODIES AND AUDITOR QUALIFICATIONS

1. Role of certification bodies

- 1.1. The independent assessment of conformity of organisations 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 organisations have management systems in place which address the enhanced ISO 9001:2015 requirements detailed in this SSD. The scope of the organisation's management system should cover the evidence for the range of services that the organisation is competent to supply and for which they are seeking registration/approval 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 the NAB that it possesses and can maintain the necessary assessor experience and technical understanding of the execution of steelwork 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 execution in the steelwork industry, including the methods and techniques sufficient to understand the processes employed and the controls necessary to ensure delivery of conforming steelwork products. (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 transportation engineering background, capable of reading and understanding specifications and drawings, including knowledge of relevant specifications (eg Specification for Highway Works) and standards relating to the execution of steelwork in transportation infrastructure assets.

iv) ability to demonstrate that they have ongoing suitable health and safety training which shall include appreciation of the risks involved in the execution of steelwork.

3.2. The certification body must also ensure that assessors have sufficient knowledge of health &

safety requirements related to working on live highways and railways where appropriate, knowledge of temporary traffic management, working in confined spaces and working at height for assessment of guidance provided on this aspect.

- 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 of National Highway Sector Schemes Part 4.
- 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 obtained from assessments of the execution of steelwork activities in two different organisations.
 - iii) technical assessment competence in the execution of steelwork industry.
 - iv) knowledge, understanding and application of this SSD
 - knowledge of the execution of steelwork industry, including the methods and techniques sufficient to understand the processes employed and the controls necessary to ensure delivery of conforming steelwork products. (Conveyance of this knowledge to auditing teams will be determined by the Certification Body and will be audited by the NAB).
 - vi) demonstrable technical transportation engineering background, capable of reading and understanding specifications and drawings, including knowledge of relevant specifications (e.g. Specification for Highway Works) and design standard requirements for the execution of steelwork in transportation infrastructure assets.
 - vii) ability to demonstrate that they have ongoing suitable health and safety training which shall include appreciation of the risks involved in the execution of steelwork.

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 sites and locations where the execution of steelwork covered by the scope of this Sector Scheme are being undertaken from.
- 4.2. Certification Bodies shall make every endeavour to ensure that during a three year certification cycle there is evidence of assessment of all steelwork execution activities covered by the Organisation's scope of registration. Certification Bodies shall undertake surveillance visits at intervals of not greater than one year.
- 4.3. There may be occasions when a CB encounters an Organisation 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/Approval Certificates.

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- 5.1. Certificates of registration/approval issued by Certification Bodies, which include within the scope of registration/approval 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/approval 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 which may be published in NHSS 0.

6. UKAS CertCheck.

- 6.1. Certification Bodies shall monitor UKAS CertCheck at https://certcheck.ukas.com/ to ensure equivalence between their client's registration details to this Sector Scheme and the registration details provided on UKAS CertCheck.
- 6.2. Certification Bodies shall update/remove on UKAS CertCheck the details of registered organisations whose scope of registration/approval against this Sector Scheme has ceased to be applicable, within 10 working days of that situation occurring.
- 6.3. Certification Bodies shall audit the organisation to ensure that they have reviewed their registration details on UKAS CertCheck immediately following confirmation of their certification/re-certification to the sector scheme, and at least annually to ensure currency and accuracy.

7. Reporting on Sector Scheme Performance.

- 7.1. Each Lead certification body shall report to the Chairperson of the SSACS 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.

Note 1: This is to be issued to the Chairperson of this Sector Scheme Committee.

APPENDIX G1: GUIDANCE TO ASSESSORS AND OTHER AUDITORS

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 this NHSS document. 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 <u>General</u>

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 and any related client standards and specifications.

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 requirements have been provided. These are indicated by "Y" in the table.

Additionally in the "comments/requirements" column information is provided for use by assessors when assessing an Organisation. This information is guidance providing an indication of priority where particular requirements have been provided.

Section/Clause	Particular requirement Yes/No	Comment/Requirement
4. Context of the organisation		
4.1 Understanding the organisation and its context	N	
4.2 Understanding the needs and expectations of interested parties	Y	Check annually that the Organisation has determined interested parties including those listed, their requirements and is monitoring and reviewing the information about them. For Organisations undertaking work to the Specification for Highway Works Series 1800 – Structural Steelwork, check that the Organisation has the necessary RQSC registration in place (See Series 1800, Clause 1800.4, 1).
4.3 Determining the scope of the quality management system	Y	Check scope is valid. Check extent of outsourced services and how these are controlled. Check documented information.
4.4 Quality management system and its		

Section/Clause	Particular requirement Yes/No	Comment/Requirement	
processes			
4.4.1	Y	Check annually by the CB Auditors and other Auditors.	
4.4.2	Y	Check annually by the CB Auditors and other Auditors. Check UKAS CertCheck website to ensure registration/approval details are correct and up to date. Confirm effectiveness of the process for Organisation check of their registration/approval details on UKAS CertCheck and for informing CB of any error in their sector scheme registration/approval details.	
5. Leadership			
5.1 Leadership and commitment			
5.1.1	Y	Check policy documented information for Top Management commitment to the NHSS and leadership and commitment to the QMS. Ensure that policy is being correctly implemented, communicated and understood.	
5.1.2	Y	Check that Organisation is considering, meeting and maintaining customer requirements. Ensure that the Organisation has determined all necessary applicable statutory and regulatory requirements for contract compliance. This may include supplementary services such as recycling, final disposal, equipment inspection etc. Check documentation for safe working methods and risk assessments in place, are available, and how deviations are agreed. Ensure customer feedback documents are in place on completion of the contract.	
5.2 Policy			
5.2.1	Y	Ensure statement of commitment to NHSS is in policy documented information.	
5.2.2	N		
5.3. Organisation roles, responsibilities and authorities	Y	Ensure there is an organisation plan which covers responsibility/authority in accordance with the requirements of the SSD. Ensure that personnel with contract specific responsibilities and authorities have been identified and are recorded. Ensure that the Organisation management have appointed personnel with the appropriate responsibilities and authorities.	
6 Planning			
6.1 Actions to address risks and opportunities			
6.1.1	Y	Check that documented information is in place to address risk and opportunities and is operational.	
6.1.2	N		

Section/Clause	Particular requirement Yes/No	Comment/Requirement	
6.2 Quality objectives and planning to achieve them			
6.2.1	Y	Ensure objectives are established and documented. Check documented information is in place and meets requirements. Check that quality planning is in place and evaluated.	
6.2.2	N		
6.3 Planning of changes	N		
7. Support			
7.1 Resources			
7.1.1	Y	Ensure contract/tender review is in place, including review/availability of the necessary financial resources related to contractual commitments.	
7.1.2	Y	Review provisions of resources including trainees, to confirm they are suitable and include providing the defined personnel for contracts. See Appendix C.	
7.1.3	Y	Review facilities, process equipment and supporting services to confirm they are suitable for the scope of registration/approval.	
7.1.4	Y	Checks to include environmental condition records, plant maintenance sheets, access equipment certification and induction records.	
7.1.5			
7.1.5.1	Y	See Appendix E. Check records.	
7.1.5.2	Y	See Appendix E. Check records.	
7.1.6	Y	Check with reference to Appendix B	
7.2 Competence	Y	Check processes in place and knowledge of identified personnel. See Appendix C 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 and that all documentation is in date. Check sample of identity cards for accuracy and authenticity. Review competence of personnel to confirm it is appropriate for work to be undertaken. For competence in preloaded bolting ensure the BCSA Level 3 Bolting Co-ordinator Certificate of Technical Knowledge <u>and</u> the Organisations Certificate of Competence in Preloaded Bolting are both in place.	
7.3 Awareness	Y	Check for contract specific briefings and arrangements for updates.	
7.4 Communication	Y	Check internal and external communication processes have been established. Check access to QMS documentation and communication/awareness of processes.	
7.5 Documented information			
7.5.1	Y	Check quality plans are in place. Check processes are in place to ensure that the	

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Section/Clause	Particular requirement Yes/No	Comment/Requirement	
		Organisation maintains up to date information on documented information. (See Appendix B for external documented information)	
7.5.2	Ν		
7.5.3			
7.5.3.1	N		
7.5.3.2	Y	Ensure that all required standards and documents, including contract specific documents, are in place and current. Ensure that all required contract specific documents and records are in place and controlled. Check appropriate processes are in place for the retention and disposal of documented information.	
8 Operation			
8.1 Operational planning and control	Y	Check quality plans are in place and comply with requirements of 8.1 and Appendix A. Check appropriate documented arrangements are in place for dealing with wastes.	
8.2 Requirements for products and services			
8.2.1	Y	Check effectiveness of communication arrangements for relevant information.	
8.2.2	Y	Check that the organisation has determined all necessary applicable statutory and regulatory requirements for contract compliance. This may include supplementary services such as recycling, final disposal, equipment inspection etc. Check required risk assessments are undertaken.	
8.2.3		-	
8.2.3.1	Y	Ensure contract/tender review of product requirements including ongoing reviews are in place within an appropriate timescale. To include an assessment of ability to meet technical requirements and availability of resources including personnel. Ensure contract / tender review is in place in respect of design and development obligations. Check appropriate matters are raised with Customer and/or Client.	
8.2.3.2	<u>N</u>		
8.2.4 8.3 Design and development of products and services	<u> </u>		
8.3.1	Y	Ensure contract/tender review is in place in respect of design and development obligations and that design and development responsibilities are identified and addressed.	
8.3.2	Ν		
8.3.3	Ν		
8.3.4	N		
8.3.5	N		

Section/Clause	Particular requirement Yes/No	Comment/Requirement
8.3.6	Ν	
8.4 Control of externally provided processes, products and services		
8.4.1	Y	Check for inspection of delivery documentation by competent person. Check for control of suppliers to meet production needs. Check for use of NHSS registered suppliers where appropriate. Check that documented information is in place for externally provided product and services to meet specified requirements. Check records for outsourced services.
8.4.2	Y	Check that required processes are in place and are effective including evidence of verification of constituent product including mechanical fasteners and structural steel products where appropriate.
8.4.3	Y	Check that purchasing requests are adequate. Check communication to suppliers, including by traceable and confirmable means.
8.5 Production and		
service provision 8.5.1	Y	Check all requirements as part of in process audit. Check certification of Welding Quality Management system. Check CB accreditation for BS EN ISO 3834 by a NAB.
8.5.2	Y	Cover during process review and check that relevant documented information, personnel and materials are identifiable and traceable. Check effectiveness of processes.
8.5.3	N	
8.5.4	Y	Cover during process review. Check effectiveness of processes.
8.5.5	N	
8.5.6 8.6 Release of products and services	N Y	Check that monitoring and measuring process documentation has been implemented in line with the contract specification. Check records of persons authorising the release of products and services.
8.7 Control of		
nonconforming outputs 8.7.1	Y	Check processes are in place and have been implemented in line with contract specification. Check documented information. Check processes for dealing with nonconforming work.
8.7.2	Ν	
9 Performance evaluation		
9.1 Monitoring, measurement, analysis		

Section/Clause	Particular requirement Yes/No	Comment/Requirement
and evaluation		
9.1.1	Y	Check performance and effectiveness of quality management system is reviewed and that stated impacts are considered. Review copy of annual management review to confirm appropriate considerations. Ensure this contains targets for improvement.
9.1.2	N	
9.1.3	N	
9.2 Internal audit		
9.2.1	N	
9.2.2	Y	Check internal audits are being carried out at the required frequency and locations, and ensure corrective actions have been made.
9.3 Management review		
9.3.1	Y	Verify that reviews are undertaken at least every 12 months. Review outcome of annual management review.
9.3.2	N	
9.3.3	Y	Check that the output and actions are considered by Top Management at regular intervals.
10. Improvement		
10.1 General	N	
10.2 Nonconformity and corrective action		
10.2.1	Y	Check that corrective action and risk assessment processes include analysis of incidents and accident statistics.
10.2.2	N	
10.3 Continual improvement	Y	Check that continual improvement processes include analysis of near miss reporting.

<u>2C – Overview of this NHSS in terms of industry requirements and working practices.</u>

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 competency of personnel
- 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 etc; understand English.
- Method Statements/work procedures.
- Risk Assessment.
- Skills/Identification 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 as applicable to the execution of steelwork.
- Aware of current best practice including temporary traffic management measures (including site arrangements).
- C2 Training, Qualifications and Assessment of Competence
 - Have achieved appropriate training and appropriately certificated
 - Have been assessed as competent within their scope of works (e.g. scheme specific assessment)
 - 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/Identification card.

C3 – Maintain Equipment

- Relevant personnel are aware of LOLER and PUWER requirements
- Maintenance checklists are available and have been completed as required

C4 – Public Protection

- 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
- The Organisation(company) has a complaints process in place

(Note: Public in this instance includes personnel employed by the customer/client)

C5 - Environment

Auditors should be sufficiently competent to make general observations on the effectiveness of the Organisation'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 processes.

APPENDIX H: ORGANISATION ACCEPTANCE AND GUIDELINES FOR NEW ENTRANTS

1.0 Organisation Acceptance

- 1.1 For work carried out on roads managed by National Highways, the Welsh Government, Transport Scotland and Dfl Northern Ireland, only those Organisations holding a valid Certificate of Registration/approval for work within the scope of this SSD will be accepted as complying with Clause 104 and Appendix A of the Specification for Highway Works.
- 1.2 For work carried out on transportation infrastructure managed by other clients, acceptance of the Organisation will depend on the requirements of the contract.

2.0 Guidelines for New Entrants - Requirements

- 2.1 Organisations must have the required experienced and qualified personnel and management who meet the requirements of this Sector Scheme. Organisations will need to demonstrate that their equipment and systems meet the requirements of this Sector Scheme.
- 2.2 Organisations must have applied for registration/approval with a certification body that is accredited by their NAB to audit against this Sector Scheme. Organisations will have to demonstrate that they have been audited for office, shop and site based activities as appropriate.
- 2.3 The Organisation shall check their registration/approval to this sector scheme on the UKAS CertCheck website (https://certcheck.ukas.com/) upon receipt of the certificate issued by their certification body to confirm their registration/approval, and thereafter at least annually to ensure currency and accuracy of their registration details. (See 4.4.2. See also Introduction paragraph 13, and Appendix O for more details about UKAS CertCheck).

3.0 Trade Associations

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

British Constructional Steelwork 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 organisation 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 organisation
- 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*
- Organisation*
- 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
- 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	1.Document Feedback, or
	not applicable)	2 Feedback to Certification Body or
Name*		3. Feedback to the Client
Name		
Organisation*		
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 BODIES

Certification Bodies (CB) issue Certificates of Registration (CoR) in a variety of styles as suits their particular house style. They may consist of a single CoR containing all the requisite information or the CoR may be a standard certificate with appendices or addendum attached providing the full scope of certification (services) and the location(s) where these services are offered by an Organisation. In the latter case, the CoR refers to the relevant appendices or addenda, which form an integral part of the certificate.

A valid NHSS CoR is only issued by a CB accredited by a NAB against the relevant NHSS (See Appendix F of this document).

As a minimum a valid CoR will contain the following information:

- a) The scope of certification including specific certification to ISO 9001:2015 and this Sector Scheme including the Sector Scheme title - National Highway Sector Scheme 20 for the Execution of Steelwork in Transportation Infrastructure Assets.
- b) The identification of each and every permanent location where NHSS 20 activities are carried out at or from, and to which the CoR is applicable.
- c) The services offered by the Organisation at each location identified on the CoR for NHSS 20 including applicable categories in accordance with Table K1.
- d) The name and address(es) of the Organisation
- e) The NHSS mark must be used. Other marks may be used provided they are not misleading or ambiguous.
- f) The name, address and certification mark of the certification body and the signature of a relevant Certification Body official with their name and title.
- g) The validity of the certificate* (generally 3 years for management system auditing), to include a certificate issue and expiry/renewal date.
- h) A unique identification number/code

*Note where an Organisation has an extension to scope to include for this NHSS, the expiry date of the BS EN ISO 9001 certificate remains as 3 years after their initial assessment/or triennial assessment and not 3 years after obtaining the extension to their certificate for this NHSS i.e. the validity of the BS EN ISO 9001 certificate will not be reset following their NHSS assessment. Where the extension of scope to include for this NHSS is undertaken by a different Certification Body to that for the BS EN ISO 9001 certification, then the expiry date for the NHSS certificate shall be the same as that for the BS EN ISO 9001 certification.

Table K1: Scope of Registration

Activity ¹ (select)		Title	Primary Category (select)	Secondary Category (select if relevant)
Execution ^{2,3}	of	Steelwork for Steel Structures	Define location ⁵	Optional other defined by the Organisation ⁶
Design ³	of	Steelwork for Steel Structures		
Other Specific Activities ⁴	of	Steelwork for Steel Structures	Define location ⁵	Optional other defined by the Organisation ⁶

Notes

¹ 'Corrosion Protection' should not be included as an Activity as this should be covered separately if relevant, by registration to NHSS 19A.

² Registration for 'Execution' should only be used for Organisations offering **all** the specific activities required for the execution of steelwork. i.e. no outsourced activities that are not controlled under the Organisations QMS (See 4.3(ii) and Note 4 below).

³ The specific activity 'Design' is not covered by registration for 'Execution' and should be listed separately where offered.

⁴ These may include specific activities within the overall process of the execution of steelwork e.g. fabrication, installation, erection, welding, welding of shear studs, preloaded bolting. These may also qualify the execution activities offered, by excluding activities that are required but are outsourced and not controlled under the Organisations QMS e.g. execution excluding welding of shear studs, erection excluding welding. (See 4.3(ii)).

⁵ Location shall be 'in the workshop', or 'on site', or 'in the workshop and on site' as appropriate. ⁶ These may include additions to or limitations on the scope of the QMS defined by the Organisation covering specific competencies e.g. parent materials, execution class(es), welding processes, Welding Coordinator, preloaded fastener tightening methods, Bolting Coordinator. (See 4.3 (i))

APPENDIX K1: EXAMPLE MODEL CERTIFICATE OF REGISTRATION

The following is an example model for the Certificate of Registration.

Figure 1 shows an example of a specific NHSS 20 Certificate of Registration.

Figure 2 shows an example of a specific Appendix for scope of registration. Where appropriate the information on location(s) and the respective scope(s) may be included in an Appendix for scope of registration, with a separate page used within the Appendix for each location where there is more than one location.

Note: [The italic text in square brackets shown on the examples indicates where specific text would need to be included.]

Note: The Example Model Certificate of Registration is for information only and show the information required to be included on any such certificates. They do not imply any specific layout or format, and are not intended to inhibit the house style of the Certification Body.

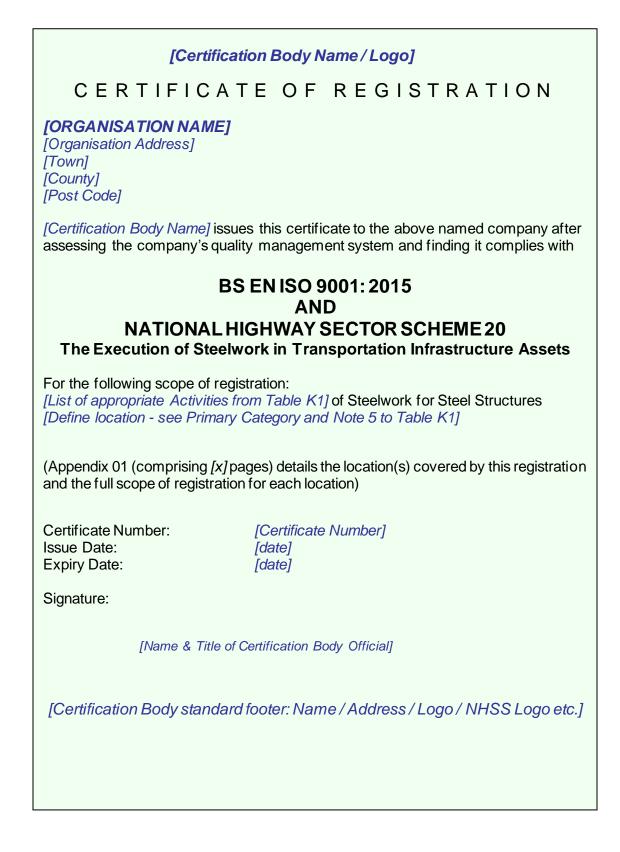
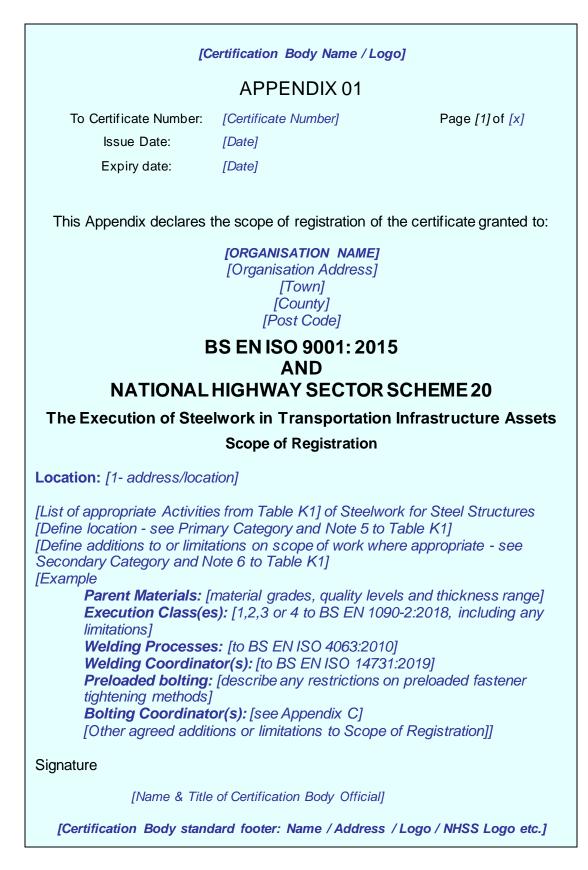


Figure 2: Example Model Appendix for Scope of Registration



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 N before deciding whether to specify that Organisations should be registered to NHSS 20, as registration/approval to other NHSSs may include relevant requirements for the execution of steelwork.

2.2. The NHSS for the Execution of Steelwork in Transportation Infrastructure Assets was originally conceived as a document for use by Clients to specify the minimum standards for quality, training and competence of Organisations used by them to carry out the execution of steelwork.

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 associated with the execution of steelwork and the production of an associated comprehensive quality plan for each contract.
- c) An obligation on the registered Organisation 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.

2.4. It is necessary for the Client to ensure that all those involved in carrying out the execution of steelwork 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 of the execution of steelwork.

2.5. For contracts involving steelwork undertaken to the Specification for Highway Works Series 1800 – Structural Steelwork, Organisations are required to have an appropriate independently certified quality management system in place which can be demonstrated through being registered to this SSD. In addition, Organisations are required to demonstrate that they have the necessary technical capability and competence, which can be achieved through being registered to the Register of Qualified Steelwork Contractors (RQSC) Bridgeworks Scheme for the type and value of work to be undertaken (See Introduction, paragraph 11). Where Series 1800 is adopted as the specification for the execution of structural steelwork it is essential that Clients, either directly or via the agents and individuals they employ to supervise contracts, ensure that the two requirements relating to registration to this SSD and registration to RQSC are rigorously complied with.

2.6. For contracts involving steelwork undertaken to specifications other than Series 1800, the SSACS strongly recommends that in addition to requiring Organisations to be registered to this SSD, Clients make registration with RQSC a requirement in procuring Organisations. This will assist in the procurement process and the execution of the works through identifying those Organisations with an appropriate quality management system and with the required technical capability and competence to undertake the work.

2.7. The RQSC also undertakes audits of steelwork contractors who have signed the Steel Construction Sustainability Charter. Satisfactory completion of the audit enables the contractor to become a

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Sustainability Charter Member. For Clients wishing to include sustainability criteria in their procurement process for steelwork, SSACS strongly recommends that Clients make Sustainability Charter Membership via RQSC a requirement in procuring Organisations.

2.8. 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 NHSS 12D, 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 organisation installing temporary traffic management measures should always be registered to NHSS 12A/B and/or 12C.

2.9. 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. (See Appendices F and K respectively)

2.10. 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 Skills/Identification cards. On being presented with a suspect Skills/Identification card, the issuing body should be contacted to confirm authenticity, and appropriate action taken.

2.11. UKAS host a register of certificated Organisations on their website (https://certcheck.ukas.com/). All Certification Bodies accredited by UKAS to ISO/IEC 17021-1:2015 are required to provide and keep updated data on their certified clients on the UKAS CertCheck website. The principal functions of UKAS CertCheck are:

- 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.

UKAS CertCheck enables clients to verify that a claim of holding UKAS accredited certification for all certifications, including the National Highway Sector Scheme (NHSS), is valid.

2.12. Client check list to be used to assess the validity of contracting organisations claims for compliance with this SSD.

- 1 Is there an ISO 9001 certificate present that has been extended to cover NHSS 20?
- 2 Is the Certification Body that issued the certificate accredited by a NAB for assessments to ISO 9001 and NHSS 20? (See Appendix F)
- 3 Does the certificate have a identification number and signature of a Certification Body official, with their name and title?
- 4 Does the scope of registration/approval given on the certificate cover the full scope of services required and the locations at which those services are to be provided?
- 5 Is the certificate in date and does it cover the period required for the provision of the services?
- 6 Is the organisation listed on UKAS CertCheck and are registration details correct/compatible with those on the certificate that has been provided?

If the answer to any of the above questions is 'No' further clarification should be sought from the Organisation or their Certification Body.

APPENDIX M: GUIDANCE FOR ORGANISATIONS

Not Used

APPENDIX N: GUIDANCE ON THE RELATIONSHIP BETWEEN THIS NHSS AND OTHER NHSSs

Registration to this NHSS is not necessary for the following:

- 1. Fences Organisations carrying out the design, supply, installation or repair of fences shall be registered to NHSS 2A
- Vehicle restraint systems including parapets Organisations carrying out the design, supply, installation, maintenance, repair or inspection of vehicle restraint systems shall be registered to NHSS 2B and 5B (NHSS 10B)
- 3. Environmental barriers Organisations carrying out the design, supply, installation or repair of environmental barriers shall be registered to NHSS 2C
- 4. Lighting columns, masts or posts Organisations manufacturing or installing lighting columns, masts or posts shall be registered to NHSS 6 and/or NHSS 8 as appropriate.
- Traffic sign/signal posts Organisations assembling, installing or maintaining road traffic signs excluding sign/signal gantries shall be registered to NHSS 9 and/or NHSS 8 as appropriate.

Organisations undertaking the corrosion protection of steelwork using industrial coatings shall be registered to NHSS 19A.

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 will be accepted by Lantra after 16 June 2022.

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

UKAS CertCheck: <u>https://certcheck.ukas.com/</u>

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.

As at 16 June 2022, UKAS CertCheck will be operational and as stated above will replace the requirement for individual companies to upload their own certificates to the Lantra Schedule of Suppliers website; however, Lantra will continue to host the NHSS Sector Scheme Documents <u>only</u>, on the Schedule of Supplier website: https://www.lantra.co.uk/schedule-suppliers

NHSS Certification and the organisation's scope

When discussing the organisation's scope with their certification body auditor, organisations 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 organisation has certificates relating to a number of sector schemes or a number of allocations, the organisation 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.

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

APPENDIX Z: DOCUMENT CONTROL (Previous Issues)

Issue history for the SSD for versions of ISO 9001 prior to ISO 9001: 2015.

ISO 9001:2008

UKAS Issue 1	31 st July 2008
UKAS Issue 2	January 2010
UKAS Issue 3	March 2011
UKAS Issue 4	January 2013
UKAS Issue 5	July 2013
UKAS Issue 6	December 2014
lssue 7 [9001:2008]	30 June 2016
lssue 8 [9001:2008]	30 December 2016 – Withdrawn September 2018

Issue history for the ISO 9001:2015 versions of the SSD prior to this issue.

Issue	Amendments
Issue 1 [9001:2015]	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
	define particular requirements within ISO 9001:2015 as it applies to a particular
	activity/industry within the United Kingdom.
	Note: This document has been produced to supersede the Issue 7 [9001:2008] version
	(which relates to ISO 9001:2008), however the Issue 7 [9001:2008] version (or a later
	updated version) will continue to have validity until September 2018 when the 2008
	version of ISO 9001 will become obsolete.
Issue 2 [9001:2015]	Document Control – Issue 2 [9001:2015] details added.
	Composition of Sector Scheme Advisory Committee – Road Service Northern Ireland
	changed to Transport Northern Ireland.
	Implementation of Issue 1 [9001:2015] – Changed to Issue 2 [9001:2015] and
	implementation details updated.
	8.4.2 (iii) – Reference to Sector Scheme 3B added.
	Appendix C – Table Note (7) – details updated for BCSA Standard – Competence in
	Preloaded Bolting
	Appendix F – BSI Assurance UK Limited added
	Appendix G1 Section 8.4.2 – Reference to structural steel products and Sector Scheme
	3B added.
	Appendix $K - 3^{rd} Paragraph b) - a comma added after 'from'.$
Issue 3 [9001:2015]	Document Control – Issue 3 [9001:2015] details added.
	Implementation of Issue 2 [9001:2015] – Changed to Issue 3 [9001:2015] and
	implementation details updated. Reference to the ISO 9001:2008 version of the
	document removed.
	Scope - BS EN 1090-2:2008+A1:2011 updated to BS EN 1090-2:2018
	General update to accord with NHSS 0 Template Document Issue 1.0 dated 17 th
	December 2018. These include additional requirements in Sections 7.1.5.2, 7.1.6, 8.4.1,
	8.4.3, 8.6, 10.2, 10.3.
	Scheme Secretary telephone details updated throughout the document.
	Reference to Lantra Schedule of Suppliers web address and contact Email changed
	throughout the document (<u>www.scheduleofsuppliers.co.uk</u> , <u>sosadmin@lantra.co.uk</u>).
	2. Normative References – Reference to BS EN ISO 9004 updated
	Document references to 'GD 02' and 'GD 04' updated to 'GG 102' and 'GG
	104'respectively throughout the document.
	8.5.1, iii – Added requirement relating to certified Welding Quality Management
	System in accordance with BS EN ISO 3834 with implementation date and auditing
	details in Appendix G1.
	Appendix B – General reference documents updated; BSEN 1090-2 note added

Amendments
confirming the status of the BS EN 1090-2:2008+A1:2011 and BS EN 1090-2:2018
added, BS EN 1418 deleted, BS EN ISO 9606-1:2013 updated to BS EN ISO 9606-
1:2017, BS EN ISO 14731 updated to 2019, BS EN ISO 14732 added, BS EN ISO/IEC
17021:2011 updated to BS EN ISO/IEC 17021:2015,
Appendix C – Table - BS EN ISO 9606-1:2013 updated to BS EN ISO 9606-1:2017,
'BS EN 1418:1998' replaced with 'BS EN ISO 14732:2013'.
Appendix C – requirements for work on site, welding and fabrication updated.
Appendix C, Health and Safety, Paragraph 3 – Health, Safety and Environment test requirements updated
Appendix F – Process for identifying certification bodies on the UKAS website
updated.
Appendix G1 – removed reference to 'induction card'.
Appendix J3 – Highways England Standards feedback email address corrected.
Appendix K1 – New Appendix with Example Model Certificate of Registration.
Appendix N – NHSS details updated.
Appendix O – The process for registering on the Schedule of Suppliers updated.
Document Control – Issue 4 [9001:2015] details added.
Implementation of Issue 3 [9001:2015] amended for Issue 4 [9001:2015]
Revised to accord with NHSS 0 Template Document Issue 1.1 dated 1st April 2020 as
follows:
General revision to align with new publisher.
Introduction – Paragraph 2 'within the United Kingdom' deleted from end of paragraph.
Document Control – Issue 5 [9001:2015] details added.
Implementation of Issue 4 [9001:2015] amended for Issue 5 [9001:2015]
BCSA web addresses updated throughout the document.
Composition of Sector Scheme Advisory Committee – Updated in line with agreed
Committee Constitution.
Selection of Certification Body – note updated and notes added to reflect arrangements
for UK Marking.
Amendments to Introduction, 3.2, 4.4.2, 7.1.1, 8.2.3.1, Appendices G1, H and L relating
to RQSC registration and clarifying the Schedule of Suppliers. Amendment to 8.5.1 (iii) and entry in Appendix G1 for 8.5.1 removing reference to
implementation date of 1 st September 2020 for compliance with the BS EN ISO 3834
certification requirement.
Appendix B – Details for PD6705-2 updated. Reference to BS EN ISO/IEC 17021-
1:2015 corrected.
Appendix B & C – Reference to BS EN 287-1 removed as this has now been with drawn
and welder certification now required to BS EN ISO 9606-1.
Appendix F – Ocean Certification Limited details added as a UKAS accredited CB.