



**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)

DOCUMENT CONTROL

Issue Statement

Issue 1 [9001:2015]	30 June 2016
Issue 2 [9001:2015]	30 December 2016
Issue 3 [9001:2015]	31 December 2019

Previous issues of this SSD are shown in Appendix Z.

Current Issue	Amendments
Issue 3 [9001:2015]	<p>Document Control – Issue 3 [9001:2015] details added.</p> <p>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.</p> <p>Scope - BS EN 1090-2:2008+A1:2011 updated to BS EN 1090-2:2018</p> <p>General update to accord with NHSS 0 Template Document Issue 1.0 dated 17th 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.</p> <p>Scheme Secretary telephone details updated throughout the document.</p> <p>Reference to LANTRA Schedule of Suppliers web address and contact Email changed throughout the document (www.scheduleofsuppliers.co.uk, sosadmin@lantra.co.uk).</p> <p>2. Normative References – Reference to BS EN ISO 9004 updated</p> <p>Document references to ‘GD 02’ and ‘GD 04’ updated to ‘GG 102’ and ‘GG 104’ respectively throughout the document.</p> <p>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.</p> <p>Appendix B – General reference documents updated; BS EN 1090-2 note added 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,</p> <p>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’.</p> <p>Appendix C – requirements for work on site, welding and fabrication updated.</p> <p>Appendix C, Health and Safety, Paragraph 3 – Health, Safety and Environment test requirements updated</p> <p>Appendix F – Process for identifying certification bodies on the UKAS website updated.</p> <p>Appendix G1 – removed reference to ‘induction card’.</p> <p>Appendix J3 – Highways England Standards feedback email address corrected.</p> <p>Appendix K1 – New Appendix with Example Model Certificate of Registration.</p> <p>Appendix N – NHSS details updated.</p> <p>Appendix O – The process for registering on the Schedule of Suppliers updated.</p>

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COMPOSITION OF SECTOR SCHEME ADVISORY COMMITTEE

MEMBER ORGANISATIONS

Association of Directors of Environment, Economy, Planning and Transport – ADEPT
British Constructional Steelwork Association – BCSA
Highways England
Lloyds Register Quality Assurance – LRQA
Steel Construction Certification Scheme – SCCS (Lead Certification Body)
Transport for London – TfL (to include London Boroughs)
Transport Scotland

CORRESPONDING MEMBER ORGANISATIONS

Highway Term Maintenance Association
DfI Northern Ireland
Welsh Government

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SELECTION OF CERTIFICATION BODY

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

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

Specifiers, consultants, engineers etc. that require confirmation of compliance with the Contract Specification in respect of a supplier's registration/approval to this Sector Scheme or the supply of products/materials should confirm the current status of the quality management system certificate

issuer and that specific reference is made to this Sector Scheme on the Certificate of Registration (See Appendix K).

Note: Where the Construction Products Regulations apply and CE marking is a requirement, this can only be applied following successful evaluation of the factory production control process by a Notified Body. (Notified Bodies are appointed by the relevant authority in a Member State of the European Union and notified to the European Commission. In the UK, the relevant authority for notification under the Construction Product Regulations (CPR) is the Ministry of Housing, Communities and Local Government (MHCLG)).

IMPLEMENTATION

ISSUE 3 [9001:2015]

This document has been produced to supersede the Issue 2 [9001:2015] version.

This issue of the SSD is to be implemented immediately from the date of publication on the NAB 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 Organization shall implement the changes in time for their next assessment visit by the Certification Body.

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

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

INTRODUCTION

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 Organizations and certification bodies engaged in the sector, and the minimum qualifications that an assessor/auditor requires. The document shall be read in conjunction with ISO 9001:2015.

2 This Sector Scheme is one of the series of National Highway Sector Schemes (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 within the United Kingdom.

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:

- 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 Organization
- 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 organization installing temporary traffic management measures should always be registered to NHSS 12A/B and/or 12C.

9 The Register of Qualified Steelworks Contractors (RQSC) provides an assessment of an Organizations ability to undertake steelwork. Under RQSC, the Bridgeworks Scheme provides a categorisation (eg Bridge Refurbishment) for registered Organizations 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. The SSACS strongly recommends that Organizations achieve registration with RQSC to provide a rigorous independent assessment of their technical capability and competence which may support any scope of work defined within their scope of registration to this Sector Scheme. As part of its procurement policy/strategy for contracts involving steelwork, Highways England requires that Organizations demonstrate their technical capability and competence which can be achieved through being listed in the Bridgeworks Scheme of RQSC for the type and value of work to be undertaken.

10 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 Highways England 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.

Note: The Sector Scheme was listed in Appendix A of the Specification for Highway Works (November 2007) and became a mandatory requirement for suppliers working to the unmodified listing of the Sector Scheme in Appendix A of the Specification for Highway Works after the publication of the first issue of this document by UKAS on 31st July 2008. It is listed in Series 1800 and Appendix A of the Specification for Highway Works as a means of satisfying a mandatory requirement relating to quality management systems.

11 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. The SSD may be obtained by visiting the UKAS website (www.ukas.com) from where the document can be freely downloaded. Organizations should be aware that utilisation of internet search engines may result in out of date references being identified/called up.

12 Lantra hosts the register of Organizations on their website (www.scheduleofsuppliers.co.uk). This is a self-registration list and it is a requirement of this scheme that Organizations register their details on this website and keep them up to date; Certification Bodies will check that the Organization is registered on the website together with all relevant information, including a pdf copy of the current certificate of registration/approval that the Certification Body issues and any other specific documentation to be uploaded specified by this SSD, prior to annual and surveillance visits.

13 Scheme Feedback

Any observations, concerns or feedback relating to the operation of this document and the scheme should be addressed using the procedures given in Appendices J1, J2 or J3 as appropriate. Appendix J1 is to be used for observations and general queries concerning the document and general feedback. Appendix J2 relates to the assessment process carried out by Certification Bodies. Appendix J3 relates to policing of the scheme.

Completed J1 forms should be sent to the scheme contact (see below).

Completed J2 forms should be sent directly to the relevant Certification Body.

Completed J3 forms should be sent to the relevant Highway Authority, client or HSE as appropriate and indicated on the form.

14 Scheme Contact

The Secretary
The Sector Scheme Advisory Committee for the Execution of Steelwork
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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 Organizations 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 3834-2:2005 and BS EN ISO 3834-3:2005 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 Organization or that part of the Organization complying with this SSD (see Appendix K).

Organizations 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. Organizations 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

Organizations 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 organization – 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*	The person identified and recorded by the Organization as being responsible and competent to coordinate those bolting and bolting related activities listed on the Organization's scope of registration.(See 7.2)
Certificate of Registration:	A certificate issued by a NAB accredited Certification Body certifying that the holder operates a Quality Management System complying with ISO 9001: 2015 and this SSD. (See Appendix K)
Client:	The owner or manager of the transportation infrastructure asset.
Contract Specification:	The specification for the execution of steelwork included in the contract.
Customer:	The body engaging the Organization for the purpose of the work described in this SSD.
Foreperson:*	The competent person identified and recorded by the Organization as being responsible for the supervision of a process within the overall process of the execution of steelwork. (See 7.2)
Inspector:*	A competent person identified and recorded by the Organization as being responsible for the inspection of steelwork for compliance with specific requirements. (See 7.2)
Manager:*	The competent person named in the Organization's Quality Plan for a contract as being responsible for the overall management of the execution of steelwork for that contract. (See 7.2)
Operative:*	A competent person who works under the supervision of a Foreperson and is directly involved with a process within the overall process of the execution of steelwork. This may include a person who is working towards becoming competent in a process. (See 7.2)
Organization:	The legal entity undertaking the execution of steelwork and any other related contractual obligations and who will be assessed against this SSD by the Certification Body. See also ISO 9001:2015
"shall":	Used in this document to indicate a requirement strictly to be followed in order to conform to the standard and from which no deviation is permitted. (See ISO/IEC Directives Part 3:1997, Annex E) (reference "guidance on terminology used in ISO 9001 and ISO 9004".)
Skills/Identification Card	A card issued by a recognised authority, which demonstrates the level of competency achieved by the holder. In some instances it is also used as a registration card and as an

identity card.

Sub-contractor:	An organization, or individual providing a service(s) or material(s) to the Organization 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 Organization 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 Organization 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 Organization as being responsible and competent to coordinate those welding and welding related activities listed on the Organization'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 Steelworks Contractors (see www.steelconstruction.org)
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 Organization

4.1 Understanding the Organization and its context

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

4.2 Understanding the needs and expectations of interested parties

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

4.3 Determining the scope of the quality management system

- (i) The scope of the quality management system shall cover the range of specific services that the Organization is competent to supply and for which they are 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 Organization shall operate a quality management system to ISO 9001:2015 and this SSD.

4.4.2 (i) The Organization shall have a process in place to record and maintain their registration/approval to this sector scheme on the Schedule of Suppliers website www.scheduleofsuppliers.co.uk immediately following confirmation of their certification/re-certification to the sector scheme from the certification body. (See Appendix O for information)

(ii) The Organization shall notify Lantra's NHSS Schedule of Suppliers if Certification is suspended or withdrawn. (Email – sosadmin@lantra.co.uk)

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 Organization'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 Organization roles, responsibilities and authorities

- (i) Where, a quality plan is required by the contract, relevant organizational roles, responsibilities and authorities shall be included. (See 7.5.1 and Appendix A)
- (ii) The Organization shall define who is responsible for the roles defined by this SSD. (See Section 3)
- (iii) The Organization 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 Organization shall be able to demonstrate that it has the necessary financial resources to meet its contractual commitments.

Note: RQSC includes recommendations in this respect.

7.1.2 People

- (i) The Organization 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 Organization'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 Organization 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 Organization 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 Organization 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 Organization 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 Organizational 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 Organization to determine and implement safe systems of work.
- (ii) The Organization 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 Organization shall ensure that its personnel are suitably competent. The Organization 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 Organization needs to mobilise specifically qualified personnel. In addition, the Organization needs to be satisfied that personnel are suitably competent for the specific tasks allocated.

- (ii) Records and Identification Cards

The Organization 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 Organization.

7.3 Awareness

With respect to special situations or requirements that occur on a specific contract, the Organization 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 Organization 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 Organization 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 Organization 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 Organization'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 Organization'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 Organization).
- 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.
- l) 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 Organization.

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

- (iv) The Organization 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 Organization shall document its arrangements for the identification, segregation, handling, storage and disposal of the different types of wastes arising from the contracted works to maximise

opportunities for the re-use and recovery of wastes.

8.2 Requirements for products and services

8.2.1 Customer communication

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

Note: 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 Organization shall undertake relevant risk assessments in accordance with the Client's standards and processes (for example Highways England's 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 Organization 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.

Note: RQSC includes recommendations in this respect.

(ii) During the progress of the product realisation process the Organization 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 Organization 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

- (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 Organization, the requirements of 8.3.2 to 8.3.6 inclusive shall apply. For highway works these requirements may be satisfied through the Organization 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 Organization shall identify and plan the supply and installation processes. The control procedures shall verify that suppliers of incoming materials, equipment and services are capable of providing the required quality and adequate supplies in order to maintain the planned rate and quality of production of the 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 Organization's quality management system, the supplier of the services shall have relevant NHSS registration/approval. The Organization 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 Organization 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 Organization 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 Organization shall have processes that match purchased steel products with the welding procedure specifications to be used in production.
- (iii) Organizations 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 Organizations obtaining mechanical fasteners from a supplier that is registered to NHSS 3.

For structural steel products this requirement may be satisfied by Organizations 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

- (i) The Organization 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.
- (ii) 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.

- (iii) With respect to welding processes, the Organization 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 3834-3:2005 for Execution Class 2 and BS EN ISO 3834-2:2005 for Execution Class 3 and 4, implemented using the guidance given in PD CEN ISO/TR 3834-6:2007. Organizations shall have a plan in place to implement this requirement by 1st September 2020 and shall be fully compliant with the requirement after that date.
- (iv) The Organization 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 Organization shall implement and maintain documented processes to ensure that retained documents and records can be clearly identified and traced.
- (ii) The Organization 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 Organization 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 Organization shall implement and maintain documented monitoring and measurement processes that comply with the Contract Specification.
- (ii) The organization shall retain records to show that the person authorizing the release of products and services had the necessary authority and competence to do so.

8.7 Control of nonconforming outputs

8.7.1 The Organization 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 Organization 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 Organization does not have contracts which provide continuous working throughout a full year, visits shall be conducted on a pro-rata basis to ensure a consistent approach across site activities, but at least one visit per contract must be made.

9.3 Management review

9.3.1 General

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

9.3.2 Management review inputs

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

9.3.3 Management review outputs

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 Organization's management strategy for undertaking the execution of steelwork, including clear and sustainable performance objectives.
- 1.3. Identification of the relevant parts of the Organization's documented quality management system relevant to the product or service being provided.
- 1.4. 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 Organization'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 organizations 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 Organization 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. Organizations shall ensure that they have a working knowledge of and access to all the relevant documents including amendments required by the contract and specification
2. Organizations 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 Organization shall have processes in place to ensure that the latest version is always available. Organizations should be aware that utilisation of internet search engines may result in out of date references being identified/called up.

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 287-1:2011 Qualification test of welders – Fusion welding. – Part 1: Steels

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 3834-2:2005 Quality requirements for fusion welding of metallic materials – Part 2: Comprehensive quality requirements.

BS EN ISO 3834-3:2005 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 9712:2012 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 mechanized and automatic welding of metallic materials

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

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: 2010+A1:2013 – Structural Use of Steel and Aluminium Part 2: Recommendations for the execution of steel bridges to BS EN 1090-2

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 Organization 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 Organizations 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 Organization. Personnel without demonstrated competence by means of independent assessment may be assessed by industry accreditation schemes, or in agreed circumstances by the Organization itself provided suitable management processes are in place.

Activity	Operatives	Forepersons ⁽¹⁾	Inspectors	Technical Managers
For work on site	In accordance with site specific requirements.			
Welding ⁽²⁾	BCSA Craft or equivalent ⁽³⁾ and Welders according to BS EN ISO 9606-1:2017 ⁽⁴⁾ Welding operators according to BS EN ISO 14732:2013	BCSA Craft or equivalent ⁽⁵⁾	Certificated to Level 2 in accordance with BS EN ISO 9712:2012 for each NDT technique used ⁽⁶⁾	Welding Coordinator according to BS EN ISO 14731:2019
Fabrication	BCSA Craft or equivalent ⁽⁵⁾	BCSA Craft or equivalent ⁽⁵⁾	BCSA Craft or equivalent ⁽⁵⁾	Welding Coordinator according to BS EN ISO 14731:2019
Craneage	Crane Operator	Crane Supervisor (Banksman) ⁽⁷⁾	n/a	Appointed Person Certificate
Preloaded Bolting ⁽⁸⁾	BCSA Scheme L1 Bolting Practitioner or specific training ⁽⁹⁾	BCSA Scheme L2 Bolting Inspector	BCSA Scheme L2 Bolting Inspector	BCSA Scheme L3 Bolting Coordinator
Design and Development	Technical Manager (Design): Membership of appropriate professional engineering institution (e.g. MInstuctE or MICE), Registered with the Engineering Council as a Chartered Engineer (CEng).			
Corrosion Protection	Refer to NHSS 19A			
NOTES	<p>(1) Including all supervisory roles in chain of command on site</p> <p>(2) Welder qualification appropriate to processes and materials being used</p> <p>(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.</p> <p>(4) Certification to BS EN 287-1:2011 also valid until the standard is withdrawn, after which certification to BS EN ISO 9606-1:2017 is required.</p> <p>(5) 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.</p> <p>(6) Certificates for NDT provided by CSWIP, PCN or AWS are suitable.</p> <p>(7) Or Appointed Person Certificate</p> <p>(8) See BCSA Standard – Competence in Preloaded Bolting (www.steelconstruction.org/resources/training/e-learning/)</p> <p>(9) Provided by preloaded fastener supplier where use is restricted by tightening method. (Tightening methods: Torque, Combined/Part Turn, HRC, DTI, other (to be specified))</p>			

Health and Safety

Organizations are reminded of the legal requirements to provide health and safety training for all personnel as appropriate in accordance with the Health and Safety at Work Act 1974.

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

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 – Organizations are reminded of the requirements for a safe system of work to be set up by persons with relevant track safety certification. Organizations' 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 organizations are reminded of the requirements for temporary traffic management on all highways including high speed dual carriageways and motorways.

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

For works on mobile lane closures NHSS12C applies.

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

APPENDIX D: EXAMPLE REGISTER OF PERSONNEL ATTAINMENTS

Not used

APPENDIX E: 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.

Note

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 info@ukas.com).

Note 4: Organizations 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).

Alcumus ISOQAR Ltd	www.isoqar.com
BSI Assurance UK Limited	www.bsigroup.com
Lloyd's Register Quality Assurance Limited	www.lrqa.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 organizations to the requirements of ISO 9001:2015 and this SSD rely upon the assessment expertise, competence and capability of accredited certification bodies.
- 1.2. The certification body role is to ensure, through assessment, that organizations have management systems in place which address the enhanced ISO 9001:2015 requirements detailed in this SSD. The scope of the organization's management system should cover the evidence for the range of services that the organization is competent to supply and for which they are seeking registration/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 organizations.
 - iii) technical assessment competence in the execution of steelwork industry.
 - iv) knowledge, understanding and application of this SSD
 - v) 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 Organization'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 Organization that wishes to expand, and the scope is not included in the relevant NHSS. This may be due to the introduction of new technology or innovation. In such instances, the CB shall advise the SSAC of this and ask them to consider an extension of scope within the SSD. CB auditors should check a) that a person in the Organization has been identified in the Organization's procedures to be responsible for uploading the required information onto the Schedule of Suppliers, and b)

that the password to edit/update the entry on Schedule of Suppliers is available and kept in a secure place.

5. Format and Content of Registration/Approval Certificates.

- 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. National Highway Sector Schemes Schedule of Suppliers.

- 6.1. Certification Bodies shall monitor the National Highway Sector Schemes Schedule of Suppliers posted at www.scheduleofsuppliers.co.uk to ensure equivalence between their clients registered to this Sector Scheme and the listed organizations.
- 6.2. Certification Bodies shall provide to National Highway Sector Schemes Schedule of Suppliers administrator at Lantra details of registered organizations 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 organization to ensure that the organization has recorded their NHSS registration/approval on the Lantra Schedule of Suppliers web-based register (See 4.4). This check shall include verification of the certificate of registration/approval currency.

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
 - d) the number of organizations whose scope of registration/approval includes this Sector Scheme for comparison against the Schedule of Suppliers

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 General

Assessors and auditors shall be familiar with the requirements of this NHSS and the contents of this SSD as well as any relevant documents referenced. For example, assessors and auditors should have knowledge of relevant international, European and British standards for the scope of work covered by this NHSS 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 Organization. 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 organization		
4.1 Understanding the organization and its context	N	
4.2 Understanding the needs and expectations of interested parties	Y	Check annually that the Organization has determined interested parties including those listed, their requirements and is monitoring and reviewing the information about them.
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 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 Schedule of Suppliers website to ensure registration/approval is current and

Section/Clause	Particular requirement Yes/No	Comment/Requirement
		registration/approval details are correct and up to date. Check up-loaded information is current and valid. Confirm effectiveness of the process.
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 Organization is considering, meeting and maintaining customer requirements. Ensure that the Organization has determined all necessary applicable statutory and regulatory requirements for contract compliance. This may include supplementary services such as recycling, final disposal, equipment inspection 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. Organization roles, responsibilities and authorities	Y	Ensure there is an organization 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 Organization 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	
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

Section/Clause	Particular requirement Yes/No	Comment/Requirement
		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. For Organizations registered to RQSC, contract value guidance given in the Organization's RQSC scope of registration should provide evidence that supports meeting this requirement.
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 and the Organizations 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 Organization maintains up to date information on documented information.

Section/Clause	Particular requirement Yes/No	Comment/Requirement
		(See Appendix B for external documented information)
7.5.2	N	
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 organization has determined all necessary applicable statutory and regulatory requirements for contract compliance. This may include supplementary services such as recycling, final disposal, equipment inspection etc. Check required risk assessments are undertaken.
8.2.3		
8.2.3.1	Y	Ensure contract/tender review including ongoing reviews are in place within an appropriate timescale including an assessment of availability of resources. For Organizations registered to RQSC, category guidance given in the Organization's RQSC scope of registration/approval should provide evidence that supports meeting this requirement. 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	N	
8.2.4	N	
8.3 Design and development of products and services		
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	N	
8.3.3	N	
8.3.4	N	
8.3.5	N	

Section/Clause	Particular requirement Yes/No	Comment/Requirement
8.3.6	N	
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. (Note implementation date for this requirement)
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	N	
8.6 Release of products and services	Y	Check that monitoring and measuring process documentation has been implemented in line with the contract specification. Check records of persons authorizing 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	N	
9 Performance evaluation		

Section/Clause	Particular requirement Yes/No	Comment/Requirement
9.1 Monitoring, measurement, analysis 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.

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

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

- C1 - Safe Working Practices
- C2 - Training, qualifications and assessment of 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 Organization(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 Organization's provisions in respect of the environment and in particular management of waste and its reduction.

C6 – Inspection/ Testing/Workmanship

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

C7 – Health and Safety

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

C8 – Equal Opportunities

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

APPENDIX H: ORGANIZATION ACCEPTANCE AND GUIDELINES FOR NEW ENTRANTS

1.0 Organization Acceptance

- 1.1 For work carried out on roads managed by Highways England, the Welsh Government, Transport Scotland and DfI Northern Ireland, only those Organizations 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 Organization will depend on the requirements of the contract.

2.0 Guidelines for New Entrants - Requirements

- 2.1 Organizations must have the required experienced and qualified personnel and management who meet the requirements of this Sector Scheme. Organizations will need to demonstrate that their equipment and systems meet the requirements of this Sector Scheme.
- 2.2 The Register of Qualified Steelworks Contractors (RQSC) provides an assessment of an Organizations ability to undertake steelwork. RQSC provides a categorisation for registered Organizations 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. The SSACS strongly recommends that Organizations achieve registration with RQSC to provide a rigorous independent assessment of their technical capability and competence which may support any scope of work defined within their scope of registration/approval to this Sector Scheme.
- 2.3 Organizations must have applied for registration/approval with a certification body that is accredited by their NAB to audit against this Sector Scheme. Organizations will have to demonstrate that they have been audited for office, shop and site based activities as appropriate.
- 2.4 The Organization shall record their registration/approval to this sector scheme on the Schedule of Suppliers website www.scheduleofsuppliers.co.uk upon receipt of the certificate issued by their certification body to confirm their registration/approval and thereafter keep their Organization's information up to date.

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 J1: FEEDBACK TO COMMITTEE CHAIRPERSON

Any observations or feedback relating to the content of this document or the process described herein should be addressed (using the form below) to:

Committee Secretary
The Sector Scheme Advisory Committee for the Execution of Steelwork
Mr G Bowden
Highways England
Piccadilly Gate
Store Street
Manchester
M1 2WD

Email: geoffrey.bowden@highwaysengland.co.uk
Tel: +44 (0)300 470 5141

(a) Issue Identified:

(b) Suggested Action:

(c) Organization raising feedback/issue:

Name:
Organization:
Address:

Contact details (Address, email address, telephone etc):

Date:

Signed:

Note: In many instances, J1 forms can be responded to without the need for them to be considered by an NHSS committee, those requiring a more detailed response will be dealt with at the next meeting of the committee as part of the review of the document. If the J1 form contains information that is critical, then exceptionally action can be taken prior to the meeting by the secretary for instance by arranging an extraordinary meeting of the NHSS advisory committee. The secretary will normally advise the originator of receipt of the J1 document and when the next meeting is expected to be held. If J1 forms are sent to the NAB, they will be forward to the relevant scheme secretary for consideration.

APPENDIX J2: FEEDBACK TO CERTIFICATION BODIES &/OR NOTIFIED BODIES

Feedback relating to certification matters including alleged deficiencies in the product provided under this scheme should in the first instance be taken up with the Organization. In the event that the matter cannot be satisfactorily resolved written concerns should be made to the Organization's certification body and/or notified body as appropriate, detailing the problem identified.

(a) Issue Identified:

(b) Organization's Details:

Name:

Address:

Feedback

(c) Organization raising feedback/issue:

Name:

Organization:

Address:

Contact details (Address, email address, telephone etc)

Date:

Signed:

APPENDIX J3: FEEDBACK TO CLIENT BODIES ON POLICING OF NATIONAL HIGHWAY SECTOR SCHEME REGISTRATION

Feedback relating to policing 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 should be referred back to the client body through an independent third party e.g. a trade association. Details of the alleged mismanagement or omission should as a minimum include the following details

(a) **Contract identified**

(b) **Issue Identified**

- i) Details of omission in contract or
- ii) Organization Identified as being awarded the contract or
- iii) Both i) and ii) above

(c) **Organization raising feedback / issue**

Name:

Organization:

Address:

Contact details (Address, email address, telephone etc)

Date:

Signed:

Highways England Roads/Contracts – Route for Feedback

Feedback should be sent by email to Standards_Enquiries@highwaysengland.co.uk

Other Highway Authorities and Clients

Feedback should be sent back to the relevant project manager or head of division responsible for the contract works. Such information or relevant contact details may be available on that highway authority's or client's web-site.

Health and Safety Executive

Advice about reporting a concern about the application of the health and safety recommendations related to a specific incident is available at <http://www.hse.gov.uk/contact/concerns.htm>

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 Organization. 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 Organization 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 Organization
- 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 Organization 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 Organization 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 Organization ⁶
Notes				
<p>¹ 'Corrosion Protection' should not be included as an Activity as this should be covered separately if relevant, by registration to NHSS 19A.</p> <p>² Registration for 'Execution' should only be used for Organizations offering all the specific services required for the execution of steelwork. i.e. no outsourced services that are not controlled under the Organizations QMS (See 4.3(ii) and Note 4 below).</p> <p>³ The specific activity 'Design' is not covered by registration for 'Execution' and should be listed separately where offered.</p> <p>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 specialist services that are required but are outsourced and not controlled under the Organizations QMS e.g. execution excluding welding of shear studs, erection excluding welding. (See 4.3(ii)).</p> <p>⁵ Location shall be 'in the workshop', or 'on site', or 'in the workshop and on site' as appropriate.</p> <p>⁶ These may include additions to or limitations on the scope of the QMS defined by the Organization covering specific competencies e.g. parent materials, execution class(es), welding processes, Welding Coordinator, preloaded fastener tightening methods, Bolting Coordinator. (See 4.3 (i))</p>				

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 1: Example Model Certificate of Registration.

[Certification Body Name / Logo]

C E R T I F I C A T E O F R E G I S T R A T I O N

[ORGANIZATION NAME]
[Organization Address]
[Town]
[County]
[Post Code]

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

**BS EN ISO 9001: 2015
AND
NATIONAL HIGHWAY SECTOR SCHEME 20
The Execution of Steelwork in Transportation Infrastructure Assets**

For the following scope of registration:
[List of appropriate Activities from Table K1] of Steelwork for Steel Structures
[Define location - see Primary Category and Note 5 to Table K1]

(Appendix 01 (comprising *[x]* pages) details the location(s) covered by this registration and the full scope of registration for each location)

Certificate Number: *[Certificate Number]*
Issue Date: *[date]*
Expiry Date: *[date]*

Signature:

[Name & Title of Certification Body Official]

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

Figure 2: Example Model Appendix for Scope of Registration

[Certification Body Name / Logo]

APPENDIX 01

To Certificate Number: *[Certificate Number]* Page *[1]* of *[x]*

Issue Date: *[Date]*

Expiry date: *[Date]*

This Appendix declares the scope of registration of the certificate granted to:

[ORGANIZATION NAME]
[Organization Address]
[Town]
[County]
[Post Code]

**BS EN ISO 9001: 2015
AND
NATIONAL HIGHWAY SECTOR SCHEME 20
The Execution of Steelwork in Transportation Infrastructure Assets
Scope of Registration**

Location: *[1- address/location]*

*[List of appropriate Activities from Table K1] of Steelwork for Steel Structures
[Define location - see Primary Category and Note 5 to Table K1]
[Define additions to or limitations on scope of work where appropriate - see
Secondary Category and Note 6 to Table K1]
[Example*

Parent Materials: *[material grades, quality levels and thickness range]*

Execution Class(es): *[1,2,3 or 4 to BS EN 1090-2:2018, including any
limitations]*

Welding Processes: *[to BS EN ISO 4063:2010]*

Welding Coordinator(s): *[to BS EN ISO 14731:2019]*

Preloaded bolting: *[describe any restrictions on preloaded fastener
tightening methods]*

Bolting Coordinator(s): *[see Appendix C]*

[Other agreed additions or limitations to Scope of Registration]]

Signature

[Name & Title of Certification Body Official]

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

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 Organizations 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 Organizations 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 Organization to review the work instructions issued by the Client and verify that they meet the technical requirements included in the Client's specification and that the Client's objectives for the works will be met.

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. The Register of Qualified Steelworks Contractors (RQSC) provides an assessment of an Organizations ability to undertake steelwork and provides a categorisation for registered Organizations 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. As part of its procurement policy/strategy for contracts involving steelwork, Highways England requires that Organizations demonstrate their technical capability and competence which can be achieved through being listed in the Bridgeworks Scheme of RQSC for the type and value of work to be undertaken. SSACS strongly recommends that Clients make registration with RQSC a requirement in procuring Organizations to undertake the execution of steelwork in transportation infrastructure assets as this will assist in the procurement process through identifying those Organizations with the appropriate technical competence and capability to undertake the work.

2.6. 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 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 Organizations.

2.7. In using this Sector Scheme users are required to use best practice such as specifying any other

relevant NHSSs as appropriate to the nature of the work being undertaken. Where traffic management is required companies should either employ a relevant National Highway Sector Scheme registered company or, where applicable, have skilled registered traffic management personnel qualified to meet the requirements of 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 organization installing temporary traffic management measures should always be registered to NHSS 12A/B and/or 12C.

2.8. 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)

2.9. 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.

2.10. The Schedule of Suppliers Management Team have established and manage a schedule of registered companies that have been registered to National Highway Sector Schemes; free access to the schedule is obtained by logging on to the Lantra website www.scheduleofsuppliers.co.uk. However, it should be noted that only those companies that register on the schedule are listed. Clients should contact Lantra by email at sosadmin@lantra.co.uk to ascertain/check the status of company if it is not listed on the schedule.

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

- 1 Is the organization listed on the Lantra Schedule of Suppliers for NHSS 20?
- 2 Is there an ISO 9001 certificate present that has been extended to cover NHSS 20?
- 3 Is the Certification Body that issued the certificate accredited by a NAB for assessments to ISO 9001 and NHSS 20? (See Appendix F)
- 4 Does the certificate have a identification number and signature of a Certification Body official, with their name and title?
- 5 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?
- 6 Is the certificate in date and does it cover the period required for the provision of the services?

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

APPENDIX M: GUIDANCE FOR ORGANIZATIONS

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

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

APPENDIX O: HOW TO REGISTER ON THE SCHEDULE OF SUPPLIERS

The process for registering on the Schedule of Suppliers is as follows:

1. Go to the Lantra Schedule of Suppliers website: www.scheduleofsuppliers.co.uk
2. Select 'Register as a Supplier' or 'Supplier login' and 'Create new account'
3. Enter the details required and select 'Create New Account'.

Lantra will check that the relevant document(s) have been uploaded (see note 1) and that the registration details (see note 2) have been filled in. Once complete the information will be published and appear on the Schedule of Suppliers website and will be searchable.

Note 1 It is the responsibility of companies registering on the site to enter their own details and data which would then be checked by certification bodies during any subsequent company audit. Lantra do not check the content of the records going onto the site and accept no liability for the information being entered. However, Lantra will continue to check that your company ISO certificate (also HERS certificate if registering for NHSS 8) has been uploaded before approving the registration.

Note 2 Your certification body Assessor should check your entry prior to each surveillance or assessment visit to you to ensure that you have recorded your registration and the details are correct.

Note 3 You should review/update your registration (It is recommended that this is done annually)

Note 4 Where work is contracted to a public body (e.g. a local highway authority acting for example as a "Contracting Authority"), or where there is a business restriction in place limiting the extent where a local highway authority operates, the NHSS registered Organization (highway authority) when completing their registration should under the section "Business Summary" state that "Works carried out are only within the area of the [highway] Authority for in-house requirements only" or as a "Service provider to", and under the section for "Business Description" provide the statement "Local Government trading account" or similar text. In this instance it would not be appropriate for the NHSS registered Organization to complete the section "What areas do you cover?"

Note 5 Any queries should be sent to the 'schedule of suppliers' team at sosadmin@lantra.co.uk

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
Issue 7 [9001:2008]	30 June 2016
Issue 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]	<p>First Issue</p> <p>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.</p> <p>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.</p>
Issue 2 [9001:2015]	<p>Document Control – Issue 2 [9001:2015] details added.</p> <p>Composition of Sector Scheme Advisory Committee – Road Service Northern Ireland changed to Transport Northern Ireland.</p> <p>Implementation of Issue 1 [9001:2015] – Changed to Issue 2 [9001:2015] and implementation details updated.</p> <p>8.4.2 (iii) – Reference to Sector Scheme 3B added.</p> <p>Appendix C – Table Note (7) – details updated for BCSA Standard – Competence in Preloaded Bolting</p> <p>Appendix F – BSI Assurance UK Limited added</p> <p>Appendix G1 Section 8.4.2 – Reference to structural steel products and Sector Scheme 3B added.</p> <p>Appendix K – 3rd Paragraph b) – a comma added after ‘from’.</p>