



National Highways Sector Schemes for Quality Management in Highway Works

SCHEME 0

GUIDE TO THE IDENTIFICATION, DEVELOPMENT, MANAGEMENT AND CERTIFICATION OF NATIONAL HIGHWAY SECTOR SCHEMES

PART 1 INTRODUCTION AND OVERVIEW

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NHSS0 - Guide to the identification, development, Management and certification of National Highway Sector Schemes

1.0 Summary

The intention of National Highway Sector Scheme 0 is to define the processes for the development and management of National Highway Sector Schemes and associated Documents.

It specifies the role of the National Highway Sector Scheme Liaison Group and the associated National Highway Sector Scheme Committees, as the highway industry's quality, health and safety, environmental management standards interpretation bodies.

It defines the frame work for the establishment of scheme committees and the framework of the development, preparation and maintenance of interpretive documents associated with highways infrastructure.

It also covers the governance, organisational structure and mechanisms for the preparation of interpretive documents which are necessary to meet the requirements of the ISO9001 in the highways industry.

The purpose of this document is to establish the standards to be used across National Highway Sector Schemes Documents.

It is split into 5 parts

Part 1 Introduction and overview

Part 2 Scheme development and governance process

Part 3 Template for composing a National Highway Sector Scheme Document

Part 4 Accreditation, Registration and Assessment Guidance for Certification Bodies

Part 5 Glossary

2.0 Introduction

2.1 General

National Highways Sector Schemes are bespoke integrated management schemes within an ISO 9001 framework. They are developed in partnership with all sides of the highways industry to interpret the international quality management standard as it applies to a particular activity or industry within the United Kingdom.

They are designed to:

- Provide an industry benchmark
- Ensure that all processes are planned
- Provide a basis for continuous improvement
- Focus on quality as an objective
- Reduce overall costs for the client and supplier
- Provide and maintain a properly trained and competent workforce
- Involve all sides of the industry in scheme ownership within a partnership framework
- Ensure that Certification Bodies use auditors with technical knowledge and experience of the sector concerned
- Promote confidence in quality management systems by provision of a robust, transparent system.

The following normative references are indispensable for the application of this document. For dated references, only the edition referenced to applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN ISO 9000 - Quality Management Systems – Fundamentals and Vocabulary

BS EN ISO 9001 - Quality Management Systems – Requirements

BS EN ISO 9004 - Quality Management Systems - Guidance

The various Schemes are managed by separate technical advisory committees. Each Sector Scheme technical advisory committee interprets BS EN ISO 9001 in relation to the requirements of their particular activity. A consensus is reached on the minimum levels of workmanship, services, products, testing and the training and competency of operatives and auditors needed to meet specification requirements.

The technical advisory committees are made up of representatives from across the sector, including clients, contractors, suppliers, trade associations, training organisations, certification bodies, other stakeholders and co opted representatives.

The individual technical advisory committees are overseen by the Highways Sector Scheme Liaison Group. This forum provides a focus for discussion in the effectiveness of the Sector Schemes and co-ordinates developments so that they can be uniformly taken forward by each of the technical advisory committees. See Annexes A & B for organogram and stakeholder relationships respectively.

The Sector Schemes are included in the procurement process through reference in the Contracts Documents e.g. Specification for Highway Works (SHW). For Highways Agency contracts their use is a mandatory requirement of the SHW.

The Sector Scheme Documents are published by UKAS (United Kingdom Accreditation Service) on behalf of the technical advisory committees. They can be downloaded from their web site <http://www.ukas.com> (contained in the technical information section)

Lantra Awards maintains the schedule of registered suppliers for the National Highways Sector Schemes on behalf of the Highways Sector Scheme Liaison Group.

See www.scheduleofsuppliers.co.uk

2.2 Coverage

National Highways Sector Schemes cover a variety of highways activities; the current list of Schemes is as follows:

Scheme 2A	Sector Scheme Document for the Design and/or Supply, Installation and Repair of Fences for Infrastructure Works.
Scheme 2B	Sector Scheme Document For the supply, installation, maintenance and repair of Vehicle Restraint Systems.
Scheme 2C	Sector Scheme Document for the Design, Supply, Installation and Repair of Environmental Barriers (Structural) for Infrastructure Works.
Scheme 4	Sector Scheme Document for Preservative Treatment of Timber.
Scheme 5A	Sector Scheme Document for the Manufacture of Parapets for Road Restraint Systems.
Scheme 5B	Sector Scheme Document for the Installation of Parapets for Road Restraint Systems.
Scheme 6	Sector Scheme Document for Manufacture and verification of lighting columns.
Scheme 7	Sector Scheme Document for The Application of Road Marking Materials and Road Studs to Road Surfaces)
Scheme 8	The Overseeing and / or Installation and / or Maintenance of Highway Electrical Works
Scheme 9A	Sector Scheme for the manufacture of permanent and/or temporary road traffic signs.
Scheme 12A/12B	Sector Scheme Document For static temporary traffic management on motorways and high speed dual carriageways including on-line widening schemes.
Scheme 12C	Sector Scheme Document for Mobile Lane Closure Traffic Management on Motorways and Other Dual Carriageways.
Scheme 12 D	Sector Scheme Document for Installing, maintaining and removing temporary traffic management on rural and urban roads.
Scheme 13A	For the supply and application of surface dressings to road surfaces
Scheme 13B	Sector Scheme Document for the Supply and Application of Microsurfacing
Scheme 14	For the quality management of the production of asphalt mixes.
Scheme 15	Sector Scheme Document for The Supply of Paving Grade Bitumen
Scheme 16	Sector Scheme Document for the Laying of Asphalt Mixes
Scheme 17/17B	Sector Scheme Document for Vehicle Recovery at Highway Construction sites (17) and Vehicle Recovery and Removal on Control Roads
Scheme 18	Sector Scheme Document for the environment and landscape including ecology.
Scheme 19A	Sector Scheme document for corrosion protection of ferrous materials by industrial coatings.
Scheme 20	Sector Scheme document for the Execution of Steelwork in Transportation Infrastructure Assets
Scheme 22	Sector Scheme document for the Management, Operation, Installation and Maintenance of Road Tunnels
GD02/08	Quality Management Systems for Highway Design

Further schemes are under consideration, these are as follows:

Scheme Number	Scheme Coverage
Scheme 3	Industrial Fasteners Stockist Scheme
Scheme 13C	High Friction Surfacing
Scheme 21	Concrete barriers

All National Highway Sector Schemes apart from Highway Design (GD02) relate to site activities and are developed through a committee structure drawn from stakeholders. GD02 has been developed as a Highways Agency standard by a temporary project board and reviewed at regular intervals (normally five years).

The Certification Body Group has developed an interpretive document for the assessment of design organisations for GD02. This has been published by UKAS as a National Highways Sector Scheme to benchmark and ensure organisations are working to the same interpretation of the standard.

3.0 Purpose and use

The National Highways Sector Schemes are developed to provide a common interpretation of ISO9001 for the benefit of Organisations, Client Bodies (procurers) and Certification Bodies for defined activities in the Highway Construction and Maintenance industries.

The Sector Schemes are included in the procurement process by incorporation in the Specification for Highway Works, (SHW) they are called up in Clause 104 and are referenced in many other clauses. Appendix A of the SHW lists the relevant schemes.

Where the SHW is a contractual document and unless otherwise indicated in the contract documents, they are a mandatory requirement. Any supplier providing the relevant services for the Highway Authority must be registered for the appropriate Scheme(s). The SHW does not permit sub-contractors to provide services under the umbrella of another registered supplier.

The Schemes are applied to all the Highways Agency and Road Services Northern Ireland types of procurement using SHW – e.g. Early Contractor Involvement (ECI), Design Build Finance and Operate (DBFO) and Term Maintenance.

Other Overseeing Organisations and Highway Authorities using the SHW may also choose to use the Schemes. Reference should be made to individual contracts or authorities.

Some of the Schemes have been developed to be client neutral with a view to them being adopted by other clients outside the highways industry such as the rail industry, waterways, airport schemes and private finance initiatives.

The Schemes are endorsed by the Highways Agency, Transport Scotland, Welsh Assembly Government, Northern Ireland Roads Service, the County Surveyors Society, relevant trade associations, UKAS and Certification Bodies. Each of these organisations has been actively involved with the development of Sector Schemes.

4.0 Structure

Separate technical advisory committees are established for each sector. The committee interprets ISO 9001 in relation to the requirements of their particular activity. A consensus is reached on the minimum levels of workmanship, services, products, testing and the training and competency of operatives needed to meet specification requirements. The committees meet on a regular basis and update the scheme requirements from time to time through amendments to the Sector Scheme Document.

The individual technical advisory committees are overseen by the Highways Sector Scheme Liaison Group. This group 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 technical advisory committees. It is also the venue where dialogue with UKAS and the Certification Bodies on the application of the Schemes takes place.

5.0 Implementation

National Highways Sector Schemes that supersede existing established and recognized Certification Body Quality Management Schemes published in the Specification for Highway Works (SHW) are normally implemented within 12 months of the new scheme being published on the UKAS web-site. Information of the transitional arrangements is normally provided in the SHW and the relevant SSD.

Notice of new National Highways Sector Schemes will normally be provided in the SHW together with anticipated publication and implementation dates of the Scheme.

Implementation of totally new schemes normally takes longer than replacement of an existing scheme with typical lead in times of 18 to 24 months depending on the supply industry readiness.

Information on transitional arrangements may also be included in the individual Sector Scheme Documents.

6.0 Registration Process

6.1 Certification Bodies

When a new scheme is being developed, the Certification Body Group is advised and through this route a number of certification bodies are informed of the development. At about the same time, certification bodies that have UKAS accreditation for construction (EA38) are identified from the UKAS published list of certification body scopes and are requested (by the scheme secretary) to express their interest in extending their scope of accreditation to embrace the scheme.

Following the publication of the scheme certification bodies will then need to apply to UKAS for an extension of scope to include accreditation for National Highways Sector Schemes.

6.2 Organisations

An Organisation has to determine two basic parameters, firstly which NHSS applies to the product/service being delivered, and secondly how is the product/service going to be delivered – directly by the Organisation or through the Organisation's supply chain?

Once this is identified a relevant UKAS accredited certification body that has been accredited to assess organisations for a particular sector scheme should be contacted. Information on relevant Certification Bodies is given in Appendix A of the Specification for Highway Works and is available on the UKAS website, www.ukas.com under 'Certification Body Scope of Accreditation'. It is also included in the Sector Scheme Documents.

If you are already approved to ISO 9001 with a UKAS accredited Certification Body that does not possess accreditation for the relevant NHSS you may continue to use them for ISO 9001 approval maintenance and nominate another CB to undertake your approval for the specific NHSS.

7.0 Contractual conformity

Initially, the Organisation will need to establish which of the scenarios below best fits the contractual and/or business requirement:

Scenario A - If the Contract is in accordance with the Highways Agency, Manual of Contract Documents for Highway Works (MCD) – Volume 1 – Specification for Highway Works (SHW) Series 0100, Clause 104 and Appendix A, then all NHSS current at the time of the signing the contract are relevant and should be delivered under the Contract. (i.e. BS EN ISO 9001: 2008, Clause 7.2.1a)

Scenario B – As Scenario A but the Contract provides for the delivery of NHSS that are changed or introduced after the Contract has been signed. This may or may not have financial implications under the Contract. (Attention is drawn here to the Health and Safety at Work, etc. Act 1974 and the need to demonstrate suitable and sufficient health and safety arrangements.)

Scenario C – Not stated directly in the contract but may be required due to subsequent adoption of the works by the Highway Authority. (i.e. BS EN ISO 9001: 2008, Clause 7.2.1b)

Scenario D – Determined by the organisation for reasons of market leadership, current best practice, etc. (i.e. BS EN ISO 9001: 2008, Clause 7.2.1d)

Having determined the contractual and/or business requirement as set out above, the Organisation must now deliver such NHSS either directly or through the supply chain. Care should be taken, to ensure that sub-subcontracting does not compromise the desired intent, e.g. if surfacing works are subcontracted out to a NHSS 16 Organisation then the asphalt that this sub-contractor uses must be supplied by a NHSS 14 Organisation and any Line Markings sub-contracted out by the NHSS 16 Organisation must be carried out by a NHSS 7 Organisation. Accordingly, BS EN ISO 9001: 2008 Clause 7.4 – Purchasing processes of the Organisation must be clear and robust.

8.0 Highways design

GD 02 is a mandatory standard which was published by the Highways Agency in conjunction with the Overseeing Organisations in Scotland, Wales and Northern Ireland. It provides an interpretation of ISO 9001 for quality management systems for the design of highway infrastructure and associated activities. It includes a requirement for an organisation to have a competency management system in place. It is published as part of the Design Manual for Roads and Bridges and forms part of Volume 0, Section 2 of the Manual.

GD 02/08 replaces HD 46/05. Highways design organisations may apply for registration to GD 02. Certification bodies can be accredited by UKAS for this scheme.

9.0 Training and Competency Aspects

Normally Sector Scheme Documents provide information on training and competency requirements for operatives and supervisors. Establishing minimum requirements has been central to the development of the Schemes. Some Schemes have been instrumental in developing training and competency qualifications where none were previously available or suitable.

Training and competency requirements generally include registration/skill card schemes which require registered operatives to carry cards indicating the status and categories of work for which they are competent to undertake. Details of recognised cards can be found in a pamphlet published by the Highways Agency titled "Approved Workforce Registration/Skill Card Requirements for Suppliers".

10.0 Contacts and useful links

Contact UKAS at the address below for the following:

- General queries regarding NHSS can be made in writing to the Secretary of the Highways Sector Scheme Liaison Group
- Queries with respect to specific Schemes can be sent to the Secretary of the relevant Sector Scheme technical advisory committee

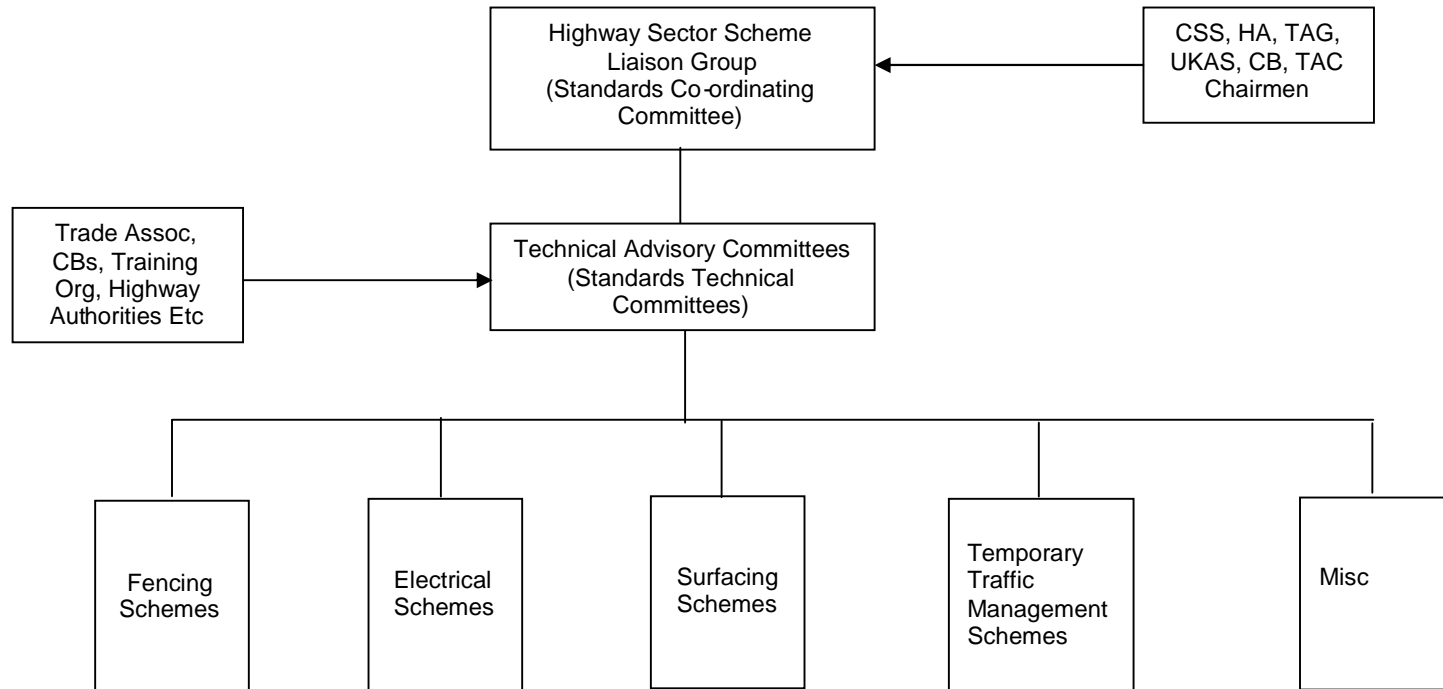
UKAS
21-43 High Street
Feltham
Middlesex
TW13 4UN
Tel 0208 917 8400
Fax 0208 917 8500
www.ukas.com

Email: info@ukas.com

Alternatively, any general enquiries can be directed to the Highways Agency by email to standards_feedback&enquiries@highways.gsi.gov.uk or by phone to the information line on 08457 50 40 30.

Annex A
Organisational Structure

Highway Sector Scheme Committee Structure



Annex B
Stakeholder relationships

