



# National Highways Sector Schemes for Quality Management in Highway Works

19A

For corrosion protection of ferrous materials by  
industrial coatings

**Published by the Sector Scheme Advisory Committee for  
Corrosion Protection of Transportation Infrastructure  
Assets (SSACCP)**

# DOCUMENT CONTROL

## Issue Statement

UKAS Issue 1	1 <sup>st</sup> October 2006
UKAS Issue 2	December 2007
UKAS Issue 3	July 2009

## Revisions

It is the SSACCP's policy that the issue of any revision to this document shall be an issue of the full document rather than individual pages. The following gives details of the changes that have been made in this and previous editions of the document.

Issue	Amendments
UKAS Issue 1	First Issue
UKAS Issue 2	<p>Some minor formatting errors corrected throughout and page numbers in contents list corrected not noted below.</p> <p>Document Control – UKAS Issue 2 details added</p> <p>Contents – ‘UKAS 1’ changed to ‘UKAS 2’</p> <p>Contents – Appendix C – Title changed, ‘For Corrosion Protection Operatives, Forepersons and Inspectors’ deleted.</p> <p>Composition of Sector Scheme Advisory Committee – Lists changed to reflect those that actually attended committee meetings and those that were invited but did not attend.</p> <p>Composition of Sector Scheme Advisory Committee – BCSA – ‘Construction’ changed to ‘Constructional’.</p> <p>Implementation of Issue – 2<sup>nd</sup> Paragraph – Reference added to Table C1 for implementation of ICATS.</p> <p>Implementation of Issue – 3<sup>rd</sup> Paragraph ‘Certification Bodies will be able to issue Certificates of Registration from 1<sup>st</sup> July 2007.’ Deleted.</p> <p>Implementation of Issue – Note – ‘contracted’ after ‘suppliers’ deleted.</p> <p>Implementation of Issue – * Note – Amended to clarify equivalence of accreditation bodies.</p> <p>Introduction – 8<sup>th</sup> Paragraph – Reference to BS EN ISO9001:2000 corrected.</p> <p>Introduction – 9<sup>th</sup> Paragraph – Guidance regarding use of the current version of the document improved.</p> <p>1. Scope – 2<sup>nd</sup> Paragraph – ‘of’ before ‘ferrous materials’ changed to ‘to’.</p> <p>2. Normative References – BS ISO10005:2005 added</p> <p>3. Terms and Definitions – Foreperson – ‘identified and recorded by the Organization’ replaces ‘named in the Organization’s Quality Plan’. ‘the’ deleted from before ‘corrosion protection works’.</p> <p>3. Terms and Definitions – Inspector – ‘identified and recorded by the Organization’ replaces ‘named in the Organization’s Quality Plan’. ‘the’ deleted from before ‘corrosion protection works’ and ‘contract specification’ and in the latter case replaced with ‘a’.</p> <p>3. Terms and Definitions – Manager – ‘for a contract’ and ‘for that contract’ added.</p> <p>3. Terms and Definitions – Operative – ‘the’ deleted from before ‘corrosion protection works’.</p> <p>3. Terms and Definitions – Quality Plan – ‘the project’ replaced by ‘a contract’.</p> <p>3. Terms and Definitions – Technical Manager – ‘for a contract’ and ‘for that contract’ added.</p> <p>Clause 4.1(ii) – 2<sup>nd</sup> sentence added requiring outsourced services to be listed with details of how they are controlled.</p> <p>Clause 4.2.1 – 2<sup>nd</sup> sentence added referring to Clause 7.1 regarding the content of the Quality Plan.</p> <p>Clause 4.2.3 – ‘i) Design Information (see 7.3)’ added. Relates to the amendment of Clause 7.3.</p>

Issue	Amendments
	<p>Clause 4.2.4 (i) – ‘m) Design Information (see 7.3)’ added. Relates to the amendment of Clause 7.3.</p> <p>Clause 6.1 – New requirement added requiring an Organization to demonstrate that it has the necessary financial resources to meet its contractual commitments.</p> <p>Clause 6.2.1 – Final para – ‘uncertified’ replaced by ‘under training’.</p> <p>Clause 6.2.2 (ii) – The requirement for the Manager, Technical Manager and Foreperson to have a minimum period of experience changed to guidance.</p> <p>Clause 6.2.2 (ii) – The recommendation that the Manager and Technical Manager attend the ICATS appreciation course added.</p> <p>Clause 6.2.2 (iv) – ‘ID’ changed to ‘identity’</p> <p>Clause 6.4 – Monitoring of the work environment added.</p> <p>Clause 7 – Title corrected</p> <p>Clause 7.1(i) – Paragraphs reorganised, reworded and a paragraph requiring the Quality Plan to describe the management strategy deleted. BS ISO 10005:2005 reference corrected</p> <p>Clause 7.1(i) – Sustainability Plan deleted from the list of plans which need to be considered as part of an integrated approach.</p> <p>Clause 7.2.2(ii) – ‘omissions’ added.</p> <p>Clause 7.3 (i) – New Paragraph (i) added to clarify that design and development addresses all associated processes required for the corrosion protection works. Old Paragraph (i) renumbered as (ii) and clarified that the requirement it describes refers to the industrial coating.</p> <p>Clause 7.5.1 (i) – ‘d) Material certificates of conformity.’ added.</p> <p>Appendix A – Clause 1 – Paragraph numbering corrected.</p> <p>Appendix A – Clause 2 – First paragraph deleted regarding names and contact details of staff. Remaining paragraphs renumbered 2.1 to 2.7.</p> <p>Appendix A – Clause 2.2 – ‘the Rail Authority’ added to the list.</p> <p>Appendix C – Title – Reference to Corrosion Protection Operatives, Forepersons and Inspectors deleted.</p> <p>Appendix C – 2<sup>nd</sup> Paragraph – ‘personnel’ replaces ‘Operatives, Forepersons and Inspectors’.</p> <p>Appendix C – 3<sup>rd</sup> Paragraph giving ICATS implementation requirements deleted. (See new paragraph D).</p> <p>Appendix C – Clause A - * Note describing ICATS implementation and the ‘*’s to which it refers deleted.</p> <p>Appendix C – Clause A – Thermal (Metal) Sprayer – ‘in collaboration with the Thermal Spraying and Surface Engineering Association (TSSEA)’ added.</p> <p>Appendix C – Clause A –Water Jetting Operator – ‘in collaboration with the Water Jetting Association (WJA)’ added.</p> <p>Appendix C – Clause B – Paragraph reworded to clarify requirement for Forepersons.</p> <p>Appendix C – New Clause D – Changed to refer to Managers, and Manager training requirements added. Subsequent Clauses re-designated.</p> <p>Appendix C – New Clause E – Changed to ‘Implementation of Training’ and ICATS implementation requirements added in Table C1. Subsequent Clauses re-designated.</p> <p>Appendix C – Clause D Health and Safety – Re-designated ‘F’. ‘Disclaimer’ added to title. An Organizations Health and Safety responsibilities clarified, 2<sup>nd</sup> paragraph deleted.</p> <p>Appendix C – Clause E – Re-designated ‘G’. 1<sup>st</sup> paragraph ‘persons’ replaces ‘Operatives’.</p> <p>Appendix C – Clause E – Re-designated ‘G’.</p> <p>Appendix C – New Clause G – 1<sup>st</sup> paragraph – ‘Operatives’ replaced by ‘personnel’</p> <p>Appendix C – Clause G - Highways – 2<sup>nd</sup> paragraph added ‘Health and Safety Qualifications’.</p> <p>Appendix C – Clause F - Re-designated ‘H’.</p> <p>Appendix C – New Clause H – New para d) added for railways.</p> <p>Appendix C – Clause G - Re-designated ‘I’.</p> <p>Appendix C – Clause H - Re-designated ‘J’.</p> <p>Appendix C – Clause J – ICATS reference added c) to h).</p>

Issue	Amendments
	<p>Appendix C – Clause J – d) ‘Applicator’ changed to ‘Applicator’s’.</p> <p>Appendix C – Clause J – g) ‘Inspector’s’ changed to ‘Inspector’.</p> <p>Appendix C – Clause J – h) ‘Logbook’ changed to ‘Log Book’.</p> <p>Appendix C1 – Revised and phone number corrected.</p> <p>Appendix E – Example Register – Final Column – ‘Calibration Certificate Ref’ replaces ‘ Name of Traceable Calibration Lab’</p> <p>Appendix F – Final paragraph deleted and note added to provide the names and contact details of those Certification Bodies that have indicated their interest to be accredited to the Sector Scheme.</p> <p>Appendix G – Clauses 1 &amp; 2 – Reference to BS EN ISO9001:2000 corrected.</p> <p>Appendix G – Clauses 3.1 – Requirements for assessor competence simplified, subparagraphs (i) to (ix) deleted.</p> <p>Appendix G – Clause 3.2 – ‘where appropriate’ added after ‘live highway’.</p> <p>Appendix G – Clauses 3.5 – Subparagraph (ii) requiring assessor experience of five different Organizations deleted. Subparagraph (iii) re-designated (ii) and amended to delete reference to paragraph 3.1.</p> <p>Appendix G – Clauses 4.1 – ‘an adequate proportion’ replaces ‘at least a third’.</p> <p>Appendix G – Clauses 4.2 – ‘make every endeavour to’ added.</p> <p>Appendix G – Clauses 4.2 – The frequency of surveillance visits clarified.</p> <p>Appendix G – Clauses 6.3 – New clause regarding auditing to ensure Lantra awards have been notified of NHSS registration.</p> <p>Appendix H – Clauses 1.1 – ‘the National Assembly for Wales’ changed to ‘The Welsh Assembly Government’</p> <p>Appendix H – Clauses 1.1 – ‘Scottish Executive’ changed to ‘Transport Scotland’</p> <p>Appendix H – Clauses 1.1 – Spelling of Specification for Highway Works corrected.</p> <p>Appendix K – CoR list f) – ‘(ISO 9001-3yrs)*’ added and ‘*Note’ added to clarify validity period of certificates.</p> <p>Appendix K – Note added at end of Appendix regarding the layout and format of the model certificates.</p> <p>Appendix L – 6<sup>th</sup> Paragraph – procedures for confirmation of compliance clarified.</p> <p>Appendix M – Sector Scheme 5A included.</p> <p>Appendix M – Arrangements for Sector Scheme 6 and 8, 9B and 10 updated.</p> <p>Appendix M – Highway Electrical Academy Email address corrected.</p>
UKAS Issue 3	<p>Document Control – UKAS Issue 3 details added</p> <p>Throughout document - BS EN ISO 9001:2008 as (or 2008) added to reference to BS EN ISO 9001:12000</p> <p>Throughout document – ‘NHSS 8, 9B and 10’ changed to ‘NHSS 8’.</p> <p>Contents – ‘UKAS 2’ changed to ‘UKAS 3’</p> <p>Contents - Appendix C, title changed from ‘Training and Health and Safety’ to ‘Competences’.</p> <p>Contents – ‘Appendix G1 Guidance to Certification Body Assessors and Internal Auditors’ added.</p> <p>Contents – Page numbering amended</p> <p>Composition of Sector Scheme Advisory Committee – ASLEC definition changed to ‘The Association of Signals, Lighting and other Highway Electrical Contractors’.</p> <p>Composition of Sector Scheme Advisory Committee – Industrial Painting Contractors and TfL added to Committee list.</p> <p>Implementation of Issue UKAS 3 – Implementation requirements updated for UKAS Issues 1 &amp; 2 and implementation requirements for UKAS Issue 3 added.</p> <p>Scope – New 2<sup>nd</sup> paragraph added, ‘The SSD does not apply to the application of powder organic coatings.’</p> <p>Scope – previous 6<sup>th</sup> paragraph, new 7<sup>th</sup> paragraph. Deleted final word ‘certification’ and replaced with ‘registration’.</p> <p>3. Terms and Definitions, Note - Added ‘supervising or’ before ‘applying’.</p>

Issue	Amendments
	<p>4.2.3 g) – added ‘relevant’ before ‘health’</p> <p>4.2.4 (ii) – added ‘as requested’ at end.</p> <p>5.5.1 – New paragraph (ii) added, ‘Top management shall ensure that those personnel with contract specific responsibilities and authorities are identified and recorded.’ Original paragraph numbered (i)</p> <p>5.6.3 – ‘No specific interpretation’ deleted. New paragraph added, ‘The output and actions from the management review shall be considered by Top Management at regular intervals throughout the year.’</p> <p>6.2.1 1<sup>st</sup> paragraph - Add ‘, development’ after ‘training’. Delete ‘qualified Operatives’ and replace with ‘competent personnel’.</p> <p>6.2.1 2<sup>nd</sup> paragraph - Deleted ‘Operatives’ and replaced with ‘personnel’.</p> <p>6.2.1 3<sup>rd</sup> paragraph - Moved to end of 6.2.1 and made a ‘Note’.</p> <p>6.2.2 (iv) &amp; (v) - Changed ‘certificated’ to ‘qualified’ and ‘uncertificated’ to ‘unqualified’ throughout.</p> <p>6.3 – ‘No specific interpretation’ deleted. New paragraph added, ‘The Organizations infrastructure in terms of facilities and process equipment shall be suitable for the scope of registration being sought.’</p> <p>7.1 – New paragraph (ii) added, ‘The Quality Plan shall describe the management strategy that sets clear and sustainable performance objectives, delegates responsibility and establishes lines of communication.’ Other paragraphs renumbered as (iii), (iv) &amp; (v).</p> <p>7.2.2 (i) – ‘in a timely manner’ added after ‘review’.</p> <p>7.2.2 (ii) – ‘at the earliest opportunity’ added at end</p> <p>Appendix C Title – Changed from ‘Training and Health and Safety’ to ‘Competences’.</p> <p>Appendix C, Paragraph A – Note added at end clarifying Operative status of those delivering ICATS training.</p> <p>Appendix C, Table C1 – Interim target dates removed, final target dates updated</p> <p>Appendix C – Note removed regarding publication of details for ICATS appreciation course.</p> <p>Appendix C, Paragraph G - Added ‘attending construction sites’ after ‘Inspectors’ in first paragraph after Title ‘Health and Safety Qualifications’. Deleted CSCS painter and decorator cards, corrected CRO card description for ‘Industrial Coatings Applicators’.</p> <p>Appendix C1 – Updated address for Correx Ltd.</p> <p>Appendix F- Amended CB list to list those CBs accredited by UKAS for this scheme. Added ISOQAR Ltd and NQA to the list.</p> <p>Appendix G – Updated to reflect latest NHSS 0 wording where relevant.</p> <p>Appendix G 2.1 – ‘EN450012/ISO Guide 62’ replaced by ‘BS EN ISO/IEC 17021:2006’</p> <p>Appendix G1 – Added completely new appendix.</p> <p>Appendix K 1<sup>st</sup> Paragraph - changed ‘scope of certification’ to ‘scope of registration’.</p> <p>Appendix K Figure 2 - Delete from Table after ‘Site’, ‘1 Old Road Old Town’ and replace with ‘Works’</p> <p>Appendix K Figure 3 – Add ‘Works’ after ‘2. Site’</p> <p>Appendix K Figure 4 - Add ‘Works’ after ‘2. [Site]’. Delete from first column of Table after ‘Site’, ‘1 Old Road Oldham’ and replace with ‘Works’. Column 3, Add ‘Works’ after ‘Site’</p> <p>Appendix L – Deleted 5<sup>th</sup> Paragraph regarding client considerations during implementation phase of this Sector Scheme.</p> <p>Appendix M General Guidance Table - updated title for NHSS 8</p> <p>Appendix M National Highway Sector Scheme Arrangements - Updated arrangements described for NHSS 6 and NHSS 8.</p>

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## COMPOSITION OF SECTOR SCHEME ADVISORY COMMITTEE

ARTSM – Association of Road Traffic Safety and Management  
ASLEC – The Association of Signals, Lighting and other Highway Electrical Contractors  
BCF – British Coatings Federation  
BCSA – British Constructional Steelwork Association  
BSI – British Standards Institute– (Lead Certification Body)  
Forth Estuary Transport Authority  
Galvanisers Association  
Highway Electrical Academy  
HEMSA – Highway Electrical Manufacturers and Suppliers Association  
HTMA – Highway Term Maintenance Association  
HA – Highways Agency  
ICorr – The Institute of Corrosion  
ILE – The Institution of Lighting Engineers  
Industrial Painting Contractors  
LCTF – Lighting Column Technical Forum  
National Highway Sector Scheme 6  
National Highway Sector Scheme 8  
Network Rail  
Overseeing Organisations (N. Ireland (DRD(NI)), Scotland (Transport Scotland Trunk Road Network Management Directorate) and Wales (The Welsh Assembly Government))  
TfL – Transport for London

### **The following were also invited to be members of the Sector Scheme Advisory Committee:**

ACE – Association of Consulting Engineers  
BOF - Bridge Owners Forum  
CECA – Civil Engineering Contractors Association  
Corrosion Science Symposium  
CSS – County Surveyors Society  
DfT - Department for Transport  
EA - Environment Agency  
European Federation of Corrosion  
FCA – Fencing Contractors Association  
HSE - Health and Safety Executive  
ICE – The Institution of Civil Engineers  
IStructE – The Institution of Structural Engineers  
LGA – Local Government Association  
LUL - London Underground Limited  
Steel Construction Institute  
TAG – Technical Advisory Group  
Thermal Sprayers Association  
Water Jetting Association

## EXCLUSION OF LIABILITY

The Sector Scheme Advisory Committee for Corrosion Protection of Transportation Infrastructure Assets (SSACCP)

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

## COPYRIGHT

Permission is granted to reproduce and distribute this Sector Scheme Document subject to the restriction that the complete document must be copied without alteration, addition or deletion.

## 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 SSACCP to assist United Kingdom Accreditation Service (UKAS) in the assessment of Certification Bodies as described in Appendix G.

Prospective companies seeking registration under this Sector Scheme shall ensure that they engage a Certification Body specifically accredited to assess against the requirements of this Sector Scheme Document (SSD). Advice for Organizations acceptance is contained in Appendix H.

## IMPLEMENTATION OF ISSUE UKAS 3

This National Highway Sector Scheme (NHSS) introduces requirements for an integrated management scheme for contracting organizations providing services relating to the corrosion protection of ferrous materials by industrial coatings.

The SSACCP had agreed that an introductory period for the scheme (Document Issues UKAS 1 & UKAS 2) was applicable to allow Certification Bodies and Organizations time to adopt the scheme, adapt to its requirements and become accredited for/registered to it. The introductory period ended on 31<sup>st</sup> January 2008. Following expiry of the introductory period and where required in a contract, Organizations were required to be registered to this scheme by a relevant UKAS\* accredited Certification Body.

This issue (UKAS 3) of the SSD can be implemented immediately for assessments in accordance with BS EN ISO 9001:2000 or BS EN ISO 9001:2008.

Issue UKAS 2 may continue to be used for assessments within 6 months of the publication of this issue (UKAS 3) on the UKAS web site. This period allows for Organizations to review their management systems and make any necessary changes. Thereafter all assessments shall be made

against this issue (UKAS 3). Assessments against issue UKAS 2 shall continue to be valid until the next assessment is carried out by an accredited certification body. Organizations registering for the first time shall be required to conform to the requirements of this issue (UKAS 3).

Note: The Sector Scheme was listed in Appendix A of the Specification for Highway Works (May 2006) and became a mandatory requirement for suppliers to the Highways Agency after the publication of the first issue of this document by UKAS on 1<sup>st</sup> October 2006.

\*Accreditation from equivalent accreditation bodies may also be recognised (In respect of works carried out for the Highways Agency reference should be made to Clause 104 and Appendix A of the Specification for Highway Works). Equivalent accreditation bodies are accreditation bodies appointed by a member state of the European Union and which are members of a multi lateral agreement with UKAS.

## INTRODUCTION

This Sector Scheme Document (SSD) relates to the quality management system requirements for corrosion protection of ferrous materials in transportation infrastructure assets using industrial coatings for new works and maintenance works. It sets out to identify a common interpretation of BS EN ISO 9001:2000 (or 2008) for Organizations and Certification Bodies engaged in the sector.

This Sector Scheme is one of the series of NHSSs, which are bespoke integrated management schemes within an ISO 9001:2000 (or 2008) framework that have been developed to interpret BS EN ISO 9001:2000 (or 2008) as it applies to a particular activity/industry within the United Kingdom.

Separate technical advisory committees for each activity within the sector provide advice to UKAS and expert representation is drawn from all sides of industry. Each NHSS technical advisory committee interprets BS EN ISO 9001:2000 (or 2008) 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 operatives needed to meet specification requirements as well as auditor qualification and requirements in respect of Environmental Management Systems (EMS) and other management systems. The details are contained in the individual SSDs.

The individual NHSS 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 NHSS technical advisory committees. It is also the venue where dialogue with UKAS and the Certification Bodies on the application of the Sector Schemes takes place.

NHSSs together with BS EN ISO 9001:2000 (or 2008) 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 costs for Client and contractor
- 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

The Sector Scheme shall apply only where specified by the Client in their Contract for the corrosion protection works.

In using this Sector Scheme users shall use best practice in specifying any other relevant NHSSs as appropriate to the nature of the work being undertaken.

It shall be noted that NHSSs are mandatory for Highways Agency contracts and suppliers shall demonstrate compliance with the requirements of BS EN ISO 9001:2000 (or 2008) and this SSD as part of their continuous improvement within their BS EN ISO 9001:2000 (or 2008) registration. It is anticipated that other highway authorities that use the Specification for Highway Works as the basic document for procuring highway works will also require compliance with BS EN ISO 9001:2000 (or 2008) and this SSD. Other owners of transportation infrastructure may also require their suppliers to comply with this Sector Scheme, for example Network Rail and London Underground.

The SSD is a live document with the SSACCP meeting at least once a year to develop it as appropriate. Those using the document should always ensure that they have the current version of the document by contacting any of the Certification Bodies in Appendix F, or UKAS at the address below or by visiting the UKAS website ([www.ukas.com](http://www.ukas.com)) from where the document can be freely downloaded.

The Secretary of the SSACCP shall maintain a list of registered Organizations. The Secretary can be contacted at the address below. Lantra Awards also maintains a list of registered Organizations as a schedule of suppliers for the NHSS, details of which can be accessed from their web site [www.scheduleofsuppliers.com](http://www.scheduleofsuppliers.com). The cost of managing the website is defrayed by a small annual charge made by Lantra awards to those Organizations appearing on the publicly available register. However, it should be noted that only those companies that confirm entry onto the schedule to Lantra Awards are listed. A list of all registered suppliers is held by Lantra Awards (if notified). Lantra Awards should be contacted by email at [NHSSscheduleofsuppliers@lantra.co.uk](mailto:NHSSscheduleofsuppliers@lantra.co.uk) to ascertain/check the status of company if it is not listed on the schedule

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Any feedback relating to this SSD should be provided in accordance with the procedures detailed in Appendices J1 and J2.

# INTERPRETATION OF BS EN ISO 9001:2000 (or 2008)

## 1. SCOPE

This SSD describes the quality management system requirements to be established by Organizations providing corrosion protection to ferrous materials in transportation infrastructure assets using industrial coatings.

The SSD does not apply to the application of powder organic coatings.

The SSD does not apply to providing corrosion protection to ferrous materials by hot dip galvanising or similar metal coatings (eg. electroplating and sheradizing) but does apply to the application of industrial coatings to such substrates.

The SSD is applicable to the provision of corrosion protection to new assets and to the maintenance of corrosion protection to existing assets. It is applicable to corrosion protection works undertaken in the workshop and on site, and embraces the associated health and safety and environmental controls.

This SSD interprets the requirements of British Standard BS EN ISO 9001:2000 (or 2008) and shall be read in conjunction with that Standard.

Works shall include all the associated processes required for corrosion protection including but not limited to planning the works, access for the works, protection of the works and environment, preparation of surfaces for receiving corrosion protection materials, the storage, mixing and application of corrosion protection materials, and inspection at all stages of the work.

Organizations may achieve registration to this Sector Scheme for specific services that they are competent to supply (e.g. surface preparation by water jetting on site works) within the overall process of providing corrosion protection to ferrous materials in transportation infrastructure assets using industrial coatings. The Certificate of Registration (see Appendix K) shall record the full scope of registration.

Organizations registered to another NHSS undertaking works that includes works covered by the scope of this Sector Scheme should refer to Appendix M for guidance on compliance with this Sector Scheme.

## 2. NORMATIVE REFERENCE

The normative reference documents are

- BS EN ISO 9001:2000 (or 2008) Quality Management Systems – Requirements
- BS EN ISO 9000:2005 Quality Management Systems – Fundamentals and Vocabulary
- BS EN ISO 9004:2000 Quality Management Systems – Guidelines for Performance Improvements.
- BS ISO 10005:2005 Quality Management Systems – Guidelines for quality plans.

### 3. TERMS AND DEFINITIONS

For the purpose of this SSD the following definitions shall apply.

Certificate of Registration:	A certificate issued by a UKAS accredited Certification Body certifying that the holder operates a Quality Management System complying with BS EN ISO 9001:2000 (or 2008) and this SSD. (See Appendix K)
Client:	The owner or manager of the transportation infrastructure asset to which corrosion protection is to be provided.
Contract Specification:	The specification for corrosion protection 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 the implementation of corrosion protection works. (See 6.2.2)
Industrial Coating:	A single protective coat or a series of protective coats, which may include pre-treatments, thermally sprayed metal coats, paints and aesthetic finish coats, applied to provide corrosion protection to a substrate.
Inspector:*	The competent person identified and recorded by the Organization as being responsible for the inspection of corrosion protection works for compliance with the requirements of a Contract Specification. (See 6.2.2)
Manager:*	The competent person named in the Organization's Quality Plan for a contract as being responsible for the overall management of the implementation of the corrosion protection works for that contract.
Operative:*	A competent person who works under the control of a Foreperson and is directly involved with the implementation of corrosion protection works. This may include a person who is working towards becoming competent in the implementation of corrosion protection works. (See 6.2.2)
Organization:	The legal entity providing the corrosion protection work and any other related contractual obligations and who will be assessed against this SSD by the Certification Body.
Quality Management System:	The Organization's structure, responsibilities, procedures, processes and resources for implementing quality management.

Quality Manual:	The document that specifies the quality management system and the documentation to be used.
Quality Plan:	The document setting out the specific quality practices, resources and sequence of activities relevant to a contract (See Appendix A).
Quality Policy:	The overall quality intentions and direction of an Organization as regards quality as formally expressed by top management.
“shall”:	“used 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 9001:2000 and ISO 9004:2000”).
SSACCP:	Sector Scheme Advisory Committee for Corrosion Protection of Transportation Infrastructure Assets.
Sub-contractor:	An organization or individual providing a service(s) or material(s) to the Organization.
Substrate:	The ferrous base, the metal coating such as galvanising applied over a ferrous base or existing sound industrial coatings over a ferrous base, to which the industrial coating is to be applied to provide the corrosion protection.
Technical Manager:*	The competent person named in the Organization’s Quality Plan for a contract as being responsible for ensuring that the technical requirements of the Contract Specification for that contract are met.
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.
* Note	The roles may be combined. The role of Inspector may not be undertaken by a person who is directly involved in supervising or applying the corrosion protection.

## QUALITY MANAGEMENT SYSTEM REQUIREMENTS

Paragraph numbers in Sections 4 to 8 reference appropriate paragraphs of **BS EN ISO 9001:2000 (or 2008)**. Where “no specific interpretation” is recorded under a heading this means that the committee did not consider it necessary to provide supplementary interpretation for that clause.

### 4 Quality Management System

#### 4.1 General Requirements

- (i) The Organization shall submit an application for inclusion on the NHSS Schedule of Suppliers to Lantra Awards ([www.scheduleofsuppliers.com](http://www.scheduleofsuppliers.com)) and notify the Secretary to SSACCP of their registration to this Sector Scheme immediately following confirmation from the Certification Body and thereafter annually.
- (ii) Where services are outsourced and not controlled under the Organization’s procedures, the supplier of the services shall have relevant NHSS registration. The Organization shall maintain a collated list of all outsourced services, which shall included details of how those outsourced services are controlled.

#### 4.2 Documentation Requirements

##### 4.2.1 General

Documents needed by the Organization shall include the contract specific Quality Plan. See 7.1 regarding content of the Quality Plan.

##### 4.2.2 Quality Manual

See paragraph 7.3 regarding design and development.

##### 4.2.3 Control of Documents

As part of the Organization’s procedures for document control, the following contract specific documents are typically required to be controlled:

- a) Correspondence.
- b) Delivery notes and certification where required.
- c) Training records/certificates.
- d) Contract documentation and Client order.
- e) Instructions to Operatives, Forepersons and Inspectors.
- f) Relevant standards and specifications, including this document.
- g) Method statements for controlling the works to include relevant health and safety, and environmental requirements.
- h) Drawings.
- i) Design information. (See 7.3)

##### 4.2.4 Control of Records

- (i) 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) Instructions to Operatives, Forepersons and Inspectors.
  - d) Complaints and feedback.
  - 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 (known to the Organization) in or adjacent to the corrosion protection works, including near misses.
  - i) Maintenance and calibration records of the equipment used.
  - j) Product data sheets and health and safety data sheets.
  - k) Contract records e.g. temperature, relative humidity, wet and dry film thickness, sampling and testing.
  - l) Records to enable Operative traceability, i.e. who did what.
  - m) Design information. (See 7.3)
- (ii) 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 Client and/or Customer as requested.

## **5 Management Responsibility**

### **5.1 Management Commitment**

No specific interpretation.

### **5.2 Customer Focus**

Processes for determining Customer requirements shall consider the interests of the Client and stakeholders to enhance Customer satisfaction, e.g. the general public and travelling public.

### **5.3 Quality Policy**

No specific interpretation.

### **5.4 Planning**

#### **5.4.1 Quality Objectives**

The quality objectives shall include a commitment to meet Customer and Client requirements with respect to corrosion protection of ferrous materials by industrial coatings.

#### **5.4.2 Quality Management System Planning**

No specific interpretation.

## **5.5 Responsibility, Authority and Communication**

### 5.5.1 Responsibility and Authority

- (i) Top management shall ensure that responsibilities and authorities are consistent with the definitions in Section 3 of this SSD.
- (ii) Top management shall ensure that those personnel with contract specific responsibilities and authorities are identified and recorded.

### 5.5.2 Management Representative

No specific interpretation.

### 5.5.3 Internal Communication

No specific interpretation.

## **5.6 Management Review**

### 5.6.1 General

The Organization shall review the Quality Management System at least once every twelve months to ensure its continuing suitability and effectiveness to conform to this Sector Scheme.

### 5.6.2 Review Input

No specific interpretation.

### 5.6.3 Review Output

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

## **6 Resource Management**

### **6.1 Provision of Resources**

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

### **6.2 Human Resources**

#### 6.2.1 General

The Organization shall establish, maintain and implement procedures for the training, development and use of competent personnel in accordance with this SSD.

The education, training, skills and experience of personnel required by this Sector Scheme is aimed primarily at technical competence of those personnel involved with the implementation of corrosion protection works and with the inspection of those works.

The Technical Manager, Forepersons and Inspectors shall have a working knowledge of the relevant parts of the Contract Specification that are applicable to the work being undertaken.

Not more than 20% of an Organization's workforce of Corrosion Protection Operatives employed on corrosion protection works shall be under training, subject to a practical minimum of 1 trainee Corrosion Protection Operative within a small workforce of 5 Corrosion Protection Operatives or less.

Note: Although this Sector Scheme provides awareness of the need to carry out work in a safe manner it remains the sole responsibility of the Organization to determine and implement safe systems of work.

## 6.2.2 Competence, Awareness and Training

### (i) Certification Record Cards

#### Forepersons and Operatives

The required competency for Corrosion Protection Forepersons and Operatives is defined by successful completion of an approved training course as given in Appendix C.

The appropriate records to be maintained shall include a 'Certification Record Card' issued to and carried by the individual successfully completing an approved training course together with an entry in a register held by the Organization.

The Card defines the types of corrosion protection work that the holder has been trained and assessed to undertake and the degree of responsibility that the holder can normally accept. It shall not be valid for any type of corrosion protection works that is not defined. The issue of a new or renewed Certification Record Card, as the case may be, shall be recorded by the Organization. A sample register is given in Appendix D.

#### Inspectors

The required competency for Corrosion Protection Inspectors is defined by successful completion of an approved training course as given in Appendix C.

The appropriate records to be maintained shall include a 'Certificate of Completion' issued to the individual successfully completing an approved training course together with an entry in a register held by the Organization.

The Certificate defines the levels of corrosion protection inspection that the holder has been trained and assessed to undertake.

### (ii) Experience Required

#### Manager

The Manager shall have sufficient initial and continuing professional development to show competence. This does not have a minimum time period, as it is an outcome that is measured. It would be unusual however for anyone with less than three years experience of involvement in managing the implementation of corrosion protection works using industrial

coatings to have attained the breadth and depth of experience required.

It is recommended that the Manager attends the ICATS appreciation course, or equivalent.

#### Technical Manager

The Technical Manager shall have sufficient initial and continuing professional development to show competence. This does not have a minimum time period, as it is an outcome that is measured. It would be unusual however for anyone with less than five years experience of the technical implementation of corrosion protection works using industrial coatings to have attained the breadth and depth of experience required.

It is recommended that the Technical Manager attends the ICATS appreciation course, or equivalent.

#### Foreperson

Corrosion Protection Forepersons shall have sufficient initial and continuing professional development to show competence. This does not have a minimum time period, as it is an outcome that is measured. It would be unusual however for anyone with less than two years experience of corrosion protection works using industrial coatings to have attained the breadth and depth of experience required. The maximum number of people that the Foreperson shall control at any one time shall be defined in the Quality Plan.

#### Inspectors

Corrosion Protection Inspectors shall have sufficient initial and continuing professional development to show competence. This does not have a minimum time period, as it is an outcome that is measured. It would be unusual however for anyone with less than three years experience of corrosion protection works using industrial coatings to have attained the breadth and depth of experience required.

- (iii) The Organization shall create, maintain and issue to each Inspector, Foreperson and Operative he employs a Record of Corrosion Protection Experience. The record shall include details of the practical experience obtained and shall be updated at least twice a year.
- (iv) Qualified Corrosion Protection Inspectors, Forepersons and Operatives shall carry an identity card, which shall include a relevant recent photograph of the holder. This identity card shall contain sufficient information to provide linkage to the holder's Certification including the name of the Organization they represent.
- (v) Unqualified Corrosion Protection Operatives shall enter relevant training within 3 months of starting works covered by this Sector Scheme and shall at all times be directly supervised by a designated qualified Corrosion Protection Operative on a one to one basis. This supervised experience shall include practical experience of the aspect of the work for which they are training or intend to train and shall be recorded as part of the training records of the Operative. The supervising qualified Corrosion Protection Operative shall be certificated for the type of work being undertaken and shall be responsible for the supervision of no more than one designated unqualified Corrosion Protection Operative at any one time.

### **6.3 Infrastructure**

The Organizations infrastructure in terms of facilities and process equipment shall be suitable for the scope of registration being sought.

### **6.4 Work Environment**

The Organization shall ensure that all necessary access, plant, services and equipment are available and maintained, and that the work environment is monitored to enable the corrosion protection works to be carried out effectively.

## **7 Product Realization**

### **7.1 Planning of Product Realization**

- (i) 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. The topics for the content of a Quality Plan are in BS ISO 10005:2005 and this document (See Appendix A). The Quality Plan shall as a minimum address the topics listed in Appendix A.
- (ii) The Quality Plan shall describe the management strategy that sets clear and sustainable performance objectives, delegates responsibility and establishes lines of communication.
- (iii) The Quality Plan shall not be considered in isolation. An integrated approach shall be taken which links the Quality Plan, Environmental Plan (including protected sites) and the Health and Safety Plan (including risk and hazard assessments) together. Management of the service as a whole is reliant on quality and hence the contract and the quality element cannot be separated, as one cannot function without the other.
- (iv) The Organization shall, in order to reduce the need for waste disposal, consider ways of minimising the generation and environmental impacts of wastes arising during the corrosion protection works and maximising 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 corrosion protection works.
- (v) The Quality plan may be a largely standard document as indicated in Appendix A supplemented by contract specific information.

### **7.2 Customer Related Processes**

#### **7.2.1 Determination of Requirements Related to the Product**

No specific interpretation

#### **7.2.2 Review of Requirements Relating to the Product**

- (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 and Client's Contract Specification.

- (ii) 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 and Client for resolution at the earliest opportunity.
- (iii) Matters of a significant nature, which arise during the determination and review of requirements shall be referred to the Customer and Client for clarification.

#### 7.2.3 Customer Communication

No specific interpretation.

### 7.3 Design and Development

- (i) Design and development may address all associated processes required for the corrosion protection works including but not limited to access for the works and protection of the works and environment.
- (ii) Design and development of the industrial coating is excluded when there is a full industrial coating specification supplied by the Client or Customer.

### 7.4 Purchasing

#### 7.4.1 Purchasing Process

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

#### 7.4.2 Purchasing Information

No specific interpretation.

#### 7.4.3 Verification of Purchased Product

The Organization shall establish, maintain and implement procedures to inform the Client and/or Customer of the proposed and actual source of supply of all corrosion protection materials.

### 7.5 Production and Service Provision

#### 7.5.1 Control of Production and Service Provision

- (i) The Organization shall obtain and make available to those undertaking and inspecting the corrosion protection works the following:
  - a) Specification for the system to be applied;
  - b) Material product data sheets;
  - c) Material safety data sheets including COSHH assessments;
  - d) Material certificates of conformity.
- (ii) The Organization shall produce method statements and risk assessments for the corrosion protection works typically including the following:

- a) access and egress to the site and access to the corrosion protection works;
  - b) temporary works and encapsulation;
  - c) surface preparation;
  - d) coating application including conditions for application;
  - e) curing including conditions for curing;
  - f) materials identification, delivery, storage and disposal;
  - g) repair of damaged coatings;
  - h) Identification of the requirements of third parties that effect or are affected by the corrosion protection works, e.g. utility companies, the public, the Environment Agency etc.
- (iii) The Organization shall make available for the corrosion protection works the plant and equipment identified in the method statements. All plant and equipment shall be properly maintained and maintenance records kept.
  - (iv) The Organization shall establish, maintain and implement procedures for the inspection and monitoring of the corrosion protection works. Records of the inspection and monitoring shall be maintained.
  - (v) The Organization shall undertake a review of the corrosion protection works and the application and inspection records to confirm compliance with the Contract Specification. Where works are carried out in the workshop this review shall be carried out prior to despatch, and for all works at completion. This review shall be undertaken by an Inspector.

#### 7.5.2 Validation of Processes for Production and Service Provision

- (i) Validation may be undertaken by using trial panels or by witnessing similar corrosion protection works.
- (ii) The Organization shall establish, maintain and implement a process for reporting to the Customer and Client any unexpected conditions or factors encountered that may affect the corrosion protection works, and work with the Customer and Client to mitigate such conditions or factors.

#### 7.5.3 Identification and Traceability

The Organization shall establish, maintain and implement documented procedures to ensure the identification and traceability of corrosion protection personnel and materials respectively.

#### 7.5.4 Customer Property

No specific interpretation.

#### 7.5.5 Preservation of Product

- (i) The Organization shall establish, maintain and implement documented procedures for the appropriate handling, storage, packaging and disposal of corrosion protection materials.
- (ii) The Organization shall establish, maintain and implement documented procedures for the appropriate handling, storage and packaging of corrosion protection products, including transportation where applicable.

## **7.6 Control of Monitoring and Measuring Devices**

- (i) The Organization shall establish and maintain a register of the monitoring and measuring devices used in corrosion protection works. Guidance is given in Appendix E.
- (ii) Where no standard exists, monitoring and measuring devices shall be calibrated in accordance with the manufacturer's instructions and as a minimum annually.

## **8 Measurement, Analysis and Improvement**

### **8.1 General**

The Organization shall identify and set targets for improvements in application of corrosion protection works.

### **8.2 Monitoring and Measurement**

#### **8.2.1 Customer Satisfaction**

No specific interpretation.

#### **8.2.2 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 corrosion protection works.
- b) In addition audits of corrosion protection works being carried out in the shop or on-site, at least twice a year; these are to include the following works: surface preparation and application of corrosion protection.

#### **8.2.3 Monitoring and Measurement of Processes**

No specific interpretation.

#### **8.2.4 Monitoring and Measurement of Product**

The Organization shall establish, maintain and implement monitoring and measurement processes that comply with the Contract Specification.

### **8.3 Control of Non-conforming Product**

No specific interpretation.

### **8.4 Analysis of Data**

No specific interpretation.

### **8.5 Improvement**

No specific interpretation.

## **APPENDIX A: REQUIREMENTS FOR QUALITY PLANS**

The Quality Plan shall include the following items as a minimum.

### **1. General Requirements**

- 1.1 Definition of the product to be provided.
- 1.2 The Organization's management strategy for undertaking corrosion protection works, including clear and sustainable performance objectives.
- 1.3 The structure of the Organization describing delegated responsibilities, the line of command and stating the name of the Organization's Manager responsible for the contracted work.
- 1.4 Identification of the relevant parts of the Organization's documented quality system relevant to the product or service being provided.\*
- 1.5 The processes for the selection of staff.\*
- 1.6 The control, maintenance and selection of equipment.
- 1.7 The processes for communications between Customer and Organization.

### **2. Contract Specific Information**

- 2.1 Name and contact details of Customer and/or Client contact(s).
  - 2.2 Details of the communications required between the Organization's staff and the Customer/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.
  - 2.3 Work programme and details of deliverables including risk assessments, COSHH assessments and method statements.
  - 2.4 Storage, handling, application and disposal of corrosion protection materials.
  - 2.5 Details and control of quality records, including receipt, examination and submission to Client and Customer of certificates of registration, test results, sample retention and origins of materials used.
  - 2.6 Control of non-conforming product.\*
  - 2.7 The maximum number of people that a Foreperson shall control at any one time.
- \* Copies of the Organization's general procedures covering these items shall be made available for examination by the Client's representative, copies are to be provided when requested.

## **APPENDIX B: REFERENCE AND ASSOCIATED DOCUMENTS**

### **Not used**

Reference should be made to the Client's Contract Specification.

## APPENDIX C: COMPETENCES

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

The Organization shall ensure that their personnel shall have undergone suitable training and assessment that shall cover aspects of the work to be undertaken as described below. The Industrial Coatings Applicator Training and Certification Scheme (ICATS) process developed by Institute of Corrosion (ICorr) for Operatives has been approved by the SSACCP as the benchmark level for industry, together with the ICorr certification scheme for paint and coating inspectors. Where other schemes exist, these will be assessed for equivalence by the SSACCP for acceptability.

### A Operatives

The required training of Operatives shall consist of the "Industrial Coatings Applicator" training course, successful completion of which shall result in issue of the ICATS registration card. Training of Operatives consists of classroom-based activities and practical assessment undertaken at a registered training provider, or registered workplace, under supervision of an ICATS registered trainer. Training and assessment of Specialist Operatives with required specific skills shall consist of successful completion of the Industrial Coating Applicator training course followed by the relevant specialist course, successful completion of which shall result in the issue of a revised card recording the additional skills gained. Details of all current and planned courses provided under ICATS are tabled below.

Industrial Coatings Applicator (6 training segments)	<ol style="list-style-type: none"><li>1. Health and Safety</li><li>2. Access, Plant and Equipment</li><li>3. Surface Preparation</li><li>4. Materials and Paint Types</li><li>5. Paint Application</li><li>6. Quality Control</li></ol>
Abrasive Blast Cleaning Operator (6 training segments)	<ol style="list-style-type: none"><li>1. Introduction</li><li>2. Health and Safety</li><li>3. Blast Media</li><li>4. Standards and Quality Control</li><li>5. Operational Procedures</li><li>6. Process Control</li></ol>
Paint Sprayer (5 training segments)	<ol style="list-style-type: none"><li>1. Introduction</li><li>2. Health and Safety</li><li>3. Paint Materials</li><li>4. Airless Spray Equipment</li><li>5. Conventional Air Spray</li></ol>
Thermal (Metal) Sprayer	Under development in collaboration with the Thermal Spraying and Surface Engineering Association (TSSEA).
Water Jetting Operator	Under development in collaboration with the Water Jetting Association (WJA).

Note: Personnel delivering the ICATS training will not be qualified as an Operative unless they have completed appropriate training as an Operative.

## **B Forepersons**

For the corrosion protection works they are supervising, a Foreperson shall hold ICATS certification as an Operative or shall be a registered ICATS trainer.

## **C Inspectors**

Inspectors shall hold a certificate qualifying them to a minimum of ICorr Level 1 Paint Inspector (or equivalent). ICorr Level 1 certificated personnel have demonstrated competence to set up specific equipment; carry out tests and perform inspections against written criteria; record and classify the results of tests and inspections against written criteria and report results. However note that Level 1 personnel have not demonstrated competence in selecting the extent of inspection or testing required, appropriate inspection or test methods to be used, nor for the interpretation of specific requirements. Holders of ICorr Paint Inspector certificates at higher levels (i.e. Levels 2 or 3) are also qualified to Level 1.

## **D Managers**

It is recommended that Managers and Technical Managers attend the ICATS appreciation course.

## **E Implementation of Training**

In seeking registration to this Sector Scheme, Organizations shall comply with the requirements of the following table.

**Table C1: Implementation of Training**

<b>ICATS Course</b>	<b>Final Target Date</b> (For 100% of Operatives to be Certificated, excluding trainees. See 6.2.1)
<b>Industrial Coatings Applicator</b>	31 January 2008
<b>Abrasive Blast Cleaning Operator</b>	31 December 2009
<b>Paint Sprayer</b>	31 December 2009
<b>Thermal (Metal) Sprayer</b>	Date to be confirmed
<b>Water Jetting Operator</b>	Date to be confirmed

## **F Health and Safety Disclaimer**

Organizations are reminded of the legal requirements to provide appropriate health and safety training for

each of the Organizations employees and other persons under their control and the implementation of safe systems of work in accordance with the Health and Safety at Work etc Act 1974.

## **G Protection of the work force: additional safety competencies**

Clients may have specific requirements for personnel seeking access to their infrastructure.

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 such works shall be carried out by an Organization registered to NHSS 12A or 12 B as appropriate. For works on other roads NHSS 12D applies and Organizations need to ensure that they have appropriately skilled Operatives to set out the necessary temporary traffic management measures. Guidance is given in Appendix M of NHSS 12D.

### Health and Safety Qualifications.

It is a requirement that Operatives, Forepersons and Inspectors attending construction sites pass a health and safety test (CITB (highways) Health and Safety test associated with a relevant occupation card as listed below; or ECS HE version Health and Safety Test). It is a requirement that management staff pass the CITB Management Health and Safety test.

Relevant occupation cards:

Construction Related Occupation Card for 'Industrial Coatings Applicator'

Note: A relevant Certification Record Card will also be required. (See 6.2.2)

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.

## **H Electrical Work**

### a) Highway Equipment

Electrical and associated highway equipment requires specialist skills and knowledge; Operatives will need to hold relevant qualifications, certification and be registered in accordance with the requirements of NHSS 8 for highway works as well as complying with the necessary legal requirements and obligations.

### b) On-site Equipment

Advice and guidance also needs to be provided for electrical and other work that may be needed in connection with the renovation of structural steelwork, e.g. lighting, heating and ventilating etc for which the Organization shall provide/ensure separate training and assessment.

### c) Access

Advice and guidance on access to the structure shall be provided.

d) Railways

Organizations are reminded of the requirements for a safe system of work to be set up by persons with relevant electrification competence. Requirements are given in the relevant Railway Group Standards and company standards.

**I National Vocational Qualifications**

ICATS training and assessment has been developed so that it provides a natural link from training through to competency assessments. ICATS exceeds the knowledge requirements required for the National Vocational Qualification (NVQ (Industrial Painter)), developed by CITB Construction Skills. Under certain circumstances it is possible for the required training assessment under ICATS and the competence assessment under the NVQ to be combined and for both to be awarded simultaneously. Generally, however, persons trained and assessed under ICATS will require additional assessment for competence under the NVQ before award of the NVQ (Industrial Painter) can be made.

It is important to note that the achievement of the NVQ (Industrial Painter) without ICATS does not satisfy the training requirements of this Sector Scheme.

**J Reference Documents**

ICorr Operative Training and Competence Assessment

- a) ICATS – Industrial Coating Applicator Training Scheme
- b) ICATS – Requirements for the Certification of Personnel Engaged in Industrial Coatings Application
- c) ICATS – Applicator Training Manual
- d) ICATS – Applicator’s Log Book
- e) ICATS – Foreperson Training Manual
- f) ICATS – Foreperson’s Log Book
- g) ICATS – Inspector Training Manual
- h) ICATS – Inspector’s Log Book

## APPENDIX C1: SCHEMATIC OF ICATS PROCESS

The ICATS process is summarised below:

### Industrial Coatings Applicator (Basic Module)

1. Organization must be registered with the Institute of Corrosion (ICorr)/Correx Ltd. as ICATS corporate scheme member.
2. Organization nominates experienced staff who are then trained and assessed, as Trainers, at the ICorr Training Centre and are issued with certification.
3. Organization registers Trainees with Correx Ltd. Trainees are then trained and assessed, in-house or at a training centre, by the Certificated Trainer.
4. Certificated Trainer submits notice of results to Correx Ltd., who issue Certification to the Industrial Coatings Applicator

### Specialist Modules

1. Organization must be registered with the Institute of Corrosion (ICorr)/Correx Ltd. as ICATS corporate scheme member.
2. Organization nominates experienced staff who:
  - EITHER** have 10 years experience in training operatives relating to the particular specialist activity,
  - OR** have 5 years experience in use of the particular specialist activity plus 120 hours as Trainer for the Industrial Coatings Applicator.

On receipt of evidence and/or experience and training record, Correx Ltd. assesses the information for evidence of the required experience and competence as a Specialist Trainer and where appropriate issue Specialist Trainer Certification.

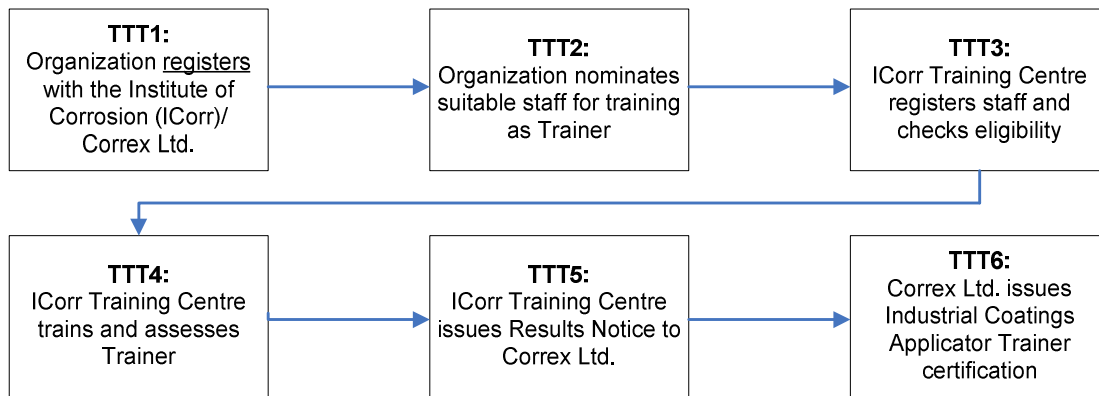
3. Organization registers Trainees with Correx Ltd. Trainees are then trained and assessed either in-house or at a specialist training centre by the Certificated Specialist Trainer.
  - (a) Specialist Trainees for Abrasive Blast Cleaning Operative, Paint Sprayer and Thermal (Metal) Sprayer, **MUST** be certificated as Industrial Coatings Applicator (Basic Module) as a pre-requisite.
  - (b) Specialist Trainees for Water Jetting Operative do not require prior certification as Industrial Coating Applicator and in such cases shall be only permitted to undertake water jetting.
4. Certificated Specialist Trainer submits notice of results to Correx Ltd., who issue Certification to the Specialist Operative

As certificating body, Correx Ltd maintains a list of certificated personnel who have attended and passed the ICATS training and assessment requirements for corrosion protection works listed in Appendix C.

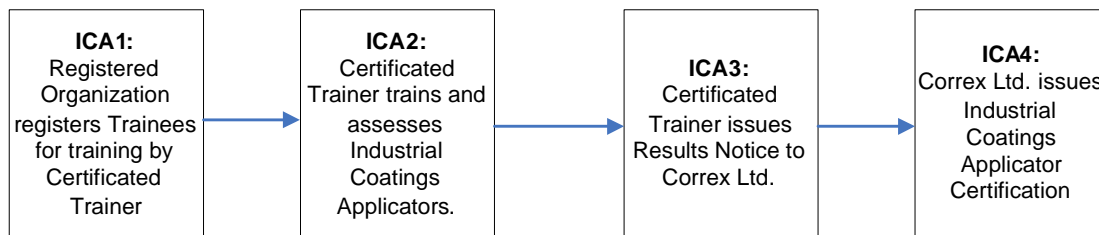
Correx Ltd. is the wholly-owned trading subsidiary of the Institute of Corrosion and can be contacted at the offices of the Institute of Corrosion:

7b High Street Mews  
High Street  
Leighton Buzzard  
Bedfordshire, LU7 1EA  
Tel: 01525 851771, Email: correx@icorr.org

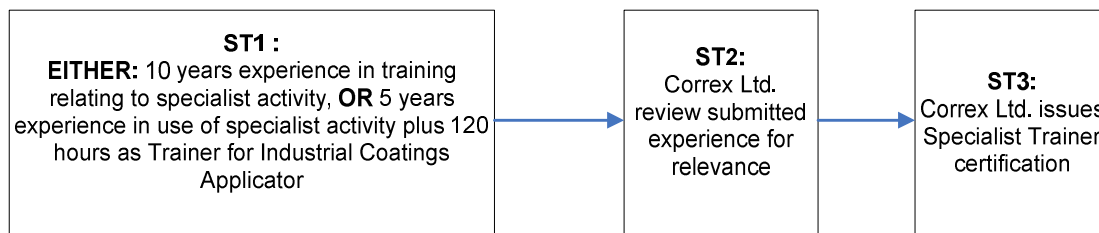
Industrial Coatings Applicator **Trainer** Certification



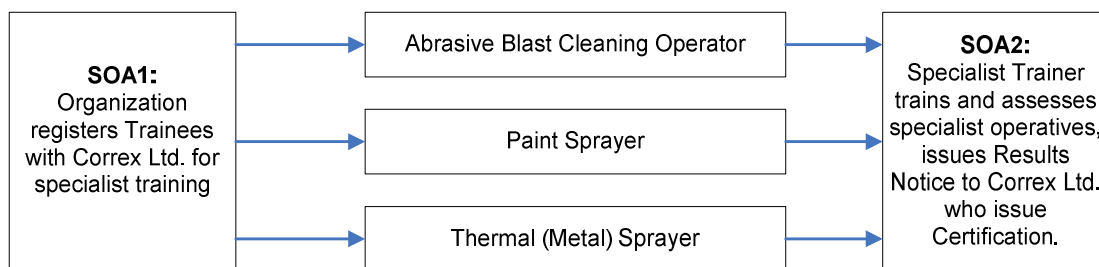
Industrial Coatings Applicator Certification



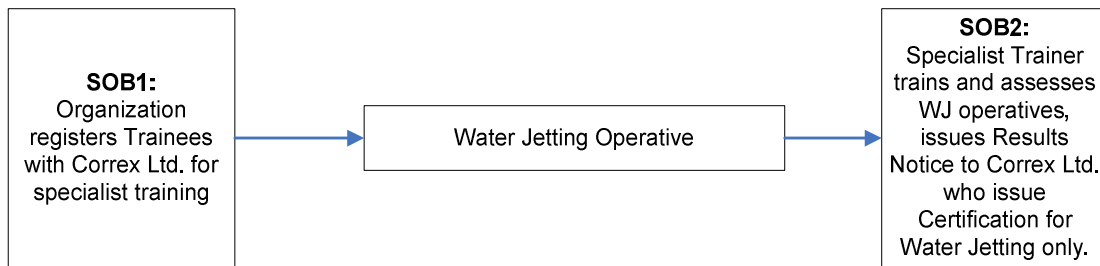
Specialist **Trainer** Certification



Specialist Operative Certification – Route A



Specialist Operative Certification – Route B



## APPENDIX D: EXAMPLE REGISTER OF CORROSION PROTECTION OPERATIVES

NAME OF OPERATIVES' COMPANY: .....

COMPANY ICATS REGISTRATION: .....

Full Name of Certificated Person	Certification Renewal Date	Details of training courses successfully completed by Certificated Person	Certificate number	Issued by

## APPENDIX E: MONITORING AND MEASURING DEVICES

### Example Register For Monitoring and Measuring Devices

Equipment & Unique Reference Number	Equipment Specification	Calibration Control	Calibration Frequency	Date of Calibration	Date Next Calibration Due.	Calibration Certificate Ref.
Soluble Salts Digital Meter – COA/037 (SCM 400)	N/A	In-house, or, Traceable calibration.	Annually	dd/mm/yyyy	dd/mm/yyyy	Ref
Digital Thermo hygrometer (Temp/humidity)- COA/060	N/A	Traceable calibration	Annually	dd/mm/yyyy	dd/mm/yyyy	Ref
Pull Off Adhesion Tester –COA/092 (Elcometer 108)	ASTM D4541-02	Traceable calibration	Annually	dd/mm/yyyy	dd/mm/yyyy	Ref
Dry Film Thickness Gauge – COA/076 (Elcometer 456) & COA/009 (calibration shim set).	BS 3900: Part C5	Operator calibration before use & Annual traceable calibration	Calibrate before use and Annually	dd/mm/yyyy	dd/mm/yyyy	Ref
Spark Tester – COA/003 (Elcometer 136)	ASTM G62-87	Traceable calibration	Annually	dd/mm/yyyy	dd/mm/yyyy	Ref
Surface Profile Gauge -COA/201 (Elcometer E123)	ASTM D4417-03	Traceable calibration	Annually	dd/mm/yyyy	dd/mm/yyyy	Ref
Contact thermometer – COA/083 (Elcometer)	N/A	Traceable calibration	3 years	dd/mm/yyyy	dd/mm/yyyy	Ref

'In house' calibrations to be in accordance with procedure(s) described in the equipment's operating manual. Separate records to be kept on method(s) used and results of calibration.

All Calibrations (other than 'in house') shall be certified by accredited/registered Inspection Bodies providing certification to UKAS traceable standards wherever possible / practical.

## APPENDIX F: CERTIFICATION BODIES ACCREDITED FOR CORROSION PROTECTION WORKS

Information on Certification Bodies accredited against this Sector Scheme can be found on the UKAS website [www.ukas.com](http://www.ukas.com). To identify the certification bodies on the website:

- place the cursor onto 'about accreditation' in top grey menu bar
- move down to 'accredited bodies'
- move across to 'certification body schedules' and left click on this to take you to the list of schedules
- move down past 'key abbreviations' to 'search within the schedules' – click on 'advanced search'
- type 'Highway Sector Scheme No 19A' in the box and tick the square by 'search UKAS documents'
- left click 'search'
- this then lists the certification bodies who are accredited and their details can be found by clicking on the appropriate links.

Note: The following Certification Bodies are accredited by UKAS for corrosion protection work to this Sector Scheme.

BM TRADA Certification Ltd  
(BM TRADA)

[www.bmtrada.com](http://www.bmtrada.com)

ISOQAR Ltd

[www.isoqar.com](http://www.isoqar.com)

Lloyd's Register Quality Assurance  
(LRQA)

[www.lrqa.com](http://www.lrqa.com)

NQA

[www.nqa.com](http://www.nqa.com)

Steel Construction Certification Scheme  
(SCCS)

[www.steelconstruction.org](http://www.steelconstruction.org)

SGS United Kingdom Ltd  
(SGS)

[www.uk.sgs.com](http://www.uk.sgs.com)

# **APPENDIX G: THE ROLE OF THE CERTIFICATION BODIES AND ASSESSOR COMPETENCE**

## **1. Role of Certification Bodies**

- 1.1. The independent assessment of conformity of Organizations to the requirements of BS EN ISO9001:2000 (or 2008) and the additional requirements required by this SSD relies 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 BS EN ISO9001:2000 (or 2008) requirements detailed in this SSD.

## **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 BS EN ISO/IEC 17021:2006 by the United Kingdom Accreditation Service (UKAS) or an equivalent International Accreditation Forum (IAF) member for assessment and registration of BS EN ISO9001:2000 (or 2008) quality management systems interpreted in accordance with this NHSS.

## **3. Assessor and Assessment Team Competence.**

- 3.1. The Certification Body must be able to demonstrate to UKAS that it possesses and can maintain the necessary assessor experience and technical understanding of the industrial coating processes covered in the scope of this Sector Scheme.
- 3.2. The Certification Body must also ensure that assessors have sufficient knowledge of health & safety requirements related to working on live highways where appropriate, including knowledge of NHSS 12D, 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 – National Highway Sector Scheme Accreditation, Registration and Assessment Guidance for Certification Bodies.
- 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) International Register of Certificated Auditors (IRCA) Registered ISO9001:2000 Lead Auditor qualification or Certification Body equivalent and demonstrable expertise in leading assessment teams.
  - ii) Technical assessment competence in industrial coating and corrosion protection processes.

#### **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 corrosion protection works covered by the scope of this Sector Scheme are being undertaken.
- 4.2. Certification Bodies shall make every endeavour to ensure that during a three year certification cycle there is evidence of assessment of all corrosion protection activities covered by the Organization's scope of registration. Certification Bodies shall undertake surveillance visits at intervals of not greater than one year.

#### **5. Format and Content of Registration Certificates.**

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

#### **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.com](http://www.scheduleofsuppliers.com) 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 Awards details of registered Organizations whose scope of registration 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 Lantra Awards have been notified by the Organization of their NHSS registration. (See 4.1(i))

#### **7. Reporting on Sector Scheme Performance.**

- 7.1. Each Certification Body accredited for this Sector Scheme shall provide to the Chairman of the SSACCP a summary report which includes as a minimum:
  - 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) a list of Organizations whose scope of registration includes this Sector Scheme for comparison against the Schedule of Suppliers
- 7.2. The report shall be provided at or in the month before each National Highway Sector Scheme

Liaison Committee meeting, so that it may be considered during the Group Sessions of the Liaison meeting.

- 7.3. Certification Bodies shall ensure they are all represented by at least one nominated individual (who will represent all Certification Bodies) at Sector Scheme Advisory Committee. This does not preclude other Certification Bodies from attending, as appropriate.
- 7.4. Certification Bodies shall be represented at the National Highway Sector Scheme Liaison Committee.

# APPENDIX G1: GUIDANCE TO CERTIFICATION BODY ASSESSORS AND INTERNAL AUDITORS

## General Information

The certification body group (reporting to the Highways Liaison Committee) has proposed that an e-learning programme for assessors based on the information provided by the individual National Highway Sector Scheme Committees should be made available to third party assessors to enable them to have a fuller appreciation of the particular activities involved in highway construction and maintenance. The information contained in this appendix has been collated by the NHSS committee to provide Certification Body(CB) assessors with the background information that is considered appropriate for carrying out an assessment against BS EN ISO 9001 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. It is hoped that it will be possible in the near future for access to the e-learning programme to be available to all assessors and auditors; information on this development will be made available through revision issues of the relevant NHSS document posted on the UKAS web-site.

## Requirements

In addition to an assessor/auditor having a general appreciation of the requirements and processes required by BS EN ISO 9001:2000 (or 2008), a CB assessor or internal auditor should be aware of the following when completing an audit:

### A General background to the scheme,

- i) The reasons for development of the National Highway Sector Schemes (NHSS) and this scheme in particular, and for CB assessors' examples of where its absence has caused concern/problems.

This is normally contained in the introduction to the scheme, in this instance the scheme (NHSS 19A) was initially developed with partnering bodies drawn from the industrial coatings industry recognising that the majority of premature failures of industrial coatings used to protect ferrous materials in transportation infrastructure assets occur as a result of poor practice in applying the industrial coating.

- ii) To whom the scheme applies

See Scope in relevant NHSS document ie NHSS 19A

- iii) Contact details of those that can offer scheme specific assistance

Secretary to the Advisory Committee to the Sector Scheme - See introduction in NHSS document. Contact details should also be contained in the Organization's quality manual.

- iv) An overview of the highway infrastructure that the scheme applies to

This scheme applies to the corrosion protection of ferrous materials in transportation infrastructure assets such as but not limited to highway and rail bridges, parapets, gantries, masts, columns, signal posts, electrification masts, station structures, level crossing equipment, buildings and toll booths. See Appendix M of the NHSS document for

details of the highway infrastructure not covered by the scheme.

v) The range of contracts that the scheme can apply to

See Scope in relevant NHSS document ie NHSS 19A (Section 1). Note that NHSS 19A has been written so as to be contract and client neutral. The scheme may be specified by any client in their contract for corrosion protection works.

vi) Specific types of works that the scheme applies to

See Scope (Section 1) in relevant NHSS document and also Appendix L in NHSS 19A; in this instance applies to corrosion protection of ferrous materials in transportation infrastructure assets using industrial coatings. The scheme applies to the provision of corrosion protection to new assets and to the maintenance of corrosion protection to existing assets. It is applicable to corrosion protection works undertaken in the workshop and on site. The scheme does not apply to providing corrosion protection to ferrous materials by hot dip galvanising or similar metal coatings (eg. electroplating and sheradizing) but does apply to the application of industrial coatings to such substrates.

vii) Definitions and terminology that are particular to the scheme

See Section 3 of the NHSS 19A document.

viii) Information on routes to competency of management, supervisors and operatives etc delivering the scheme services

Information/guidance is contained in Appendix C of the document, however the organization's training administrator should have this information available.

ix) Overview of important reference documentation applicable to the scheme

Section 2 and Appendix B of the document provides some information.

Knowledge of relevant European and British Standards, other standards and specifications for corrosion protection works, in particular those relating to product conformity, type testing and their requirements. Familiarity with SHW especially Series 1900 & 5000, and notes for guidance, including when these are updated.

x) Relationship with other NHSS and it applicability to this scheme.

See Appendix M of the NHSS 19A document.

**B Summary of where the scheme introduces the interpretation of Sections 4 to 8 of BS EN ISO 9001**

4. Quality Management System	Interpretation Y/N	Comment
4.1	Y	Check Lantra Website to ensure all registration is current.

4.2		
4.2.1	Y	Check Quality Plan is in place and complies with 7.1. Obtain a copy of plan as evidence.
4.2.2	Y	Ensure contract / tender review is in place.
4.2.3	Y	Ensure that all required contract specific documents are in place. Seek Evidence.
4.2.4	Y	Ensure that all required contract specific documents are in place. Seek Evidence.
5. Management Responsibility		
5.1	N	
5.2	Y	Ensure Customer feedback documents are in place upon completion of contract.
5.3	N	
5.4		
5.4.1	Y	Ensure objectives are covered in Quality plan and or policies.
5.4.2	N	
5.5		
5.5.1	Y	Ensure there is an organisation plan which covers responsibility / authority in accordance with the requirements of the SSD. Seek evidence. Ensure that personnel with contract specific responsibilities and authorities have been identified and is recorded. Seek evidence.
5.5.2	N	
5.5.3	N	
5.6		
5.6.1	Y	Review copy of annual management review. Ensure this contains reference to the relevant sector scheme.
5.6.2	N	
5.6.3	Y	Seek evidence that the output and actions of the management review are considered by Top Management at regular intervals.
6. Resource Management		
6.1	Y	Ensure contract / tender review is in place.
6.2		
6.2.1	Y	Review Copies of training certificates and forward looking training plans. Ensure that these are in accordance with the requirements of the sector scheme documents and that all related documentation is in date.

6.2.2	Y	See Appendices C, and D
6.3	Y	Review facilities and process equipment to confirm they are suitable for the scope of registration.
6.4	Y	In process Audit. Checks to include environmental condition records, plant maintenance sheets, access equipment certificates and induction records.
7. Planning and Product Realization		
7.1	Y	See Appendix A
7.2		
7.2.1	N	
7.2.2	Y	Ensure contract / tender review is in place within an appropriate timescale.
7.2.3	N	
7.3	Y	Ensure contract / tender review is in place.
7.4		
7.4.1	Y	Seek evidence that records are in place.
7.4.2	N	
7.4.3	Y	Seek evidence that documents are in place.
7.5		
7.5.1	Y	Check as part of in process audit
7.5.2	Y	Check as part of in process audit
7.5.3	Y	Cover during procedure review
7.5.4	N	
7.5.5	Y	Cover during procedure review
7.6	Y	See Appendix E
8. Measurement, Analysis and Improvement		
8.1	Y	Review copy of annual management review. Ensure this contains continuous improvements to the relevant sector scheme.
8.2		
8.2.1	N	
8.2.2	Y	Check internal audits are being carried out.
8.2.3	N	
8.2.4	Y	Check that Monitoring and measuring process documentation has been implemented in line with the contract specification. Seek evidence.
8.3	N	
8.4	N	
8.5	N	

8.5.1	N	
8.5.2	N	
8.5.3	N	

C Overview of the corrosion protection of ferrous materials

- 1 safe working practices
- 2 operative/supervisor training and qualifications
- 3 maintenance of equipment
- 4 public protection
- 5 environment
- 6 testing/inspection/workmanship
- 7 Health and Safety
- 8 other

C1 Safe Working Practices

Correct Personal Protective Equipment available and used

Equipment approved and suitable for use

Personnel to be 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
- Induction card/skills card

Vehicles/loads are inspected and drivers are competent

Awareness of relevant H&S legislation as applicable to the corrosion protection of ferrous materials.

Aware of current best practice including traffic management measures (including site arrangements).

C2 Training and Qualifications

- Have achieved appropriate training and competency modules
- Been inducted on specific equipment (by employer) or if appropriate (ie 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 NHSS 19A.
- Been inducted on site specific H&S issues (daily if necessary).
- Hold relevant skills card

C3 Maintenance of Equipment

- 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 need to protect public during installation operations
- 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 personnel are aware of HATO role
- Personnel have identification
- The Organization(company) has a complaints procedure 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 Testing/Inspection/Workmanship

Auditors should be aware of the importance of testing and inspection of the product.

C7 Health and Safety

Auditors should be aware of the current Health and Safety Legislation and related legislation, such as CDM regulations, as it applies to this Sector Scheme 19A.

## **APPENDIX H: ORGANIZATION ACCEPTANCE AND GUIDELINES FOR NEW ENTRANTS**

### **1. Organization Acceptance**

- 1.1 For work carried out on roads managed by the Highways Agency, The Welsh Assembly Government, Transport Scotland and DRD (Northern Ireland), only those Organizations holding a valid Certificate of Registration for work within the scope of this SSD shall 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 assets managed by other Clients acceptance of the Organization will depend on the requirements of the contract.
- 1.3 The Organization shall notify Lantra Awards (Lantra House, Stoneleigh Park, Kenilworth, CV8 2LG) and the Secretary of the SSACCP of their registration to this Sector Scheme immediately following confirmation from the Certification Body and thereafter annually, as detailed in paragraph 4.1 of Section 4 of this SSD. This will allow inclusion of the Organization in the published list of registered Organizations maintained by Lantra Awards. In addition the Organization shall provide details of a focal point for the Organization.

### **2. Guidelines for New Entrants – Requirements**

- 2.1 Organizations shall have the required experienced and qualified Corrosion Protection Operatives and management who meet the requirements of this Sector Scheme. Organizations shall demonstrate that their equipment and systems meet the requirements of this Sector Scheme.
- 2.2 Organizations shall have applied for registration with a Certification Body that is accredited by UKAS to audit against this Sector Scheme. Organizations shall demonstrate that they have been audited for shop and/or site based activities.

## APPENDIX J1: FEEDBACK

Any feedback relating to this SSD or the process described herein may either be

a) reported electronically through the Highways Agency's Standards Improvement System (SIS)  
(See below)

or b) addressed to the Committee Secretary using the form below

or c) to the Client

### Standards Improvement System (SIS)

SIS is implemented through Highways Agency Standard HD34 – The Implementation and Use of Standards Improvement System (DMRB Volume 5 Section 3.1 (DMRB 5.3.1)). HD34 was published in November 2003 followed in December 2003 by the launch of SIS.

SIS is the successor to the Quality Control Reporting System (QCRS) – a paper based system, which relied on designers to complete reports and the Highways Agency staff to enter them on an old mainframe computer. The difficulty in entering reports and the fact that QCRS was perceived as a means of only recording defects with an emphasis on redress meant that QCRS had fallen into disuse.

The revised system overcomes both of these shortfalls. SIS is simple to use being available to anyone with Internet Access and is aimed at improving standards rather than reporting defects. It also provides a feedback system to the original author to advise him of the actions being taken. HD 34 can be accessed through the Highways Agency web-site:

<http://www.standardsforhighways.co.uk/dmrb/index.htm>

or directly via:

<http://www.standardsforhighways.co.uk/dmrb/vol5/section3/hd3403.pdf>

***Note: It will be necessary to be authorized to use the system, and in the first instance you are requested to contact the Specification and Policy Team by e-mail to: [standards\\_enquiries@highways.gsi.gov.uk](mailto:standards_enquiries@highways.gsi.gov.uk)***

## Feedback form

The Sector Scheme Advisory Committee for Corrosion Protection of Transportation Infrastructure Assets  
c/o UKAS  
21 – 43 High Street  
Feltham  
Middlesex  
TW13 4UN  
Tel: 0208 917 8400  
Fax: 0208 917 8500

Feedback/Issue Identified:

Suggested Action:

Name:

Organization:

Address:

Contact details:

Date:

## APPENDIX J2: FEEDBACK TO CERTIFICATION BODIES

Feedback relating to certification matters in respect of alleged deficiencies in the product provided under this Sector Scheme shall in the first instance be taken up with the Organization. In the event that the matter cannot be satisfactorily resolved, written feedback shall be made to the Organization's Certification Body, detailing the feedback or issue identified. Contact addresses may be obtained by following the procedure given in Appendix F.

Feedback/Issue Identified:

Organization's Details:

Name:

Address:

Complainants

Name:

Organization:

Address:

Date:

Signed:

## APPENDIX K: THE INTERPRETATION OF CERTIFICATES ISSUED BY CERTIFICATION BODIES

Certification Bodies 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 registration (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 Certification Body accredited by UKAS against the relevant NHSS (See Appendix F of this document) or by a recognised equivalent accreditation body.

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

- a) The scope of registration including specific registration to BS EN ISO 9001:2000 (or 2008) and this Sector Scheme including the Sector Scheme title - National Highway Sector Scheme 19A for Corrosion Protection of Ferrous Materials by Industrial Coatings.
- b) The identification of each and every permanent location where NHSS19A activities are carried out at or from and to which the CoR is applicable.
- c) The services/product offered by the Organization at each location identified on the CoR e.g. for NHSS 19A Corrosion Protection of Ferrous Materials by Industrial Coatings. Workshop and non-specific site are applicable categories with sub-categories as listed below.
- d) Logos for the NHSS, UKAS (or equivalent) and the Certification Body.
- e) The name and address(es) of the Organization
- f) The validity of the certificate (ISO 9001 - 3 yrs)\*
- g) A unique reference number/code
- h) The signature of a relevant Certification Body official with his name and title

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

Categories of work are 'Workshop' or 'Site Works'.

Within each category the following subcategories have been identified:

- Industrial coatings application
- Abrasive blast cleaning,
- Paint spraying
- Thermal (Metal) Spraying
- Water jetting

The following are example models for the certification.

Figure 1 shows the scope of registration on the certificate.

Figure 2 shows an example of an Appendix for scope of registration. Where appropriate the

information on location and their respective scopes may be included on the Appendix for scope of registration.

Figure 3 shows an example of a specific NHSS 19A certificate including typical sample scope.

Figure 4 shows an example of a specific Appendix for scope of registration illustrating typical scope of registration and locations/offices/depots covered by the certificate.

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

Note: These Example Model Certificates of Registration are 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 they 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 in compliance with

**BS EN ISO 9001:2000 (or 2008)  
AND  
THE FOLLOWING NATIONAL HIGHWAY SECTOR SCHEMES**

For the following scope of registration  
*[List of appropriate related works].*  
National Highway Sector Schemes  
*[Sector Scheme number and Title]*  
*[Sector Scheme number and Title]*  
*[Sector Scheme number and Title]*

*[(Appendix ... details the full scope of registration and Appendix ... details the locations covered by this registration)]*

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

Signature

*[Name & Title of Certification Body Official]*

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

**Figure 2:** Example Model Appendix

*[Certification Body Name / Logo]*

**APPENDIX**

To Certificate Number *[Certificate Number]* Appendix No. *[1]* Page 1 of *[1]*

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

*[ORGANIZATION NAME]*

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

Scope of Registration

*[List of appropriate highways related activities]*  
National Highway Sector Schemes  
*[Sector Scheme Number and Title]*  
*[Sector Scheme Number and Title]*  
*[Sector Scheme Number and Title]*

<b><i>Depot, Regional Office etc</i></b>	<b><i>Applicable National Highway Sector Scheme(s)</i></b>	<b><i>Scope of Registration</i></b>
<i>Workshop 1 New road, Newtown</i>	<i>[Sector Scheme Number and title]</i>	<i>[Detailed scope]</i>
	<i>[Sector Scheme Number and title]</i>	<i>[Detailed scope]</i>
<i>Site Works</i>	<i>[Sector Scheme Number and title]</i>	<i>[Detailed scope]</i>

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

Figure 3: Example Model Certificate of Registration for Corrosion Protection

*[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 in compliance with  
**BS EN ISO 9001:2000 (or 2008)**  
**AND**  
**NATIONAL HIGHWAY SECTOR SCHEME 19A**

For the following scope of registration  
*Corrosion Protection of Ferrous Materials by Industrial Coatings for:*

*[1. Workshop (list applicable activities)]*  
*[2. Site Works(list applicable activities)]*

National Highways Sector Schemes  
*19A – National Highway Sector Scheme for Corrosion Protection of Ferrous Materials by Industrial Coatings*

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

Signature  
  
*[Name & Title of Certification Body's Official]*

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

**Figure 4:** Example Model Appendix to Certificate of Registration for corrosion protection

*[Certification Body Name / Logo]*

## APPENDIX 01

To Certificate Number *[Certificate Number]* Appendix No. *[1]* Page 1 of *[1]*

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

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

Scope of Registration:  
*Corrosion Protection of Ferrous Materials by Industrial Coatings for:*

1. *[Workshop]*
  - i) *[Industrial Coatings Application]*
  - ii) *[Abrasive Blast Cleaning]*
  - iii) *[Thermal (Metal) Spraying]*
  - iv) *[Paint Spraying]*
2. *[Site Works]*
  - i) *[Industrial Coatings Application]*
  - ii) *[Abrasive Blast Cleaning]*
  - iii) *[Water jetting ]*
  - iv) *[Paint Spraying]*

National Highway Sector Schemes  
*19A – National Highway Sector Scheme for Corrosion Protection of Ferrous Materials by Industrial Coatings*

<b><i>Depot, Regional Office etc</i></b>	<b><i>Applicable National Highway Sector Scheme(s)</i></b>	<b><i>Scope of Registration</i></b>
<i>Work Shop1 New Road, Newton</i>	<i>NHSS 19A for Corrosion Protection of Ferrous Materials by Industrial Coatings</i>	<i>Workshop i), ii), iii), iv)</i>
<i>Site Works</i>	<i>NHSS 19A for Corrosion Protection of Ferrous Materials by Industrial Coatings</i>	<i>Site i), iii), iv)</i>

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

## APPENDIX L: GUIDANCE TO CLIENTS

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

Reference should be made to Appendix M before deciding whether to specify that Organizations should be registered to NHSS 19A, as registration to other NHSSs may include relevant requirements for corrosion protection of ferrous materials by industrial coatings.

The NHSS for Corrosion Protection of Ferrous Materials by Industrial Coatings 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 corrosion protection of ferrous materials by industrial coatings.

The implementation of the Sector Scheme and development of ICATS is intended to provide:

- a) A qualified workforce competent at carrying out corrosion protection of ferrous materials by industrial coatings
- b) Requirements to evaluate risks and develop processes associated with the application of coatings and the production of an associated comprehensive quality plan for each contract.

It is necessary for the Client to ensure that all those involved in carrying out corrosion protection of ferrous materials by industrial coatings are appropriately trained and skilled, whether or not they are directly employed. The modular training scheme described in this SSD is designed to cater for the range of skills within the overall process of providing corrosion protection to ferrous materials by industrial coatings.

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 UKAS or equivalent and that specific reference is made to relevant Sector Schemes on certificates.

For the Sector Scheme 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 Sector Scheme. Supervisory staff must be instructed to carry out spot checks of identification cards.

Lantra Awards have established and manage a schedule of registered companies that have been registered to National Highways Sector Schemes; free access to the schedule is obtained by logging on to the Lantra Awards website [www.scheduleofsuppliers.com](http://www.scheduleofsuppliers.com). However, it should be noted that only those companies that confirm entry onto the schedule to Lantra Awards are listed. The list of all registered suppliers is held by Lantra Awards (if notified); Clients should contact Lantra Awards by email at [NHSSscheduleofsuppliers@lantra.co.uk](mailto:NHSSscheduleofsuppliers@lantra.co.uk) to ascertain/check the status of company if it is not listed on the schedule.

# APPENDIX M: GUIDANCE FOR OTHER NHSS COMMITTEES AND ORGANIZATIONS REGISTERED TO ANOTHER NHSS, FOR WORK WHICH INCLUDES CORROSION PROTECTION OF FERROUS MATERIALS BY INDUSTRIAL COATINGS

## General Guidance

1. This guidance is primarily of relevance to other NHSS Committees and those Organizations registered to these Sector Schemes. The guidance is designed to enable them to decide how works covered under the scope of this Sector Scheme, which they might be undertaking, should be dealt with. This Appendix should be read in conjunction with Appendix L "GUIDANCE TO CLIENTS".
2. National Highway Sector Schemes likely to be directly affected by this document are:

Scheme 2A	The Design and/or Supply, Installation and Repair of Fences for Infrastructure Works
Scheme 2B	The Supply, Installation and Repair of Vehicle Restraint Systems
Scheme 2C	The Design, Supply, Installation and Repair of Environmental Barriers (Structural) for Infrastructure Works
Scheme 5A	The Manufacture of Parapets for Road Restraint Systems
Scheme 5B	The Installation of Parapets for Road Restraint Systems
Scheme 6	The Manufacture and Verification of Lighting Columns
Scheme 8	The Installation and Maintenance of Highway Electrical Works
Scheme 9A	The Manufacture of Permanent and/or Temporary Road Traffic Signs

Note: the above is not an exhaustive list

3. A NHSS Committee may liaise with a relevant, recognized training and competency assessment body to develop bespoke training and competency assessment relevant to their sector and specific corrosion protection activities. The training and competency assessment requirements shall be described in the appropriate SSD and supporting documents.
4. Details of the training and competency assessment shall be submitted to the SSACCP for acceptance as being appropriate and relevant for the intended purpose but not necessarily equivalent to that provided under NHSS 19A.
5. Where the arrangements described above are in place within a NHSS, it is not intended that Organizations registered under the NHSS and undertaking works covered by it, which includes works covered by the scope of NHSS 19A, should also be registered to NHSS 19A.
6. Relevant NHSS Committees should consider the available options and provide appropriate advice to Organizations on what they need to do to meet their individual specific requirements and work commitments in respect of corrosion protection of ferrous materials by industrial coatings for their field of operations.

## National Highway Sector Scheme Arrangements

The following table describes the current arrangements within other NHSSs for works covered under the scope of this Sector Scheme.

Scheme 2A	NHSS 19A applies
Scheme 2B	NHSS 19A applies
Scheme 2C	NHSS 19A applies
Scheme 5A	NHSS 19A applies
Scheme 5B	NHSS 19A applies
Scheme 6	Bespoke arrangements described within the SSD.
Scheme 8	Bespoke arrangements described within the SSD.
Scheme 9A	NHSS 19A applies

## National Highway Sector Scheme Specific Arrangements

- 1 **NHSS 6** - The Manufacture and Verification of Lighting Columns; **NHSS 8** - The Installation and Maintenance of Highway Electrical Works
- 1 Bespoke training and competency assessment for corrosion protection works within the Highway Electrical Industry are being developed and will be available through a partnership between the Institute of Corrosion and the Highway Electrical Academy. This training and competency assessment in corrosion protection for the Highway Electrical industry is known as HEICATS and is referenced in the SSD for NHSS 6 and NHSS 8 and described in supporting documents.
- 2 Organizations or employees trained and registered under the HEICATS scheme will not entitle them to be registered to ICATS or NHSS 19A.
- 3 For the Highway Electrical industry whether NHSS 6 or NHSS 8, where the scope of the corrosion protection works being undertaken by the Organization extends beyond that covered by the specific training under the HEICATS training programme, full accreditation to the ICATS scheme, following successful training under the ICATS scheme, must be gained. Employees who have already been successfully trained under the HEICATS scheme will be able to take additional modules to gain certification under ICATS.
- 4 A register of employees who have undertaken the HEICATS scheme will be held by ICorr to enable verification of the training records.
- 5 Further details of HEICATS may be obtained from the Highway Electrical Academy.

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