

National Highways Limited

Scheme Delivery Framework (SDF)

Framework Information

Appendix 4

Quality Management

CONTENTS AMENDMENT SHEET

Amend No.	Revision No.	Amendments	Initials	Date
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LIST OF CONTENTS

1.	QUALITY MANAGEMENT	4
1.1.	Introduction	4
1.2.	Requirements	4
1.3.	Levels of Audit	5
1.4.	Internal Audit	5
1.5.	Service Quality Audit	6
1.6.	Contract Assurance Regime Audits	6
1.7.	Additional Audits	6
2.	PROCESS DESIGN AND OWNERSHIP	7
2.1.	Process Design	7
2.2.	Process Ownership	8
2.3.	Process Model	8
3.	NONCONFORMITY AND CORRECTIVE ACTION	17
3.1.	Requirements	17
4.	CONTRACT MANAGEMENT POINTS	17
4.1.	Requirements	17

1. Quality Management

1.1. Introduction

- 1.1.1 This Appendix details the requirements for the *Supplier* to develop, implement and maintain its quality management system and Quality Plan.
- 1.1.2 The Supplier's Quality Plan incorporates all aspects of its Quality Statement and its Commitments Register (if specified in the Form of Agreement) and will be sufficiently detailed to demonstrate how the Supplier intends to provide the service/provide the works under the framework.
- 1.1.3 The Client notifies the Supplier if it considers that the Supplier's Quality Plan does not comply with the requirements of the contract. Following such notification, the Supplier reviews its Quality Plan and submits a report to the Client setting out its proposed changes. If the Client accepts the proposals, the Supplier updates its Quality Plan which becomes the latest Quality Plan.

1.2. Requirements

- 1.2.1. The Supplier operates a quality management system which complies with ISO 9001 by the mobilisation Work Order completion date and ensures that compliance with this standard continues throughout the framework contract and until completion of all Work Orders (including any defects or aftercare period).
- 1.2.2. Notwithstanding the requirement stated in 1.2.1, the *Supplier* also gains certification to ISO9001 by a third-party accreditation body (approved by UKAS or other body recognised by the *Client*) within one year of the go live date.
- 1.2.3. The *Supplier* is responsible for the development, implementation, maintenance and improvement of its quality management system and Quality Plan, including alignment with all processes and procedures (see **Tables 1 & 2**).
- 1.2.4. The Supplier's quality management system exhibits:
 - consistency
 - personal accountability
 - assured delivery and performance.
- 1.2.5. The *Supplier* keeps a controlled copy of its Quality Plan available for inspection at all times by the *Client* or its representatives. The *Supplier* provides a full copy of the quality management system to the *Client* as outlined in 2.1.3 and following any significant changes.

- 1.2.6. The Client notifies the Supplier if it considers that its quality management system or its Quality Plan does not deliver the requirements of the contract. Following such notification, the Supplier submits a report to the Client setting out proposed changes for acceptance. When the Client has accepted them, the proposed changes are to be made within agreed timescales.
- 1.2.7. Any change or revision to the *Supplier's* quality management system or Quality Plan whether raised by either Party, is not a compensation event.
- 1.2.8. If the *Supplier* fails to comply with its quality management system, the *Supplier* accrues Contract Management Points from the date when the failure is identified in accordance with the contract management tables set out in 4.1.1 below.

1.3. Levels of Audit

- 1.3.1. There are various levels of audit applicable to the contract:
 - Supplier's internal audit,
 - service quality audit carried out by the *Client*,
 - contract assurance regime audit (CAR) carried out by the Client.
 - additional audits carried out by the Supplier or Client.

1.4. Internal Audit

- 1.4.1. In accordance with ISO9001, the *Supplier* must undertake internal audits of its quality management system and its Quality Plan, including processes and procedures to ensure that the service or works being provided comply with them and with the contract requirements.
- 1.4.2. The *Supplier* submits an annual internal audit programme to the *Client*. Where amendments to the programme are needed this must be submitted to the *Client* for approval prior to the proposed changes with justification for the changes.
- 1.4.3. Provision must be made for the *Client* to attend all *Supplier* internal audits as an observer. The *Supplier* notifies the *Client* when the audit is taking place and the *Client* decides whether it is appropriate to attend.
- 1.4.4. All internal audit reports must be submitted to the *Client* within one week of completion of the audits.
- 1.4.5. The Supplier as part of the scope of an internal audit, undertakes a review of the following processes and procedures and documents its findings and recommendations in its audit report:
 - Supplier defined processes,

- Client defined processes,
- Standard defined processes.

1.5. Service Quality Audit

- 1.5.1. The Client undertakes Service Quality Audits as part of its assurance regime. These are audits that assess the way the processes and procedures are designed, implemented, maintained and improved.
- 1.5.2. Service quality audits are undertaken by the *Client's* regional team or other persons nominated by the *Client*.
- 1.5.3. The *Supplier* permits access at any reasonable time within working hours to the *Client* (or the nominated persons) to carry out audits. This includes access to Premises, works, materials, employees, Subcontractors, systems and records.

1.6. Contract Assurance Regime Audits

- 1.6.1. The *Client* (National Highways Audit and Assurance Division or other group nominated by the *Client*) may undertake contract assurance regime audits at intervals of six months at the relevant locations, including but not limited to site, premises (depots and associated facilities), head and local offices.
- 1.6.2. Where applicable, the Client's regional teams will liaise with the relevant Supplier's staff regarding the contract assurance regime audits, any subsequent findings and corrective actions.

1.7. Additional Audits

- 1.7.1. The *Client* may undertake additional audits, or instruct the *Supplier* or Others to undertake additional audits, when the total number of Contract Management Points applied exceeds 40 across all three tables.
- 1.7.2. The *Client* determines the location, frequency and extent of additional audits.
- 1.7.3. Specialist advisers may be required to be engaged to determine the root cause of nonconformities. The Supplier pays all the costs of any additional audits, including the costs of any specialist advisors.

2. Process Design and Ownership

2.1. Process Design

- 2.1.1 The *Supplier* designs, implements and maintains the *Supplier* defined processes and procedures (detailed in **Table 1**), either using versions that the *Supplier* has previously developed elsewhere, that proved effective in delivering the required works or services, or by developing them specifically for this contract.
- 2.1.2 The *Supplier* reviews, implements and complies with the *Client's* existing and standard defined processes and procedures (detailed in **Table 2 and 3**), and ensures relevance to this contract and to ensure they will provide the service/provide the works. Examples from **Tables 2 and 3** are:
 - network occupancy defined in the Scope and Network Occupancy Requirements,
 - red & green claims detailed in the Scope, or
 - customer communications detailed in Annex 3.
- 2.1.3 During the Mobilisation Period the *Supplier* develops its Quality Plan, including its processes and procedures and at least 4 weeks before the *go live date*, the *Supplier* submits to the *Client* for acceptance the following:
 - the Supplier's Quality Plan incorporating the requirements from its tendered Quality Statement and Commitments Register (if shown in the Form of Agreement),
 - the Supplier defined processes and procedures in Table 1,
 - a verification statement that the Supplier will implement and adhere to the Client and standard defined processes and procedures in Tables 2 and 3. In addition, the Supplier provides assurance that these processes and procedures are sufficient to ensure that the services or works will be delivered in accordance with the contract. To provide this assurance, the Supplier may propose changes for the Client's acceptance.
- 2.1.4 The *Supplier* will not deliver any part of the service or works unless the relevant processes and/or procedures are accepted by the *Client*.
- 2.1.5 Objectives, inputs and outputs for the *Supplier*'s and the *Client's* defined processes and procedures are detailed in Table 1 and 2.
- 2.1.6 Flowcharts for *Supplier* defined processes must:
 - have swim lanes to demonstrate accountability and responsibility for activities, unless agreed otherwise by the *Client*. Any interaction with parties outside of the control of the *Supplier* should be clearly demonstrated as inputs and outputs,
 - include activity notes and

- be capable of being used as a stand-alone product.
- 2.1.7 An example of process flowcharts and activity notes are shown in Figure 3.
- 2.1.8 Hold Points are required where *Client* acceptance is required to proceed, and these must be shown within the process or procedure in "red" and have a clear documented release mechanism, stating the responsible person within the *Supplier*'s organisation for obtaining the *Client's* acceptance.
- 2.1.9 Stage Gates are required where internal Supplier acceptance is needed to proceed, these are to be shown within the process or procedure in "amber" and have a clear documented release mechanism, stating the responsible person within the Supplier's organisation for release.
- 2.1.10 If during the course of the framework contract or any Work Order under it, the *Client* determines that the *Supplier* is providing the service/providing the works (or part of it) without a specific *Supplier* defined process, the *Client* instructs the *Supplier* to develop and implement a *Supplier* defined process for that service or works, within 2 weeks of such notification by the *Client*.

2.2. Process Ownership

- 2.2.1 The processes are required to have two levels of ownership within the *Supplier's* organisation:
 - Executive Owner. A senior manager within the *Supplier's* organisation who is responsible for providing strategic direction and accountability for the design, implementation, improvement and maintenance of the processes.
 - Implementation Owner. A manager within the Supplier's organisation responsible for the implementation and improvement of the processes. This includes a documented regular review of the process and associated procedures and the dissemination of the process and associated documentation and any amendments to the relevant employees and sub-contractors.

2.3. Process Model

- 2.3.1. The process models as shown in Figures 1, and 2 comprise of three types of processes:
 - Supplier defined processes. These are processes which the Supplier is required to develop and implement during the Mobilisation Period, then maintain during the framework period. Table 1 details the required objectives, inputs and outputs for each process,

- Client defined processes. These are processes which the Supplier must adhere to and are detailed within the Scope, relevant Scope Annexes or within the Client's own quality system and processes. Table 2 details the required objectives, inputs and outputs for each process and the relevant parts of the Scope or associated Scope Annexes applicable,
- Standard defined processes. These are processes which the *Supplier* must adhere to and are detailed in other published and contract referenced documentation e.g. ISO Standards, NEC4 Guidance and flowcharts etc. Table 3 details the publications applicable.
- 2.3.2. There are different collaborative process models for each of the following:
 - Scheme Delivery Framework Lots 1 -11 Construction Works (Figure 1)
 - Scheme Delivery Framework Lot 12 Design Services (Figure 2)

Figure 1: SDF Process Model - Construction

SDF Collaborative Process Model Construction







Figure 2: SDF Process Model - Design

SDF Collaborative Process Model Design





DESIGN SCHEMES

HEALTH, SAFETY AND WELLBEING MANAGEMENT

ENVIRONMENTAL MANAGEMENT

PERFORMANCE MANAGEMENT

CUSTOMER SERVICE

NETWORK OCCUPANCY

COMMERCIAL MANAGEMENT

Table 1: Supplier defined processes

Process	Purpose / Objectives	Inputs	Outputs
Risk Management	To ensure identification, analysis, mitigation, monitor, escalation and management of risk.		Risk managed.
Supply Chain Management	To ensure best value, effective management and due diligence within the supply chain.	Decision to procure resources.	Works complete.
Deliver Schemes	To efficiently plan, manage and construct defect free works as designed and planned including the mitigation of risk and the avoidance of site changes to scheme closed out effectively. The process must incorporate: Scheme risk management CDM duties - Principal contractor Construction phase plan Data provision		Scheme Completion
Design Schemes	To produce effective solutions for construction. The process must incorporate: • Technical queries • Health and safety file completion		Scheme Completion
Deliver Incident Response	To safely, effectively and efficiently execute the appropriate elements of the Incident Response Plan, working closely with National Highways' control room, traffic officers and police services.	Incident. Instruction. Incident Response Plans.	Incident Clearance. Network Restored.

Table 2: Client defined processes

Process	
Commercial Management	ECC/PSC Scope, Section 4 ECC/PSC Scope Annex 1 – Cost Capture Data Requirements
Network Occupancy	Appendix 2 - Reference documents
Customer Service	ECC/PSC Scope Annex 4 – Customer Service
Early Contractor Involvement - ECI	Framework Information 3.1
Performance Management	Appendix 11 – Performance Management
Red and Green Claims	Scope, Section 20
Additional Management Duties	RACI

Table 3: Standard defined processes

Process	ISO Standard
Health, Safety and Wellbeing Management	ISO 45001
Environmental Management	ISO 14000
IT Security	ISO 27001
Risk Management	ISO 31000
Quality Management	ISO 9001

Process Title (as defined in Figure 1, 2 or 3) Objective Define succinctly the purpose of the process and the output or outcome it is intended to achieve (as defined in Table 1) Role or position of those responsible as defined in Para 2.2.1 Input As defined in Table 1 **Executive Owner** Role or position of those responsible as defined in Para 2.2.1 Output As defined in Table 1 Implementation Owner **Activity Owner** Activity Owner **Activity Owner Activity Owner** Activity 1 Activity 2 Activity 3 Activity 4 Activity 5 Stage gate (Treat like an activity - must summarise what the stage gate is for what happens, who is accountable for making that happen and what the condition/ actions are for release, or reference that within activity notes) Role Accountable Release Mechanism Activity 6 Activity 7 Hold Point (Treat like an activity – must describe what the hold point is for, what happens who is accountable for making that happen and what condition/actions are for release or reference that within Activity Notes) Activity 7 Includes links to other Sub-Processes and procedures, inputs and outputs within the diagram inputs and output should be shown on the swim lanes or in dedicated Input/ Output columns each side. Process flows must not contain Highways England swim lanes.

Figure 3: Example of 'swim-lane' process flowchart and activity notes)

Process Title (as defined in Figure 1, 2 or 3)			Date: date prepared or updated Page 1 of 1
Objective		Define succinctly the purpose process and the output or out intended to achieve (as define	come it is
Input		As defined in Table 1	
Output		As defined in Table 1	
Executive Process (Owner	Role or position of those response defined in Para 2.2.1	onsible as
Implementation Ov	wner	Role or position of those respondefined in Para 2.2.1	onsible as
Activity 1	Brief de	scription of the activity unde	rtaken
- ·		ity undertaken at this stage. Th method statements, forms, reg	
Activity 2 etc	Brief de	scription of the activity unde	rtaken
Ditto for the activities u	ındertake	n at this stage.	
Activity 5 Stage Gate as defined in para 2.19	Brief de	scription of the stage gate	
Treat like an activity and include a description of what the stage gate is for, what happens, who is accountable for making that happen and what the conditions/actions are for release.			
Activity 6			
Activity 7 Hold Point as defined in para 2.18	Brief description of the hold point		
Treat like an activity and include a description of what the hold point is for, what happens, who is accountable for making that happen and what the conditions/actions are for release.			
Activity 8			

3. NONCONFORMITY AND CORRECTIVE ACTION

3.1. Requirements

- 3.1.1. The purpose of this section is to describe the minimum requirements to be fulfilled by the *Supplier* when submitting reports of nonconformities to the *Client*.
- 3.1.2. The reporting of nonconformities, corrective action plans and Contract Management Points is to be done by utilising the combined nonconformity and Contract Management Point Register.
- 3.1.3. The Nonconformity Register is to be submitted to the *Client*.
 - within 3 working days of a nonconformity being raised, or
 - monthly where no nonconformities have been raised in that month, or
 - for Client approval to "close off" a nonconformity, within 3 working days of the closure and should include evidence demonstrating why the Nonconformity should be closed.
- 3.1.4. A suitable action plan for each nonconformity must be submitted to the *Client* for approval within 7 days of identification.
- 3.1.5. If the *Supplier* needs to change the corrective actions and/or target date to a nonconformity, this must be submitted to *Client* for approval a calendar month prior to the original target date with reasonable justification for approval.

4. CONTRACT MANAGEMENT POINTS

4.1. Requirements

- 4.1.1. Contract Management Points accrue for the failures listed in the Contract Management Points Tables. Contract Management Points are points accrued by the *Supplier* in accordance with the Tables below. Contract Management Points accrue for the failures listed in the three Tables whether identified by the *Supplier* or the *Client*. Contract Management Points accrue across the framework contract and all Work Orders.
 - a) Table 4: Contract Management Points Health & Safety,
 - b) Table 5: Contract Management Points Delivery, and
 - c) Table 6: Contract Management Points Quality.

- 4.1.2. Contract Management Points accrue for all failures whether identified by the Supplier or the Client or the relevant UKAS accredited certification body. Contract Management Points are awarded and administered by the Supplier.
- 4.1.3. Contract Management Points accrue from the earlier of:
 - the date of identification, or
 - the date of the audit if raised during an audit, or
 - the date of the *Client's* instruction.
- 4.1.4. If the *Supplier* fails to properly accrue Contract Management Points the *Client* instructs the *Supplier* to accrue the Contract Management Points.
- 4.1.5. The *Supplier* maintains a combined Nonconformity and Contract Management Point Register.
- 4.1.6. The Contract Management Point Register is to be submitted:
 - within 3 working days of Contract Management Points being accrued or removed, or
 - for Client approval to remove Contract Management Points, or
 - monthly where no Contract Management Points have been accrued or removed.
- 4.1.7. If the total number of Contract Management Points in effect at any time are more than (deemed to be the Contract Management Point threshold):
 - a) 100 combined points across Tables 4, 5 and 6, or
 - b) 40 points from any individual Table,

the *Supplier* and the *Client* meet within one week to consider ways of reducing the number of Contract Management Points in effect to be below the specified threshold and to avoid accruing further Contract Management Points. The *Supplier* submits a report to the *Client* within one week of the meeting setting out:

- The actions agreed at the meeting and any other actions which the Supplier proposes to take immediately to reduce the number of Contract Management Points in effect to below the specified threshold and to avoid accruing further Contract Management Points.
- The *Client* does not accept the *Supplier*'s proposals, or the *Supplier* does not take the agreed actions, the *Client* serves a contract warning notice on

the *Supplier*. Within one week of receipt of the contract warning notice, the *Supplier* submits a report to the *Client* setting out the actions which the *Supplier* has taken and what further or alternative actions it proposes to take to reduce the number of Contract Management Points in effect to be below the specified threshold.

- 4.1.8. Following the issue of a contract warning notice and until the number of Contract Management Points in effect is reduced to be below the specified threshold, the *Client* may impose the consequences as described in Z151 of the *conditions of contract*.
- 4.1.9. Until the number of Contract Management Points in effect is reduced to be below the specified threshold, or until the *Client* exercises its rights in relation to Z151 (whichever is sooner), the *Supplier* takes the actions detailed in its reports and submits weekly update reports to the *Client* setting out the actions it has taken, the results of those actions and the actions which are still to be taken by it.

4.1.10. A failure by the *Supplier* to:

- take actions to reduce the number of Contract Management Points in effect to be below the specified threshold, or
- comply with a corrective action plan that has been accepted by the Client,

is treated as a substantial failure by the *Supplier* to comply with its obligations under the contract.

Table 4: Contract Management Points - Health and Safety

Failure		Contract Management Points	Period of Effect
1	No Health & Safety Manager in post	25	Until <i>Client</i> is notified of the appointment of the Health & Safety Manager
2	Failure to report incidents in line with GG128	5 per incident	Until incident reported and investigation report issued
3	Failure to complete scheme health and safety file (or failure to provide necessary information for the health and safety file) within contractual timescales	5 per scheme	Until scheme health and safety file complete and submitted, or until the necessary information has been submitted
4	Failure to have a complete	10	6 months

	Health & Safety Maturity Matrix (HSMM) Action Plan in place and operating as required by this contract		
5	Failure to update HSMM Plan as required	5	Until action is complete
6	Failure to take an action detailed in the agreed HSMM Plan	5	Until action is complete
7	Failure to have a Health & Safety Management System in place and operating as required by the contract	25	Until the H&S Management System is in place and certified.

Table 5: Contract Management Points - Delivery

Fail	ure	Contract Management Points	Period of Effect
1	Failure to submit a quotation and programme within the required contractual timeframes	5 per scheme	Until the quotation and programme are submitted and accepted by the <i>Client</i>
2	Failure to maintain an agreed programme in accordance with contractual requirements	5 per scheme	Until the Scheme Completion Certificate is issued
3	Failure to notify and correct Defects in accordance with contractual requirements	5 per defect	Until defect has been corrected'
4	Failure to submit defined cost data in the required format and via the templates provided	5 per scheme	Until the defined cost data is submitted in the required format
5	Failure to submit final account and activity benchmark data in accordance with contractual timescales	5 per scheme	Until final account and activity benchmark data has been submitted

Table 6: Contract Management Points - Quality

Failure		Contract Management Points	Period of Effect
1	No Quality Manager, Commercial Manager or General Manager (as approved by the <i>Client</i>) in post	25 per post	Until <i>Client</i> is notified of the appointment of the Quality Manager, Commercial Manager or General Manager
2	Failure to have a complete quality management system (including Supplier defined processes) and Quality Plan in place and operating	25	Until Supplier submits the Quality Management System (including Supplier defined processes) and Quality Plan and these are accepted by the Client
3	Failure to identify a nonconformity	5 per nonconformity	6 months
4	Failure to complete and submit a corrective action report Within seven days of the identification of a nonconformity	5 per report	Until the report is received by the <i>Client</i> .
5	Failure to rectify Nonconformity in the time set out in a corrective action plan	5 per nonconformity	Until the nonconformity is rectified and accepted by the <i>Client</i> .
6	Failure to prevent a repeat nonconformity	5 per repeat Nonconformity	6 months
7	Failure to correct the quality management system (including Client-defined processes, in accordance with this Annex) and Quality Plan in the manner set out in a corrective action plan	5 per Nonconformity	6 months
8	Failure to carry out an internal audit	15 per audit	Until completed audit report is received by the Client
9	Carrying out work without release of Hold Point	10 per failure	6 months
10	Failure to make records available for inspection by the <i>Client*</i> within period of reply.	10 per failure	Until the records are made available

11	Failure to provide access for <i>Client</i> audits	10 per failure	Until access is allowed
12	Failure to notify the <i>Client</i> of changes to processes and procedures (including <i>Client-defined</i> processes and associated procedures)	5 per failure	6 months
13	Failure identified by the Client during an audit (High Risk only from CAR or equivalent Audits)	5 per Nonconformity	6 months
14	Failure by the Supplier to accrue Contract Management Points or Supplier has been instructed by the Client to accrue Quality Management Points	The number of points that should have been accrued, and an additional number of Points equivalent to the Points that should have been accrued	The period applicable to the original failure, and 6 months from the actual accrual date of the Contract Management Points that should have been accrued.

^{*}This includes all reporting as required by the contract, including but not limited to, monthly health and safety data submissions, commercial submissions and Collaborative Performance Framework reports.