National Highways Limited

Pavement Delivery Framework

NEC 4 Framework Contract

(June 2017)

Framework Information

Appendix 04 - Quality Management

CONTENTS AMENDMENT SHEET

Amend. No.	Revision No.	Amendments	Initials	Date
0	0	Tender issue	JW	15/03/2022
1	1	1.2.2 Removal of ISO 31000 (risk) certification requirement	LJR	19/04/2022

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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 Submission and its Tender Commitments Register (specified in the Form of Agreement) and will be sufficiently detailed to demonstrate how the *Supplier* intends to Provide the Works under the framework contract and any Work Orders.

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 framework 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* complies with and operates management systems as follows:

- a quality management system complying with ISO 9001:2015 and ISO 9004:2018,
- a formal health and safety management system which complies with ISO 45001:2018 or another equivalent and relevant standard accepted by the *Client*,
- a health and safety management system that aligns to HSG65,
- an environmental management system complying with ISO 14001:2015,
- a collaboration framework complying with ISO 44001:2017 (that encompasses the behaviours, organisational culture and management processes that provide a common platform to support effective collaborative business relationships), and
- a risk management system and processes that follow the guidelines contained in ISO 31000:2018 in relation to risk management

(see links in **Appendix 02**).

1.2.2 Where a management system is certifiable against the standards above, the *Supplier* obtains certification from a relevant UKAS accredited body (see links in **Appendix 02**) within the timescales set out below and submits to the *Client* a copy of each certificate and audit report within one week after it is obtained. The *Supplier* maintains this certification for the full duration of the framework contract and all Work Orders.

The *Supplier* obtains certification within the following timescales

- ISO 9001 within 52 weeks of the *go live date*,
- ISO 45001 by the *go live date*,
- ISO 14001 within 52 weeks of the *go live date*,
- ISO 44001 within 156 weeks (3 years) of the *go live date* and

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 and
- 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 framework 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 framework contract

- *Supplier's* internal audit,
- service quality audit carried out by the *Client*,
- contract assurance regime audit (CAR) carried out by the *Client* and
- additional audits carried out by the *Supplier or Client.*

1.4. **Internal Audit**

1.4.1 In accordance with ISO 9001, the *Supplier* must undertake internal audits of its quality management system and its Quality Plan, including processes and procedures to ensure that the works being provided comply with them and with the requirements of the framework contract and any Work Orders under it.

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 acceptance 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, the *Supplier* 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 60 across all four tables in 4.1.1 below.

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 by developing them specifically for this framework contract.

2.1.2 The *Supplier* reviews, implements and complies with the *Client's* existing and standard defined processes and procedures (detailed in **Tables 2 and 3**), and ensures relevance to this framework contract and to ensure they will Provide the Works. Examples from **Tables 2 and 3** are

- network occupancy defined in the Scope and "GM 702 Operational Requirements for Network Occupancy" in **Annex 20** and **Appendix 02**, and
- customer communications detailed in **Annex 3**.

2.1.3 During the framework contract mobilisation 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 Submission and Tender Commitments Register,
- 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 *works* will be delivered in accordance with the framework 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 *works* unless the relevant processes and 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 2.**

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 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 10 working days 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 subcontractors.

2.3. **Process Model**

2.3.1 The process models as shown in **Figures 1** comprises three types of processes

- ***Supplier* defined processes**. These are processes which the *Supplier* is required to develop and implement before the *go live date*, then maintain during the framework contract. **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.

Figure 1: PDF Process Model

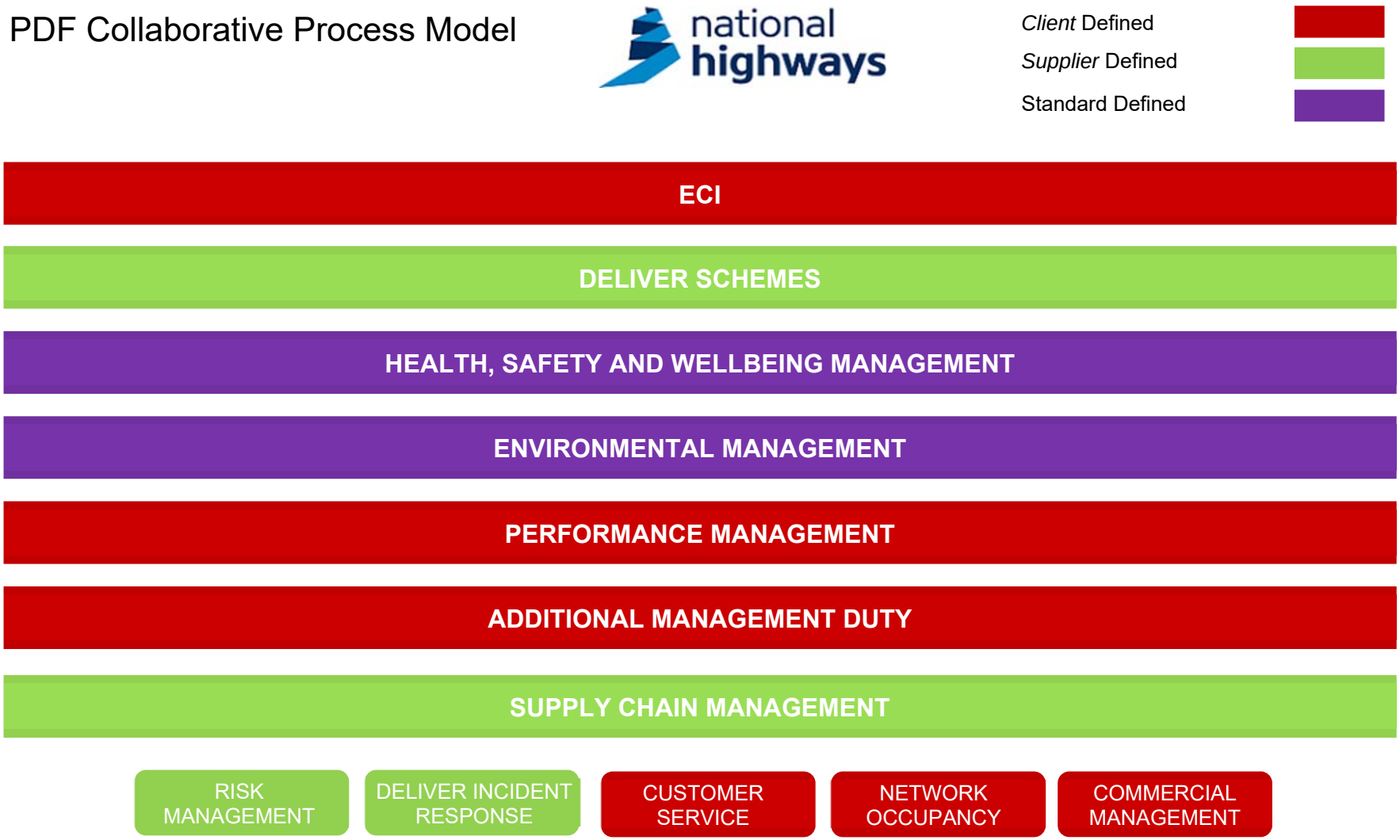


Table 1: *Supplier* defined processes

Process	Purpose / Objectives	Inputs	Outputs
Risk Management	To ensure identification, analysis, mitigation, monitor, escalation and management of risk.	Potential risk identified.	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, to include 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 • carbon reduction plan • Data provision	Instruction	Scheme Completion
Deliver Incident Response	To safely, effectively and efficiently execute the appropriate elements of the Incident Response Plan, working closely with the *Client's* control room, traffic officers and the police services.	Incident. Instruction. Incident Response Plans.	Incident Clearance. Network Restored.

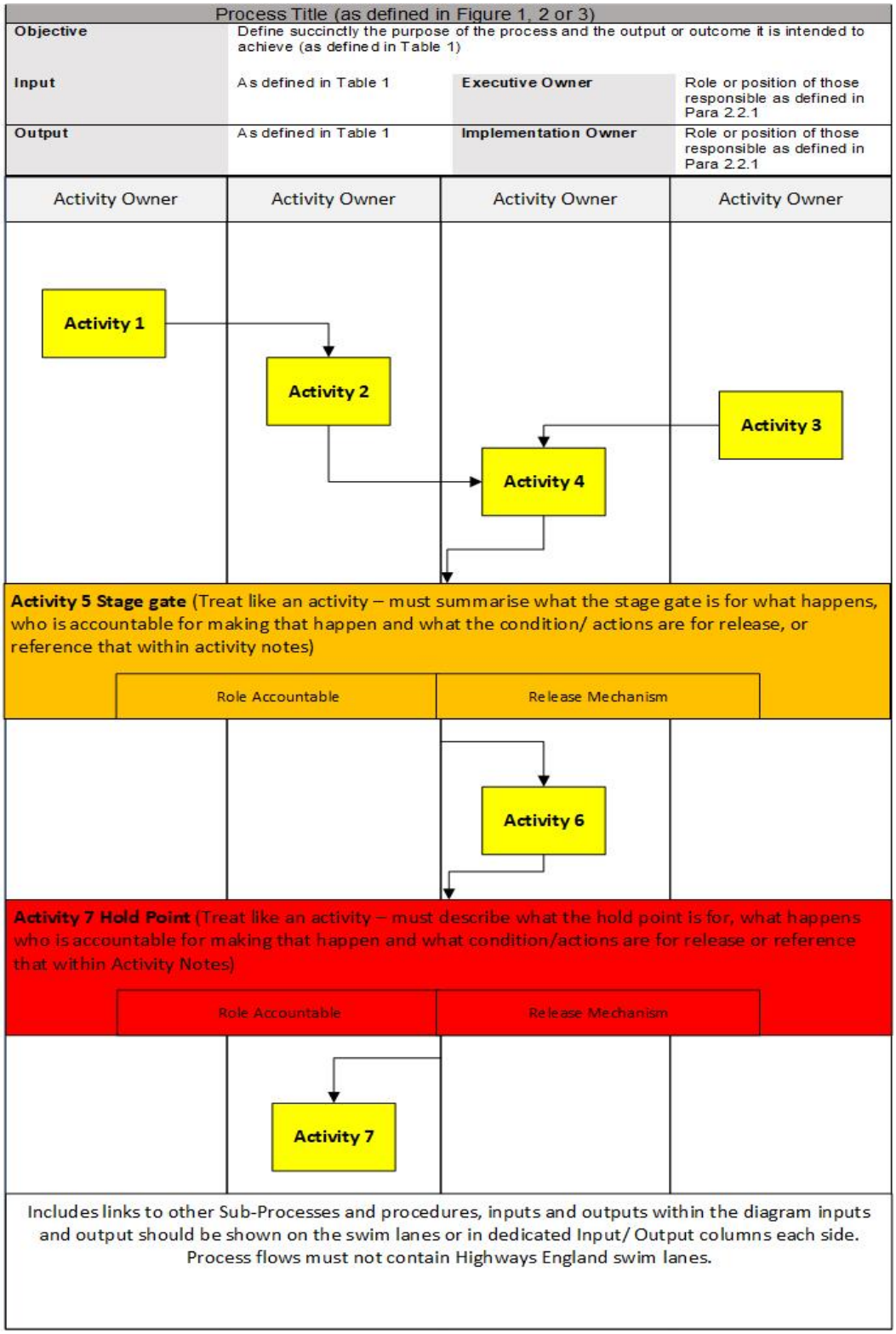
Table 2: *Client* defined processes

Procedure	Location
Commercial Management	Main Contract Work Order Scope Annex 18 – Cost Capture
Network Occupancy	Appendix 02 - Reference documents and Scope Annex 20
Customer Service	Main Contract Work Order Scope section S 240
Early Contractor Involvement - ECI	User Guide for Scheme Management - Scheme Passport and Stage Gates (3D) Framework Information section 5.11
Performance Management	Framework Information section 9.50
Additional Management Duties	Main Contract Work Order Scope sections S 120 and S1127

Table 3: Standard defined processes

Process	ISO Standard
Health, Safety and Wellbeing Management	ISO 45001
Environmental Management	ISO 14001
IT Security	ISO 27001
Risk Management	ISO 31000
Quality Management Systems	ISO 9001
Quality Management	ISO 9004
Collaboration	ISO 44001

Figure 2: Example of 'swim-lane' process flowchart and activity notes)



Process Title (as defined in Figure 1, 2 or 3)	Date: date prepared or updated
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Objective	Define succinctly the purpose of the process and the output or outcome it is intended to achieve (as defined in Table 1)
Input	As defined in Table 1
Output	As defined in Table 1
Executive Process Owner	Role or position of those responsible as defined in Para 2.2.1
Implementation Owner	Role or position of those responsible as defined in Para 2.2.1
Activity 1	**Brief description of the activity undertaken**
Detailed description of the activity undertaken at this stage. This should also refer to associated Procedures, method statements, forms, registers etc.	
Activity 2 etc	**Brief description of the activity undertaken**
Ditto for the activities undertaken at this stage.	
Activity 5 Stage Gate as defined in para 2.19	**Brief description 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 Points register.

3.1.3 The combined nonconformity and Contract Management Points register is to be submitted to the *Client*

- within 3 working days of a nonconformity being raised,
- monthly where no nonconformities have been raised in that month or
- for *Client* acceptance 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 Following identification of a nonconformity the *Supplier* submits within three working days, a nonconformity report covering

- the unique reference for the nonconformity,
- a brief description stating which requirement is not being fulfilled and in what way,
- the effect both current and potential, and
- the likely cause i.e. what aspect of the Quality Plan or compliance with the Quality Plan is not functioning properly.

3.1.5 A suitable action plan for each nonconformity must be submitted to the *Client* for acceptance within seven days of identification of the nonconformity, covering

- the unique reference of the nonconformity,
- description – this could be as per the nonconformity report or expanded,
- details of the corrective action proposed,
- categorisation of the nonconformity into high, medium or low risk,
- for high and medium risk, an analysis of the root cause(s) of the nonconformity commensurate with risk i.e. what is the evidence-based underlying truth about what is causing the nonconformity to occur,
- what aspect of the Quality Plan needs to be addressed i.e. which of the *Supplier’s* processes is not performing as required,

- what the corrective action will address, for example - is it a process design that needs changing or is it an execution issue (i.e. that requires additional training, tools etc.),
- for high and medium risk, a detailed action plan, commensurate with risk, with planned correction date and milestones – the plan should contain named individuals for the actions and for high risk the plan should nominate the relevant executive process owner from the *Supplier* to take overall accountability for the plan. A brief action plan is required for low risk,
- method of reporting progress to the *Client*,
- the method to be used to confirm successful correction of the nonconformity to allow that to be recorded on the Contract Management Point register. Any envisaged circumstance that will allow the *Client* to confirm the correction and
- adjustments to be made to the quality management system in order to prevent recurrence of the nonconformity.

3.1.6 The *Supplier* keeps the register of nonconformities updated covering

- the unique reference
- date of identification
- identification method for example through performance management, by testing or by audit etc.
- date of corrective action plan
- date nonconformity corrected (i.e. confirmed as such by the *Supplier*),
- traffic light type notation,
    - red – indicates nonconformity identified but no corrective action plan prepared – also where corrective action not complete by planned date,
    - amber – corrective action plan prepared and action in progress and within planned parameters,
    - green – corrective action complete and accepted by the *Supplier*.

3.1.7 If the *Supplier* needs to change the corrective actions or target date to a nonconformity, this must be submitted to the *Client* for acceptance a calendar month prior to the original target date, with reasonable justification.

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 **Tables 4 - 7** below. 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,

c) **Table 6**: Contract Management Points - Quality and

d) **Table 7**: Contract Management Points - Environmental.

4.1.2 Contract Management Points accrue for all failures listed in the four tables (**Tables 4 – 7**) whether identified by the *Supplier* or the *Client* or the relevant UKAS accredited certification body. Contract Management Points are administered by the *Supplier*.

4.1.3 Contract Management Points accrue from the earlier of

- the date of identification,
- 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 combined nonconformity and Contract Management Point register is to be submitted

- within 3 working days of Contract Management Points being accrued or removed,
- for *Client* acceptance 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 the Threshold Level, which is

a) 120 combined points across **Tables 4, 5 ,6 and 7** 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 Threshold Level 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 Threshold Level and to avoid accruing further Contract Management Points,

if 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 Threshold Level.

4.1.8 Following the issue of a contract warning notice or until the number of Contract Management Points in effect is reduced to below the Threshold Level, the *Client* may impose the consequences set out in section 5.5 of the Framework Information and in Z151 of the framework contract *conditions of contract***.**

4.1.9 Until the number of Contract Management Points in effect is reduced to below the Threshold Level 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 Threshold Level 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 framework contract or any Work Order.

Table 4: Contract Management Points - Health and Safety

Failure		Contract Management Points	Period of Effect
1	No Health and Safety Manager in post	25	Until *Client* is notified of the appointment of the Health and 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 Supply Chain Maturity Matrix Action Plan (SCMM Action Plan) in place and operating as required by the framework contract	10	6 months
5	Failure to update SCMM Action Plan as required	5	Until action is complete
6	Failure to take an action detailed in the agreed SCMM Action Plan	5	Until action is complete
7	Failure to have a health and safety management system in place and operating as required by the framework contract	25	Until the health and safety management system is in place and certified.

Table 5: Contract Management Points - Delivery

Failure		Contract Management Points	Period of Effect
1	Failure to submit a programme as required by the framework contract	5 per Scheme	Until the programme is submitted and accepted by the *Client*
2	Failure to maintain an accepted programme as required by the framework contract	5 per Scheme	Until the Scheme Completion Certificate is issued
3	Failure to submit a quotation as required by the framework contract	5 per Scheme	Until the quotation is submitted to the *Client*
4	Failure to notify or correct Defects as required by the framework contract	5 per Defect	Until Defect has been notified or corrected
5	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
6	Failure to submit final assessment and activity benchmark data as required by the framework contract	5 per Scheme	Until final assessment and activity benchmark data has been submitted

Table 6: Contract Management Points - Quality

Failure		Contract Management Points	Period of Effect
1	No Framework Director, Pavement Engineer / Technical Specialist, Construction Manager, Communications Manager, or Commercial Manager in post	25 per post	Until *Client* is notified of the appointment of the Framework Director, Pavement Engineer / Technical Specialist, Construction Manager, Communications Manager, or Commercial 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 plan within seven days of the identification of a nonconformity	5 per plan	Until the plan is received by the *Client.*
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 *Client.*
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 Appendix) 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 *Client** within *period of reply*.	10 per failure	Until the records are made available
11	Failure to provide access for *Client* audits	10 per failure	Until access is allowed
12	Failure to notify the *Client* of changes to processes and procedures (including *Client* defined 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 Contract 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.

Table 7: Contract Management Points - Environmental

Failure		Contract Management Points	Period of Effect
1	Failure to meet a SMART environmental or carbon Tender Commitment (of which there should be one per year).	5 per failed Tender Commitment	Until *Supplier* delivers the Tender Commitment
2	No Environmental Manager in post	25	Until *Client* is notified of the appointment of the Environmental Manager
3	Failure to implement an accredited carbon management system by 2025	15	Until *Supplier* has implemented an accredited carbon management system
4	Failure to use warm mixed asphalt to clause 908 of the MCHW where technically permissible	5 per Scheme	Until justification has been accepted by the *Client*
5	Failure to report on carbon usage associated with activities as per section S 269 of the Scope	5 per failed submission	6 months