



Highways England Company Limited

Area 12

Asset Delivery (AD)

Scope

Annex 16

Quality Management

CONTENTS AMENDMENT SHEET

Amend No.	Revision No.	Amendments	Initials	Date
0	0	Contract Issue	SOS	Nov 2020

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1. Quality Management

1.1 Introduction

- 1.1.1 This annex details the requirements for the Contractor to develop, implement and maintain its Quality Management System and Quality Plan.
- 1.1.2 The Contractor'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 Contractor intends to Provide the Service.
- 1.1.3 The *Service Manager* notifies the Contractor if it considers that the Contractor's Quality Plan does not comply with the requirements of the contract. Following such notification, the Contractor reviews its Quality Plan and submits a report to the *Service Manager* setting out its proposed changes. If the *Service Manager* accepts the proposals, the Contractor updates its Quality Plan which becomes the latest Quality Plan.

1.2 Requirements

- 1.2.1 The Contractor will operate a quality management system which will comply to ISO 9001 by the end of the Mobilisation Period and will ensure that compliance to this standard continues throughout the Service Period.
- 1.2.2 Notwithstanding the requirement stated in 1.2.1, the Contractor will also gain certification to ISO9001 by a third-party accreditation body (approved by UKAS or other body recognised by the *Client*) within one year of the *access date or go live date*.
- 1.2.3 The Contractor 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 **Process Model Tables**).
- 1.2.4 The Contractor's Quality Management System must exhibit:
- Consistency
 - Personal Accountability
 - Assured deliver and performance.
- 1.2.5 The Contractor keeps a controlled copy of its Quality Management System available for inspection at all times by the *Service Manager*.

- 1.2.6 The *Service Manager* notifies the Contractor if it considers that its Quality Management System does not comply with the requirements of the contract. Following such notification, the Contractor submits a report to the *Service Manager* setting out proposed changes for acceptance. When the *Service Manager* has accepted the proposed changes are to be made within agreed timescales.
- 1.2.7 Any change or revision to the Contractor's Quality Management System or Quality Plan whether raised by either Parties, is not a compensation event.
- 1.2.8 If the Contractor fails to comply with its Quality Management System, the Contractor accrues Quality Management Points from the date when the failure is identified in accordance with the **Quality Table**.

1.3 Levels of Audit

- 1.3.1 There are various levels of audit applicable to this contract:
- Contractor's Internal Audit,
 - Service Quality Audit carried out by the *Client*,
 - Contract Assurance Regime audit carried out by the *Client*.
 - Additional Audits carried out by the Contractor or *Client*.

1.4 Internal Audit

- 1.4.1 In accordance with ISO9001, the Contractor must undertake internal audits of its Quality Management System, its Quality Plan, including Processes and Procedures to ensure that the *service* being provided complies with them and contract requirements.
- 1.4.2 The Contractor must submit an annual internal audit programme to the *Client*. Where amendments to the programme are needed this must be submitted to the *Service Manager* for approval prior to the proposed changes with justification for the changes.
- 1.4.3 Provision must be made for the *Service Manager* to attend all Contractor internal audits as an observer. The *Service Manager* will decide whether it is appropriate to attend after notification.
- 1.4.4 All internal audit reports must be submitted to the *Service Manager* within one week of completion of the audits.

1.4.5 The Contractor as part of the scope of an internal audit, will undertake a review of the following Processes and Procedures and will document findings and recommendations in its audit report:

- Contractor defined Processes,
- *Client* defined Processes,
- Standard defined Processes.

1.5 Service Quality Audit

1.5.1 The *Client* will undertake 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 *Service Manager*.

1.5.3 The Contractor 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* (Highways England Audit and Assurance Division or other group nominated by the *Service Manager*) undertakes 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 The *Client's* regional teams will liaise with the relevant Contractor's staff regarding the Contract Assurance Regime audits and their subsequent findings.

1.7 Additional Audits

1.7.1 The *Service Manager* may instruct the Contractor or Others to undertake additional audits when the number of Quality Management Points exceeds 25.

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 Contractor pays all the costs of any additional audits, including the costs of any specialist advisers.

2. Process Design and Ownership

2.1 Process Design

- 2.1.1 The Contractor will design, implement and maintain the Contractor defined Processes and Procedures (detailed in **Table 1**), either using versions the Contractor has previously developed elsewhere, that proved effective in delivering the required works or services, or developing them specifically for this contract.
- 2.1.2 The Contractor will review, implement and comply with existing *Client* and Standard defined Processes and Procedures (detailed in **Table 2 and 3**), to ensure relevance to this contract and to ensure they will Provide the Service. 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 12.
- 2.1.3 During the Mobilisation Period the Contractor will develop its Quality Plan, including its Processes and Procedures and at least 4 weeks before the *access date or go live date*, the Contractor will submit to the *Service Manager* for approval the following:
- the Contractor's Quality Plan incorporating the requirements from its tendered Quality Statement and Commitments Register (if shown in the Form of Agreement),
 - the Contractor defined Processes and Procedures in **Table 1**,
 - a verification statement that the Contractor will implement and adhere to the *Client* and Standard defined Processes and Procedures in **Tables 2 and 3**. In addition, the Contractor provides assurance that these Processes and Procedures ensure that the *services* will be delivered in accordance with the contract. To provide this assurance, the Contractor may propose changes for the *Service Manager's* approval.
- 2.1.4 The Contractor will not deliver any part of the *service* unless the relevant Processes and/or Procedures are approved by the *Service Manager*.
- 2.1.5 Objectives, Inputs and Outputs for the Contractor's and the *Client's* defined Processes and Procedures are detailed in **Table 1 and 2**.
- 2.1.6 Flowcharts for Contractor defined Processes must:
- have swim lanes to demonstrate accountability and responsibility for activities, unless approved otherwise by the *Service Manager*. Any interaction with parties outside of the control of the Contractor should be clearly demonstrated as inputs and outputs,
 - include activity notes and
 - be capable of being used as stand-alone product.

- 2.1.7 An example of process flowcharts and activity notes are shown in **Figure 4**.
- 2.1.8 Hold Points are required where *Service Manager* approval 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 Contractor’s organisation for obtaining the *Client’s* approval.
- 2.1.9 Stage Gates are required where internal Contractor approval 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 Contractor’s organisation for release.
- 2.1.10 If during the Service Period, the *Service Manager* determines that the Contractor is not Providing the Service (or part of it) without a specific Contractor defined Process, the *Service Manager* instructs the Contractor to develop and implement a Contractor defined Process for that service, within 2 weeks of such notification by the *Service Manager*.

2.2 Process Ownership

- 2.2.1 The processes are required to have two levels of ownership within the Contractor’s organisation:
- **Executive Owner.** A senior manager within the Contractor’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 Contractor’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, 2 and 3** comprise three types of Processes:
- **Contractor defined Processes.** These are Processes which the Contractor is required to develop, implement and maintain during the Mobilisation Period. **Table 1** details the required objectives, inputs and outputs for each Process,
 - **Client defined Processes.** These are Processes which the Contractor 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 Contractor 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 relevant parts of these publications applicable,

2.3.2 There are different Process Models for the Maintenance and Response, Design Services and Construction Works Framework Contracts.

2.3.3 The Design Services and Construction Works Framework Process Models are in accordance with Highways England's 3D Process as seen at the top of the Process Models.

Figure 1: M&R Process Model

M&R Collaborative Process Model



- Client defined
- Contractor defined
- Standard defined

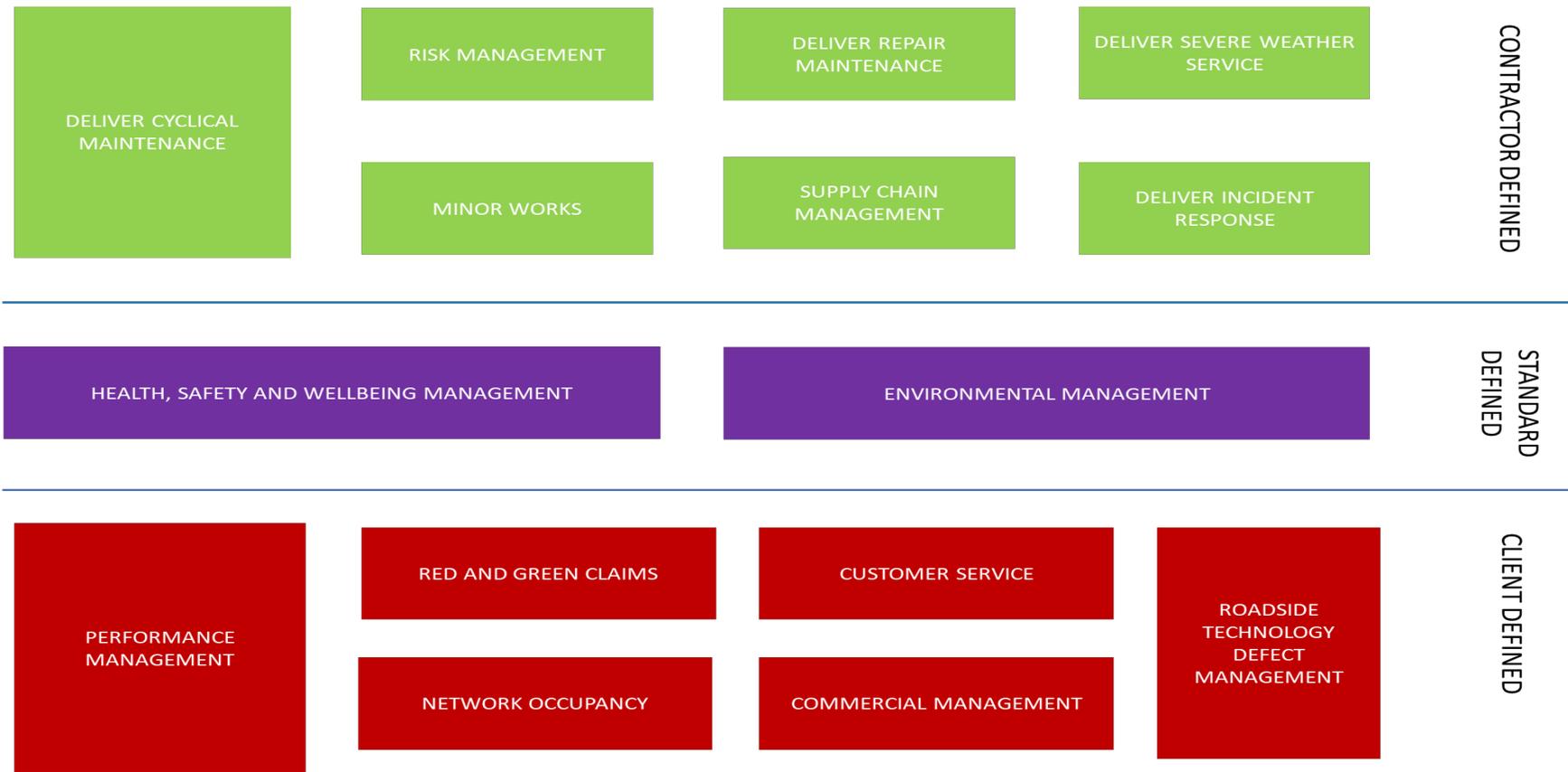


Figure 2: DSC Process Model

DSC Collaborative Process Model



- Client Defined
- Contractor Defined
- Standard Defined



Figure 3: CWF Process Model

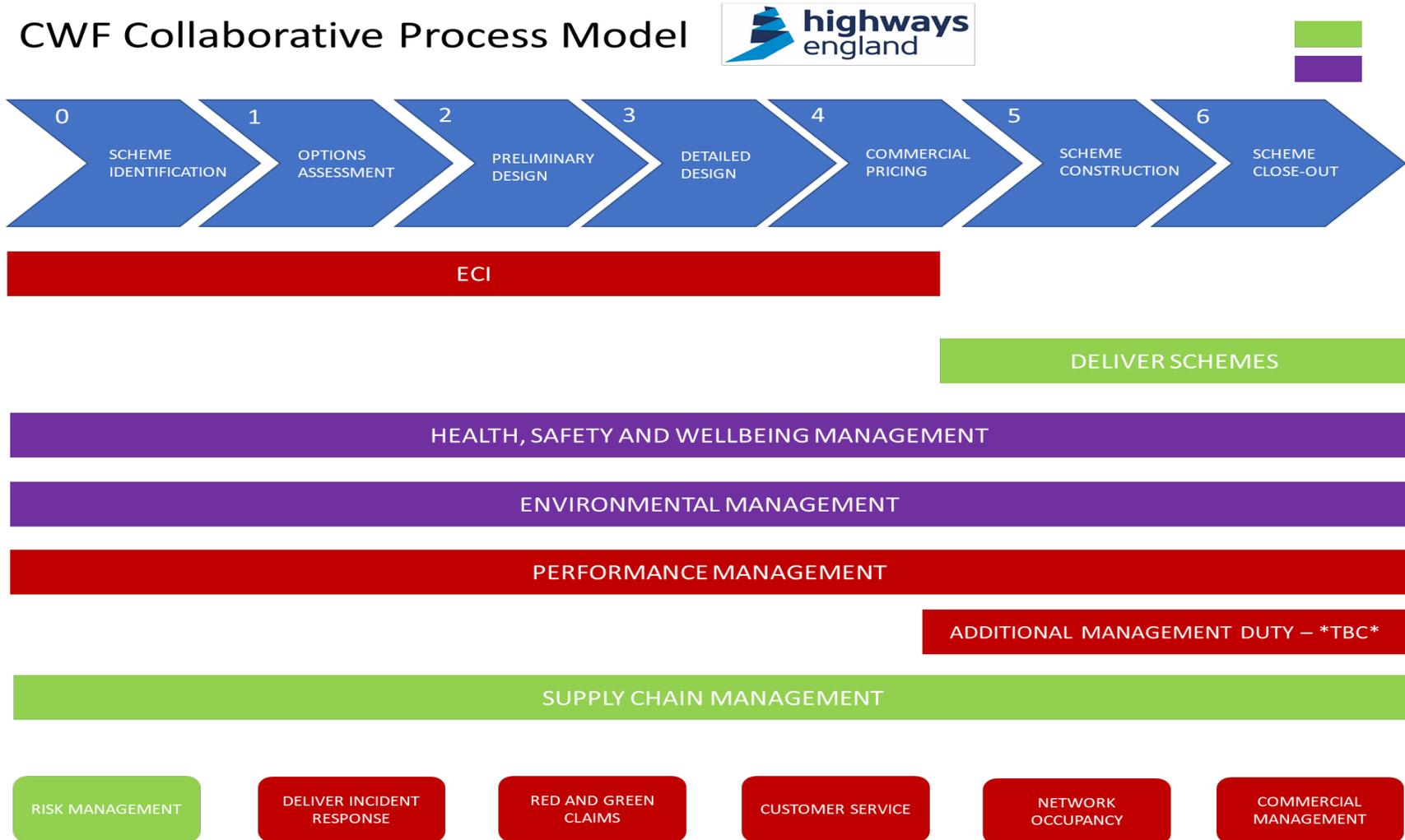


Table 1: Contractor defined Processes

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	<p>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.</p> <p>The process must incorporate:</p> <ul style="list-style-type: none"> • Scheme Risk Management • CDM Duties • Principal Contractor • Construction Phase Plan • Data provision 	Instruction	Scheme Completion
Design Schemes	<p>To produce effective solutions for construction.</p> <p>The process must incorporate:</p> <ul style="list-style-type: none"> • Technical Queries • Health and Safety File completion 	Instruction	Scheme Completion
Deliver Incident Response	To safely, effectively and efficiently execute the appropriate elements of the Incident Response Plan, working closely with Highways England’s control room, traffic officers and police services.	Incident. Instruction. Incident Response Plans.	Incident Clearance. Network Restored.

Deliver Repair Maintenance	To ensure effective repair of defects.	Potential defect identified.	Defect repaired.
Deliver Cyclical Maintenance	To safely, effectively and efficiently maintain the network in accordance with the cyclical maintenance requirements.	Cyclic maintenance requirements.	Maintained network
Deliver Severe Weather Service	To safely, effectively and efficiently execute the Severe Weather Plan	Severe weather event.	Operational requirements met.

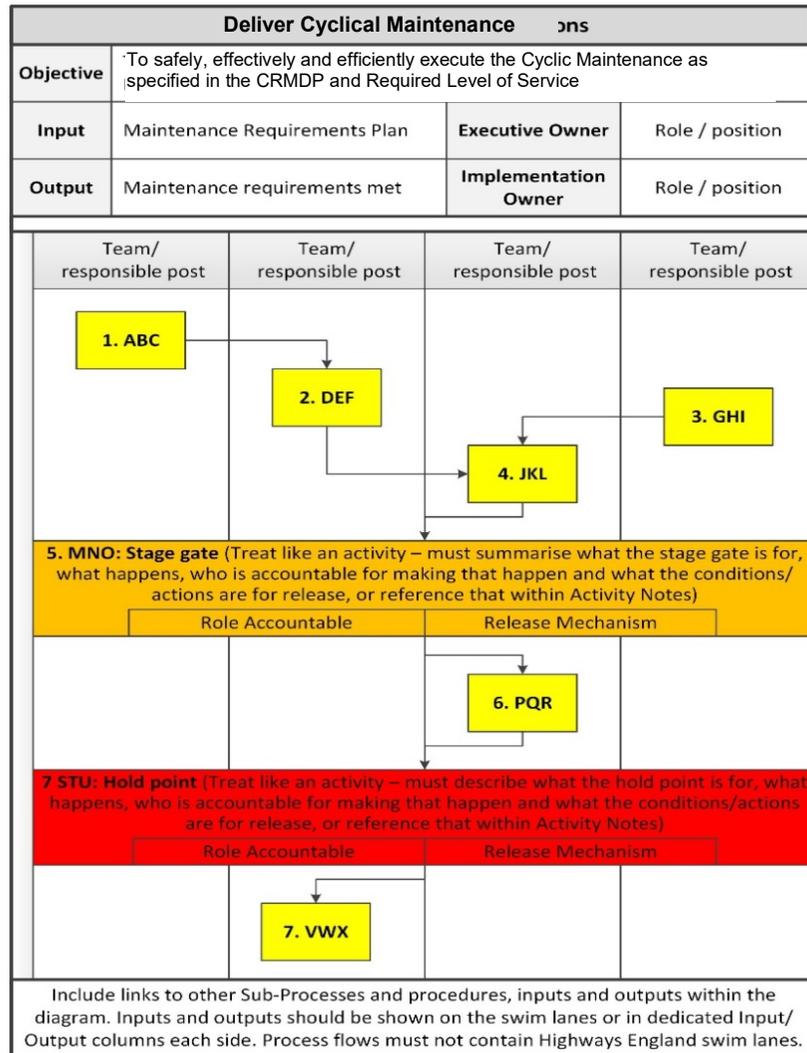
Table 2: Client defined Processes

Process	
Commercial Management	Annex 9 – Instructions and Payment. Annex 10 – Cost Capture
Communications	Annex 12 - Communications
Network Occupancy	Annex 3 - Reference documents
Customer Service	Annex 26 – Customer Service
Early Contractor Involvement - ECI	User Guide for Scheme Management - Scheme Passport and Stage Gates (3D) Framework Information A6.1
Performance Management	Annex 17 – Performance Management
Red and Green Claims	Scope, Section 20
Deliver Rapid Response (CWF only)	Scope
Additional Management Duties	RACI
Roadside Technology Defect Management	Appendix 1

Table 3: Standard defined Processes

Process	ISO Standard	Contract Document
Health, Safety and Wellbeing Management	ISO 45001	Annex 13
Environmental Management	ISO 14000	Annex 27
IT Security	ISO 27001	Annex 06
Risk Management	ISO 31000	Scope
Quality Management	ISO 9001	Annex 16

Figure 4: Example of ‘swim-lane’ Process flowchart and Activity Notes



Deliver Cyclical Maintenance		Date
		Page 1 of 1
Objective	To safely, effectively and efficiently execute the Cyclical Maintenance as specified in the CRMDP and Required Level of Service	
Input	Cyclic and Reactive Maintenance Delivery Plan and Required Level of Service	
Output	Cyclic maintenance requirements met	
Executive Process Owner	Role or position	
Implementation Owner	Role or position	
Activity 1	ABC	
Abc (Detailed description of Activity 1).....also can refer to Procedure XXX (method statements, forms, registers etc.)		
Activity 2 etc	DEF	
Def.....		
Activity 5	MNO	
Stage gate	Treat like an activity – must describe 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	PQR	
.....		
Activity 7	STU	
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 the conditions/actions are for release.	
Stu.....		
Activity 8	VWX	

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 Contractor when submitting nonconformities to the *Service Manager*.
- 3.1.2 The reporting of Nonconformity reports, corrective action plans and Quality Management Points is to be done utilising the combined Nonconformity and Quality Management Point Register.
- 3.1.3 The Nonconformity Register is to be submitted:
- within 3 working days of a nonconformity being raised, or
 - for *Service Manager* verification to “close off” the Nonconformity, or
 - monthly where no Nonconformities have been raised in that month.
- 3.1.4 A suitable action plan for each nonconformity must be submitted to the *Service Manager* for approval.
- 3.1.5 If the Contractor needs to change the corrective actions and/or target date to a Nonconformity, this must be submitted to *Service Manager* for approval a calendar month prior to the original target date with reasonable justification for approval.

4. QUALITY MANAGEMENT POINTS

4.1 Requirements

- 4.1.1 Quality Management Points accrue for the failures listed in the **Quality Table**.
- 4.1.2 Quality Management Points accrue for all failures whether identified by the Contractor or the *Client* or the relevant UKAS accredited certification body.
- 4.1.3 Quality Management Points accrue from the:
- Date of identification, or
 - Date of the audit if raised during an audit, or
 - Date of the *Client's* instruction.
- 4.1.4 If the Contractor fails to properly accrue Quality Management Points the *Service Manager* will instruct the Contractor to accrue the Quality Management Points.

4.1.5 The Contractor maintains a combined Nonconformity and Quality Management Point Register.

4.1.6 The Quality Management Point Register is to be submitted:

- within 3 working days of Quality Management Points being accrued or removed, or
- for *Service Manager* approval to remove Quality Management Points, or
- monthly where no Quality Management Points have been accrued or removed.

4.1.7 If the number of Quality Management Points in effect at any time is more than 25 points, the Contractor and the *Client* meet within one week to consider ways of reducing the number of Quality Management Points in effect to 25 or less and to avoid accruing further Quality Management Points. The Contractor 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 Contractor proposes to take immediately to reduce the number of Quality Management Points in effect to 25 or less and to avoid accruing further Quality Management Points.
- The *Client* does not accept the Contractor's proposals, or the Contractor does not take the agreed actions, the *Client* serves a Quality Warning Notice on the Contractor. Within one week of receipt of the Quality Warning Notice, the Contractor submits a report to the *Client* setting out the actions which the Contractor has taken and what further or alternative actions it proposes to take to reduce the number of Quality Management Points in effect to 25 or less.

4.1.8 Following the issue of a quality warning notice and until the number of Quality Management Points in effect is reduced to 25 or less, the *Service Manager* may impose the consequences as described in the Z Clauses Z18.

4.1.9 Until the number of Quality Management Points in effect is reduced to 25 or less, the Contractor takes the actions detailed in its reports and submits weekly update reports to the *Service Manager* 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 Contractor to:

- take actions to reduce the number of Quality Management Points in effect to 25 or less, or
- comply with a corrective action plan that has been accepted by the *Service Manager*,

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

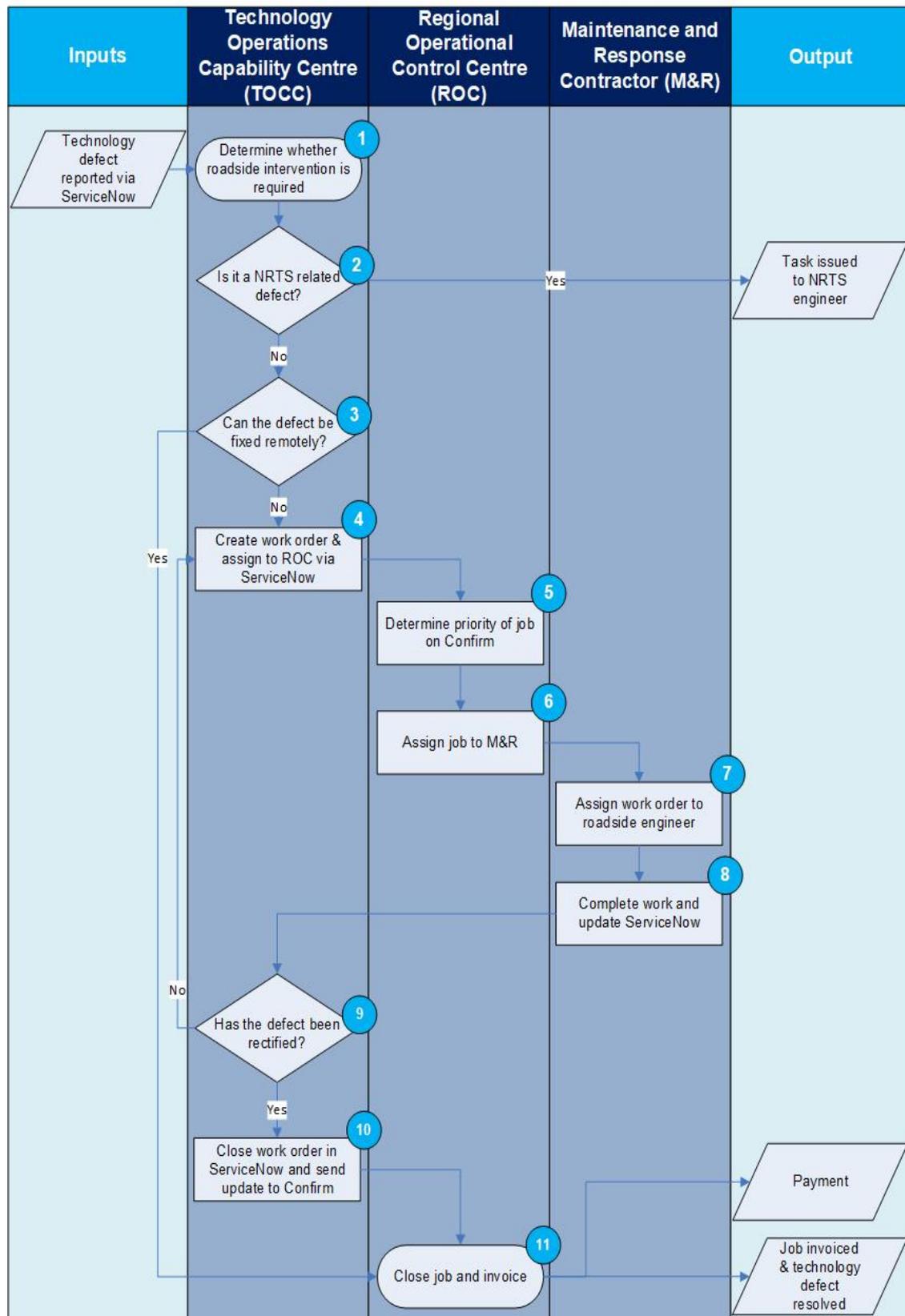
Quality Table

	Failure	Quality Management Points	Period of Effect
1	No Quality Manager in post	25	Until Client is notified of the appointment of the Quality Manager
2	Failure to have a complete (including Highways England Asset Delivery specific processes) in place and operating	25	Until Contractor submits the Quality Management System and accepted by the Client
3	Failure to identify a Nonconformity	5 per nonconformity	6 months
4	Failure to complete and submit required data*	5 per failure	6 months
5	Failure to rectify Nonconformity in the time set out in a corrective action plan	5 per Nonconformity	Until Nonconformity verified by the Client
6	Failure to prevent repeat Nonconformity	5 per repeat Nonconformity	6 months
7	Failure to correct the Quality Management System (including Highways England Asset Delivery specific processes) in the manner set out in a corrective action plan	5 per Nonconformity	6 months
8	Failure to implement recommendations in a Clients audit report	5 per recommendation	Until verified complete by the Client
9	Failure to carry out an internal audit	15 per audit	Until completed audit report is received by the Client
10	Carrying out work without release of Hold Point	10 per failure	6 months
11	Failure to make records available for inspection by the Client	10 per failure	Until the records are made available
12	Failure to provide access for Client audits	10 per failure	Until access is allowed
13	Failure to notify the Client of changes to processes and procedures (including	5 per failure	6 months

	Highways England Asset Delivery specific processes and associated procedures)		
14	Failure identified by the Client during an audit (High Risk only)	5 per Nonconformity	6 months
15	Failure to carry out works as agreed in the scope/works order/task brief/task order	5 per failure	Until issue confirmed rectified by the Client
16	Failure to by the Contractor to accrue Quality Management Points or Contractor has been instructed to accrue Quality Management Points by the Contractor	The number of points that should have been accrued and	The period applicable to the original failure
		an additional number of Points equivalent to the Points that should have been accrued	6 months from the actual accrual date of the Quality 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.

APPENDIX 1 – Roadside Technology Defect Management Process (M&R Contract ONLY)



Objective	Provide guidance of how technology defects are reported and resolved, showing the interfaces between the Technology Operating Capability Centre (TOCC), Regional Operations Centre (ROC) and Contractor.
<p>The TOCC will assess, triage and prioritise defects. Initially, this will check if the technology defect is National Roads Telecommunications Service (NRTS) related. There are two possible outcomes:</p> <ol style="list-style-type: none"> 1. If it is NRTS related: The defect will be issued to a NRTS service desk. 2. If it is not NRTS related: Activity 3 will apply. 	
Activity 1: Determine whether roadside intervention is	
	Link to Chart
<p>The TOCC will identify a defect via ServiceNow or receive a report of the technology defect via other sources e.g the customer contact centre or traffic officer report.</p>	
Activity 2: Is it a NRTS related defect?	
	Link to Chart
Activity 3: Can the defect be fixed remotely?	
	Link to Chart
<p>The TOCC will determine whether the defect can be fixed remotely or whether a roadside engineer is required.</p> <ol style="list-style-type: none"> 1. If the defect can't be fixed remotely: Activity 4 will apply. 2. If the defect can be fixed remotely. Activity 12 will apply 	
Activity 4: Create work order and assign to ROC via	
	Link to Chart
<p>The TOCC will check whether an automatic ServiceNow ticket has been raised, if not the TOCC will create a ticket in ServiceNow and identify actions needed to diagnose or resolve the defect. The TOCC will then assign it to the ROC (within ServiceNow) and apply the correct response time</p>	
Activity 5: Determine priority of job on Confirm	
	Link to Chart
<p>The ROC operator will determine and log the priority of the job, in line with other jobs on the system that require attention from the M&R.</p>	
Activity 6: Assign job to M&R	
	Link to Chart
<p>The ROC operator will assign the job to the Contractor via Confirm through ServiceNow which will be automatically updated with information about the works.</p>	
Activity 7: Assign work order to roadside engineer	
	Link to Chart
<p>The Contractor will make an internal decision to determine which of their engineers the work is assigned to. Instruction will be issued to the engineer who will then attend the site to resolve the defect.</p>	
Activity 8: Complete work and update ServiceNow	
	Link to Chart
<p>Once the work has been completed, the Roadside Engineer will update ServiceNow on their tablet to provide detail of what has been done and if the defect has been fully resolved.</p>	
Activity 9: Has the defect been rectified?	
	Link to Chart
<p>The TOCC will receive and review the work report sent by the engineer</p>	

Some defects may require further activity to fully resolve the issue. The TOCC will be responsible in determining whether this is required or whether the issue has already been resolved.

1. If follow up activity **is not required**. Activity 10 will apply.
2. If follow up activity **is required**. Activity 4 will apply

Activity 10: Close work order in ServiceNow and send update to Confirm

[Link to Chart](#)

Activity 11: Close job and invoice

[Link to Chart](#)

The ROC will close the job in Confirm and notify the commercial team of the works via Confirm and any evidence that has been passed to them from the Contractor. Payment will be made in accordance with the contract payment provisions.