

Highways England Company Limited

Maintenance & Response

Annex 16

Quality Management

CONTENTS AMENDMENT SHEET

Amend No.	Revision No.	Amendments	Initials	Date
0	0	Tender Issue	AJP	30/06/2021

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	15
3.1.	Requirements	15
4.	CONTRACT MANAGEMENT POINTS	15
4.1.	Requirements	15

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 Submission and its Tender Commitments (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 contract.
- 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.*
- 1.2.3 The *Contractor* is responsible for the development, implementation, maintenance and improvement of its quality management system, quality policy statement and Quality Plan, including alignment with all Processes and Procedures (detailed in **Tables 1 to 3**) see Process Model Tables.
- 1.2.4 The *Contractor*'s quality management system must exhibit:
 - Consistency
 - Personal Accountability
 - Assured delivery and performance.
- 1.2.5 The *Contractor* keeps a controlled copy of its quality management system available for inspection by the *Service Manager* at all times. The *Contractor* provides a complete copy of its quality management system to the *Service Manager* by the end of the Mobilisation Period and any subsequent updates during the contract.

- 1.2.6 The Service Manager notifies the Contractor if it considers that its quality management system does not deliver 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 them, 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 or Quality Plan, the *Contractor* accrues Contract Management Points from the date when the failure is identified in accordance with the Contract Management Tables as detailed in section 3.

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 the contract requirements.
- 1.4.2 The *Contractor* must submit an annual internal audit programme to the *Service Manager*. 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 of the audit taking place.
- 1.4.4 All internal audit reports must be submitted to the *Service Manager* within one week of completion of the audit.

- 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 any locations in the Affected Property, including but not limited to Premises (depots and associated facilities) and 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, any subsequent findings and corrective actions.

1.7. Additional Audits

- 1.7.1 The Service Manager may undertake additional audits itself or instruct the *Contractor* or *Others* to undertake additional audits when the total number of Contract Management Points applied exceeds 40.
- 1.7.2 The *Service Manager* 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 advisors.

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 the 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*, the *Contractor* will submit to the *Service Manager* for acceptance the following:
 - the Contractor's quality policy statement,
 - the *Contractor*'s Quality Plan incorporating the requirements from its tendered Quality Submission and Tender Commitments
 - 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 are sufficient to 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 accepted 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 **Tables 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 2**.
- 2.1.8 Hold Points are required where *Service Manager* 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 *Contractor*'s organisation for obtaining the *Service Manager*'s acceptance.
- 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 contract, 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 the service, within 2 weeks of such notification by the *Service Manager*.

2.2. Process Ownership

- 2.2.1 Processes require 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 Model is detailed in **Figure 1** and comprises three types of Processes:
 - Contractor defined Processes.

These are Processes which the *Contractor* is required to develop and implement during the Mobilisation Period and maintain during the contract. **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 Scope or associated Scope Annexes,

• 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 publications applicable.

Figure 1: M&R Process Model

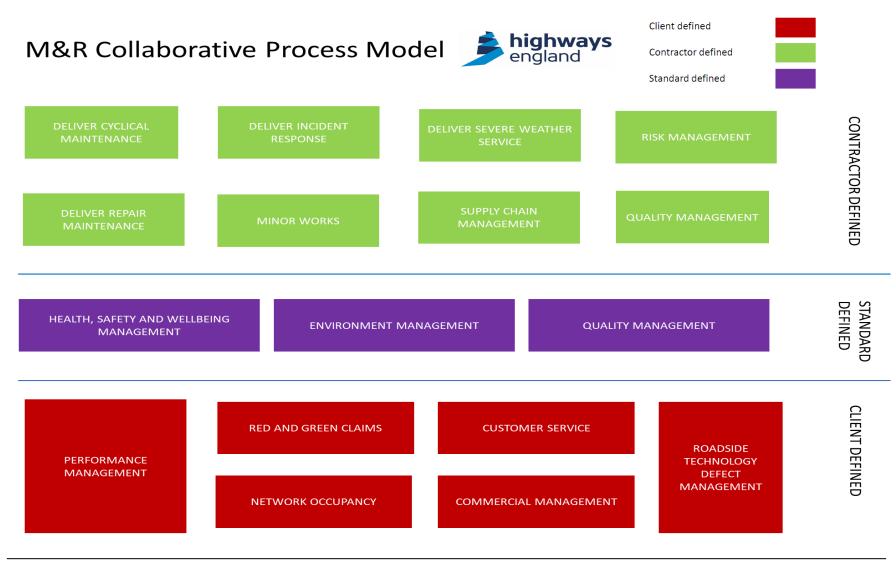


Table 1: Contractor defined Processes

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	Supply Chain ManagementTo ensure best value, effective management and due diligence within the Supply Chain.		Works complete.
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 ServiceTo safely, effectively and efficiently execute the Severe Weather Plan		Severe weather event.	Operational requirements met.
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.

Table 2: Client defined Processes

Process	
Commercial Management	Annex 9 – Instructions and Payment. Annex 10 – Cost Capture Annex 15 – Service Plan & Annual Commercial Plan
Network Occupancy	Annex 3 - Reference documents
Customer Service	Annex 26 – Customer Service
Performance Management	Appendix 17 – Performance Management
Red and Green Claims	Scope, Section 20
Roadside Technology Defect Management	Appendix 1 (to this document)

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

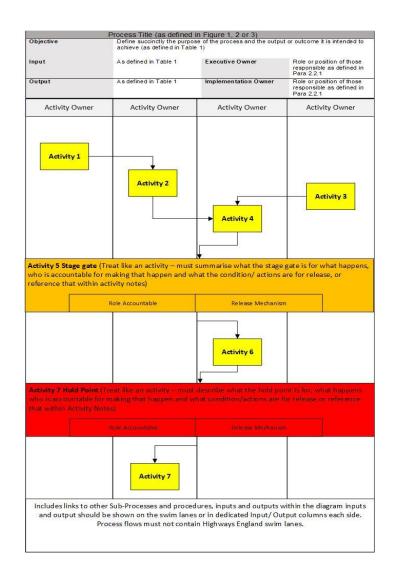


Figure 2: Example of 'swim-lane' Process flowchart and Activity Notes)

Process Title (as defined in Figure 1, 2 or 3)			Date: date prepared or updated Page 1 of 1	
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 responde	onsible as	
Implementation O	wner	Role or position of those respondering the second s	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	Indertake	n at this stage.		
Activity 5 Stage Gate as defined in para 2.19	Brief de	scription of the stage gate		
	accounta	e a description of what the stag ble for making that happen and se.	.	
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.				
	vity 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 *Contractor* when submitting Nonconformities to the *Service Manager*.
- 3.1.2 The reporting of Nonconformity reports, corrective action plans and Contract Management Points is to be done utilising the combined Nonconformity and Contract Management Point Register.
- 3.1.3 The Nonconformity Register is to be submitted:
 - within 3 working days of a nonconformity being raised, or
 - monthly where no Nonconformities have been raised in that month, or
 - for *Service Manager* acceptance to "close off" a Nonconformity. This should take place 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 *Service Manager* for approval within 7 days of identification.
- 3.1.5 If the *Contractor* needs to change the corrective actions and/or target date to a Nonconformity, this must be submitted to the *Service Manager* for acceptance 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 Tables. Contract Management Points are points accrued by the *Contractor* for the failures listed in the tables below:
 - Table 1: Health & Safety Management Points,
 - Table 2: Delivery Management Points, and
 - Table 3: Quality Management Points.

- 4.1.2 Contract Management Points accrue for all failures whether identified by the *Contractor*, the *Service Manager* or the relevant UKAS accredited certification body. Contract Management Points are awarded and administered by the *Contractor*.
- 4.1.3 Contract Management Points accrue from the earlier of:
 - Date of identification, or
 - Date of the audit if raised during an audit, or
 - Date of the Service Manager's instruction.
- 4.1.4 If the *Contractor* fails to properly accrue Contract Management Points the *Service Manager* instructs the *Contractor* to accrue the Contract Management Points.
- 4.1.5 The *Contractor* 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 Service Manager 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 is more than (deemed to be the Contract Management Point threshold):
 - a) 100 combined points across Tables 1, 2 and 3, or
 - b) 40 points from any table,

the *Contractor* and the *Service Manager* 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 *Contractor* submits a report to the *Service Manager* 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 Contract Management Points in effect to below the specified threshold and to avoid accruing further Contract Management Points.

- The Service Manager does not accept the Contractor's proposals, or the Contractor does not take the agreed actions, the Service Manager issues a contract warning notice on the Contractor. Within one week of receipt of the contract warning notice, the Contractor submits a report to the Service Manager setting out the actions which the Contractor 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 quality warning notice and until the number of Contract Management Points in effect is reduced to be below the specified threshold, the *Service Manager* may impose the consequences as described in the Z43.
- 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 Z43 (whichever is sooner), 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 Contract Management Points in effect to be below the specified threshold, 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.

Failure		Contract Management Points	Period of Effect
1	No Health & Safety Manager in post	25	Until the <i>Service Manager</i> is notified of the appointment of the Health & Safety Manager
2	Failure to report incidents in accordance with GG128	5 per incident	Until the incident is investigated, and the report issued
3	Failure to provide information for health and safety file within	5 per occurrence	Until the information for the health and safety file has been provided by the

Table 1: Health and Safety Management Points

	the period of reply following instruction from the <i>Service</i> <i>Manager</i>		Contractor and accepted by the Service Manager.
4	Failure to have a complete Home Safe & Well Implementation Plan in place and operating	10	6 months
5	Failure to update Home Safe & Well Implementation Plan as required	5	Until action is complete
6	Failure to take an action detailed in the Home Safe & Well Implementation 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 implemented and certification gained from the the UKAS accredited organisation.

Table 2: Delivery Management Points

Failure		Contract Management Points	Period of Effect
1	Failure to submit the Annual Commercial Plan in accordance with Annex 9 and Annex 15.	5	Until the Annual Commercial Plan is submitted and accepted by the <i>Service Manager</i>
2	Failure to update the Annual Commercial Plan in accordance with Annex 9 and Annex 15.	5	Until the updated Annual Commercial Plan is submitted by the <i>Contractor</i> and accepted by the <i>Service Manager</i> .
3	Failure to notify Defects in accordance with the contract	5 per Defect	6 months

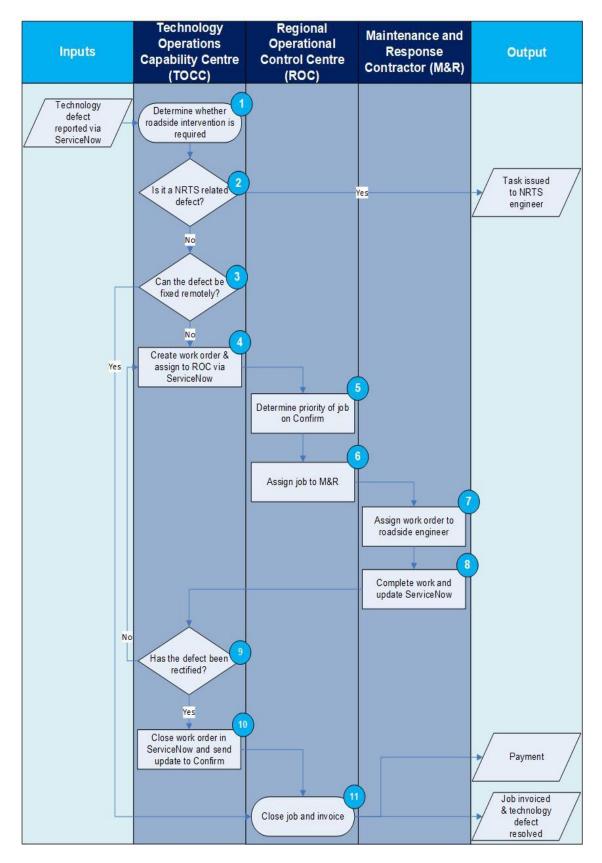
4	Failure to correct Defects in accordance with contractual requirements	5 per Defect	6 months
5	Failure to submit defined cost data in the required format in accordance with Annex 10	5 per monthly payment application.	6 months

Table 3: Quality Management Points

Failu	'e	Contract Management Points	Period of Effect
1	No Quality Manager, Commercial Manager or General Manager (or other key manager) as accepted by the <i>Service</i> <i>Manager</i> in post	25 per post	Until the Service Manager is notified of the appointment of the Quality Manager, Commercial Manager or General Manager
2	Failure to have a complete quality management system (including <i>Client-defined</i> Processes) and Quality Plan in place and operating	25	Until <i>Contractor</i> submits the quality management system and Quality Plan and accepted by the <i>Service Manager</i>
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 Service Manager.
5	Failure to rectify Nonconformity in the time set out in a corrective action plan	5 per Nonconformity	Until the Nonconformity is rectified and approved by the <i>Service Manager.</i>
6	Failure to prevent repeat Nonconformity	5 per repeat Nonconformity	The period applicable to the original failure

7	Failure to correct the quality management system (including <i>Client- defined</i> 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 <i>Service Manager</i>
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>Service Manager</i> *	10 per failure	Until the records are made available
11	Failure to provide access for the Service Manager or Client nominated representatives to perform audits	10 per failure	Until access is allowed
12	Failure to notify the Service Manager of changes to processes and procedures (including Client-defined Processes and associated procedures)	5 per failure	6 months
13	Failure to implement a corrective action (rated high risk) in a CAR issued by the <i>Client</i> during an audit	5 per Nonconformity	6 months
14	Failure by the Contractor to accrue Contract Management Points or <i>Contractor</i> has been instructed to accrue	The number of points that should have been accrued, and	The period applicable to the original failure
	Contract Management Points by the <i>Contractor</i>	an additional number of Points equivalent to the Points that should have been accrued	6 months from the actual accrual date of the 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.





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.

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:

- 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 required

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.

Activity 2: Is it a NRTS related defect?

Activity 3: Can the defect be fixed remotely?

The TOCC will determine whether the defect can be fixed remotely or whether a roadside engineer is required.

- 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 ServiceNow

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

Activity 5: Determine priority of job on Confirm

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.

Activity 6: Assign job to M&R

The ROC operator will assign the job to the Contractor via Confirm through ServiceNow which will be automatically updated with information about the works.

Activity 7: Assign work order to roadside engineer

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.

Activity 8: Complete work and update ServiceNow

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.

Activity 9: Has the defect been rectified?

The TOCC will receive and review the work report sent by the engineer

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

Activity 11: Close job and invoice

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.