SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 5 PART 6

PERFORMANCE MEASUREMENT

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SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 5 PART 6

PERFORMANCE MEASUREMENT

1. REQUIREMENTS

1.1 General Requirements

1.1.1 The Director will measure the performance of the Operating Company through the use of performance measures. The performance measures the Director will use are:

(i) Performance Indicators,

(ii) Monitoring Indicators, and

(iii) Payment Adjustment Factors.

1.1.2 The Operating Company shall carry out the necessary data aggregation and analysis to provide the information required for all Performance Indicators, Monitoring Indicators and Payment Adjustment Factors to the Director no later than five Working Days after the end of the relevant reporting period in the format provided by the Director, with a copy to the Performance Audit Group.

1.1.3 The Operating Company shall work with the Director to amend and improve the Performance Indicators and the Monitoring Indicators until the Service End Date with the aim of achieving continuous improvement in service delivery. The performance targets for any new or amended Performance Indicators shall be set by the Director with the objective of improving performance until the Service End Date.

1.2 Performance Indicators

1.2.1 The Director will use the Performance Indicators detailed in Annex 5.6/A of this Part to measure the performance of the Operating Company in complying with this Contract.

1.2.2 The Performance Audit Group may issue a Notice of Non-Conformance when a Performance Indicator indicates a failure to achieve the required performance target stated in Annex 5.6/A of this Part.

1.2.3 The maximum value which will be reported for any Performance Indicator will be 100 percent, indicating achievement of the specified requirements.

1.3 Monitoring Indicators

1.3.1 The Director will use the Monitoring Indicators detailed in Annex 5.6/B of this Part to measure and monitor service performance.

1.4 Payment Adjustment Factors

1.4.1 The Payment Adjustment Factors are detailed in Annex 5.6/C of this Part and shall be used to measure the items subject to Payment Adjustment Factors.

1.4.2 The measurement of items subject to Payment Adjustment Factors is set out in Schedule 2 Part 1.

2. PUBLICATION OF PERFORMANCE AND MONITORING INDICATORS

2.1.1 The Director may publish the Performance Indicators and Monitoring Indicators within the public domain.

This is Annex 5.6/A to Schedule 5 Part 6 referred to in the foregoing Agreement between Scottish Ministers and Amey LG Limited.

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 5 PART 6

PERFORMANCE MEASUREMENT

ANNEX 5.6/A – Performance Indicators

SCOTTISH MINISTERS' REQUIREMENTS

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PERFORMANCE MEASUREMENT

ANNEX 5.6/A – Performance Indicators

No.	Title	Measure Description	Reporting period	Target
00	Overall Performance Indicator	The arithmetical average of all the Performance Indicators listed below which have a target of 100% and are reported each reporting period.	Monthly	100%
01	RIDDOR *(Reporting of Injuries, Diseases and Dangerous Occurrences Regulations)*	The incident rate based on the number of RIDDOR 'reportable' accidents, incidents and injuries reported within working sites under control or supervision of the Operating Company.	Monthly	Year on year improvement on a benchmark to be agreed in the first Annual Period
02	Accident Frequency Rate	The accident frequency rate based on the number RIDDOR 'reportable' incidents and injuries reported within working sites under control or supervision of the Operating Company.	Monthly	Year on year improvement on a benchmark to be agreed in the first Annual Period
03a	Repair of Category 1 Defects	The percentage of all Category 1 Defect repairs that are carried out within the required timescales.	Monthly	100%
03b	Repair of Category 1 Defects – Forth Road Bridge	The percentage of all Category 1 Defect repairs that are carried out within the required timescales.	Monthly	100%
04	Incident Response	Percentage of Incident Response(s) within the required timescales.	Monthly	100%

No.	Title	Measure Description	Reporting period	Target
05	Safety Inspections and Patrols	Percentage of days on which link/sections within the Unit are within the required inspection interval for Safety Inspections, Safety Patrols and night time Safety Patrols.	Monthly	100%
06	Detailed Inspections	Percentage of Detailed Inspections carried out within the required intervals.	Monthly	100%
07	Maintenance	Percentage of asset (excluding maintenance of grassed areas) maintained within the required timescales.	Monthly	100%
08	Structures Principal Inspections	Percentage of Structures Principal Inspections and reports carried out to agreed programme excluding the Principal Crossings.	Monthly	100%
09	Structures General Inspections	Percentage of Structures General Inspections and reports carried out to agreed programme excluding the Principal Crossings.	Monthly	100%
10	Forth Road Bridge Inspections	Percentage of inspections and reports carried out on the Forth Road Bridge to agreed programme.	Monthly	100%
11	Queensferry Crossing Inspections	Percentage of inspections and reports carried out on the Queensferry Crossing to agreed programme.	Monthly	100%
12a	Structures maintenance	Percentage of Structures maintenance activities carried out within the required timescales excluding the Principal Crossings.	Monthly	100%
12b	Structure maintenance – Forth Road Bridge	Percentage of Structure maintenance activities carried out within the required timescales.	Monthly	100%
13	Winter Service treatments	Percentage of Winter Service treatments carried out in compliance with the required timescales.	Monthly (winter period)	100%
14	Actual spend against profile	Percentage of total spend on Schemes as a proportion of profiled total spend.	Monthly	100%
15	Works Contracts cost estimates	Accuracy of Works Contracts cost estimates.	Monthly	100%
16	Works Contracts out turn cost	Success in delivering Schemes at the awarded tender value.	Monthly	100%

No.	Title	Measure Description	Reporting period	Target
17	Closure of Non-Conformances	Percentage of Non-Conformances closed out within the required timescales.	Monthly	100%
18	Submission of reports	Percentage of monthly reports and submissions that are submitted within the required timescales.	Monthly	100%
19	Planning applications	Percentage of planning applications processed within the required timescales.	Monthly	100%
20	Communications response	Percentage of communications processed by the Operating Company within the required timescales.	Monthly	100%
21	Carbon emissions	Annual carbon emissions.	Annually	Year on year improvement on a benchmark to be agreed after the third Annual Period
22	Grassed area	Percentage of grassed area maintained in accordance with the Scottish Ministers' Requirements.	Monthly (growing period)	100%
23a	Recording Inventory Condition Rating	The percentage of all inventory condition ratings that are recorded within the required timescales excluding the Principal Crossings.	Monthly	100%
23b	Recording Inventory Condition Rating – Forth Road Bridge	The percentage of all inventory condition ratings that are recorded within the required timescales for the Forth Road Bridge.	Monthly	100%
23c	Recording Inventory Condition Rating – Queensferry Crossing	The percentage of all inventory condition ratings that are recorded within the required timescales for the Queensferry Crossing.	Monthly	100%
24	Community Engagements and Community Benefits	The percentage of all opportunities created, visits and tours undertaken and meetings attended during the reporting period.	Monthly	100%

No.	Title	Measure Description	Reporting period	Target
25	Queensferry Crossing Structural Health Monitoring System Reporting	Production and distribution of Queensferry Crossing Structural Health Monitoring Data Reports	Annually	100%
26	Queensferry Crossing Supervisory Control And Data Acquisition System Maintenance	Percentage of Supervisory Control And Data Acquisition System maintenance activities carried out within the required timescales on the Queensferry Crossing.	Monthly	100%
27a	Access Systems inspection - Forth Road Bridge	Percentage of inspections on Access Systems and reports carried out on the Forth Road Bridge and to agreed programme.	Monthly	100%
27b	Access Systems maintenance and testing – Forth Road Bridge	Percentage of Access Systems maintenance activities and testing carried out on the Forth Road Bridge and within the required timescales and equipment availability.	Monthly	100%
28a	Access Systems inspection - Queensferry Crossing	Percentage of inspections on Access Systems and reports carried out on the Queensferry Crossing and to agreed programme.	Monthly	100%
28b	Access Systems maintenance and testing – Queensferry Crossing	Percentage of Access Systems maintenance activities and testing carried out on the Queensferry Crossing and within the required timescales and equipment availability.	Monthly	100%
29	Programmed Special Inspections – Forth Road Bridge	Percentage of programmed structural Special Inspections and reports carried out on the Forth Road Bridge and to agreed programme.	Monthly	100%

Performance Indicator No. 01			
Title	RIDDOR		
Measure Description	The incident rate based on the number of RIDDOR 'reportable' accidents, incidents injuries and diseases reported within working sites under control or supervision of the Operating Company.		
Measure Aim	To measure the effectiveness of the Operating Company's safety processes by monitoring the incident rate per 100,000 hours worked, according to the standard reporting practice of the Health and Safety Executive.		
Methodology	The Operating Company shall use the records required by the *Reporting of Injuries, Diseases and Dangerous Occurrences Regulations* (RIDDOR) of accidents, incidents, injuries and diseases incurred within their Unit to produce the Performance Indicator.		
Data input	A = total number of RIDDOR reportable deaths or major injuries during reporting period, B = total number of RIDDOR reportable over seven day lost time injuries during reporting period, C = total number of RIDDOR reportable diseases during reporting period, D = total number of RIDDOR reportable dangerous occurrences during reporting period, F = Total number of working hours on the Unit during reporting period. The following data shall be derived based on the sum of the previous 12 months* data: P = sum of all RIDDOR reportable incidents during previous 12 months* (A+B+C+D), R = sum of all working hours during previous 12 months* (Sum of F values). *or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.		
Formula	Performance Indicator = (P/R) x 100,000		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists and commentary of all incidents during period.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	RIDDOR data
Return Format	RIDDOR score	**Decimal places**	1

Performance Indicator No. 02	
Title	Accident Frequency Rate
Measure Description	The accident frequency rate based on the number RIDDOR 'reportable' incidents and injuries reported within working sites under control or supervision of the Operating Company.
Measure Aim	To measure the effectiveness of the Operating Company's safety processes by monitoring the frequency rate of injuries per 100,000 hours worked, according to the standard reporting practice of the Health and Safety Executive.
Methodology	The Operating Company shall use the records required by the *Reporting of Injuries, Diseases and Dangerous Occurrences Regulations* and Records of other accidents and near misses required by Schedule 5 Part 1, of accidents, incidents and injuries and near misses incurred within the Unit to produce the Performance Indicator.
Data input	A = total number of RIDDOR reportable deaths or major injuries during reporting period, B = total number of RIDDOR reportable over seven day lost time injuries during reporting period, C = total number of RIDDOR reportable diseases during reporting period, D = total number of RIDDOR reportable dangerous occurrences during reporting period, E = total number of other accidents (non RIDDOR reportable) recorded in accident books during reporting period, F = Total number of working hours on Unit during reporting period. The following data shall be derived based on the sum of the previous 12 months* data: P = sum of all accidents and incidents during previous 12 months* (A+B+C+D+E), R = sum of all working hours during previous 12 months* (Sum of F values). *or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.
Formula	Performance Indicator = (P /R) x 100,000
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists and commentary of all incidents during period. • Number of near misses during reporting period.

Performance Indicator No. 02			
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	RIDDOR accident data.
Return Format	Accident frequency rate	**Decimal places**	1

Performance Indicator No. 03a			
Title	Repair of Category 1 Defects		
Measure Description	The percentage of all Category 1 Defect repairs that are carried out within the Unit within the required timescale and with exclusion of Defects listed under Appendix 3/A of this Part.		
Measure Aim	To measure the Operating Company's performance in undertaking the Repair of Category 1 Defects.		
Methodology	The Operating Company shall use the Records in the routine maintenance and management function of the Integrated Roads Information System of the actual dates and times when the Operating Company was aware of the presence of a Category 1 Defect and the date and time of all temporary and permanent repairs of Category 1 Defects to produce the Performance Indicator.		
Data input	A = total number of Category 1 Defect temporary repairs due during the month, B = total number of Category 1 Defect temporary repairs repaired on time during the month, C = total number of Category 1 Defect permanent repairs due during the month, D = total number of Category 1 Defect permanent repairs repaired on time during the month.		
Formula	Performance Indicator for temporary repairs = (B/A) x 100% Performance Indicator for permanent repairs = (D/C) x 100% Reported Performance Indicator = ((B + D) / (A + C)) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Any trends or differences between temporary and permanent repairs. • Numbers of each Defect type raised each month and their trends. • Numbers of Defects raised by inventory type each month and their trends. • Lists of all late and overdue Defects and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Routine maintenance and management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 03b	
Title	Repair of Category 1 Defects – Forth Road Bridge
Measure Description	The percentage of all Category 1 Defect repairs, listed under Appendix 3/A of this Part that are carried out within the required timescales.
Measure Aim	To measure the Operating Company's performance in undertaking the repair of Category 1 Defects on the Forth Road Bridge.
Methodology	The Operating Company shall use the Records in the routine maintenance and management function of the Integrated Roads Information System of the actual dates and times when the Operating Company was aware of the presence of a Category 1 Defect and the date and time of all temporary and permanent repairs of Category 1 Defects to produce the Performance Indicator.
Data input	For each of the Category 1 Defects as listed in Appendix 3/A of this Part, the following shall be calculated: A = total number of Category 1 Defect temporary repairs due during the month, B = total number of Category 1 Defect temporary repairs repaired on time during the month, C = total number of Category 1 Defect permanent repairs due during the month, D = total number of Category 1 Defect permanent repairs repaired on time during the month.
Formula	Performance Indicator for temporary repairs = (B/A) x 100% Performance Indicator for permanent repairs = (D/C) x 100% Reported Performance Indicator = ((B + D) / (A + C)) x 100% Overall Performance Indicator shall be calculated for the activities listed in Appendix 3/A of this Part.
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Any trends or differences between temporary and permanent repairs. • Numbers of each Defect type raised each month and their trends. • Numbers of Defects raised by inventory type each month and their trends. • Lists of all late and overdue Defects and analysis of their reasons.

Performance Indicator No. 03b			
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Routine maintenance and management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Appendix 3/A – Forth Road Bridge related Category 1 Defects

Bridge Category 1 Defects

Failure of an end trimmer on the side spans

Failure of an end trimmer on the main span

Failure of the components of the comb joint (between the northern side tower and northern approach viaduct)

Failure of any of the five no. movement joints adjacent to the side towers or the approach viaducts

Failure of the components of the Demag (main tower) expansion joints

Failure of welds or components of the truss end links at main towers

Performance Indicator No. 04	
Title	Incident Response (excluding the Trunk Road Incident Support Service)
Measure Description	Percentage of Incident Responses within the required timescales.
Measure Aim	To measure the Operating Company's performance in providing Incident Response.
Methodology	The Operating Company shall use the Records in the management of Incidents function of the Integrated Roads Information System, required by Schedule 7 Part 3, to produce the Performance Indicator.
Data input	A = total number of initial responses required during the reporting period, B = total number of initial responses carried out on time during the reporting period, C = total number of secondary responses required during the reporting period, D = total number of secondary responses carried out on time during the reporting period, E = total number of contingency responses required during the reporting period, F = total number of contingency responses carried out on time during the reporting period.
Formula	Performance Indicator for initial response = (B/A) x 100% Performance Indicator for secondary response = (D/C) x 100% Performance Indicator for contingency response = (F/E) x 100% Reported Performance Indicator N = ((B + D + F)/(A + C +E)) x 100%
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall provide the following supporting information for all Incident Response and the Trunk Road Incident Support Service: • Data input values. • Any trends in the figures. • Reasons for any failures and actions taken to prevent recurrence. • Percentage of initial responses carried out >20 minutes early. • Percentage of initial responses carried out 20-10 minutes early. • Percentage of initial responses carried out 10-0 minutes early. • Percentage of initial responses carried out 0-10 minutes late. • Percentage of initial responses carried out >10 minutes late.

Performance Indicator No. 04			
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Incidents data required by Schedule 7 Part 3
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 05	
Title	Safety Inspections and Patrols
Measure Description	Percentage of days on which each link/section is within the required inspection interval for Safety Inspections, Safety Patrols and night time Safety Patrols.
Measure Aim	To measure the Operating Company's performance in carrying out of Safety Inspections, Safety Patrols and night time Safety Patrols.
Methodology	The Operating Company shall use the Records in the routine maintenance and management function of the Integrated Roads Information System of the actual date and time when the Operating Company carried out Safety Inspections, Safety Patrols and night time Safety Patrols to produce the Performance Indicator.
Data input	A = the number of days during the reporting period on which each link/section is compliant with the specification in respect of Safety Inspections, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System, B = the number of days during the reporting period on which each link/section is not compliant with the specification in respect of Safety Inspections, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System, C = the number of days during the reporting period on which each link/section is compliant with the specification in respect of Safety Patrols, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System, D = the number of days during the reporting period on which each link/section is not compliant with the specification in respect of Safety Patrols, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System, E = the number of days during the reporting period on which each link/section is compliant with the specification in respect of night time Safety Patrols, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System, F = the number of days during the reporting period on which each link/section is not compliant with the specification in respect of night time Safety Patrols, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System.
Formula	Performance Indicator for Safety Inspection = ((A) / (A+B)) x 100% Performance Indicator for Safety Patrol = ((C) / (C+D)) x 100% Performance Indicator for night time Safety Patrol = ((E) / (E+F)) x 100%

Performance Indicator No. 05			
	Reported Performance Indicator = ((A + C + E) / (A + B + C + D + E + F)) x 100%.		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Any trends or differences between each inspection type. • Lists of all late and overdue inspections and commentary on their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Routine maintenance and management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 06			
Title	Detailed Inspections		
Measure Description	Percentage of Detailed Inspections carried out within the required intervals.		
Measure Aim	To measure the Operating Company's performance in carrying out Detailed Inspections.		
Methodology	The Operating Company shall use the Records in the routine maintenance and management function of the Integrated Roads Information System of the actual date and time when the Operating Company carried out Detailed Inspections on each inventory item to calculate the Performance Indicator.		
Data input	For each of the interval based Detailed Inspection activities as listed in Appendix 6/A of this Part the following shall be calculated: A = the number of inventory items where the inspection activity is compliant with the required Detailed Inspection activity interval, B = the number of inventory items where the inspection activity is not compliant with the required Detailed Inspection activity interval.		
Formula	Detailed Inspection activity Performance Indicator = A/(A+B) x 100%. Overall Performance Indicator shall be the arithmetical average of all the Detailed Inspection activity Performance Indicator percentages for the Detailed Inspection activities listed in Appendix 6/A of this Part.		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values for each Detailed Inspection activity. • Any trends in the figures. • Lists of all late and overdue inspections and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Routine maintenance and management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Appendix 6/A – Inspection Activities

Inspection activity
Carriageway
Carriageway (offside)
Footways and cycleways
Covers, gratings and frames
Covers, gratings and frames (offside)
Kerbs and edgings
Kerbs and edgings (offside)
Linear drainage system
Gullies, catchpits, soakaways and oil separators
Gullies, catchpits, soakaways and oil separators (offside)
Drainage grips
Drainage grips (offside)
Ditches
Filter drain
Filter drain (offside)
Balancing ponds
Head walls, aprons and spillways
Sluices, tidal flaps, penstocks, valves, pumps and other specialist equipment
Geotechnical asset
Earthwork monitoring
Grass areas
Bulbs and wildflower areas
Woodland areas and trees
Woodland areas and trees (mature)
Scrub, shrub and hedges
Wetland areas
Special ecological measures
Invasive species
Vehicle road restraint system
Vehicle road restraint system (tensioning devices)
Pedestrian road restraint system
Fences walls screens and noise barriers
Road markings (high speed monitor)
Road markings (Hand held)

Inspection activity

Road marking (visual survey)

Road markings (skid resistance)

Road studs (visual, daytime)

Road studs (conspicuity, night time)

Road traffic sign (visual performance)

Road traffic sign (structural integrity)

Road traffic sign (electrical safety & operation)

Road traffic sign (sign plate replacement)

Road traffic sign (co-efficient of retroreflectivity)

Road traffic sign (obscuration)

Road traffic sign (electrical testing)

Traffic signals

Traffic signals (operational review)

Road lighting

Arrester beds

Traffic control barriers (structural condition & integrity)

Traffic control barriers (electrical)

Node markers

Network referencing

Drainage structures

Traffic signals (obscuration)

Road sensors

Snow poles, signs, fences and barriers

Performance Indicator No. 07			
Title	Maintenance (excluding maintenance of grassed areas).		
Measure Description	Percentage of asset maintained within the required timescales.		
Measure Aim	To measure the Operating Company's performance in carrying out maintenance.		
Methodology	The Operating Company shall use the Records in the routine maintenance and management function of the Integrated Roads Information System of the actual date and time when the Operating Company carried out maintenance to produce the Performance Indicator.		
Data input	For each of the interval based maintenance activities as listed in Appendix 7/A of this Part the following shall be calculated: A = total number/length/area of live inventory items on network, B = total number/length/area of live inventory items where the last maintenance action is within the required maintenance interval at the end of the reporting period.		
Formula	Each maintenance activity Performance Indicator = (B/A) x 100%. Overall Performance Indicator shall be the arithmetical average of all the maintenance activity Performance Indicator percentages for the maintenance activities listed in Appendix 7/A of this Part.		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values for each maintenance activity. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Routine maintenance and management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Appendix 7/A – Maintenance Activities

Interval Based Maintenance Activities

Maintenance activity
Cleaning of slot drains and kerb block drains
Cleaning of gullies, catchpits, soakaways, manholes and oil separators
Cleaning of drainage grips
Harrowing of filter drain
Special ecological measures
Vehicle road restraint system (tensioning)
Road traffic signs (sign face cleaning)

Performance Indicator No. 08			
Title	Structures Principal Inspections		
Measure Description	Percentage of Structures Principal Inspections and reports carried out to agreed programme excluding the Principal Crossings.		
Measure Aim	Measure the Operating Company's performance in carrying out Structures Principal Inspections on programme, excluding those carried out on the Principal Crossings.		
Methodology	The Operating Company shall use the Records in the structures management function of the Integrated Roads Information System of the programmed inspection dates and the actual inspection dates to produce the Performance Indicator.		
Data input	A = total cumulative number of Principal Structures Inspection reports programmed to be completed by the end of current reporting period, B = total cumulative number of Principal Inspection reports completed at the end of current reporting period.		
Formula	Reported Performance Indicator = (B/A) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Structures management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 09			
Title	Structures General Inspections		
Measure Description	Percentage of Structures General Inspections and reports carried out to agreed programme excluding the Principal Crossing.		
Measure Aim	Measure the Operating Company's performance in carrying out Structures General Inspections on programme, excluding those carried out on the Principal Crossings.		
Methodology	The Operating Company shall use the Records in the structures management function of the Integrated Roads Information System of the programmed inspection dates and the actual inspection dates to produce the Performance Indicator.		
Data input	A = total cumulative number of Structures General Inspection reports programmed to be completed by the end of current reporting period, B = total cumulative number of Structures General Inspection reports completed at the end of current reporting period.		
Formula	Reported Performance Indicator = (B/A) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Structures management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 10			
Title	Forth Road Bridge Inspections		
Measure Description	Percentage of inspections and reports carried out on the Forth Road Bridge to the agreed programme.		
Measure Aim	Measure the Operating Company's performance in carrying out inspections on the Forth Road Bridge to programme.		
Methodology	The Operating Company shall use the Records from the inspection scheduled as described in Schedule 7 Part 7 to produce the Performance Indicator.		
Data input	A = total cumulative number of inspection reports programmed to be completed by the end of current reporting period, B = total cumulative number of inspection reports completed at the end of current reporting period.		
Formula	Reported Performance Indicator = (B/A) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records Inspection frequencies derived in accordance with the Forth Road Bridge Engineering Manual
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 11			
Title	Queensferry Crossing Inspections		
Measure Description	Percentage of inspections and reports carried out on the Queensferry Crossing to the agreed programme.		
Measure Aim	Measure the Operating Company's performance in carrying out inspections on the Queensferry Crossing to programme.		
Methodology	The Operating Company shall use the Records from the inspection scheduled as described in Schedule 7 Part 7 to produce the Performance Indicator.		
Data input	A = total cumulative number of inspection reports programmed to be completed by the end of current reporting period, B = total cumulative number of inspection reports completed at the end of current reporting period.		
Formula	Reported Performance Indicator = (B/A) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 2	**Data Source**	Operating Company Records Inspection frequencies derived in accordance with the Queensferry Crossing Inspection and Maintenance Manual
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 12a			
Title	Structures Maintenance		
Measure Description	Percentage of Structures maintenance activities carried out within the required timescales excluding the Principal Crossings.		
Measure Aim	To measure the Operating Company's performance in carrying out Structures maintenance, on programme. excluding those carried out on the Principal Crossings,		
Methodology	The Operating Company shall use the Records in the structures management function of the Integrated Roads Information System of the number of Structures with maintenance activities due and the number of Structures with maintenance activities completed to produce the Performance Indicator.		
Data input	A = total cumulative number of Structures with maintenance activities programmed to be completed by the end of the current reporting period, B = total cumulative number of Structures with maintenance activities completed by the end of the current reporting period.		
Formula	Performance Indicator = (B) / (A) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Structures management function of the Integrated Roads Information System or Operating Company Records
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 12b			
Title	Structure Maintenance – Forth Road Bridge		
Measure Description	Percentage of Structure maintenance activities carried out on the Forth Road Bridge and within the required timescales.		
Measure Aim	To measure the Operating Company's performance in carrying out Structure maintenance on the Forth Road Bridge.		
Methodology	The Operating Company shall use the Records in the Forth Road Bridge defects and repair management database of the number of maintenance activities due and the number of maintenance activities completed to produce the Performance Indicator.		
Data input	A = total cumulative number of maintenance activities programmed to be completed by the end of the current reporting period, B = total cumulative number of maintenance activities completed by the end of the current reporting period.		
Formula	Performance Indicator = (B) / (A) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Forth Road Bridge Maintenance Database
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 13			
Title	Winter Service treatments		
Measure Description	Percentage of Winter Service treatments carried out in compliance with required timescales.		
Measure Aim	To measure the Operating Company's performance in carrying out Winter Service activities.		
Methodology	The Operating Company shall use the register, as required by Schedule 7 Part 2, of all daily proposed and actual actions including all dates and times for each route and each treatment to produce the Performance Indicator.		
Data Input	A = number of operations where a planned (precautionary treatment) or unplanned (call out) treatment is required, B = number of operations which are completed within the required treatment timescale, C = number of operations for which full data logger downloads are achieved, D = total number of unplanned (call out) treatments called out, E = total number of unplanned (call out) treatments commenced within required timescale.		
Formula	Performance Indicator (treatment time) = (B/A) x 100% Performance Indicator (data logger downloads) = (C/A) x 100% Performance Indicator (response time) = (E/D) x 100% Overall Performance Indicator shall be the arithmetic average of all the three Performance Indicator items' percentages.		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Reasons for any failures and actions taken to prevent reoccurrence.		
Measurement Period	Monthly during Winter Service Period as from Commencement of Service Date 1	**Data Source**	Winter Service Records, as required by Schedule 7 Part 2
Return Format	Percentage	**Decimal places**	0

Performance Indicator 14	
Title	Actual spend against profile
Measure Description	Percentage of total spend on Schemes as a proportion of profiled total spend.
Measure Aim	To measure actual spend at the end of each reporting period against the profiled spend set at the start of the reporting period.
Methodology	The Operating Company shall use the Records of profiled and actual spend recorded in the contract control and management function of the Integrated Roads Information System, as required by Schedule 4 Part 1, to produce the Performance Indicator.
Data input	A = sum of actual spend included in the Statement for all routine/cyclic Schemes, B = sum of profiled spend for all routine/cyclic Schemes, C = sum of actual spend included in the Statement for all Structural maintenance Schemes, D = sum of profiled spend for all structural maintenance Schemes, E = sum of actual spend included in the Statement for all Structures Schemes, F = sum of profiled spend for all Structures Schemes, G = sum of actual spend included in the Statement for all minor improvement Schemes, H = sum of profiled spend for all minor improvement Schemes, I = sum of actual spend included in the Statement for all strategic road safety Schemes, J = sum of profiled spend for all strategic road safety Schemes.
Formula	Performance Indicator for routine and cyclic = (A/B) x 100% Performance Indicator for structural maintenance = (C/D) x 100% Performance Indicator for Structures = (E/F) x 100% Performance Indicator for minor improvements = (G/H) x 100% Performance Indicator for strategic road safety = (I/J) x 100% Reported Performance Indicator = (A+C+E+G+I) / (B+D+F+H+J) x 100%.
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Any significant findings as a result of further analysis of the link/sections Work Code or expenditure type.

Performance Indicator 14			
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Contract control and management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 15			
Title	Works Contracts cost estimates		
Measure Description	Accuracy of Works Contracts cost estimates.		
Measure Aim	To measure the accuracy of the Operating Company's estimates for Works Contracts.		
Methodology	The Operating Company shall use the Records of pre-tender estimate, awarded tender value and tender return date, recorded in accordance with the requirements of Schedule 6 Part 1, to produce the Performance Indicator. For each Scheme tender the accuracy shall be calculated and the Performance Indicator shall be based on all Scheme tenders completed during the previous 12 months or number of months elapsed after the Commencement of Service Date whichever is the lesser.		
Data input	The following data shall be used: A = pre-tender Scheme estimate for each Scheme, B = tender value for each Scheme, C = number of Schemes tendered in previous 12 months or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.		
Formula	The accuracy for each Scheme tender shall be calculated: Scheme tender accuracy = $(1-(\sqrt{((A-B)^2)}/A) \times 100\%$ Overall Performance Indicator shall be sum of the individual Scheme tender accuracy percentages divided by the number of Scheme tenders completed during the previous 12 months or number of months elapsed after the Commencement of Service Date whichever is the lesser.		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Records required by Schedule 6 Part 1
Return Format	percentage	**Decimal places**	0

Performance Indicator No. 16			
Title	Works Contracts out turn cost		
Measure Description	Success in delivering Schemes at the awarded tender value.		
Measure Aim	To measure the Operating Company's success in delivering Schemes at the awarded tender value.		
Methodology	The Operating Company shall use the Records of awarded tender value, final value and Scheme Completion Dates recorded in accordance with the requirements of Schedule 6 Part 1 to produce the Performance Indicator. For each Scheme the accuracy shall be calculated and the Performance Indicator shall be based on all Schemes completed during the previous 12 months or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.		
Data input	The following data shall be used: A = awarded tender value for each Scheme, B = final value for each Scheme, C = number of Schemes completed in previous 12 months or number of months elapsed after Commencement of Service Date 1whichever is the lesser.		
Formula	The accuracy for each Scheme shall be calculated: Scheme accuracy = $(1-\sqrt{((A-B)^2)}/A) \times 100\%$ Overall Performance Indicator shall be the sum of the individual Scheme accuracy percentages divided by the number of Schemes completed during the previous 12 months or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Records required by Schedule 6 Part 1
Return Format	percentage	**Decimal places**	0

Performance Indicator No. 17	
Title	Closure of Non-Conformances (NCR)
Measure Description	Percentage of Non-Conformances closed out within required timescale.
Measure Aim	To measure the Operating Company's performance in the closure of Non-Conformances.
Methodology	The Operating Company shall use the details recorded in a register, as required by Schedule 5 Part 1, of all Non-Conformances, corrections and corrective actions on Non-Conformances raised to produce the Performance Indicator. The Performance Indicator shall be measured monthly using the Records of the previous 6 months or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.
Data input	A = total number of Performance Audit Group NCR corrections due for closure during the reporting period, B = total number of Performance Audit Group NCR corrections closed on time during the reporting period, C = total number of Performance Audit Group NCR corrective actions due for closure during the reporting period, D = total number of Performance Audit Group NCR corrective actions closed on time during the reporting period, E = total number of Operating Company NCR corrections due for closure during the reporting period, F = total number of Operating Company NCR corrections closed on time during the reporting period, G = total number of Operating Company NCR corrective actions due for closure during the reporting period, H = total number of Operating Company NCR corrective actions closed on time during the reporting period.
Formula	Performance Indicator for Performance Audit Group corrections = {(B/A) sum latest 6 months* data} x 100% Performance Indicator for Performance Audit Group corrective actions = {(D/C) sum latest 6 months* data} x 100% Performance Indicator for Operating Company corrections = {(F/E) sum latest 6 months* data} x 100% Performance Indicator for Operating Company corrective actions = {(H/G) sum latest 6 months* data} x 100% Reported Performance Indicator = {(B+D+F+H) / (A+C+E+G) sum 6 months* data} x 100% *or number of months elapsed after Commencement of Service Date 1 whichever is the lesser

Performance Indicator No. 17			
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Reasons for any failures and actions taken to prevent reoccurrence.		
Measurement Period	Monthly (on a rolling 6 month data set) as from Commencement of Service Date 1	**Data Source**	Non-Conformance register, as required by Schedule 5 Part 1
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 18			
Title	Submission of monthly reports and submissions.		
Measure Description	Percentage of monthly reports and submissions listed in Table 5.3.A.1 in Schedule 5 Part 3, Annex 5.3/A that are submitted within the required timescales.		
Measure Aim	To measure the Operating Company's performance in the submission of the monthly reports and submissions.		
Methodology	The Operating Company shall use the Records necessary to produce all reports and submissions required by Table 5.3.A.1 to produce the Performance Indicator.		
Data input	A = total number of monthly reports and submissions due during the month, B = total number of monthly reports and submissions, submitted as required during the month.		
Formula	Performance Indicator = B/A x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Reasons for any failures and actions taken to prevent reoccurrence.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Records necessary to produce all reports and submissions required by Table 5.3.A.1
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 19			
Title	Planning applications		
Measure Description	Percentage of planning applications processed within the required timescale.		
Measure Aim	To measure the Operating Company's performance in the delivery of the delegated function of the roads authority by processing planning applications received from Planning Authorities effectively and within the required timescale.		
Methodology	The Operating Company shall use the register, as required by Schedule 8 Part 2, of all planning applications received and returned to produce the Performance Indicator. The Performance Indicator shall be based the total number of planning applications due for return during the reporting period, excluding those that require transportation assessments.		
Data input	A = total number of planning applications due for return during the reporting period, B = total number of planning applications due for return during the reporting period that are processed within the required timescale.		
Formula	Performance Indicator = (B / A) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue deliverables and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Planning Applications register, as required by Schedule 8 Part 2
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 20			
Title	Communications response		
Measure Description	Percentage of communications processed by the Operating Company within the required timescale.		
Measure Aim	To measure the Operating Company's performance in dealing with the correspondence.		
Methodology	The Operating Company shall use the register, as required by Schedule 3 Part 5, of communications received to produce the Performance Indicator. The Performance Indicator shall be based on the total number of items due a response during the reporting period. The Performance Indicator shall be based on a rolling 12 month average.		
Data input	A = total number of communications due a response during the reporting period, B = total number of communications responded to on time during the reporting period, C = total number of requests from the Director or written responses and briefings due for a response during the reporting period, D = total number of responses to requests from the Director for written responses and briefings provided to Transport Scotland within the required timescale during the reported period.		
Formula	Performance Indicator = (B+D) / (A+C) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue deliverables and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company's register, as required by Schedule 3 Part 5
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 21			
Title	Carbon emissions		
Measure Description	Annual carbon emissions.		
Measure Aim	To measure the Operating Company's performance within the Unit in reducing its carbon emissions.		
Methodology	The Operating Company shall use the Records compiled in the Carbon Management System (CMS) as required by Schedule 5 Part 8 to produce the Performance Indicator.		
Data input	N = annual carbon emissions (tonnes) produced by the Operating Company as recorded by the Carbon Management System.		
Formula	Performance Indicator (second year onwards) = N (current year) / N (benchmark figure agreed after first Annual Period following Commencement of Service Date 2) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Annually as from Commencement of Service Date 2	**Data Source**	Carbon Management System
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 22			
Title	Maintenance of grassed areas		
Measure Description	Percentage of grassed area maintained in accordance with the Scottish Ministers' Requirements.		
Measure Aim	To measure the Operating Company's performance in complying with the Scottish Ministers' Requirements for maintenance of grassed areas		
Methodology	The Operating Company shall use the results of Operating Company's Audit Inspections to produce the Performance Indicator		
Data input	A = Total number of grass heights measured and visual inspections made where the Scottish Ministers' Requirements are met. B = Total number of grass heights measured and visual inspections made.		
Formula	(A/B x 100)%		
Required supporting information	• Data input values • Any trends in the figures • Lists of all grass heights measured and visual inspections made where the Scottish Ministers' Requirements are not met and analysis of the reasons		
Measurement Period	Monthly (growing period) as from Commencement of Service Date 1	**Data Source**	Records of Operating Company's Audit Inspections
Return Format	Percentage	**Decimal places**	1

Performance Indicator No. 23a			
Title	Recording Inventory Condition Rating		
Measure Description	The percentage of all inventory condition ratings that are recorded within the required timescales excluding the Principal Crossings.		
Measure Aim	To measure the Operating Company's performance in undertaking the recording of all inventory condition ratings.		
Methodology	The Operating Company shall use the records in the routine maintenance and management function of the Integrated Roads Information System of the actual dates that each inventory condition rating is recorded in the system to produce the Performance Indicator.		
Data input	A = is the point in time to calculate the Performance Indicator i.e. to report the Performance Indicator for the end of the Annual Period 2015 to 2016 use 31 May 2016, B = total number of inventory items for the inventory types that are defined in the *Transport Scotland Condition Manual* as requiring condition assessment, C = total number of inventory items for the inventory types that are defined in the *Transport Scotland Condition Manual* as requiring condition assessment where either Commencement of Service Date 1 or the latest condition rating record prior to A is less than or equal to 1 year before A.		
Formula	(C/B) x 100%		
Required supporting information	• Data input values. • Any trends in the figures. • Lists of all late or overdue condition ratings and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Routine maintenance and management function of the Integrated Roads Information System.
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 23b			
Title	Recording Inventory Condition Rating – Forth Road Bridge		
Measure Description	The percentage of all inventory condition ratings that are recorded within the required timescales for the Forth Road Bridge.		
Measure Aim	To measure the Operating Company's performance in undertaking the recording of all inventory condition ratings.		
Methodology	The Operating Company shall use the records in the routine maintenance and management function of the Integrated Roads Information system of the actual dates that each inventory condition rating is recorded in the system to produce the Performance Indicator.		
Data input	A = is the point in time to calculate the Performance Indicator i.e. to report the Performance Indicator for the end of the Annual Period 2015 to 2016 use 31 May 2016, B = total number of inventory items for the inventory types that are defined in the *Forth Road Bridge Engineering Manual a*s requiring condition assessment, C = total number of inventory items for the inventory types that are defined in the *Transport Scotland Condition Manual* as requiring condition assessment where either Commencement of Service Date 1 or the latest condition rating record prior to A is less than or equal to 1 year before A.		
Formula	(C/B) x 100%		
Required supporting information	• Data input values. • Any trends in the figures. • Lists of all late or overdue condition ratings and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Routine maintenance and management function of the Integrated Roads Information System.
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 23c			
Title	Recording Inventory Condition Rating – Queensferry Crossing		
Measure Description	The percentage of all inventory condition ratings that are recorded within the required timescales for the Queensferry Crossing.		
Measure Aim	To measure the Operating Company's performance in undertaking the recording of all inventory condition ratings.		
Methodology	The Operating Company shall use the records in the routine maintenance and management function of the Integrated Roads Information System of the actual dates that each inventory condition rating is recorded in the system to produce the Performance Indicator.		
Data input	A = is the point in time to calculate the Performance Indicator i.e. to report the Performance Indicator for the end of the Annual Period 2015 to 2016 use 31 May 2016, B = total number of inventory items for the inventory types that are defined in the *Queensferry Crossing Inspection and Maintenance Manual* as requiring condition assessment, C = total number of inventory items for the inventory types that are defined in the *Transport Scotland Condition Manual* as requiring condition assessment where either Commencement of Service Date 2 or the latest condition rating record prior to A is less than or equal to 1 year before A.		
Formula	(C/B) x 100%		
Required supporting information	• Data input values. • Any trends in the figures. • Lists of all late or overdue condition ratings and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 2	**Data Source**	Routine maintenance and management function of the Integrated Roads Information System.
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 24	
Title	Community Engagements and Community Benefits
Measure Description	The percentage of all opportunities created, visits and tours undertaken and meetings attended during the reporting period.
Measure Aim	To measure the Operating Company's performance in engaging with communities.
Methodology	The Operating Company shall use its records to produce the Performance Indicator.
Data input	A = number of opportunities offered to young people within the Unit in accordance with the Scottish Government's *Creating Opportunities Together* document, B = total number of opportunities scheduled to be offered to young people within the Unit during the reporting period, C = number of Work Clubs supported within the Unit or adjacent to the Unit, in accordance with the UK Government's *Get Britain Working* policy, D = total number of Work Clubs programmed to be supported within the Unit or adjacent to the Unit during the reporting period, E = number of sponsorships offered to high schools within or adjacent to the Unit, F = total number of sponsorships programmed to be offered to high schools within or adjacent to the Unit during the reporting period, G = number of visits undertaken to primary and secondary schools within or adjacent to the Unit to make presentations regarding Operating Company's role and work, H = total number of programmed visits to primary and secondary schools within or adjacent to the Unit to make presentations regarding Operating Company's role and work programmed during the reporting period, I = number of tours to the Forth Road Bridge offered to engineering students from Universities listed in Schedule 3 Part 11, J = total number of tours to the Forth Road Bridge programmed to be offered to engineering students from Universities listed in Schedule 3 Part 11, during the reporting period, K = number of industry related lectures, mentoring and public speaking engagements, L = total number of industry related lectures, mentoring and public speaking engagements programmed during the reporting period, M = number of local charities supported by the Operating Company, N = total number of local charities programmed to be supported by the Operating Company during the reporting period, O = number of tours of the Principal Crossings offered for auction at charity fundraising events,

Performance Indicator No. 24			
	P = total number of tours of the Principal Crossings offered for auction at charity fundraising events during the reporting period, Q = number of attended dialogue, feedback and consultation events related to the major works affecting bridge users and in accordance with the Operating Company's communication plan required in Schedule 3 Part 5, R = total number of programmed dialogue, feedback and consultation events related to the major works affecting bridge users and in accordance with the Operating Company's communication plan required in Schedule 3 Part 5 during the reporting period, S = number of attended liaison meetings with Councillors from Fife, City of Edinburgh, West Lothian Councils and any other Councils who become members of the Forth Bridges Forum, T = total number of liaison meetings with Councillors from Fife, City of Edinburgh, West Lothian Councils and any other Councils who become members of the Forth Bridges Forum programmed during the reporting period, U = number of attended liaison meetings with Queensferry and District Community Council, V = total number of liaison meetings with Queensferry and District Community Council programmed during the reporting period, W = number of attended liaison meetings with North Queensferry, Inverkeithing, Rosyth and Newton Community Councils, X = total number of liaison meetings with North Queensferry, Inverkeithing, Rosyth and Newton Community Councils programmed during the reporting period.		
Formula	((A+C+E+G+I+K+M+O+Q+S+U+W)/(B+D+F+H+J+L+N+P+R+T+V+X)) x100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 25			
Title	Production and Distribution of the Queensferry Crossing Structural Health Monitoring System Data Reports		
Measure Description	The percentage of all Structural Health Monitoring System reports that are correctly produced and distributed to the stated recipients within the reporting interval.		
Measure Aim	To measure the Operating Company's performance in undertaking the production and promulgation of the agreed standard health monitoring reports.		
Methodology	The Operating Company shall produce reports based on outputs from the Structural Health Monitoring System and send to the recipients identified for each report type.		
Data input	A = the number of instances where the report is compliant with the reporting content requirements and has been received by the nominated recipients within the required reporting interval, B = the number of instances where the report is not compliant with the reporting content requirements or has not been received by the nominated recipients within the required reporting interval,		
Formula	(A/(A+B)) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all data losses and analysis of their reasons.		
Measurement Period	Annual as from Commencement of Service Date 2	**Data Source**	Queensferry Crossing Structural Health Monitoring System. Operating Company's Structural Health Monitoring System issued reports register. Structural Health Monitoring System report content specifications that include: • reporting intervals, and • list of recipients for each report type
Return Format	Percentage	**Decimal places**	1

Performance Indicator No. 26			
Title	Queensferry Crossing Supervisory Control And Data Acquisition System Maintenance		
Measure Description	Percentage of Supervisory Control And Data Acquisition System maintenance activities carried out within the required timescales on the Queensferry Crossing.		
Measure Aim	To measure the Operating Company's performance in carrying out maintenance of the Queensferry Crossing Supervisory Control And Data Acquisition System and the subsystems and monitored parts that it reports on or controls.		
Methodology	The Operating Company shall use the Records of the Supervisory Control and Data Acquisition parts with maintenance activities due and the number of Supervisory Control and Data Acquisition System parts with maintenance activities completed in the structures management function of the Integrated Roads Information System to produce the Performance Indicator.		
Data input	A = total number of maintenance actions programmed to be completed by the end of the current reporting period, B = total number of maintenance actions completed by the end of the current reporting period,		
Formula	Performance Indicator = (B) / (A) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late or overdue activities, analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 2	**Data Source**	Operating Company Records
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 27a			
Title	Access Systems inspections – Forth Road Bridge		
Measure Description	Percentage of inspections on Access Systems and reports carried out on Forth Road Bridge and to agreed programme.		
Measure Aim	Measure the Operating Company's performance in carrying out inspections on Access Systems on Forth Road Bridge to programme.		
Methodology	The Operating Company shall follow the inspection frequencies set out in the maintenance manuals appropriate to each Access Systems.		
Data input	A = total cumulative number of inspection reports of all types programmed to be completed by the end of current reporting period, B = total cumulative number of inspection reports of all types completed at the end of current reporting period. Access Systems inspection Records.		
Formula	Reported Performance Indicator = (B/A) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 27b			
Title	Access Systems maintenance – Forth Road Bridge		
Measure Description	Percentage of Access Systems maintenance activities and testing carried out on Forth Road Bridge and within the required timescales and equipment availability.		
Measure Aim	To measure the Operating Company's performance in carrying out Access Systems maintenance and testing on Forth Road Bridge.		
Methodology	The Operating Company shall use the Operating Company's maintenance Records and the replacement frequencies set out in the maintenance manuals appropriate to each Access Systems produce the Performance Indicator.		
Data input	A = total cumulative number of maintenance activities programmed to be completed by the end of the current reporting period, B = total cumulative number of maintenance activities completed by the end of the current reporting period. C = The reporting period x no. of items of Access Systems. D = total summed time for which single items of Access Systems (defined as a platform or gantry) are unavailable or cannot be used for any reason that is connected with maintenance or testing, including planned maintenance or lapse of certification.		
Formula	Performance Indicator = [(B / A) + (C / D)] / 2 x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Percentage	**Decimal places**	0

Appendix 27/A – Summary of Access Systems on the Forth Road Bridge

Underdeck mobile platforms (gantries) – all types - and ancillary access equipment
Main cable gantries – all types
Tower cradles – all types
Inter-walkway truss access decking system
Tower lifts
Hanger Access Cradles

Performance Indicator No. 28a			
Title	Access Systems inspections – Queensferry Crossing		
Measure Description	Percentage of inspections on Access Systems and reports carried out on Queensferry Crossing and to agreed programme.		
Measure Aim	Measure the Operating Company's performance in carrying out Access Systems inspections on the Queensferry Crossing to programme.		
Methodology	The Operating Company shall follow the inspection frequencies set out in the maintenance manuals appropriate to each Access System.		
Data input	A = total cumulative number of inspection reports of all types programmed to be completed by the end of current reporting period, B = total cumulative number of inspection reports of all types completed at the end of current reporting period. Access Systems inspection Records.		
Formula	Reported Performance Indicator = (B/A) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 2	**Data Source**	Operating Company Records
Return Format	Percentage	**Decimal places**	0

Performance Indicator No. 28b			
Title	Access Systems maintenance – Queensferry Crossing		
Measure Description	Percentage of Access Systems maintenance activities and testing carried out on the Queensferry Crossing and within the required timescales and equipment availability.		
Measure Aim	To measure the Operating Company's performance in carrying out Access Systems maintenance and testing on the Queensferry Crossing.		
Methodology	The Operating Company shall use the Operating Company's maintenance Records and the replacement frequencies set out in the maintenance manuals appropriate to each Access System to produce the Performance Indicator.		
Data input	A = total cumulative number of maintenance activities programmed to be completed by the end of the current reporting period, B = total cumulative number of maintenance activities completed by the end of the current reporting period. C = The reporting period x no. of items of Access Systems D = total summed time for which single items of Access Systems (defined as a platform or gantry) are unavailable or cannot be used for any reason that is connected with maintenance or testing, including planned maintenance or lapse of certification.		
Formula	Performance Indicator = [(B / A) + (C / D)] / 2 x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 2	**Data Source**	Operating Company Records
Return Format	Percentage	**Decimal places**	0

Appendix 28/A – Summary of Access Systems on the Queensferry Crossing

Underdeck mobile platforms (gantries) including runway beams and ancillary access equipment requiring certification
Stay inspection Gantries
Deck shuttles including runway beams
Tower cradles
Tower lifts

Performance Indicator No. 29			
Title	Programmed Special Inspections – Forth Road Bridge		
Measure Description	Percentage of programmed structural Special Inspections and reports carried out on the Forth Road Bridge and to agreed programme.		
Measure Aim	Measure the Operating Company's performance in carrying out programmed structural Special Inspections on the Forth Road Bridge to programme.		
Methodology	The Operating Company shall use its inspection Records and the agreed schedule of programmed Special Inspections to produce the Performance Indicator.		
Data input	A = total cumulative number of structural Special Inspection reports programmed to be completed by the end of current reporting period, B = total cumulative number of structural Special Inspection reports completed at the end of current reporting period.		
Formula	Reported Performance Indicator = (B/A) x 100%		
Required supporting information	In addition to reporting the Performance Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Lists of all late and overdue activities and analysis of their reasons.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records Agreed schedule of inspections and their intervals
Return Format	Percentage	**Decimal places**	0

Appendix 29/A - Items Requiring Programmed Special Inspections – Forth Road Bridge

Structural Special Inspections and established monitoring or regular inspections (not covered by Principal Inspection and General Inspection schedules).

Hanger terminations and anchors

Cable band bolt visual inspections

Half-joint inspections

Established monitored Defects

Demag joint inspections

This is Annex 5.6/B to Schedule 5 Part 6 referred to in the foregoing Agreement between Scottish Ministers and Amey LG Limited.

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 5 PART 6

PERFORMANCE MEASUREMENT

ANNEX 5.6/B – Monitoring Indicators

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 5 PART 6

PERFORMANCE MEASUREMENT

ANNEX 5.6/B – Monitoring Indicators

No.	Title	Measure Description	Reporting Period
01	Well lit network	Percentage of lighting points operational on the Unit.	Monthly
02	Network availability	The Lane length availability on the Unit.	Monthly
03	Traffic disruption caused by un-programmed work	The Lane length and duration unavailable on the Unit due to un-programmed work.	Monthly
04	Orders against Budget	Percentage of ordered work against budget.	Monthly
05	Works Contractor Invoice submission	Percentage of Works Contractor invoices submitted to Transport Scotland by the Operating Company within the required timescales.	Monthly
06	Accuracy of Operations cost estimates	Accuracy of Operations cost estimates.	Monthly
07	Disputed items in the Statement	Percentage value of disputed items against the total value of the Statement submitted by the Operating Company.	Monthly
08	Operations Instructions completed on target	Percentage of Operations Instructions completed by the target date.	Monthly
09	Staff turnover	Percentage staff turnover during last 12 months	Monthly
10	Sickness absence	Average number of days lost due to sickness per employee.	Monthly
11	Working hours	Average hours worked per employee in last 12 months.	Monthly
12	Training	Average number of training hours per employee provided in last 12 months.	Monthly

No.	Title	Measure Description	Reporting Period
13	Responses to Observations Resulting from Inspections and Hazard Notices	Percentage of Observations Resulting from Inspections and Hazard Notices responded to within the required timescale.	Monthly
14	Remedial Notices issued	Number of Remedial Notices.	Monthly
15	Innovation	Financial value of innovations introduced by the Operating Company.	Monthly
16	Collaboration	Value of collaborative services provided by Operating Company.	Monthly
17	Sustainability – use of reused, recycled, renewable materials	Percentage of raw materials used sourced from reused, recycled or renewable sources.	Monthly
18	Sustainability – waste generation and management	Percentage of waste materials re-used or recycled.	Monthly
19a	Salt Usage	Total amount of salt used in each Annual Period as a percentage of the amount used in the first Annual Period following Commencement of Service Date 2 (used as benchmark).	Annual
19b	Potassium Acetate Usage	Total amount of potassium acetate used in each Annual Period as a percentage of the amount used in the first Annual Period following Commencement of the Service Date 2 (used as benchmark).	Annual
20	Weather Forecast Accuracy	Percentage of accurate weather forecasts	Monthly
21	Vehicle Recovery Service Response	Percentage of vehicle recovery service responses within the required timescales.	Monthly
22	Queensferry Crossing Structural Health Monitoring System Availability	Percentage of data successfully captured for selected (priority) sensor set	Monthly

Monitoring Indicator 01			
Title	Well lit network		
Measure Description	Percentage of lighting points operational on the Unit.		
Measure Aim	To monitor the number of operational lighting points on the network.		
Methodology	The Operating Company shall use the Record of all non-operational lamps in the routine maintenance and management function of the Integrated Roads Information System to produce the Monitoring Indicator.		
Data input	A = total number of street lighting lamps on the network, B = total number of non-operational street lighting lamps during reporting period, C = total number of sign lamps on the network, D = total number of non-operational sign lamps during reporting period, E = total number of bollard lamps on the network, F = total number of non-operational bollard lamps during reporting period.		
Formula	Monitoring Indicator for street lighting = ((A - B) / A) x100% Monitoring Indicator for lit signs = ((C - D) / C) x 100% Monitoring Indicator for lit bollards = ((E - F) / E) x 100% Reported Monitoring Indicator = ((A+C+E) - (B+D+F)) / (A+C+E) x 100%		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Routine maintenance and management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	1

Monitoring Indicator 02			
Title	Network availability		
Measure Description	The Lane length availability on the Unit.		
Measure Aim	To measure Lane availability in terms of Lane/km/hours.		
Methodology	The Operating Company shall use the Records of traffic management required by Schedule 3 Part 7 to produce the Monitoring Indicator.		
Data input	A = Lane km of available network, B = Lane/km/hours of closures (Sum for all closures).		
Formula	Monitoring Indicator = (B) / (A x 24 x days in reporting period).		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Traffic management Records provided by the Operating Company as required by Schedule 3 Part 7
Return Format	Value	**Decimal places**	0

Monitoring Indicator 03			
Title	Traffic disruption caused by un-programmed work		
Measure Description	The Lane length and duration unavailable on the Unit due to un-programmed work.		
Measure Aim	To measure disruption caused by un-programmed work in terms of Lane/km/hours.		
Methodology	The Operating Company shall use the Records of traffic management required by Schedule 3 Part 7 to produce the Monitoring Indicator.		
Data input	A = length of un-programmed Lane closed in km, B = duration of closure in hours.		
Formula	Monitoring Indicator = A x B		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Proposed weekly traffic management programme and traffic management Records provided by the Operating Company as required by Schedule 3 Part 7
Return Format	Value	**Decimal places**	0

Monitoring Indicator 04	
Title	Orders against Budget
Measure Description	Percentage of ordered work against budget.
Measure Aim	To measure value of work ordered for the current Financial Year at the end of each reporting period against the budget for the Financial Year as set at the end of the reporting period.
Methodology	Analysis for each budget heading shall be carried out. The ordered work value shall be calculated by summing the ordered work values for each Scheme as recorded in contract control and management function of the Integrated Roads Information System at the end of each reporting period. The budget value shall be the current Financial Year budget as notified in writing by Transport Scotland. Where budget values are varied during the year, the last notified value shall be used.
Data input	A = sum of ordered work for all routine/cyclic Schemes, B = notified Financial Year budget for routine/cyclic Schemes, C = sum of ordered work for all structural maintenance Schemes, D = notified Financial Year budget for structural maintenance Schemes, E = sum of ordered work for all Structures Schemes, F = notified Financial Year budget for Structures Schemes, G = sum of ordered work for all minor improvement Schemes, H = notified Financial Year budget for minor improvement Schemes, I = sum of ordered work for all strategic road safety Schemes, J = notified Financial Year budget for strategic road safety Schemes.
Formula	Monitoring Indicator for routine and cyclic Schemes = A/B x100% Monitoring Indicator for structural maintenance = C/D x100% Monitoring Indicator for Structures = E/F x 100% Monitoring Indicator for minor improvements = G/H x100% Monitoring Indicator for strategic road safety Schemes = I/J x100% Reported Monitoring Indicator = (A+C+E+G+I) / (B+D+F+H+J) x 100%

Monitoring Indicator 04			
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures. • Any significant findings as a result of further link/section analysis by Work Code or expenditure type.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Contract control and management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 05			
Title	Works Contracts invoice submissions		
Measure Description	Percentage of Works Contractor invoices submitted to Transport Scotland by the Operating Company within the required timescales.		
Measure Aim	To monitor the efficiency of the Operating Company's process for turnaround of Works Contractor invoices enabling Transport Scotland to make payment within contractual timescales.		
Methodology	The Operating Company shall use the Records of the date the invoice is received, the date the invoice is submitted to Transport Scotland or rejected and the due submission date, which is the date the invoice is received plus 14 calendar days, as recorded in accordance with the requirements of Schedule 6 Part 1, to produce the Monitoring Indicator.		
Data input	A = number of Works Contractor invoice submission dates due during the reporting period, B = number of Works Contractor invoices submitted or rejected on time, with submission dates due during the reporting period.		
Formula	Monitoring Indicator = B/A x 100%		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Records required by Schedule 6 Part 1
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 06			
Title	Accuracy of Operation cost estimates		
Measure Description	Accuracy of cost estimates for Operations on Site.		
Measure Aim	Measure the accuracy of the Operating Company's estimates for Operations.		
Methodology	For each Operation on Site the Operating Company shall use the record of the estimate, out turn value and Scheme Completion Date in the contract control and management function of the Integrated Roads Information System to produce the Monitoring Indicator. For each Scheme the quantum accuracy shall be calculated and the Monitoring Indicator based on all Operations completed during the previous 3 months or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.		
Data input	For each Scheme the following data shall be used: A = Site Operation cost estimate, B = Site Operation out turn value.		
Formula	The accuracy for each Scheme shall be calculated: Monitoring Indicator for Scheme = $(1-(\sqrt{(A-B)/A})^2) \times 100\%$ Overall Monitoring Indicator shall be the arithmetical average of accuracy percentages for individual Schemes completed in the previous 3 months or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Contract control and management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 07			
Title	Disputed items in Statement		
Measure Description	Percentage value of disputed items against the total value of the Statement submitted by the Operating Company.		
Measure Aim	To measure success in minimising disputed items.		
Methodology	The Operating Company shall use the information in the contract control and management function of the Integrated Roads Information System to produce the Monitoring Indicator.		
Data input	A = total value of the Statement submitted by the Operating Company including disputed items, B = value of disputed items of the Statement submitted by the Operating Company.		
Formula	Monitoring Indicator = B/A x 100%		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Contract control and management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 08			
Title	Operations Instructions completed on target		
Measure Description	Percentage of Operations Instructions completed by the target date.		
Measure Aim	To measure success in completing Operations Instructions.		
Methodology	The Operating Company shall use the proposed and actual completion dates for each Operations Instruction in the contract control and management function of the Integrated Roads Information System to produce the Monitoring Indicator.		
Data input	A = number of Operations Instructions programmed for completion during reporting period, B = number of Operations Instructions programmed for completion during reporting period with a valid actual completion date entered.		
Formula	Monitoring Indicator = B/A x 100%		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Contract control and management function of the Integrated Roads Information System
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 09			
Title	Staff turnover		
Measure Description	Percentage staff turnover during last 12 months.		
Measure Aim	To measure staff turnover.		
Methodology	The Operating Company shall use the Records required by Schedule 5 Part 1 of the number of staff directly employed on the Unit leaving and the number of direct employees employed on the Unit during each reporting period to produce the Monitoring Indicator.		
Data input	P = number of direct employees leaving during previous 12 months*, Q = average number of all direct employees during previous 12 months*. * or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.		
Formula	Monitoring Indicator = P/Q x 100%		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator 10			
Title	Sickness absence		
Measure Description	Average number of days lost due to sickness per employee.		
Measure Aim	To record the average number of days lost due to sickness.		
Methodology	The Operating Company shall use the Records required by Schedule 5 Part 1 of the number of sick days taken by direct employees employed on the Unit and the number of direct employees employed on the Unit during each reporting period to produce the Monitoring Indicator.		
Data input	P = sum of working days lost during previous 12 months*, Q = average number of all direct employees during previous 12 months*. * or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.		
Formula	Average days absence per person = P/Q		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company staff Records
Return Format	Day	**Decimal places**	0

Monitoring Indicator 11			
Title	Working hours		
Measure Description	Average hours worked per employee in last 12 months.		
Measure Aim	To measure the average number of hours worked per employee.		
Methodology	The Operating Company shall use the Records required by Schedule 5 Part 1 of the number of working hours of direct employees employed on the Unit and the number of direct employees employed on the Unit during each reporting period to produce the Monitoring Indicator.		
Data input	P = sum of working hours by all employees during previous 12 months*, Q = average of all direct employees during previous 12 months. * or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.		
Formula	Average working hours per person per week = P/Q/52		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Hours per week	**Decimal places**	0

Monitoring Indicator 12			
Title	Training		
Measure Description	Average number of training hours per employee provided in last 12 months.		
Measure Aim	To measure the Operating Company's performance in providing training and development to all direct employees.		
Methodology	The Operating Company shall use Records required by Schedule 5 Part 1 of all training undertaken by direct employees employed on the Unit and the total number of direct employees employed on the Unit during each reporting period to produce the Monitoring Indicator.		
Data input	P = sum of all training hours provided during previous 12 months*, Q = average number of all direct staff during previous 12 months*. * or number of months elapsed after Commencement of Service Date 1 whichever is the lesser.		
Formula	Average training hours per person = P/Q		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Hours	**Decimal places**	0

Monitoring Indicator No. 13			
Title	Observations Resulting from Inspections and Hazard Notice responses		
Measure Description	Percentage of Observations Resulting from Inspections and Hazard Notices responded to within the required timescale.		
Measure Aim	To measure the number of Observations resulting from Inspections and Hazard Notices responded to within the required timescale.		
Methodology	The Operating Company shall use the Records necessary to comply with the requirements of Schedule 7 Part 1, to produce the Monitoring Indicator.		
Data input	A = total number of Observations resulting from Inspections and Hazard Notices (combined) due a response during the reporting period, B = total number of Observations resulting from Inspections and Hazard Notices (combined) due a response during the reporting period and responded to by the required response date.		
Formula	Monitoring Indicator = (B/A) x 100%		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Records necessary to comply with the requirements of Schedule 7 Part 1
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 14			
Title	Remedial Notices		
Measure Description	Number of Remedial Notices.		
Measure Aim	To measure the performance of the Operating Company in dealing with Non-Conformances.		
Methodology	The Operating Company shall use the Records required by Schedule 5 Part 1 of the Remedial Notices issued during each reporting period and any Remedial Notices remaining open from previous periods to produce the Monitoring Indicator.		
Data input	A = Total number of Remedial Notices issued during reporting period. B = Total number of Remedial Notices from previous reporting periods remaining open at the end of the current reporting period.		
Formula	Total number of Remedial Notices issued and still open = A + B		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Commentary on any Remedial Notices issued during each reporting period and any Remedial Notices remaining open from previous periods.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Number	**Decimal places**	0

Monitoring Indicator No. 15			
Title	Innovation		
Measure Description	Financial value of innovations introduced by the Operating Company.		
Measure Aim	To measure the Operating Company's performance in delivering an efficient and effective service whilst minimising costs.		
Methodology	The Operating Company shall use the Records of innovations submitted and accepted by the Director and the agreed financial benefits attributable to each innovation, as referred to in Schedule 1, to calculate the total financial benefit.		
Data input	The financial benefit to Transport Scotland of each introduced innovation.		
Formula	Total financial value to Transport Scotland of benefits of all accepted innovations to date = sum of individual innovation benefit financial values.		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Financial benefit for each innovation accepted by the Director.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Value (£)	**Decimal places**	0

Monitoring Indicator No. 16			
Title	Collaboration		
Measure Description	Value of collaborative services provided by Operating Company.		
Measure Aim	To measure the Operating Company's performance in providing efficiency savings in the provision of public sector services through collaborative agreements.		
Methodology	The Operating Company shall use the Records referred to in Schedule 3 Part 9, to produce the Monitoring Indicator.		
Data input	The financial value of goods and services provided to local authorities through collaboration agreements.		
Formula	Monitoring Indicator = sum of the values of goods and services provided to local authorities through collaboration agreements.		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Financial benefit for each of the collaborative agreement.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Value	**Decimal places**	0

Monitoring Indicator No. 17			
Title	Sustainability – use of reused, recycled, renewable materials		
Measure Description	Percentage of raw materials used sourced from reused, recycled or renewable sources.		
Measure Aim	To encourage sustainability.		
Methodology	The Operating Company shall use the Records required by Schedule 5 Part 8 of the quantities of raw materials used and quantities of raw materials obtained from recycled, reused, renewable or certified sources to produce the Monitoring Indicator.		
Data input	A = total raw materials consumed (tonnes), B = total raw materials from a recycled or reused source (tonnes), C = total raw materials from a renewable or certified source (tonnes).		
Formula	Percentage of raw materials from reused, recycled or renewable sources (tonnes) = (B + C) / A x 100%		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 18			
Title	Sustainability – waste generation and management		
Measure Description	Percentage of waste materials reused or recycled.		
Measure Aim	To measure the amount of waste generated by the Operating Company's Operations.		
Methodology	The Operating Company shall use the Records required by Schedule 5 Part 8 of the quantities of construction and demolition waste created and its destination to produce the Monitoring Indicator.		
Data input	A = total construction and demolition waste reused in Operations (tonnes), B = total construction and demolition waste recycled (tonnes), C = total construction and demolition waste taken to landfill (tonnes).		
Formula	Percentage of waste materials reused or recycled (tonnes). = (A + B) / (A + B + C) x100%		
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall also provide the following supporting information: • Data input values. • Any trends in the figures.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 19a			
Title	Salt Usage		
Measure Description	Total amount of salt used in each Annual Period as a percentage of the amount used in the Annual Period following Commencement of the Service Date 2 (used as benchmark). Base salt usage to be established and Monitoring Indicator reported annually from the second Annual Period following Commencement of Service Date 2 onwards.		
Measure Aim	To monitor the amount of salt used during the Winter Service Period.		
Methodology	The Operating Company shall use the route cards and the data logging system fitted into the Winter Service vehicles to provide the data to produce this Monitoring Indicator.		
Data input	Total amount of salt used per month in tonnes.		
Formula	Total amount of salt used aggregated for the Annual Period as a percentage of the amount used in the Annual Period following Commencement of Service Date 2.		
Required supporting information	Not applicable.		
Measurement Period	Monthly as from Commencement of Service Date 2	**Data Source**	Operating Company Records & Data Logging System
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 19b			
Title	Potassium Acetate Usage		
Measure Description	Total amount of potassium acetate used in each Annual Period as a percentage of the amount used in the Annual Period following Commencement of Service Date 2 (used as benchmark). Base potassium acetate usage to be established and Monitoring Indicator reported annually from the second Annual Period following Commencement of Service Date 2 onwards.		
Measure Aim	To monitor the amount of potassium acetate used during the Winter Service Period.		
Methodology	The Operating Company shall use the route cards and the data logging system fitted into the Winter Service vehicles to provide the data to produce this Monitoring Indicator.		
Data input	Total amount of potassium acetate used per month in litres.		
Formula	Total amount of potassium acetate used aggregated for the Annual Period as a percentage of the amount used in the first Annual Period following Commencement of Service Date 2.		
Required supporting information	Not applicable.		
Measurement Period	Monthly as from Commencement of Service Date 2	**Data Source**	Operating Company Records & Data Logging System
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 20			
Title	Weather Forecast Accuracy		
Measure Description	Total number of accurate forecasts provided in each month (during the Winter Service Period) as a percentage of the total number of forecasts provided in that same month.		
Measure Aim	To monitor the accuracy of forecasts obtained during the winter season.		
Methodology	The Operating Company shall use data provided by its expert weather forecasting service to produce this Monitoring Indicator.		
Data input	Frost vs. No Frost and No Frost vs. Frost.		
Formula	Number of accurate forecasts during the month/ Total number of forecasts during the month x 100.		
Required supporting information	Not applicable.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 21	
Title	Vehicle Recovery Service Response
Measure Description	Percentage of vehicle recovery service responses within the required timescales.
Measure Aim	To monitor the Operating Company's performance in providing vehicle recovery service on the Forth Road Bridge from Commencement of Service Date 1 and on the Queensferry Crossing from Commencement of Service Date 2.
Methodology	The Operating Company shall use the Records in the management of Incidents function of the Integrated Roads Information System, required by Schedule 7 Part 3, to produce the Monitoring Indicator.
Data input	A = total number of light recovery vehicle responses required during the reporting period, B = total number of light recovery vehicle responses carried out on time during the reporting period, C = total number of heavy recovery vehicle responses required during the reporting period, D = total number of heavy recovery vehicle responses carried out on time during the reporting period.
Formula	Monitoring Indicator for light recovery vehicle response = (B/A) x 100% Monitoring Indicator for heavy recovery vehicle response = (D/C) x 100% Reported Monitoring Indicator N = ((B + D)/(A + C)) x 100%
Required supporting information	In addition to reporting the Monitoring Indicator, the Operating Company shall provide the following supporting information for all Vehicle Recovery Service responses: • Data input values. • Any trends in the figures. • Reasons for any failures and actions taken to prevent recurrence. • Percentage of light recovery vehicle service responses carried out >10 minutes early. • Percentage of light recovery vehicle service responses carried out 10-5 minutes early. • Percentage of light recovery vehicle service responses carried out 5-0 minutes early. • Percentage of light recovery vehicle service responses carried out 0-5 minutes late. • Percentage of light recovery vehicle service responses carried out 5-10 minutes late. • Percentage of light recovery vehicle service responses carried out >10 minutes late.

Monitoring Indicator No. 21			
	• Percentage of heavy recovery vehicle service responses carried out >20 minutes early. • Percentage of heavy recovery vehicle service responses carried out 20-10 minutes early. • Percentage of heavy recovery vehicle service responses carried out 10-0 minutes early. • Percentage of heavy recovery vehicle service responses carried out 0-10 minutes late. • Percentage of heavy recovery vehicle service responses carried out >10 minutes late.		
Measurement Period	Monthly as from Commencement of Service Date 1	**Data Source**	Operating Company Records
Return Format	Percentage	**Decimal places**	0

Monitoring Indicator No. 22			
Title	Queensferry Crossing Structural Health Monitoring System Availability		
Measure Description	Percentage of data successfully captured for selected (priority) sensor set		
Measure Aim	To provide reassurance of reliability and consistency of the system in operation for when rare extreme events occur.		
Methodology	The system shall be configured to measure the availability of a specific data capture subset of the system, whether retained or not.		
Data input	A = the assessment duration, B = the Class A channel time loss (error) (=summed time lost for all channels in Class), C = the number of Class A channels. Lost data volumes calculated by the Operating Company for the measurement period. Priority categorisation list for sensors by channel (high/low importance - Class A/B).		
Formula	(1-(B/(A x C))) x 100%		
Required supporting information	Lost data volumes calculated by the Operating Company for the measurement period.		
Measurement Period	Monthly as from Commencement of Service Date 2	**Data Source**	Queensferry Crossing Structural Health Monitoring System
Return Format	Percentage	**Decimal places**	2

This is Annex 5.6/C to Schedule 5 Part 6 referred to in the foregoing Agreement between Scottish Ministers and Amey LG Limited.

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 5 PART 6

PERFORMANCE MEASUREMENT

ANNEX 5.6/C – Payment Adjustment Factors

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 5 PART 6

PERFORMANCE MEASUREMENT

ANNEX 5.6/C – Payment Adjustment Factors

No.	Applicable item
01	Schedule 7 Part 1 Repair of Category 1 Defects of Value not more than £10,000
02	Schedule 7 Part 3 Incident Response Operations for Incidents of Value not more than £10,000
03	Schedule 7 Part 1 Safety Inspections, Safety Patrols and Night Time Safety Patrols
04	Schedule 7 Part 1 Detailed Inspections
05	Schedule 7 Part 1 Grass Cutting
06	Schedule 7 Part 1 Vehicle Restraint systems
07	Schedule 7 Part 1 Road Traffic Signs

Payment Adjustment Factor No. 1	
Applicable Item	**Schedule 7 Part 1 Repair of Category 1 Defects of Value not more than £10,000**
Measurement description	The percentage of all Category 1 Defect repairs that are carried out within the required timescale.
Measure Aim	To adjust monthly payments to reflect the Operating Company's performance in undertaking the repair of Category 1 Defects.
Methodology	The Operating Company shall use the Records in the routine maintenance and management function of the Integrated Roads Information System of the actual dates and times when the Operating Company was aware of the presence of a Category 1 Defect and the date and time of all temporary and permanent repairs of Category 1 Defects to calculate the Payment Adjustment Factor for the month.
Data input	A = total number of Category 1 Defect temporary repairs due during the month, B = total number of Category 1 Defect temporary repairs repaired on time during the month, C = total number of Category 1 Defect permanent repairs due during the month, D = total number of Category 1 Defect permanent repairs repaired on time during the month.
Formula	Payment Adjustment Factor* = ((B + D) / (A + C)) x 100%

*rounded to nearest whole percentage point

Payment Adjustment Factor No. 2	
Applicable Item	**Schedule 7 Part 3 Incident Response Operations for Incidents of Value not more than £10,000**
Measure Description	Percentage of all Incident Response Operations (excluding the Trunk Road Incident Support Service) that are attended to within the required timescale.
Measure Aim	To measure the Operating Company's performance in undertaking Incident Response Operations (excluding the Trunk Road Incident Support Service) and adjust monthly payments to reflect performance.
Methodology	The Operating Company shall use the Records in the Incident Response register of the actual date and time when the Operating Company was aware of the requirement for all Incident Response Operations and the date and time of all Incident Response Operations to calculate the Payment Adjustment Factor for the month.
Data input	A = total number of Incident Response Operations (including initial, secondary and contingency responses but excluding the Trunk Road Incident Support Service) required during the month, B = total number of Incident Response Operations (including initial, secondary and contingency responses but excluding the Trunk Road Incident Support Service) attended to within the required timescale during the month.
Formula	Payment Adjustment Factor* = (B/A) x 100%

*rounded to nearest whole percentage point

Payment Adjustment Factor No. 3	
Applicable Item	**Schedule 7 Part 1 Safety Inspections, Safety Patrols and Night Time Safety Patrols**
Measure Description	Percentage of days on which link/sections within the Unit are within the required inspection interval for Safety Inspections, Safety Patrols and night time Safety Patrols.
Measure Aim	To adjust monthly payments to reflect the Operating Company's performance in carrying out of Safety Inspections, Safety Patrols and night time Safety Patrols.
Methodology	The Operating Company shall use the Records in the routine maintenance and management function of the Integrated Roads Information System of the actual date and time when the Operating Company carried out Safety Inspections, Safety Patrols and night time Safety Patrols to calculate the Payment Adjustment Factor for the month.
Data input	A = the number of days during the month on which each link/section is compliant with the Specification in respect of Safety Inspections, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System, B = the number of days during the month on which each link/section is not compliant with the Specification in respect of Safety Inspections, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System, C = the number of days during the month on which each link/section is compliant with the Specification in respect of Safety Patrols, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System, D = the number of days during the month on which each link/section is not compliant with the Specification in respect of Safety Patrols, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System, E = the number of days during the month on which each link/section is compliant with the Specification in respect of night time Safety Patrols, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System, F = the number of days during the month on which each link/section is not compliant with the Specification in respect of night time Safety Patrols, aggregated for all link/sections recorded in routine maintenance and management function of the Integrated Roads Information System.
Formula	Payment Adjustment Factor* = ((A + C + E) / (A + B + C + D + E + F)) x 100%

*rounded to nearest whole percentage point

Payment Adjustment Factor No. 4	
Applicable Item	**Schedule 7 Part 1 Detailed Inspections**
Measure Description	Percentage of Detailed Inspections carried out within the required intervals.
Measure Aim	To adjust monthly payments to reflect the Operating Company's performance in carrying out of Detailed Inspections.
Methodology	The Operating Company shall use the Records in the routine maintenance and management function of the Integrated Roads Information System of the actual date and time when the Operating Company carried out Detailed Inspections on each inventory item to calculate the Payment Adjustment Factor for the month.
Data input	A = the number of inventory items where the inspection activity is compliant with the required Detailed Inspection activity interval, aggregated for all inventory items and for all Detailed Inspection activities recorded in routine maintenance and management function of the Integrated Roads Information System at the end of the month, B = the number of inventory items where the inspection activity is not compliant with the required Detailed Inspection activity interval, aggregated for all inventory items and for all Detailed Inspection activities recorded in routine maintenance and management function of the Integrated Roads Information System at the end of the month.
Formula	Payment Adjustment Factor* = ((A) / (A +B)) x 100%

*rounded to nearest whole percentage point

Payment Adjustment Factor No. 5	
Applicable Item	**Schedule 7 Part 1 Grass Cutting**
Measurement description	The percentage of grass asset maintained to the Scottish Ministers' Requirements.
Measure Aim	To adjust monthly payments to reflect the Operating Company's performance in carrying out grass cutting.
Methodology	The Operating Company shall use the results of the Operating Company's Audit Inspections of grass cutting areas and associated Records to calculate the Payment Adjustment Factor for the month.
Data input	A = total number of visual inspections made and records inspected where the Scottish Ministers' Requirements are met, B = total number of visual inspections made and records inspected.
Formula	Payment Adjustment Factor* = (A / B x 100)%

*rounded to nearest whole percentage point

Payment Adjustment Factor No. 06	
Applicable Item	**Schedule 7 Part 1 Vehicle Restraint Systems**
Measurement description	The percentage of tensioned vehicle restraint systems asset maintained within required maintenance interval.
Measure Aim	To adjust monthly payments to reflect the Operating Company's performance in carrying out of maintenance of the tensioned vehicle restraint systems.
Methodology	The Operating Company shall use the Records in the routine maintenance and management function of the Integrated Roads Information System of the actual date and time when the Operating Company carried out maintenance of the tensioned vehicle restraint systems to calculate the Payment Adjustment Factor for the month.
Data input	A = total linear length of tensioned vehicle restraint systems inventory items recorded within the Unit at the end of the month, B = total linear length of tensioned vehicle restraint systems inventory items where the last maintenance action is within the required maintenance interval at the end of the month.
Formula	Payment Adjustment Factor* = (B / A) x 100%

*rounded to nearest whole percentage point

Payment Adjustment Factor No. 07	
Applicable Item	**Schedule 7 Part 1 Road Traffic Signs**
Measurement description	The percentage of road traffic signs maintained within required maintenance interval.
Measure Aim	To measure the Operating Company's carrying out of maintenance of the road traffic signs and adjust monthly payments to reflect performance.
Methodology	The Operating Company shall use the Records in the routine maintenance and management function of the Integrated Roads Information System of the actual date and time when the Operating Company carried out maintenance of the road traffic signs to calculate the Payment Adjustment Factor for the month.
Data input	A = total number of road traffic signs inventory items recorded within the Unit at the end of the month, B = total number of road traffic signs inventory items where the last maintenance action is within the required maintenance interval at the end of the month.
Formula	Payment Adjustment Factor* = (B / A) x 100%

*rounded to nearest whole percentage point