Data Communications Company

Consultation

Changes to the DCC Performance Measurement Methodology – additional information

Date: 22 January 2020

Classification: DCC Public

1 Background

On 20 December, DCC published a consultation on Changes to the Performance Measurement Methodology (PMM). DCC is proposing to amend the calculation to be applied to determine the Service Level of four Performance Measures. The Performance Measures affected by the consultation are:

- Code Performance Measure 1 – On Demand Service Responses delivered within the applicable Target Response Time;
- Code Performance Measure 2 – Future Dated Service Responses delivered within the applicable Target Response Time;
- Code Performance Measure 3 – Percentage of Alerts delivered within the applicable Target Response Time; and
- Performance Measure 12.2 – Percentage of Power Outage Event Alerts delivered: Greater than 50 Communications Hubs

Following publication, we received a request from a stakeholder to provide a worked example of the proposed changes. This document has been produced to help clarify our proposals.

2 Worked example

The current methodology for calculating the three Code Performance Measures takes an average of an average which is a mathematically flawed approach as it allows one or more over / underperforming contributing Performance Measures to positively / negatively impact the overall performance for the Code Performance Measure.

Our proposal moves us to calculating performance based on the actual performance of each contributory measure and summing the volume of events that met SLA vs. the volume of events that missed SLA to give a true percentage performance for the Code Performance Measure.

EG. Current Methodology CPM1

Add up the percentage performance for each of the contributing measures and divide by how many measures scored that month.

November Total of Percentage Performance = **753.52%**

Number of Contributory Measures = **8**

Therefore, Code Performance Measure = **94.19%**

Ref	Performance Measure	Service Provider	On Reported List	Target Service Level	Minimum Service Level	Oct-19	Nov-19
1.1	Percentage of DSP Service Request Times within relevant TRT	DSP	N	99.00%	96.00%	99.64%	99.94%
1.4	Percentage of DCC Service Request Times within relevant TRT	DSP	N	99.00%	96.00%	99.95%	99.97%
2	Percentage of Category 1 Firmware Payloads completed within the relevant TRT	CSPN	N	99.00%	96.00%	83.96%	59.55%
2	Percentage of Category 1 Firmware Payloads completed within the relevant TRT	CSPC	N	99.00%	96.00%	99.11%	97.15%
2	Percentage of Category 1 Firmware Payloads completed within the relevant TRT	CSPS	N	99.00%	96.00%	99.01%	97.01%
4.3	Round Trip Time 4 Test HAN Interface Command Time: percentage delivered within 25 seconds	CSPN	N	85.00%	80.00%	100.00%	100.00%
4.3	Round Trip Time 4 Test HAN Interface Command Time: percentage delivered within 25 seconds	CSPC	N	99.00%	90.00%	99.95%	99.95%
4.3	Round Trip Time 4 Test HAN Interface Command Time: percentage delivered within 25 seconds	CSPS	N	99.00%	90.00%	99.94%	99.95%
SMETS2	**Percentage of On-Demand Service Responses delivered within the applicable TRT**	DCC	Y	99.00%	96.00%	97.70%	94.19%

Proposed Method

The proposal would use the actual numbers that contributed to each of the performance measures as shown below. (The underlying figures in the table below have been redacted to protect confidentiality.)

Total Events in Period = 41,975,280

Events that Met SLA = 41,933,323

Therefore, Code Performance Measure = **99.90%**

Ref	Performance Measure	Service Provider	Total Events	Events Meeting SLA	Events Missing SLA	% Performance
1.1	Percentage of DSP Service Request Times within relevant TRT	**DSP**				
1.4	Percentage of DCC Service Request Times within relevant TRT	**DSP**				
2	Percentage of Category 1 Firmware Payloads completed within the relevant TRT	**CSPN**				
2	Percentage of Category 1 Firmware Payloads completed within the relevant TRT	**CSPC**				
2	Percentage of Category 1 Firmware Payloads completed within the relevant TRT	**CSPS**				
4.3	Round Trip Time 4 Test HAN Interface Command Time: percentage delivered within 25 seconds	**CSPN**				
4.3	Round Trip Time 4 Test HAN Interface Command Time: percentage delivered within 25 seconds	**CSPC**				
4.3	Round Trip Time 4 Test HAN Interface Command Time: percentage delivered within 25 seconds	**CSPS**				
CPM1	**Percentage of On-Demand Service Responses delivered within the applicable TRT**	**DCC**	**41,975,280**	**41,933,323**	**41,957**	**99.90%**

By doing this we are giving a true representation of the overall performance for the Code Performance Measure and not allowing the calculation to be skewed by one or more contributory measures performance.

This would be true for all three of the CPMs we are proposing to change.

With regards to PM12.2 for CSPN/C/S, the current calculation within the methodology leads to performance being reported at over 100% as CSPs are sending all through to DCC

EG Current Method

$$\text{PM12.2} = 100\% \times \left(\frac{\text{Number of Power Outage Event alerts}}{((\text{Number of Communications Hub Power Loss Alerts} - 50) \times 0.25) + 50} \right)$$

Numerator - Number of Power Outage Alerts = **10,278**

Denominator – ((10,278 - 50) * 0.25) + 50 = **2,607**

Therefore Performance **= 10278/2607 or 394.25%**

What we propose is that they work out how many they need to send using the same methodology and report the PM as the success of those sent.

Number of Power Outage Alerts = 10,278

Number that need to be transmitted to DCC = **((10,278 - 50) * 0.25) + 50 = 2,607**

Numerator - Number of Power Outage Alerts Successfully Transmitted **= 2,607**

Denominator - Number that need to be transmitted to DCC = **2,607**

Performance = **100%**

If you have any questions about the consultation documents, please contact DCC via consultations@smartdcc.co.uk.