Data Communications Company

Switching Change Proposal: SLAs & Exclusions

R0092

We believe in making Britain more connected, so we can all lead smarter, greener lives.

May 2023

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Overview

Following the successful go-live of the Switching Service, and subsequent understanding of user and system behaviour, DCC initiated a REC Change Proposal (R0092) to align the Switching SLAs (originally defined early in the design process) with this real-world behaviour.

The following slides give context and specific suggestions of how these SLAs could be changed to enable an accurate and tangible measurement of the performance levels in the areas outlined below.

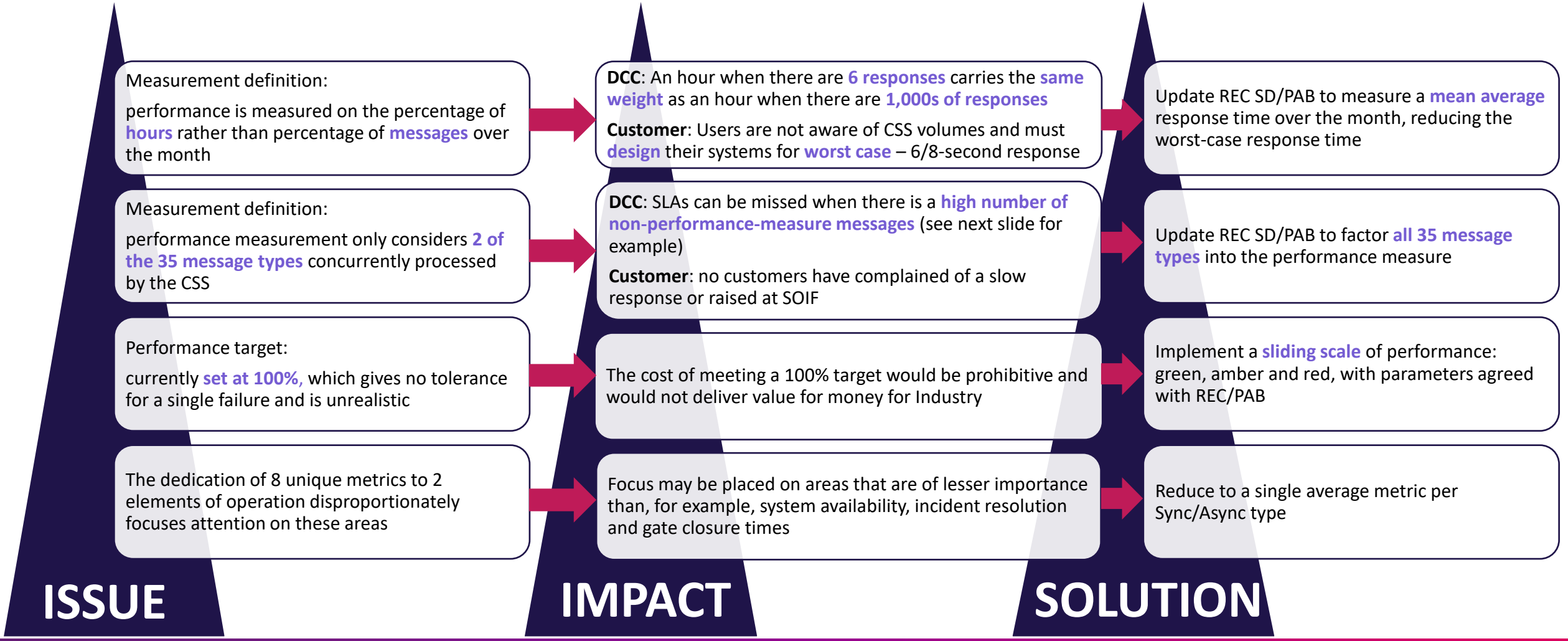
DCC welcomes the opportunity to discuss and refine these suggestions with the appropriate interested parties.

Category	Metric	Service Definition Ref.
CSS Message Targets	Synchronous Messages	CSS 6.1
	Asynchronous Messages	CSS 6.2
	Gate Closure	CSS 6.3
Incident Management Targets	CSS (Landmark) Incidents	CSS 5.2
	ERDS Incidents	ERDS 6.2
	GRDS Incidents	GRDS 6.2
	SO (DCC) Incidents	SO 5.2
	SO (DCC) Service Requests	SO 5.4
Performance Measurement Exclusions	Relevant to all areas	

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Sync/Asynchronous Responses: Context

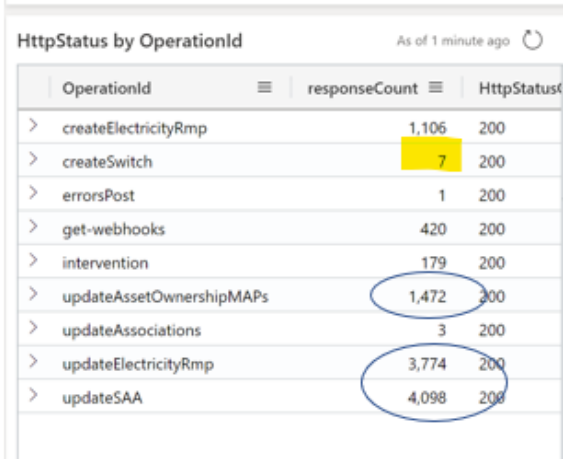
CSS 6.1 & 6.2



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Example 6.1 Data

The data below relates to 02:00 on 26th April – an Average category hour in which our mean time to complete 6.1 messaging was 2.5 seconds; therefore, we failed SLA.



HttpStatus by OperationId — As of 1 minute ago

OperationId	responseCount	HttpStatus
createElectricityRmp	1,106	200
createSwitch	7	200
errorsPost	1	200
get-webhooks	420	200
intervention	179	200
updateAssetOwnershipMAPs	1,472	200
updateAssociations	3	200
updateElectricityRmp	3,774	200
updateSAA	4,098	200

In this hour there were only 7 sync createSwitch messages, but other message types were significantly higher and impacted the system performance without being considered in the SLA measure

The use of batch-type processing was also prevalent in this hour, with 2 high peaks early in the hour affecting response times



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Synchronous Message Response Targets
CSS 6.1

Measure ID	REC Service Definition		Current PAB Measure	Proposed Change	
CSS 6.1.1	Following receipt of Market Messages from CSS Users, the CSS Provider shall carry out synchronous validation and provide a response within the following times:	Average hourly* volume: mean time of two seconds or less	Where market messages from CSS Users are at or below an average hourly volume what percentage of hours was synchronous validation and a response provided with a mean time of 2 seconds or less	What was the mean average response time for all synchronous validation and response messages (with exclusions applied). Green performance: 2 seconds or below, amber performance: 2 to 3 seconds, red performance: over 3 seconds.	
CSS 6.1.2		Average hourly volume: 90th percentile time of four seconds or less	Where market messages from CSS Users are at or below an average hourly volume what percentage of hours was synchronous validation and a response provided with a 90th Percentile time of 4 seconds or less	Propose to remove - now covered in CSS 6.1.1	**Potential Exclusions:** • Instances when users send large batches of data to CSS • Duplicate requests within short timescale
CSS 6.1.3		Peak hourly volume: mean time of three seconds or less	Where market messages from CSS Users are above average hourly volume and at or below a peak hourly volume what percentage of hours was synchronous validation and a response provided with a mean time of 3 seconds or less		
CSS 6.1.4		Peak hourly volume: 90th percentile time of six seconds or less	Where market messages from CSS Users are above average hourly volume and at or below a peak hourly volume what percentage of hours was synchronous validation and a response provided with a 90th Percentile time of 6 seconds or less		

* A drafting error in the original Service Definition listed this as ‘daily’. It was corrected in the PAB pre go-live but persists in the Service Definition

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Asynchronous Message Response Targets
CSS 6.2

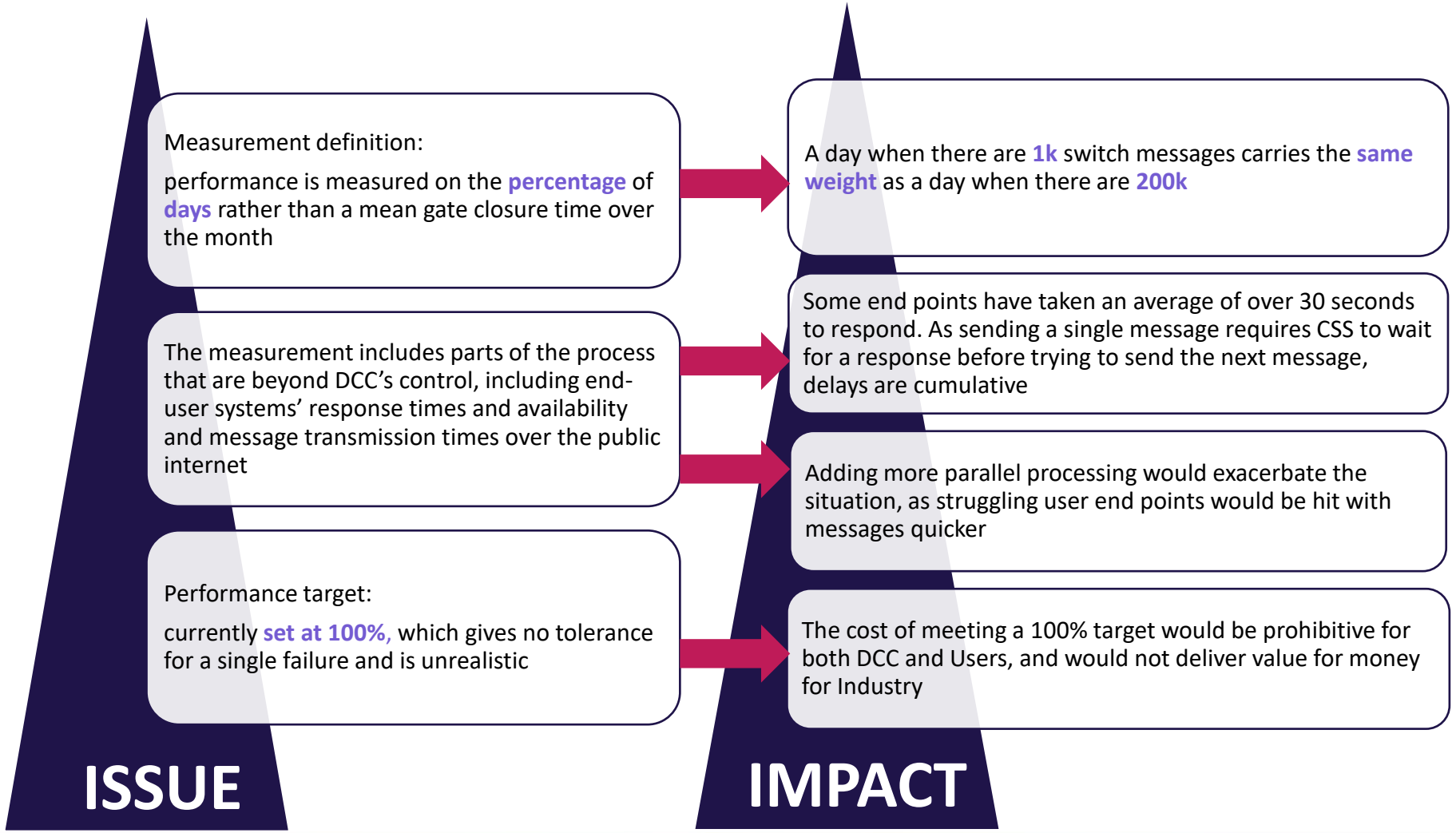
Measure ID	REC Service Definition		Current PAB Measure	Proposed Change	
CSS 6.2.1	The CSS Provider shall process a Registration Service Request (from the point of receipt by CSS to the point where CSS sends out the response of either "Validated" or "Rejected") as follows:	Average hourly volume: mean time of three seconds or less	At or below average hourly volume what percentage of hours did the CSS Provider process Registration Service Requests with a mean time of 3 seconds or less	What was the mean average processing time for all Registration Service Requests (with exclusions applied). Green performance: 2 seconds or below, amber performance: 2 to 3 seconds, red performance: over 3 seconds.	
CSS 6.2.2		Average hourly volume: 90th percentile time of six seconds or less	At or below average hourly volume what percentage of hours did the CSS Provider process Registration Service Requests with a 90th Percentile time of 6 seconds or less	Propose to remove - now covered in CSS 6.2.1	**Potential Exclusions:** • Instances when users send large batches of data to CSS • Duplicate requests within short timescale
CSS 6.2.3		Peak hourly volume: mean time of five seconds or less	Above average hourly volume and at or below peak hourly volume what percentage of hours did the CSS Provider process Registration Service Requests with a mean time of 5 seconds or less		
CSS 6.2.4		Peak hourly volume: 90th percentile time of eight seconds or less	Above average hourly volume and at or below peak hourly volume what percentage of hours did the CSS Provider process Registration Service Requests with a 90th Percentile time of 8 seconds or less		

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Gate Closure: Context
CSS 6.3

Gate Closure will not be discussed within the first Working Group. Information is provided here for reference.



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Gate Closure Targets
CSS 6.3

Measure ID	REC Service Definition		Current PAB Measure	Proposed Change
CSS 6.3.1	The CSS Provider shall process the securing of Switches and send synchronisation messages of secured Switches at Gate Closure to each relevant Switching Data Service Provider (from the time of Gate Closure to the point at which CSS sends the last message) as follows:	Average daily volume: mean response time of 20 minutes or less	At or below average daily volume did the CSS Provider process securing of switches and send synchronisation messages to each relevant Switching Data Service Provider with a mean time of 20 minutes or less	To be discussed in later sessions.
CSS 6.3.2		Average daily volume: 90th percentile response time of 25 minutes or less	At or below average daily volume did the CSS Provider process securing of switches and send synchronisation messages to each relevant Switching Data Service Provider with a 90th percentile time of 25 minutes or less	
CSS 6.3.3		Peak daily volume: mean response time of 35 minutes or less	Above average daily volume and at or below peak daily volume did the CSS Provider process securing of switches and send synchronisation messages to each relevant Switching Data Service Provider with a mean time of 35 minutes or less	
CSS 6.3.4		Peak daily volume: 90th percentile response time of 40 minutes or less	Above average daily volume and at or below peak daily volume did the CSS Provider process securing of switches and send synchronisation messages to each relevant Switching Data Service Provider with a 90th percentile time of 40 minutes or less	

Switching Incidents: Context

CSS 5.2, ERDS & GRDS 6.2, SO 5.2 & 5.4

ISSUE

All incident SLAs are currently set at 100%

IMPACT

In some instances, resolution within SLA is not possible without compromising quality (e.g. requirements to test). In these instances, striving to meet a 100% target introduces a quality risk

Introducing a 100% SLA for all incidents with Service Providers would be extremely costly

SOLUTION

Setting a minimum and target service level would provide assurance that incidents are being managed appropriately, whilst also accounting for more complex or pan-user incidents

There is a process to escalate incidents to progress service restoration based on the correct prioritisation

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CSS (Landmark) Switching Incidents

CSS 5.2

Measure ID	REC Service Definition		Current PAB Measure	Proposed Change
CSS 5.2.1	The CSS Provider shall support the response and resolution times for the following Switching Incident categories.	Priority 1 – for Switching Incidents causing critical impact and significant financial loss / disruption - 30 minute response with a –four hour resolution time;	Percentage of Priority 1 Landmark Switching Incidents Responded to within SLA (30 mins)	Percentage of Major Incidents (P1 & P2) responded to within SLA (target: 99%, min: 85%) with exclusions applied
CSS 5.2.2			Percentage of Priority 1 Landmark Switching Incidents Resolved within SLA (4 hours)	Percentage of Major Incidents (P1 & P2) resolved within SLA (target: 100%, min: 85%) with exclusions applied
CSS 5.2.3		Priority 2 – for Switching Incidents causing non-critical impact with non-significant financial loss / disruption - one hour response with a 24 hour resolution time;	Percentage of Priority 2 Landmark Switching Incidents Responded to within SLA (1 hour)	Propose to remove - now covered in CSS 5.2.1
CSS 5.2.4			Percentage of Priority 2 Landmark Switching Incidents Resolved within SLA (24 hours)	Propose to remove - now covered in CSS 5.2.2
CSS 5.2.5		Priority 3 – for Switching Incidents causing adverse impact but can be reduced to moderate adverse impact - three Working Hour response with a three Working Day resolution time;	Percentage of Priority 3 Landmark Switching Incidents Responded to within SLA (3 working hours)	Percentage of Standard Incidents (P3 & P4) responded to within SLA (target: 99%, min: 85%) with exclusions applied
CSS 5.2.6			Percentage of Priority 3 Landmark Switching Incidents Resolved within SLA (3 working days)	Percentage of Standard Incidents (P3 & P4) resolved within SLA (target: 90%, min: 80%) with exclusions applied
CSS 5.2.7		Priority 4 – for Switching Incidents causing minimal impact - one Working Day response with a 10 Working Day resolution time.	Percentage of Priority 4 Landmark Switching Incidents Responded to within SLA (1 working day)	Propose to remove - now covered in CSS 5.2.5
CSS 5.2.8			Percentage of Priority 4 Landmark Switching Incidents Resolved within SLA (10 working days)	Propose to remove - now covered in CSS 5.2.6

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ERDS Switching Incidents

ERDS 6.2

Measure ID	REC Service Definition		Current PAB Measure	Proposed Change
ERDS 6.2.1	The ERDA shall support the response and resolution times for the following Switching Incident categories.	Priority 1 – for Switching Incidents causing critical impact and significant financial loss / disruption – 30 minute response with a four hour resolution time;	Percentage of Priority 1 ERDS Switching Incidents Responded to within SLA (30 mins)	Percentage of Major Incidents (P1 & P2) responded to within SLA (target: 99%, min: 85%) with exclusions applied
ERDS 6.2.2			Percentage of Priority 1 ERDS Switching Incidents Resolved within SLA (4 hours)	Percentage of Major Incidents (P1 & P2) resolved within SLA (target: 100%, min: 85%) with exclusions applied
ERDS 6.2.3		Priority 2 – for Switching Incidents causing non-critical impact with non-significant financial loss / disruption – one hour response with a 24 hour resolution time;	Percentage of Priority 2 ERDS Switching Incidents Responded to within SLA (1 hour)	Propose to remove - now covered in ERDS 6.2.1
ERDS 6.2.4			Percentage of Priority 2 ERDS Switching Incidents Resolved within SLA (24 hours)	Propose to remove - now covered in ERDS 6.2.2
ERDS 6.2.5		Priority 3 – for Switching Incidents causing adverse impact but can be reduced to moderate adverse impact – three Working Hour response with a three Working Day resolution time;	Percentage of Priority 3 ERDS Switching Incidents Responded to within SLA (3 working hours)	Percentage of Standard Incidents (P3 & P4) responded to within SLA (target: 99%, min: 85%) with exclusions applied
ERDS 6.2.6			Percentage of Priority 3 ERDS Switching Incidents Resolved within SLA (3 working days)	Percentage of Standard Incidents (P3 & P4) resolved within SLA (target: 90%, min: 80%) with exclusions applied
ERDS 6.2.7		Priority 4 – for Switching Incidents causing minimal impact – one Working Day response with a 10 Working Day resolution time.	Percentage of Priority 4 ERDS Switching Incidents Responded to within SLA (1 working day)	Propose to remove - now covered in ERDS 6.2.5
ERDS 6.2.8			Percentage of Priority 4 ERDS Switching Incidents Resolved within SLA (10 working days)	Propose to remove - now covered in ERDS 6.2.6

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GRDS Switching Incidents

GRDS 6.2

Measure ID	REC Service Definition		Current PAB Measure	Proposed Change
GRDS 6.2.1	The GRDA shall support the response and resolution times for the following Switching Incident categories.	Priority 1 – for Switching Incidents causing critical impact and significant financial loss / disruption – 30 minute response with a four hour resolution time;	Percentage of Priority 1 GRDS Switching Incidents Responded to within SLA (30 mins)	Percentage of Major Incidents (P1 & P2) responded to within SLA (target: 99%, min: 85%) with exclusions applied
GRDS 6.2.2			Percentage of Priority 1 GRDS Switching Incidents Resolved within SLA (4 hours)	Percentage of Major Incidents (P1 & P2) resolved within SLA (target: 100%, min: 85%) with exclusions applied
GRDS 6.2.3		Priority 2 – for Switching Incidents causing non-critical impact with non-significant financial loss / disruption – one hour response with a 24 hour resolution time;	Percentage of Priority 2 GRDS Switching Incidents Responded to within SLA (1 hour)	Propose to remove - now covered in GRDS 6.2.1
GRDS 6.2.4			Percentage of Priority 2 GRDS Switching Incidents Resolved within SLA (24 hours)	Propose to remove - now covered in GRDS 6.2.2
GRDS 6.2.5		Priority 3 – for Switching Incidents causing adverse impact but can be reduced to moderate adverse impact – three Working Hour response with a three Working Day resolution time;	Percentage of Priority 3 GRDS Switching Incidents Responded to within SLA (3 working hours)	Percentage of Standard Incidents (P3 & P4) responded to within SLA (target: 99%, min: 85%) with exclusions applied
GRDS 6.2.6			Percentage of Priority 3 GRDS Switching Incidents Resolved within SLA (3 working days)	Percentage of Standard Incidents (P3 & P4) resolved within SLA (target: 90%, min: 80%) with exclusions applied
GRDS 6.2.7		Priority 4 – for Switching Incidents causing minimal impact – one Working Day response with a 10 Working Day resolution time.	Percentage of Priority 4 GRDS Switching Incidents Responded to within SLA (1 working day)	Propose to remove - now covered in GRDS 6.2.5
GRDS 6.2.8			Percentage of Priority 4 GRDS Switching Incidents Resolved within SLA (10 working days)	Propose to remove - now covered in GRDS 6.2.6

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SO (DCC) Switching Incidents
SO 5.2

Measure ID	Current Description	Proposed Change
SO 5.2.1	Percentage of Priority 1 DCC Switching Incidents Responded to within SLA (30 mins)	Percentage of Major Incidents (P1 & P2) responded to within SLA (target: 99%, min: 85%) with exclusions applied
SO 5.2.2	Percentage of Priority 1 DCC Switching Incidents Resolved within SLA (4 hours)	Percentage of Major Incidents (P1 & P2) resolved within SLA (target: 100%, min: 85%) with exclusions applied
SO 5.2.3	Percentage of Priority 2 DCC Switching Incidents Responded to within SLA (1 hour)	Propose to remove - now covered in SO 5.2.1
SO 5.2.4	Percentage of Priority 2 DCC Switching Incidents Resolved within SLA (24 hours)	Propose to remove - now covered in SO 5.2.2
SO 5.2.5	Percentage of Priority 3 DCC Switching Incidents Responded to within SLA (3 working hours)	Percentage of Standard Incidents (P3 & P4) responded to within SLA (target: 99%, min: 85%) with exclusions applied
SO 5.2.6	Percentage of Priority 3 DCC Switching Incidents Resolved within SLA (3 working days)	Percentage of Standard Incidents (P3 & P4) resolved within SLA (target: 90%, min: 80%) with exclusions applied
SO 5.2.7	Percentage of Priority 4 DCC Switching Incidents Responded to within SLA (1 working day)	Propose to remove - now covered in SO 5.2.5
SO 5.2.8	Percentage of Priority 4 DCC Switching Incidents Resolved within SLA (10 working days)	Propose to remove - now covered in SO 5.2.6

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SO (DCC) Switching Service Requests
SO 5.4

Measure ID	Current Description	Proposed Change
SO 5.4.1	Percentage of Priority 1 Switching Service Requests Resolved within SLA (1 Working Days)	Percentage of P1 & P2 Switching Service Requests fulfilled* within SLA (target: 100%, min: 85%) with exclusions applied
SO 5.4.2	Percentage of Priority 2 Switching Service Requests Resolved within SLA (2 Working Days)	Propose to remove - now covered in SO 5.4.1
SO 5.4.3	Percentage of Priority 3 Switching Service Requests Resolved within SLA (3 Working Days)	Percentage of P3 & P4 Switching Service Requests fulfilled* within SLA (target: 90%, min: 80%) with exclusions applied
SO 5.4.4	Percentage of Priority 4 Switching Service Requests Resolved within SLA (10 Working Days)	Propose to remove - now covered in SO 5.4.1

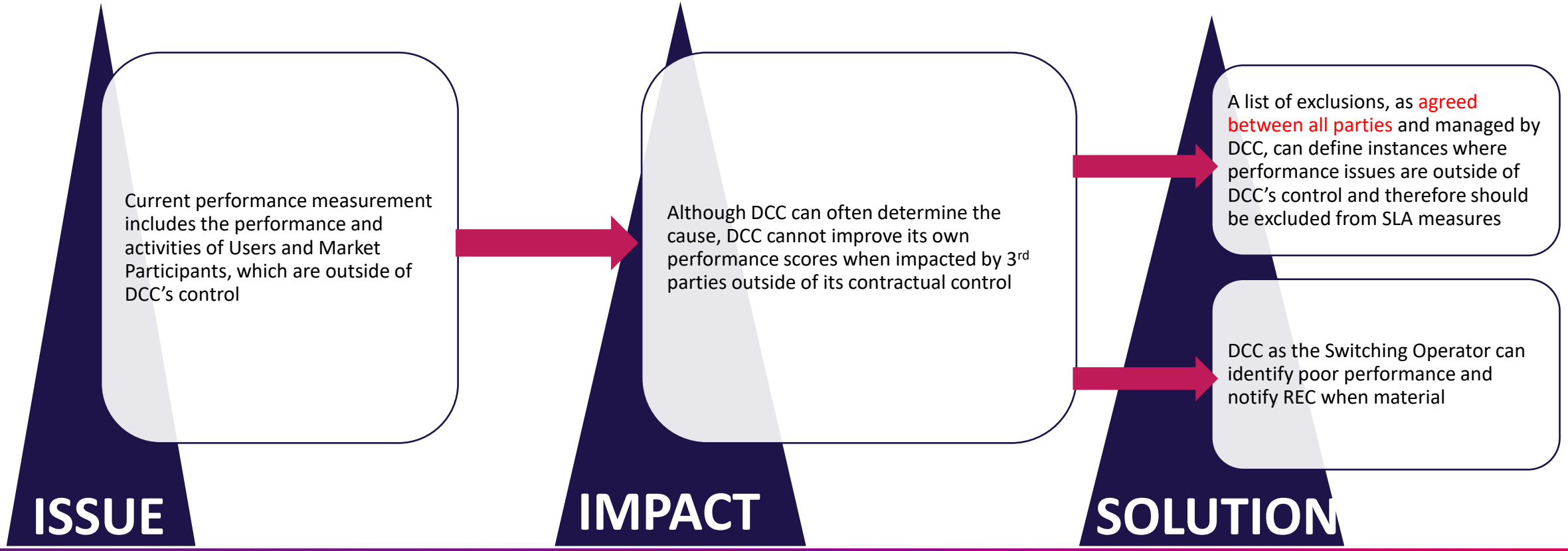
* Note wording change: ‘resolved’ changed to ‘fulfilled’ to align with REC SO Service Definition

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Performance Measurement Exclusions: Context

All service areas

DCC has been providing REC Manager with additional reporting, taking into account events that are outside of DCC's control, helping to provide clarity around core system performance and incident resolution. These events form an exclusions list, which is a living document that is updated in response to ongoing events and User behaviour. DCC is seeking to formalise this exclusions list and integrate it into the SLA reporting.



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Suggested Performance Measurement Exclusions

Incident-Related

	Title	Use Case/Justification	Related Service Definition Criteria	Process
Incident	ERDS and GRDS – Attached SLA	RECCo Managed, not under DCC Control	Switching Operator: 5.1, 5.2 & 5.4 Responses to Incidents and Service Requests	Automatic
	Cancelled State	Service restoration no longer required as this has been cancelled and no further support intervention required		
	Duplicate Incident	Duplicate incident created		
	Raised In Error	Incident raised in error – manually or system generated		
	Non CSS Impacting	Issue not impacting CSS or Switches		
	Not SO Or Provider Responsibility	Incident raised due to message unable to be delivered - this could be due to an endpoint being down, capacity issues/scaling or a business rule failure (failed to deliver)		
	Catalogue Request/Service Request	Request erroneously raised in Incident module		
	Planned Maintenance	Incident raised due to unavailability during Planned Maintenance Window		
	Event Monitoring	Alert/Alarm for Information only		
	Testing Services and Production Proving	Incident raised for testing purposes only		
	Expired TLS Certificate	User responsibility		

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Suggested Performance Measurement Exclusions

SRM, Availability, Transaction Times

	Title	Use Case/Justification	Related Service Definition Criteria	Process
SRM	Non Standard Service Request	Non-standard Service Requests have no defined SLAs	SO: 5.1, 5.2 & 5.4 Responses to Incidents and Service Requests	Automatic
	Cancelled Service Request	Service Request has been cancelled		
	Duplicate Service Request	Duplicate Service Request created		
	Service Request Raised In Error	Service Request raised in error		
Availability	Planned Maintenance	Planned Maintenance excluded from Availability Measure		Automatic
Transaction Times	Volumes above agreed thresholds	Message volumes beyond the agreed system capacity thresholds E.g. instances where the volume of hourly messages is over 25,300 or daily switches is over 281,600	CSS 6.1, 6.2 & 6.3 Response times	Reviewed

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Suggested Performance Measurement Exclusions

Any Instance

	Title	Use Case/Justification	Related Service Definition Criteria	Process
Any	Event Outside of Service Provider Control	Any 'event'/non-standard behaviour by Market Participants that negatively/positively impacts the performance metrics E.g. where user end-points are responding slowly (or not at all)	All	Reviewed
	Erroneous User Service Levels that indicates User issue			
	Exceptional Industry Incidents that impact DCC Service			
	Force Majeure			
	Incorrect Tool Usage by Market Participants		CSS 6.1, 6.2, 6.3 & 6.5 SO: 5.1, 5.2 & 5.4	Reviewed