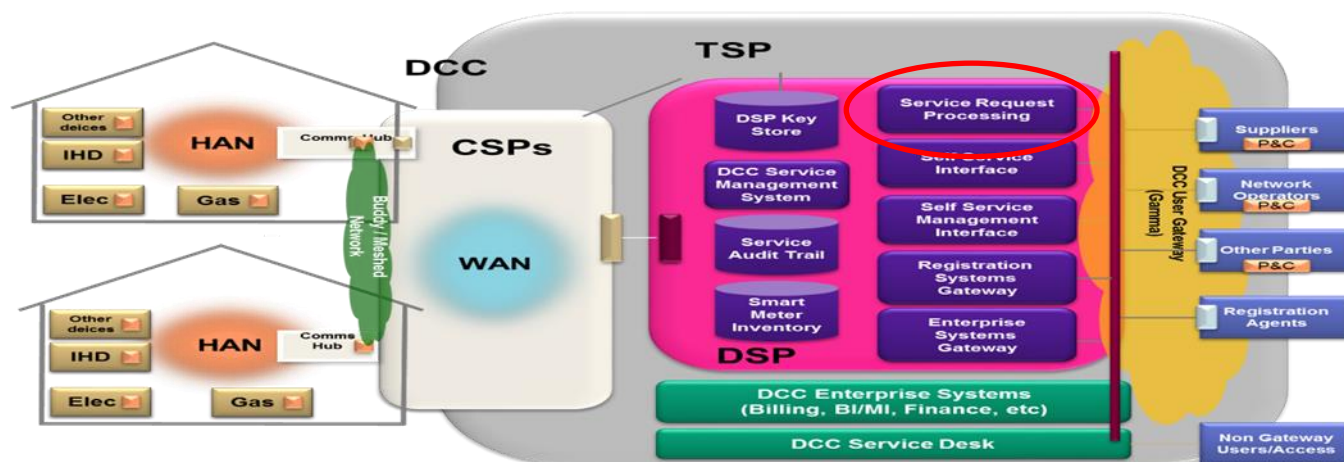


DCC Major Incident Review Report

(Produced in accordance with Section H9 of the SEC)

Date of Incident(s)	27/10/2020
DCC Incident Reference Number	INC0000000647763
DCC Problem Reference Number	PBI0000000121726
Service Impacted	All SMETS1
Date/Time Incident reported	27/10/2020 08:33 (Actual outage start time)
Parties involved	DSP (Data Service Provider), SMETS1 Service Provider (S1SPSIE), DCO (Dual Control Organisation)
Date & time incident resolved	27/10/2020 10:33 (Outage restoration time)
Time taken to restore Service(s) (Hours)	2 hours 0 minutes
Resolution within SLA (Y/N) [SEC H9.14(b)]	Y
Potential SEC Modifications [SEC H9.14(g)]	N
Major Incident summary report [SEC H9.14(a)] attached: Y / N	Y - SEE APPENDIX 1

Infrastructure Topology View



Summary of Impact [SEC H9.14(c)]

At 09:34 27/10/2020, the DCO (Dual Control Organisation) raised incident INC000000647763. DCC Technical Operations Centre (DCC TOC) and SMETS1 Service Provider (S1SP) both advised DCC Incident Management that 100% of Service Requests were failing for SMETS1 traffic.

A technical restoration bridge was hosted by DCC Incident Management, where it was identified that the DCO system was not processing transactions and a restart of core database servers and applications was required.

Full service restoration was observed at 10:33 by the S1SP following a restart of the DCO database applications.

This impacted all on demand Service Requests across the SMETS1 estate. SMETS1 migrations were delayed for the duration of the incident. This issue impacted 6666 Service Requests.

Incident Mitigation [SEC H9.14(c)]

As immediate mitigation, DCO have amended their alerting and response to events generated during this incident so action can be taken before services are fully consumed and a service outage occurs.

Preventative Measures [SEC H9.14(d)]

DCO have amended their alerting and response to events generated during this incident.

Root Cause Summary [SEC H9.14(d)]

Following investigation carried out by the DCO and their support providers, root cause has been determined and they have concluded:

1. Investigations have not found any issues at the operating system or host level.
2. The root cause was identified as a runaway / looping process on the impacted servers, causing increased Central Processing Unit (CPU) usage and spawned further processes until the servers became overloaded and hung, stopping the database from responding.

Root Cause Actions

(Actions tracked under Problem investigation ticket - PBI000000121726)

Item	Description	Owner	Closed	Open
1.	Full RCA to be determined – Ticket with operating system support provider – <i>Root cause has been determined</i>	DCO	✓	
2.	Full RCA to be determined – Ticket with application support provider – <i>Root cause has been determined</i>	DCO	✓	
3.	Ticket with hosting provider to check for any infrastructure issues – <i>No issues with infrastructure identified</i>	DCO	✓	

Identified Risks:

(Actions tracked under Problem investigation ticket - PBI000000121726)

Item	Description	Owner	Closed	Open
1.	Delay in DCO attending MIM bridge – <i>this was due to delays in receiving meeting invites and associated supporting e-mails at DCO</i>	DCO / DCC	✓	
2.	Attendance in DCC MIM bridge for technical restoration was slow and required escalation	DCO	✓	
3.	Review e-mail send / received times – specifically for DCO from DCC	DCO / DCC		✓
4.	Delayed sending of mass comms – due to e-mail client crashes in DCC Service Centre – <i>This was due to issues experienced within DCC following the migration to DCC Enterprise IT services and was a transient issue</i>	DCC SC / EIT project	✓	
5.	DCO to review process for resolution of incidents in DSMS	DCO		✓
6.	Additional strain on SIE application due to post migration key rotation batch size, due to issues with DCO throughput / application – <i>this has been addressed as part of the ongoing stability plan against DCO</i>	SIE / DCC / DCO	✓	
7.	The rate of read schedules cannot be increased due to DCO issues and Service User reads are falling later into the day and will be outside of DCC's SEC obligations within a month (20mins slippage each day) – <i>TPS has been steadily increased as part of the ongoing Stability plan against DCO</i>	SIE / DCC / DCO	✓	

8.	Additional strain experienced in SIE environment due to throughput / limitation of DCO application / environment	SIE / DCO		✓
Details of the review of the response to the Major Incident and its effectiveness [SEC H9.14(e)]				
Identification	<i>Service was initially degraded but then impact became more severe, causing a total outage</i>			
Classification/Prioritisation	<i>Initial Incident came in as a Category 3 but was increased to Category 1 as impact increased</i>			
Investigation/Diagnosis	<i>Investigations were ongoing in background despite late attendance at MIM bridge.</i>			
Resolution/Closure	<i>Once a fix had been found, restoration approval was managed via the Incident Management Procedure with no delays.</i>			
Customer Communications	<i>DCC provided, regular updates via the Incident Management team using emails, Front End Message and broadcast published on the SSI. All Customer Communications were sent out within timescales giving the true picture and updates during the incident.</i>			
Any failures by Incident Parties to comply with their obligations under Energy Licences and/or this Code [SEC H9.14(f)]				
None				
The likelihood there will be a reduction in the DCC's External Costs arising as a consequence of the DCC Service Providers failing to achieve a restoration of any Services within the Target Resolution Time [SEC H9.14(g)]				
None				

Table of linked incidents

Incident	Linked incident	Nature of link
INC000000647763	INC000000647755	Related
	INC000000647762	Related
	INC000000647782	Related
	INC000000647845	Related
	INC000000647857	Related
	INC000000647891	Related
	INC000000647896	Related