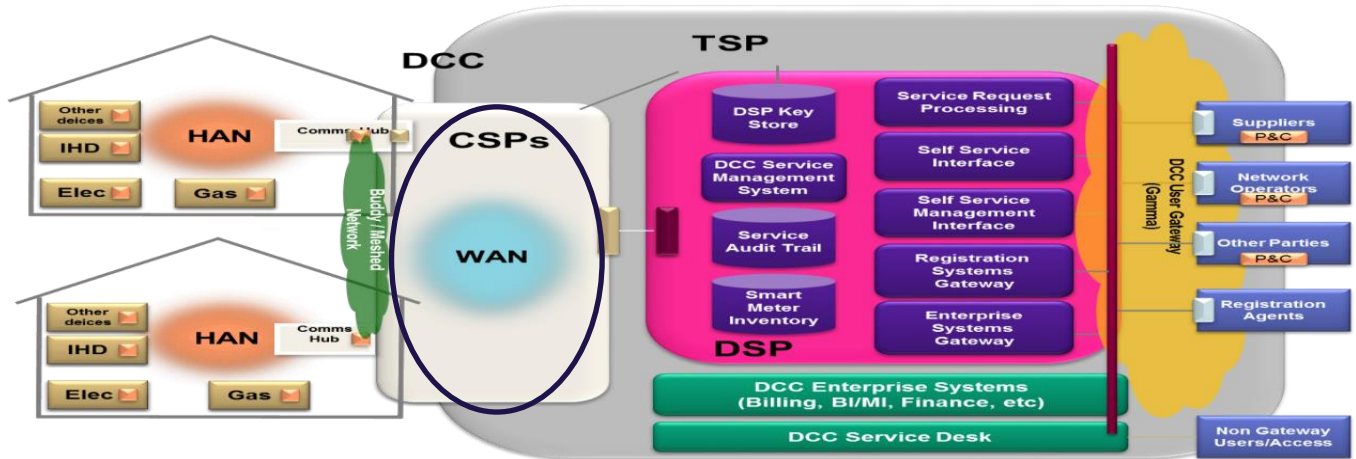


DCC Major Incident Summary Report

(Produced in accordance with Section H9 of the SEC)

Date of Incident	05/12/2019
DCC Incident Reference Number	INC000000526144
DCC Problem Reference Number	PBI000000118607
Service Impacted	All Service Request Variants in the North
Date/ Time Incident reported	04/12/2019 23:41 (Actual outage start time)
Date &time incident resolved	05/12/2019 02:17 (Outage restoration time)
Time taken to restore Service(s) (Hours)	2 Hours 36 Minutes
Resolution within SLA (Y/N) [SEC 9.14(b)]	Y

Nature of the Major Incident / Short Description



At 00:18 on 05th December Communication Service Provider (CSP) North raised a Category 1 Incident following patching activity undertaken on the servers for their core network (DCC Change reference: CRQ000000119304). CSP North observed that their network was completely down. This meant that no Service Requests could be delivered to Devices and Alerts could not be received by DCC Users.

At 00:43 DCC Incident Management (IM) were alerted to the Incident by the DCC Service Centre. CSP North advised DCC that they had rebooted the affected servers, and this had caused the incident to clear.

At 00:59 DCC IM joined CSP North Technical Conference call. During the call CSP North's network failed again at 01:05.

At 01:13 DCC IM engaged Data Service Provider (DSP) to join the technical bridge. DSP advised that they could see the northbound queue messages increasing. However, the volume was minimal at that time. DSP had raised an automated Category 3 Incident at 23:43 04/12/2019 (INC000000526075) for the increasing volumes on the northbound queue.

At 01:34 CSP Norths Engineers completed a roll back of the patching that was applied to their servers. A restart of servers was started at 00:41.

At 02:17 the restart of CSP Norths servers had completed and service had restored. DSP confirmed that CSP Norths traffic across their infrastructure had stabilised. CSP North initiated a network test which completed at 02:25 which was successful. Monitoring for a period of stability then took place.

At 03:00 DCC IM closed the technical bridge and arranged a conference call for 09:30 to check on service stability.

Region / Location impacted

This incident affected the North region.

Summary of impact / Likely future impact of the Major incident

The impact was that CSP North's network was down meaning no traffic could traverse it. All DCC User SRV's and Alerts would not have been delivered between 23:41 and 02:17. This would have caused messages to increase in the DSP's north bound queue and once service was restored all messages/alerts were delivered.

There were 43,682 alerts/SRVs in the DSP Northbound queue waiting to be delivered to CSP North. These were all delivered once the network came back up at 02:17.

Resolving actions taken

CSP North rolled back patching applied to their core network servers and restarted their Regional Network Interface application.

Immediate mitigation steps implemented:

- An immediate full change freeze is now in place for CSP North and all planned changes are being reviewed by the DCC Change Team.
- CSP North NMC are currently under Hyper Care Measures (Enhanced Monitoring and ongoing calls with their Senior Network teams)
- CSP North to retrain their engineers and ensure all Local Work Instructions are up to date when carrying out Planned Changes.
- CSP North to introduce a 4 eyes approach when carrying out changes on their critical infrastructure.

Root Cause, if known

Full root cause has been identified as human error during the patching work being carried out under planned change CRQ000000119304. All outstanding actions will be tracked under Problem Management ticket PBI000000118607.

Table of linked incidents

Incident	Linked incident	Nature of link
INC000000526144	INC000000526075	System Generated Alert

