Data Communications Company

SEC Ops Meeting

BCDR/Resilience Update

30 June 2020

DCC Controlled

SMETS1 MOC Secure Resilience Testing - POAP

- All pre Go-live Resilience Testing completed 26th June
- Summary Test Report submitted by Secure to DCC OAT 29th June
- Go-live HA E2E Resilience Testing scheduled 27th Jul to 7th Aug
- MPLS installation/testing target dates: CSP1 is 6th Nov and CSP 2 is 7th Aug (subject to approval completing)
- Post Go-live DR Testing scheduled – failover 19th Sep and failback 31st Oct 2020

DR / Resilience / BC Exercising

- **Last month:**
  - **No Service Provider DR, Resilience or BC testing conducted in June, except in relation to MOC Secure Go-live**
  - **MOC MDS – TEF MPLS implementation and testing moved from 20th June to end of August**
    - **The two CGI datacentres (Watterton and Bridgend) having restricted access due to Welsh Assembly regulations on movement during Coronavirus lockdown, further compounded by CGI and BT own restrictions on work other than critical maintenance.**
  - **DCC Exercising all appropriate measures in relation to COVID-19**

- **This month:**
  - **No Service Provider DR, Resilience or BC testing planned, except in relation to MOC Secure Go-live**
  - **DCC Exercising all appropriate measures in relation to COVID-19**

- **Future**
  - **FOC DXC/Trilliant currently being re-planned by Programme Team**

SMETS2
CORE
SMETS1
BT
BT DC I
BT DC 2
Capgemini
DCO CP DC I
DCO CP DC 2
CGI
DSP DC I
DSP DC 2
CGI
IE MDS DC I
IE MDS DC 2
Vodafone (for IE)
Telefonica (for MDS)
DR Test – Mar Completed Successfully
CP DR Test - Oct
DCO Res Test - Aug
DR Test – Sep
IE Res Test – Aug
TEF MPLS Test - Aug
Load Balanced
GAMMA
DNS
CGI
TEF
Telefonica DC I
Telefonica DC 2
DR Test - Oct
DXC
Trilliant DC I
Trilliant DC 2
Vodafone
Test – tbc
Being re-planned
ARQ
Arqiva DC I
Arqiva DC 2
DR Test - Oct
DR Test - Sep
Go-live Test – Jul
CSPs MPLS Test – Sep
DR Test – Sep-Oct
Secure
Secure DCI
Secure DC2
CSP 1 90%
CSP 2 10%
DCC User
Capita
Capita DC I
Capita DC 2

Service Providers BCDR/Resilience Approaches

Service Providers	Active Only	Active / Passive	Active / Active	Load Balanced
MDS	Yes			
CGI (DSP)		Yes		
Telefonica		Yes		
Arqiva		Yes		
BT		Yes		
Capita		Yes		
Secure		Yes		
Capgemini (CP)		Yes		
Capgemini (DCO)			Yes	Yes
CGI (IE)			Yes	Yes
DXC (Trilliant)			Yes	Yes

Active only – Primary DC / Cold Standby DC
- Data is backed up offsite
- Secondary DC - no dedicated systems

Active/Passive – Primary/Secondary DC
- 4hr RTO (Failover/Failback)
- 15min RPO (Max data loss)

Active/Active – Both DCs Active
- Near zero RTO (No service outage)
- Near zero RPO (No data loss)

Load Balanced – DCs both active/balanced
- Workload balanced/distributed across DCs
- Each DC has capacity to handle full load

Service Provider - DR and Resilience Test Schedule – remainder of 2020

Date	Service Provider	SMETS1 post Go-live Proving Activity	RTO	Contingency
19 Sep 2020	Secure Meters	DR Failover	20:30 – 00:30	00:30 - 04:30
31 Oct 2020	Secure Meters	DR Failback	20:30 – 00:30	00:30 - 04:30
07 Nov 2020	Secure Meters	Contingency date	20:30 – 00:30	00:30 - 04:30
02 Aug 2020	DCO & SIE	Resilience Testing (4hrs per Service Provider)	09:00 - 17:00	17:00 – 18:00
09 Aug 2020	DCO & SIE	Contingency Date	09:00 - 17:00	17:00 – 18:00
27 Sep 2020	DSP	DR Failover	09:00 – 13:00	13:00 – 17:00
11 Oct 2020	DSP	DR Failback	09:00 – 13:00	13:00 – 17:00
18 Oct 2020	DSP	Contingency Date	09:00 – 13:00	13:00 – 17:00
17 Oct 2020	CP	DR Failover	09:00 – 13:00	13:00 – 17:00
24 Oct 2020	CP	DR Failback	09:00 – 13:00	13:00 – 17:00
31 Oct 2020	CP	Contingency Date	09:00 – 13:00	13:00 – 17:00
18 Oct 2020	CSP N & CSP SC	DR Failover	09:00 – 13:00	13:00 – 17:00
25 Oct 2020	CSP N & CSP SC	DR Failback	09:00 – 13:00	13:00 – 17:00
01 Nov 2020	CSP N	Contingency Date	09:00 – 13:00	13:00 – 17:00
08 Nov 2020	CSP SC	Contingency Date	09:00 – 13:00	13:00 – 17:00

Service Provider and DCC Business Continuity Exercise Plan – remainder of 2020

Ref

SP BC Exercise

DCC BC Exercise

SEC – Appendix – AG – Incident Mgt and Section H10 – DCC Services

Service Provider DR / Resilience Test	Testing Approach	RTO Specified	RPO Specified	Date of last Annual Test	Result Achieved	Date of next Annual Test	Relation to SEC Appendix AG	Relation to SEC Section H10
SMETS2+ IT Disaster Recovery / Resilience Testing								
DSP - CGI	Active/Passive	4hrs	15mins	Nov 2019	Successful	Sep 2020	D1(a), D2, D5, D8, D9, D10, D11, D13, D16, D17, D19 Also see notes.	H10.9, H10.10, H11, H12, 12A, 12B, H13
TSP - BT	Active/Passive	4hrs	15mins	Mar 2020	Successful	Mar 2021		
CSP SC - TEF	Active/Passive	4hrs	15mins	Mar 2019	Successful	Oct 2020 (1)		
CSP N - ARQ	Active/Passive	4hrs	15mins	Mar 2019	Successful	Oct 2020 (1)		
Capita - FTPS	Active/Passive	4hrs	15mins	Mar 2019	Successful	Sep 2020 (2)		
SMETS1 IT Disaster Recovery / Resilience Testing								
Capgemini - DCO	Active/Active	Near Zero	Near Zero	Jul 2019	Successful	Aug 2020 (1)	D1(b), D2, D8, D9, D10, D11, D15(a), D16, D17, D19 Also see notes.	H10.9, H10.10, H11, H12, 12A, 12B, H13
Capgemini - CP	Active/Passive	4hrs	15mins	Oct 2019	Successful	Oct 2020		
IOC – IE	Active/Active	Near Zero	Near Zero	Jul 2019	Successful	Aug 2020 (1)		
MOC – MDS	Active only	Best Endeavours	Best Endeavours	N/A	N/A	N/A (3)		
MOC – Secure	Active/Passive	4hrs	15mins	Not yet live	Not tested	Sep 2020		
FOC – DXC/Trilliant	Active/Active	Near Zero	Near Zero	Not yet live	Not tested	Go-live (4)		

Notes in relation to SEC Section H10:

Existing recovery procedures, actual testing, annual test schedules, advanced notification of testing dates, minimal service disruption, SEC parties and SECOPS consultation, and notice compliance, along with a drive to achieve all Recovery Targets set, demonstrate adherence to SEC H10 requirements.

Notes in relation to Disaster Recovery / Resilience testing:

1. Delayed due to Coronavirus lockdown
2. Capita FTPS Services (e.g. SSI, SSMI, Remedy) scheduled to be moved to new Capita (Nuvem) platform in July, hence later DR test date
3. MDS is non-enduring and moving into IE so this is captured as part of IE active/active annual resilience testing
4. FOC Go-live date not yet defined but resilience testing will be part of Go-live with future annual testing linked to that date

Notes in relation to SEC Appendix AG Section 5.2:

- D3(a, b), D14 & D18 – Primary/Secondary separated by distance/local risk; no tertiary datacentre contract as risk is deemed to be very low
- D4 Virus/Malware is seldom resolved by failing over to alternative datacentres as replication processes often extend the impact across sites
- D5 only applies to CGI - DSP, D10 only applies to CGI -DSP (for SSI, SSMI, Remedy) and Capita (for FTPS connectivity), and D13 only applies to BT
- D6, D7, D12 and D22 are shown as 'deliberately left blank' in the Appendix G Disaster Recovery tables
- D15(a, b) only applies to Capgemini - DCO, plus Primary/Secondary separated by distance/local risk; no tertiary datacentre contracted for
- D20 Communications Hub recalls and Supply chain issues are the responsibility of Richard Cooper, Head of Demand and Logistics Operations

SEC – Appendix – AG – Incident Management and Section H10 – DCC Services

Service Provider Business Continuity	Testing Approach	RTO Specified	RPO Specified	Date of last Annual Test	Result Achieved	Date of next Annual Test	Relation To SEC Appendix AG	Relation to SEC Section H10
Service Operations Centre (SOC) / Network Operations Centre (NOC) Business Continuity Testing								
CGI (DSP/IE/MDS)	Simulation	4 hrs	N/A	Dec 2019	Successful	Nov 2020	Service Provider SOC / NOC Testing not specifically mentioned in Appendix AG, except for DCC Service Desk	Service Provider SOC / NOC Testing not specifically mentioned in Appendix AG, except for DCC Service Desk
BT	N/A	N/A	N/A	N/A	N/A	N/A (1)		
TEF	Simulation	4 hrs	N/A	Feb 2019	Successful	Jul 2020 (2)		
ARQ	Simulation	4 hrs	N/A	Aug 2019	Successful	Aug 2020		
Capita – DCC Service Desk	Simulation	4 hrs	N/A	Apr 2019	Successful	Nov 2020 (3)		
Capgemini (DCO & CP)	Simulation	4 hrs	N/A	N/A	N/A	Jul 2020		
Secure	Simulation	4 hrs	N/A	Not yet live	N/A	Oct 2020 (4)		
DXC	Simulation	4 hrs	N/A	Not yet live	N/A	Not live yet (5)		

Notes in relation to Business Continuity Testing:

1. No SOC/NOC testing applicable to BT
2. Delayed due to TEF BC Manager leaving company and then further delayed by Coronavirus lockdown
3. Delayed due to Coronavirus lockdown
4. Secure testing date is subject to review due to recent change to Go-live date
5. New FOC Go-live date not yet defined, but resilience testing will be part of Go-live, with future annual testing linked to that date.

Notes in relation to SEC Appendix AG Section 5.2:

D21 – A DCC Business Resilience Policy, Business Recovery Plans for the 3 DCC sites, and a Pandemic Response Plan, are in place. Most DCC staff have also been working very successfully from home since the start of the Coronavirus lockdown, with return to sites planning currently being implemented.

Notes in relation to SEC Section H10:

Existing recovery procedures, actual testing, annual test schedules, advanced notification of testing dates, minimal service disruption, SEC parties and SECOPS consultation, and notice compliance, along with a drive to achieve all Recovery Targets set, demonstrate adherence to SEC H10 requirements.

Thank you.

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