

BCDR Consultation

Consultation on DCC 2022 Business
Continuity and Disaster Recovery
Testing Schedule

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1. Introduction

Smart Energy Code (SEC) Section H10.11 places an obligation on DCC to periodically test its Business Continuity and Disaster Recovery (BCDR) arrangements in order to assess whether the BCDR procedures remain suitable for achieving the objectives described at Section H10.9 and report the results to the SEC Panel.

This consultation seeks the views of SEC Parties on the 2022 BCDR Test plan. The BCDR Tests result in planned down time of DCC Services, so DCC is consulting in advance to ensure that (insofar as is reasonably practicable) the Test is undertaken in such a way as to minimise any disruption to the provision of the Services. This consultation is being undertaken in accordance with SEC Section H10.12A.

The scope of this consultation is limited to proving DCC's ability to maintain continuity of services between 01 April 2022 to 31 March 2023, if during this period, there is an unplanned disruption to any aspect of DCC Technology Systems (Disaster Recovery). Testing of DCC's ability to provide its Services if any aspect of its own business operations is disrupted (Business Continuity) is outside the scope of this consultation.

The purpose of BCDR testing is to validate that the secondary systems can provide continuity of DCC services to Customers and Service Users. To enable DCC to carry out its annual BCDR test, it is essential that this consultation covers the whole of the stated period (01 April 2022 to 31 March 2023) of BCDR schedules of testing. The proposed testing schedules in 2022/2023 are included in Annex 2 of this consultation. In addition, DCC will communicate any changes and updates to the BCDR Test plan dates to industry appropriately and regularly to ensure BCDR awareness is maintained. DCC have where possible looked to schedule multiple BCDR tests over a single period as previously request by Users.

Disaster Recovery testing arrangements of new projects and programmes are agreed as part of the programme deliverables and are excluded from this Consultation which is solely concerned with BAU services.

DCC is inviting all SEC Parties to provide their views on these proposals.

1.1. Scope

The scope of 2022/2023 BCDR testing is that as required under Section H10 of the SEC and includes those Service Providers who provide The Services and therefore any additional service providers or service are out of scope. Specifically, the scope of 2022/2023 BCDR testing is to prove the following:

- That each Service Provider can achieve failover or fallback between their datacentres within the contracted 4-hour Recovery Time Objective (RTO).
- That each DCC Service Provider can successfully continue to operate from their secondary datacentres for at least 1 week, while also proving continuity of services in respect of SMETS2 and SMETS1 services.

- That all DCC Service Providers and DCC Service Users can continue to operate and communicate successfully for at least 1 week in conjunction with other Service Providers' primary or secondary datacentre, whichever configuration is in place for service availability.
- In respect of SMETS1, prove that DCC MCC migration team can continue to operate and carry out migrations when SMETS1 Service Providers are operating from the secondary site.
- Ensure DCC Core Services are restored at levels that meet stakeholder, customer, and regulatory obligations.
- Service Providers demonstrating their BCDR capability by testing their BCDR plan to maintain an effective continuity capability that is aligned to the SEC.
- Allowing DCC to demonstrate successful and resilient secondary site operations across its ecosystem.

A separate schedule for each Service Provider will be agreed to validate their BCDR capability to meet DCC's BCDR objectives. Each testing schedule will be impact assessed with other tests schedules and where possible arrangement for conducting multiple tests on the same day will be agreed.

2. Proposed Dates and Times

DCC Disaster Recovery failover/failback activities will be performed on Sundays between 09:00 - 17:00 hours. This ensures disruptions to normal service is minimal, managed and controlled and is based on 4 hours Recovery Time Objective (RTO) and 4 hours contingency.

On occasions, some failover/failback activities are planned to use the planned maintenance windows such as Trusted Service Provider, undertaken on Thursday after 20:00 hours and Secure Meters on Saturdays after 20:00 hours, as these do not have adverse impact on services.

In addition, as a result of lessons learned from previous testing activities, DCC will allocate a two hour validation window post 17:00 after completion of each Failover and Failback testing. This will allow capture of final outcomes from Health Checks and testing results to provide assurance that adequate measures have been taken to reduce incidents and service outages. This proposed two hour validation window will contribute to resolving issues identified during the failover / failback process, leading to positive outcome and stable environment.

Following careful consideration of the factors outlined above, DCC will conduct Business as Usual (BAU) Disaster Recovery testing during the period 01 April 2022 to 31 March 2023. Each Disaster Recovery activity will be communicated to industry as reminders in advance to ensure proposed dates and times for each proving exercise are known and shared with Service Users.

Section H10.12A and H10.12B of the SEC requires DCC to consult with Parties prior to providing each Party with a Business Continuity and Disaster Recovery Test Schedule a 60 Working Days' notice period before the start of testing. DCC is consulting now in order to start BCDR testing on or after 01 April 2022.

BCDR
Q1

Do you agree with DCC's proposal to undertake Disaster Recovery proving as detailed in Annex Two and that updates to these dates should be shared with Service Users in advance of the test dates? If you disagree, please provide your rationale.

DCC is proposing to undertake the Disaster Recovery (DR) testing on Sundays between 09:00 and 17:00. This includes 4 hours Recovery Time Objective (RTO), and 4 hours Contingency period. This is primarily intended to minimise the impact of the testing and subsequent disruption to suppliers.

Undertaking the DR testing during the daytime also ensures that resources are available from all participating Service Providers without incurring additional costs operating 'out-of-hours' and allows DCC to meet its obligations while keeping BCDR costs as low as possible on behalf of SEC Parties.

BCDR
Q2

Do you agree with DCC's proposal to undertake DR testing during Sundays 09:00 – 17:00. This covers the 4 hours expected Recovery Time Objective (RTO) and 4 hours contingency? If you disagree, please provide your rationale.

During each failover and failback activity, it is expected production services will **not** be available for the duration of the times stated. Although disruptions caused by BCDR testing does not meet the definition of Planned Maintenance, DCC will communicate with SEC Parties as follows:

- DCC BCDR Team will communicate with SEC Parties regularly by email to provide updates on BCDR activities aligned to the Forward Schedule of Change so that conflicts with Service User's internal planned change activities can be discussed, and measures can be agreed in advance where possible to avoid risking both activities.
- DCC BCDR Team have BCDR quarterly updates and presentation at SECOPS Group to share BCDR updates and forward plans that impact service.
- BCDR plan dates are entered and maintained on the DCC Forward Schedule of Change (FSC) in the Self-Service Interface for reference, and they provide a guidance to BCDR activities that have service disruption as part of the runtime.

All planned outages are aligned with the failover/failback change window timelines agreed.

BCDR
Q3

Do you agree with DCC's proposal to implement a two hour validation checks (usually 17:00 – 19:00) after the closure of each testing window to ensure all issues have been captured, managed, and controlled to avoid further downtimes being caused by incidents due to the BCDR testing activity? If you disagree, please provide your reasons.

For each failover and fallback activity conducted across the DCC ecosystem, it is necessary to carry out extra validation checks up to two hours post the end of the DCC change window at 17:00. This should ensure any remaining issues have been identified and resolved, providing assurance that adequate measures have been taken to reduce incidents and service outages. This proposed a two hour validation window will contribute to resolving issues identified during the failover / fallback process, and lead to a positive outcome and stable environment.

BCDR
Q4

Please provide any suggestions which you consider may help to minimise disruption to the provision of the Services during the proving exercise periods.

2.1. Key steps

Sunday 3rd April 2022: The first failover exercise will commence after this date. Scheduled and changes to test dates will be shared in advance with SEC Parties and will be updated in the Forward Schedule of Change.

Failover: Each DCC Service Provider will failover from their primary systems to their secondary systems in 4 hours RTO.

Business as Usual (BAU): DCC services will be delivered using the secondary systems for a minimum of one week's duration, depending on the prevailing circumstances at the time and agreed with all parties. This is intended to allow Service Users the opportunity to assess the performance of the secondary systems, and to notify DCC of any issues they might encounter during this time.

Failback: Each DCC Service Provider will failback from their secondary systems to their primary systems in 4 hours RTO.

Contingency: Each Service Provider will be allotted a contingency window which will only be used if there are problems with any of the failover/fallback exercises that results in an activity being cancelled, reversed or rollback. If no problems are experienced during the BCDR exercises, the contingency window will be cancelled, and services will be made available to service users to plan their activities.

We anticipate notifying Parties if this contingency is to be used or not on the day of the last planned activity taking place.

Exceptions: Some services in SMETS1 are delivered using high availability systems which ensures that both the primary and secondary infrastructure sites are configured to operate actively together with the workload distributed across the datacentres, removing the concept of primary and secondary site structure. This is resilience testing conducted on one outage window instead of the failover/fallback testing as described above.

2.2. Extreme Weather Conditions

Extreme weather is defined as “**when a weather event is significantly different from the average or usual weather pattern**” - flash flooding, heat wave, blizzards and thunderstorms are examples of

extreme weather in the UK which may impact testing. DCC currently monitors Met Office weather warnings and BCDR activity will be halted and replanned where deemed necessary and sufficient time from the warning to the test is available.

2.3. Post-Exercise Reporting and Actions

On completion of the proving exercise, each Service Provider will be responsible for conducting their own post-exercise reviews in conjunction with DCC and will be required to submit reports to DCC. DCC will carry out assurance checks to verify each Service Provider's performance and identify any further areas for improvement. Once this assurance review is complete DCC will prepare its report for provision to the SEC Panel in accordance with SEC Section H10.11(b).

Any residual post-exercise actions identified during the proving exercise or following DCC's assurance work will be documented and tracked to completion.

3. Consultation Questions

A summary of the consultation questions is set out below.

BCDR Q1	Do you agree with DCC's proposal to undertake Disaster Recovery proving as detailed in Annex Two and that updates to these dates should be shared with Service Users in advance of the test dates? If you disagree, please provide your rationale.
BCDR Q2	Do you agree with DCC's proposal to undertake DR testing during Sundays 09:00 – 17:00. This covers the 4 hours expected Recovery Time Objective (RTO) and 4 hours contingency? If you disagree, please provide your rationale.
BCDR Q3	Do you agree with DCC's proposal to implement a two hour validation checks (usually 17:00 – 19:00) after the closure of each testing window to ensure all issues have been captured, managed, and controlled to avoid further downtimes being caused by incidents due to the BCDR testing activity? If you disagree, please provide your reasons.
BCDR Q4	Please provide any suggestions which you consider may help to minimise disruption to the provision of the Services during the proving exercise periods

4. Next Steps

These are the next steps following the consultation closure on 3 December 2021.

DCC will review and collate consultation responses and consider any relevant refinements to the BCDR testing schedule. The final BCDR testing schedule and collated consultation responses will be provided to the SEC Panel or delegated Sub-Committee for approval or rejection.

Any future changes to the schedule will be communicated in advance.

5. How to respond

Please provide responses by 03 December 2021 to DCC at consultations@smartdcc.co.uk. If you have any questions about the consultation documents, please contact consultations@smartdcc.co.uk.

Consultation responses may be published on DCC website www.smartdcc.co.uk. Further, DCC may refer to responses in its consultation conclusions, which will appear on DCC's website. Please note that responses may be made available to the SEC Panel.

Please state clearly in writing whether you want all or any part, of your consultation to be treated as confidential. It would be helpful if you could explain to us why you regard the information you have provided as confidential. Please note that responses in their entirety (including any text marked confidential) may be made available to the Department for Business, Energy, and Industrial Strategy (BEIS) and the Gas and Electricity Markets Authority (the Authority). Information provided to BEIS or the Authority, including personal information, may be subject to publication or disclosure in accordance with the access to information legislation (primarily the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004). If BEIS or the Authority receive a request for disclosure of the information we/they will take full account of your explanation (to the extent provided to them), but we/they cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded by us as a confidentiality request.

Annex 1 - Impact on the Services

The impact on Service Users during each proving exercise window will be as follows:

- The DUIS will be closed, and no new Service Requests will be accepted. No Alerts or responses will be delivered.
- All DSP Future Dated and Scheduled events that are due to be executed during each Maintenance window will be suspended and restarted after the window ends.
- Future Dated, Scheduled, and other events originating from the HAN during the outage period will not be delivered.
- The SSI will be unavailable during a DSP testing arrangement. But should be available during all other testing schedules.
- The Service Desk will remain open and contactable via email and telephone during all outages.
- The SMKI Services will be unavailable during a TSP failover & failback test. But should be available during all other testing schedules.
- The daily file transfers from the DSP will be disabled, although inbound Registration files will still be received from the RDPs and the data applied at the end of each proving exercise window; and
- Active meter Firmware downloads will be interrupted and therefore terminated due to shutdown of the motorway. Disrupted Firmware downloads will need to be re-initiated post BCDR test.
- The Change window is effective between the hours stated during which production services will not be available.
- Key Services for SMETS1 and SMETS2 will not be available during the BCDR testing planned window.

Annex 2 - Business Continuity and Disaster Recovery Test Schedule

The below BCDR Plan testing programme shows the periods of planned outages to services during 01 April 2022 to 31 March 2023 testing plan schedules.

All DR test dates, along with the outages associated with the proving exercise will be communicated regularly providing updates where applicable including confirming tests dates that are due within the 2 months period and those that have changed.

Date	SMETS BCDR Proving Activity	Outage Window 4 Hours Recovery Time Objective 4 hours Contingency
03 April 2022	DSP – DR Failover	09:00 – 17:00
10 April 2022	DSP – DR Failback	09:00 – 17:00
24 April 2022	DSP – DR Contingency	09:00 – 17:00
08 May 2022	DSP – DR Contingency	09:00 – 17:00
08 May 2022	CSP SC - DR Failover CSP N - DR Failover	09:00 – 17:00
15 May 2022	CSP SC - DR Failback CSP N - DR Failback	09:00 – 17:00
22 May 2022	CSP SC - DR Contingency CSP N - DR Contingency	09:00 – 17:00
29 May 2022	CSP SC - DR Contingency CSP N - DR Contingency	09:00 – 17:00
07 July 2022	TSP (BT) – DR Failover	20:00 – 04:00
14 July 2022	TSP (BT) – DR Failback	20:00 – 04:00
21 July 2022	TSP (BT) – DR Contingency	20:00 – 04:00
06 Aug 2021	Secure Meters – DR Failover	20:00 – 04:00
04 Sept 2022	CP – DR Failover DCO – Resilience & SFTP Testing	09:00 – 17:00
11 Sept 2022	CP – DR Failback DCO – Resilience & SFTP Contingency	09:00 – 17:00
18 Sept 2022	CP – DR Contingency	09:00 – 17:00
24 Sept 2021	Secure Meters – DR Failback	20:00 – 04:00
01 Oct 2022	Secure Meters – DR Contingency	20:00 – 04:00

09 Oct 2022	DXC/Trilliant – Resilience & SFTP DR Failover SIE – Resilience & SFTP Failover/Failback	09:00 – 17:00
16 Oct 2022	DXC/Trilliant – Resilience & SFTP DR Failback SIE – Resilience & SFTP Contingency	09:00 – 17:00
23 Oct 2022	DXC/Trilliant – Resilience & DR Contingency	09:00 – 17:00

Table: Disaster Recovery Testing Schedule 2022 - 2023