

EPCL Report

EPCL Report 17 - DMCT Tranche 38,39

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DCC Public - EPCL Report 17

Contents

1.	Context of EPCL Request	. 3
2.	Live Service Criteria Assessment	. 6
3.	EPCL Reports Risk Register	. 8
4.	Confirmation of DCC Information	. 8
An	nex A – EPCL entries Requested for Eligible Product Combination List	10
An	nex B – Final DMCT Testing Reports for proposed EPCL entries	11
An	nex C – Latest DCC Pacing Strategy	12
An	nex D – Mapping to Clause 20 of the SVTAD	13
An	nex E – DCC Guidance Note: Child DMCs and Substantive Equivalence	15

1. Context of EPCL Request

Annex A to this EPCL Report sets out the specific details of 153 entries that DCC are proposing to add to the Eligible Products Combination List (EPCL), subject to approval from the Secretary of State to do so.

DCC is requesting to add Active, Dormant & Mixed Secure EPCL entries which have SMETS1 Installations to the EPCL.

Overall	Installs			Devices		
Secure	Active	Dormant	Mixed	Active	Dormant	Mixed
Requested EPCL entries (tested and SE) at target FW	1	0	0	1	0	0
Potential FW upgrades to target FW (tested and SE)	9,910	1,485	42	10,733	1,570	84
Totals by Installation Status	9,911	1,485	42	10,734	1,570	84
Totals	11,438			12,338		

EPCL entries contained within this report are split into 2 Groups:

- 1. Secure EPCL entries that have been the subject of testing.
- 2. Secure EPCL entries that have not been tested but are being proposed as Substantively Equivalent to EPCL entries in Group 1 that have been tested.

Group 1

DCC has completed testing via the DMCT process of 4 Dormant EPCL entries as set out in Annex A. Details of the testing performed on these EPCL entries is also detailed in Annex A.

As described in Appendix D, for the following proposed Active EPCL entries 001046, 001051, 002074, 002081 DCC has tested the Dormant entry in DMCT. In line with SVTAD Appendix AK, Clause 20.9, DCC has chosen not to additionally test the entries for these DMCs in respect of SMETS1 Installations that comprise solely Active meters or Mixed meters as it considers that the testing in respect of the entry containing only Dormant Meters suffices.

Group 1	Installs			Devices		
Secure	Active	Dormant	Mixed	Active	Dormant	Mixed
Requested EPCL entries (tested) at target FW	0	0	0	0	0	0
Potential FW upgrades to target FW (tested)	310	34	13	620	68	26
Totals by Installation Status	310	34	13	620	68	26
Totals		357			714	

Group 2

DCC is requesting to add additional Secure entries onto the EPCL based on "Substantive Equivalence" (see Annex E). DCC proposes that each of the EPCL entries contained within Group 2 are Substantively Equivalent to one of the entries in Group 1 and therefore do not require testing for the DCC to satisfy itself that it will be able to Migrate them and be able to successfully process SMETS1 Service Requests and relevant SMETS1 Alerts in respect of enrolled SMETS1 Smart Metering Systems comprising all or part of the DMC.

Group 2	Installs			Devices		
Secure	Active	Dormant	Mixed	Active	Dormant	Mixed
Requested EPCL entries (SE) at target FW	1	0	0	0	0	0
Potential FW upgrades to target FW (SE)	9,600	1,451	29	10,114	1,502	58
Totals by Installation Status	9,601	1,451	29	10,114	1,502	58
Totals		11,081			11,674	

For the requested EPCL entries above, the migration of SMETS1 installations and enrolment of Smart Metering Systems specified by these DMCs will not have an adverse impact on the delivery of DCC Services and DCC does not consider there to be any regression risk.

On 04 August 2021 DCC issued a letter to Suppliers '*SMETS1 - Secure Liberty 112 or 114 ESME in the DMCT Approach - REQ00000185156*' to present Smart DCC's planned approach for facilitating the enrolment of SMETS1 installations that include either the Secure Liberty 112 or 114 ESME in the Device Model Combinations (DMC).

No Suppliers raised concerns with this approach.

The letter also outlined the functionality restrictions on the Liberty 112 and 114 post enrolment. The Liberty 112 and 114 have a boost function and remote override functionality. The boost function is expected to continue to operate in accordance with the configuration that is set on the HAN prior to migration. However, once enrolled in the DCC Systems, neither the ability to change the boost configuration nor the ability to operate the remote override function will be accessible via the DCC SMETS1 Core Communication Services.

The Liberty 112 and 114 are twin element meters. Post-enrolment, direct access to the second element will not be possible as this is not currently supported as part of the DCC SMETS1 Core Communication Services. These Devices will need to be converted to single element operation either before, or soon after migration. To convert the Device to single element operation, Post-Enrolment, the Supplier is required to apply a tariff, by sending an Update Tariff (1.1.1) Service Request to the ESME. This will cause the S1SP to trigger a configuration change on the ESME that will convert the device to single element operation. Active Suppliers can configure these ESMEs with a single element tariff prior to enrolment.

The Liberty 112 ESME has one auxiliary load control switch. Post-enrolment, this auxiliary switch will be aligned to the switching times within any tariff applied to the ESME via the 1.1.1 Service Request as per the rules in S1SR. The Liberty 114 ESME has 3 Auxiliary Load Control switches. Post-enrolment, Auxiliary switch 1 and Auxiliary switch 2 will both open and close at the same time and be aligned to the switching times within any tariff applied to the ESME via the 1.1.1 Service Request as per the switching switch 3 will align to the ESME via the 1.1.1 Service Request as per the rules in S1SR. The Auxiliary switch 3 will align to the state present on the ESME prior to enrolment and will not be configurable post-enrolment.

DCC has provided the Security Sub-Committee (SSC) with DCC confirmation that the DCC does not consider there to be any unmanageable security risks associated with adding the requested EPCL entries to the EPCL. On 10 November 2021 SSC confirmed there are no apparent new security risks to prevent the requested EPCL entries being added to the EPCL.

DCC accordingly recommends that BEIS approves the requested new entries for the EPCL set out in Annex A.

DCC considers that the aforementioned entries should be made to the EPCL because:

- (i) The DCC has followed the process required of it in respect of them as set out in Clause 20 of the SVTAD, and as further set out in Annex D; and
- (ii) In the case of requested EPCL entries listed in Annex A where DCC does not consider that testing is necessary because each of the requested EPCL entries is considered to be substantively equivalent to entries that have been tested, the test reports are referenced in Annex A:

The rationale for treating the requested EPCL entries as substantively equivalent is set out in 'Excluded from DMCT Schedule', published on the DCC Website (<u>here</u>), and described in Annex E; and

(iii) The DCC is ready to support the Migration of SMETS1 Installations comprised of the requested EPCL entries and the subsequent operation of the associated Enrolled Smart Metering Systems in accordance with the assessment set out in the Live Service Criteria Assessment.

If a Supplier Party has any objections to the DCC's request that BEIS approves the addition of the entries listed in this report onto the EPCL their concerns should be sent to BEIS (<u>SMETS1_appeals@beis.gov.uk</u>), within 5 working days of a notification being issued by SECAS of the publication of this report.

2. Live Service Criteria Assessment

#	Live Service Criteria	RAG Status	Commentary
1	SMETS1 Migration Services ready including early migration support for relevant EPCL entry(ies)	G	DCC will be ready to carry out migration of the DMCs that are included in Annex A, which DCC is proposing to add to the EPCL.
2	Service Operations capability ready	G	DCC's core Service Operations Capabilities are in place and ready to support the migration and operation of the DMCs set out in Annex A. These include dedicated SMETS1 resources across the MCC, Early Life Support (ELS) and co-located support functions.
3	SMETS1 Service and Migration can operate at the requisite volumes to support migration and operation of the relevant EPCL entry(ies) and operating capability, in parallel with all SMETS2 activity	G	This EPCL report will introduce additional MOC Secure Cohort DMCs onto the EPCL. DCC is of the opinion that the addition of the proposed DMCs will not impact service or migration performance. DCC has proven the S1SP solution and that the migration solution capability works and is scalable up to a daily volume of 50,000 installations. Through IOC, MDS and MOC migrations, it has demonstrated the ability to successful migrate installations, many of which are now operating on DCC's network.
4	Regression Testing has completed successfully for SMETS1 and SMETS2 Live Systems	N/A	There will be no SMETS1 or SMETS2 regression testing conducted as part of DMCT for any tranche, as DMCT is focused on devices rather than code.
5	Relevant testing for relevant EPCL entry(ies) has completed	G	Annex A sets out the relevant testing for the requested EPCL entries.
6	Pre-existing services remain stable for SMETS2 and SMETS1 prior operating capabilities	G	 DCC has in excess of 15 million meters on the DCC Systems, which includes both migrated SMETS1 devices and SMETS2 installations. DCC is successfully operating all of these devices whilst continuing to migrate SMETS1 installations and commissioning new SMETS2 installations onto the DCC System. This EPCL report will introduce additional Secure Cohort DMCs onto the EPCL. Following the implementation of MOC Secure, DCC has not observed any detrimental impact on its network or services as a result of MOC Secure migrations or service operations. DCC has migrated over 500,000 meters / 340,000 installations for MOC Secure and overall migration activity has continued in line with forecast volumes and expected performance levels. DCC is of the opinion that the addition of the proposed DMCs will not impact service or migration performance.
7	Any lessons learnt from prior operating capabilities are incorporated in to live process	G	Having successfully migrated devices into the DCC System, DCC has learnt valuable lessons that it will apply when migrating the new DMCs.

8	No detrimental impact to consumers experience expected	G	Based on the experience of live migrations and early life support to date, DCC does not consider that there is a material risk of negative impact to consumers' experience.
9	Assurance of required Business Continuity/Disaster Recovery	G	Secure successfully completed a failover and failback of their systems in September 2021 and DCC is satisfied with the testing that has been conducted with MOC and believes the solution is resilient.
10	Completion of relevant security testing and approval of security architecture	G	The EPCL entry in this submission was given offline approval from SSC on 10 November 2021. SSC confirmed that there are no apparent new security risks to prevent these devices being added to the EPCL.

3. EPCL Reports Risk Register

The EPCL Reports Risk Register, which contains risks relevant to EPCL reports that DCC has published on the DCC website and is seeking BEIS approval of, can be found here:

https://www.smartdcc.co.uk/media/6598/epcl-reports-risk-register.xlsx

4. Confirmation of DCC Information

GORA

Gav Parrott
Director of Products & Logistics

List of Annexes

- Annex A EPCL entries Requested for Eligible Product Combination List
- Annex B Final DMCT Testing Reports EPCL entries
- Annex C Latest DCC Pacing Strategy
- Annex D Mapping to Clause 20 of the SVTAD
- Annex E DCC Guidance Note: Child DMCs and Substantive Equivalence

Annex A – EPCL entries Requested for Eligible Product Combination List

The file 'EPCL Report 17 – Annex A - EPCL Entries' details the entries that the DCC is requesting to make to the list of Eligible Product Combinations.

The file can be found on the DCC Website, here.

Annex B – Final DMCT Testing Reports for proposed EPCL entries

Titles and dates of Testing reports are listed with each requested EPCL entry in Annex A.

Where requested EPCL entries are being added via Substantive Equivalence (see Annex E), no testing of the DMCs corresponding to the requested EPCL entries has been performed. This is in accordance with SVTAD Appendix AK, Clause 20.6 (d) (i).

Link to Reports:

This report is available on the DCC external SharePoint, accessible to SEC Parties who have requested access. To request access please contact DCC Enrolment and Adoption <u>Enrolment.adoption@smartdcc.co.uk.</u>

Annex C – Latest DCC Pacing Strategy

To support the below migration pacing strategy the MCC will:

- Hold a daily Go / No-go to review progress of previous migrations and approve the progress of the proposed migrations for that day. This is attended by all service providers within the migration process and Operational DCC functions.
- Monitor the new EPCL entries migration progress using the current tools available to it. If any anomalous behaviour is detected these DMCs will be throttled or halted in day until diagnosis can be made and future migrations will be paused.
- As frequently as deemed necessary, but no less than weekly, review the pacing strategy against Supplier forecasts (for active migrations) and available dormant volumes. As a result, MCC may:
 - Scale volumes to optimise daily migration performance and/or ensure appropriate supplier allocation and active/dormant mix
 - Increase volumes if deemed appropriate due to the results of previous migrations.
 - Decrease volumes if previous migrations have not resulted in expected results.
 - Which includes but not exclusive to;
 - Higher than expected failure rates for that DMC.
 - Higher than expected failure rates for that cohort.
 - New or unknown error that was not expected as part of the migration process.
 - Pause if there is cause for concern by carrying on migration.
 - Which includes but not exclusive to;
 - Higher than expected failure rates for that DMC.
 - Higher than expected failure rates for that cohort.
 - New or unknown error that was not expected as part of the migration process.

This pacing strategy will be followed by DCC unless there is significant business impact or a business requirement to change it. It is prudent to state this strategy is our intent, but this could change where agreed and it is in the best interest of the migration solution or the business requirements.

Where possible DCC will seek to select dormant DMCs which will be made active immediately following migration, to ensure that DCC can confirm devices are operational at the earliest possible opportunity.

Due to the low volumes of Dormant installations made eligible for migration by this report DCC will not be pacing the volumes and progress all Dormant installations as soon as available.

Annex D – Mapping to Clause 20 of the SVTAD

For the following proposed Active EPCL entries 001046, 001051, 002074, 002081DCC has tested the Dormant entries in DMCT. In line with SVTAD Appendix AK, Clause 20.9, DCC has chosen not to additionally test entries for these DMCs in respect of SMETS1 Installations that comprise solely Active meters or Mixed meters as it considers that the testing in respect of these entries containing only Dormant Meters suffices.

DCC believes the Dormant test pack covers the full scope of Active and Mixed testing required in DMCT. Additionally, DCC believes SIT evidence for an Active or Mixed DMC is sufficient to have proven the migration steps specific to Active and Mixed migrations. Therefore, the combined Dormant DMCT and Active SIT and Mixed SIT test evidence are sufficient for DCC to propose addition of the Active and Mixed EPCL entries for respective DMCs.

In line with SVTAD Appendix AK, Clause 20.41, within Annex A for respective Active and Mixed EPCL entries, DCC has referenced the Dormant DMCT Test Completion Report and Active SIT or Mixed SIT Test Completion Report.

Group 1

Pursuant to Clause 20.15 of SEC Appendix AK, The DCC executed the Standard Dormant DMCT Migration Test Pack and the Standard DMCT Service Reference Variant Test Pack for the Capability Release.

Pursuant to Clause 20.29 There are 1 open Testing Issue that the DCC believes should not be counted against the Testing Issue Threshold for the purposes of Clause 20.28 in respect of the requested EPCL entries.

Pursuant to Clause 20.30 TAG has been advised that there are 4 open Testing Issues.

Pursuant to Clause 20.34 The DCC produced draft DMCT Testing Reports on 2 November 2021.

Pursuant to Clause 20.36 The DCC made available the draft DMCT Testing Reports to any Supplier Party that was planning to enrol one or more SMETS1 Installations that are comprised of the requested EPCL entries that are the subject of the DMCT Testing Reports.

Pursuant to Clause 20.37 no Supplier Party has referred the matter to the Secretary of State for a determination (pursuant to Clause 20.40) within 10 Working Days of either of the draft DMCT Testing Reports being provided.

Pursuant to Clause 20.38 The TAG has not considered that a different determination of the number or severity of the extant Testing Issues against the relevant Testing Issue Thresholds should be arrived at or might be arrived.

Pursuant to Clause 20.39 the draft DMCT Testing Report has been updated as necessary and deemed to be final.

Groups 1 & 2

DCC is required to publish the DMCT Status List and the DMCT Schedule in terms of Clause 20.8 and Clause 20.10 of SEC Appendix AK 'SEC Variation Testing Approach Document for SMETS1 Services' (SMETS1 SVTAD) on the DCC website. DCC is further required to publish a list of exclusions from the DMCT Schedule in terms of Clause 20.11 of the SMETS1 SVTAD.

Pursuant to these obligations, DCC has published the associated Schedules and Lists <u>here</u> and provided to SECAS for publication on the SEC website <u>here</u> for Secure on the following date 29 November 2021.

Relevant Suppliers who included in their RFI submissions the DMCs included within this report were notified that the DMCs included in this report are requested to be added to EPCL under SVTAD Appendix AK, Clause 20.6 (d) (i).

For Secure, notification was via DCC Mass Comms email on 29 November 2021 titled '*SMETS1 MOC SECURE v12.0 - DMCT Status List and DMCT Schedule published on DCC Website – 26th November 2021- REQ00000191545*'.

The comms notified those relevant Suppliers of the publication on the DCC Website of Secure versions of 'DMCT Status List & Excluded from DMCT Schedule' which includes entries for the DMCs included in this report, with reason for exclusion from DMCT Schedule on the basis of Substantive Equivalence and rationale (see Annex E).

DCC contacted the relevant Suppliers that included the DMCS in their RFI submissions to confirm that they would raise no objection to these DMCs being added to EPCL. Confirmation was received from all impacted Suppliers that they had no objection.

Pursuant to obligations set out under SVTAD Appendix AK, Clause 20.43 The DCC has published this DMCT EPCL Report on the DCC Website (here) and has notified the Panel, the Secretary of State, the Authority and SEC Parties of the publication of the report.

Annex E – DCC Guidance Note: Child DMCs and Substantive Equivalence

(Full Guidance Note is published on DCC Website, here)