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MP122B 'Operational Metrics – Part 2'

Modification Report

Version 1.1

11 November 2022

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About this document

This document is a Modification Report. It sets out the background, issue, solution, impacts, costs, implementation approach and progression timetable for this modification, along with any relevant discussions, views and conclusions.

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This document also has six annexes:

- **Annex A** contains the business requirements for the solution.
- **Annex B** contains the redlined changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.
- **Annex C** contains the full Data Communications Company (DCC) Impact Assessment response for Change Request (CR) 4392.
- **Annex D** contains the full DCC Impact Assessment response for CR4445.
- **Annex E** contains the full responses received to the first Refinement Consultation (August 2021).
- **Annex F** contains the full responses received to the second Refinement Consultation (September 2022).

Contact

If you have any questions on this modification, please contact:

Mike Fenn: 020 3314 1142; mike.fenn@gemserv.com

1. Summary

This proposal has been raised by Gemma Slaney from National Grid Electricity Distribution.

Issues with transparency of reporting and relevance of the measures contained within the DCC Performance Measurement Report (PMR) have arisen. In its monthly review of the PMR, the Operations Group has found it increasingly difficult to report to the SEC Panel on the issues within the report.

As a result of the issues encountered, the Operational Metrics Review (OMR) was undertaken to better understand the PMR measures, consider amendments and recommendations of new performance indicators. Through workshops and User surveys, it is clear that Users want to see reporting that reflects the business processes that the DCC supports.

To realise the full set of reporting sought, changes are needed to the DCC Systems and Service Provider contracts. To ensure the reporting elements that did not require these changes could be delivered sooner, the original modification was split into two and progressed under [MP122A](#) 'Operational Metrics'. The Proposed Solution has significantly reduced in scope during the Refinement Process and now consists of enhanced reporting on Alerts and Incident Categories 3, 4 and 5. The proposals to shorten the PMR service level agreement (SLA) and to enhance reporting on firmware have both been removed from this modification.

This modification's impacts will be limited to the DCC, the DCC Systems and its Service Providers. If approved, it will also provide positive impacts across all SEC Party categories.

This modification will incur a central implementation cost of approximately £1.2m. This modification will impact the DCC with consequential benefits for all Parties with improved performance reporting. It is targeted for the November 2023 SEC Release and is being progressed as a Self-Governance Modification.

2. Issue

What are the current arrangements?

The Performance Measurement Report

SEC Section H13.4 requires the DCC to produce a report setting out the Service Levels achieved in respect of each Performance Measure. The Performance Measure Service Levels are set out in SEC Sections D11.3, H13.1 and L8.6. The report also provides details of the Service Provider Performance Measures specified in the Reported List of Service Provider Performance Measures document¹.

The report that the DCC produces in accordance with SEC Section H13.4 is known as the PMR and is presented to the Operations Group on a monthly basis.

¹ This is a DCC Controlled document and is available via the DCC's SharePoint.

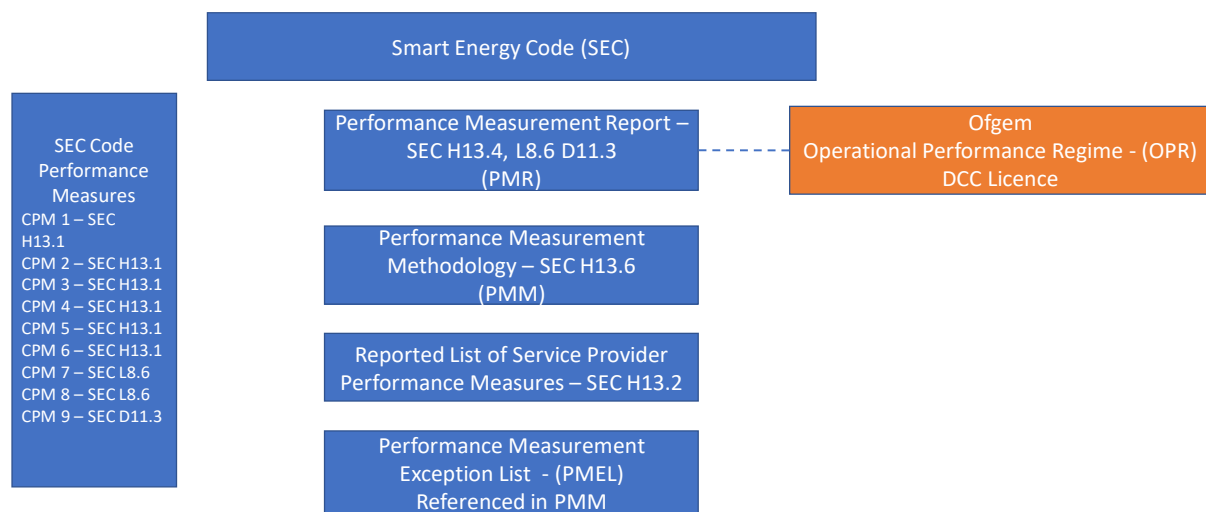
The Operational Metrics Review

In October 2019, work commenced on the OMR, overseen by the Operations Group, to identify improvements in the metrics used to measure the DCC service. The Operations Group raised the need for the review following issues raised by its members in relation to the DCC's monthly PMR. This was where it was felt that what the DCC were reporting wasn't aligned with DCC User experience.

The purpose of the OMR was to identify improvements to the operational metrics related to the SEC Performance Measures to measure the delivery of DCC Services. The improvements would reflect User requirements and priorities. The review was resourced and managed by the Smart Energy Code Administrator and Secretariat (SECAS) and was conducted between October 2019 and March 2020.

Ofgem was engaged throughout the review and has reviewed its Operational Performance Regime (OPR) structure. The aim of the Ofgem review was to ensure incentives placed on the DCC are adequate and effective, and therefore the outcomes of this project would help to ensure that the most appropriate subset of SEC defined measures fed into the OPR.

The diagram below provides a pictorial view of the performance reporting documents provided and maintained by the DCC in accordance with the SEC and utilised by Ofgem as part of its annual OPR review.



Outcomes and recommendations

The project undertook a review of the Performance Measurement Methodology (PMM). The review was not a forensic examination of the calculations. The project, instead, tried to understand if the PMR metrics and supporting methodology remain appropriate and made recommendations for potential amendments and changes.

The review recommended that the DCC Operational Performance Reporting is addressed for the following areas:

- Measure and report service performance by User business processes using Service Reference Variants (SRVs).
- Measure and report the Target Response Time for all Alerts.

- A measure of end-to-end DCC Service Availability across the DCC environment reported by Communications Service Provider (CSP) Region.
- A change to improve the timeliness of production of the PMR, to ensure the PMR remains operationally relevant to Users.
- Changes or additions to Smart Metering Equipment Technical Specifications (SMETS) 2 arrangements for the PMR are, where appropriate, taken forward for SMETS1. This would ensure consistency across SMETS Device types and make sure that reports are focussed on outcomes, reflective of the experience of Users at an industry reported level.
- A change is made to Code Performance Measure (CPM) 5 to report resolution times of Incident Categories 3, 4 and 5 individually per Reporting Period.

MP122A 'Operational Metrics'

[MP122A 'Operational Metrics'](#) was implemented into the SEC on 25 February 2021 (February 2021 SEC Release). It sought to improve the transparency of the PMR by implementing changes to DCC's Data Science and Analytics (DS&A) team (previously known as the Technical Operations Centre (TOC)), as well as interim approaches for the most affected metrics recommended in the OMR. The MP122A solution will not impact, nor will it extract data from, any of the DCC's Service Providers and is solely dependent on the DS&A team.

The MP122A legal text implemented all the required changes to the SEC, irrespective of whether the DCC's capability to comply with those changes were dependent on this MP122B. This approach was agreed with the Proposer of MP122A and MP122B, the DCC and Working Group members.

The enhanced reporting resulting from MP122A only includes data derived from the DS&A team. This reporting was presented to the Operations Group from May 2021 looking back at data from April 2021.

What is the issue?

During the development of MP122A, it became clear there would not be enough time to implement any of the changes concerning data not already held within the DS&A team and that would impact the DCC Service Providers in time to start reporting from the 2021/22 regulatory year. Specifically, the areas of improvement are:

- Enhanced reporting on Alerts
- Enhanced reporting on Incident Categories 3, 4 and 5
- Reduced delivery timescales of the PMR
- Enhanced reporting on Communications Hub firmware
- Enhanced reporting on SMETS1 Device firmware

Reporting on Alerts

Currently, the reporting that the DCC produces in relation to CPM 3 only provides a single average against the combination of all Alerts that are delivered within the Target Response Time. Existing reporting for Alerts includes the time spent in the following phases and does not use a proxy:

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- Time from receipt on the Communications Hub to onward transmission to the Data Service Provider (DSP)
- Time from receipt from the DSP to onward Transmission to the Service User Gateway

However, the Target Response Time for the two phases are reported separately and the DCC cannot currently link the two. In addition, the DCC reports the average Target Response Time for the combination of all Alerts, not for each Alert type.

Therefore, Parties do not think the current reporting on Alerts is a fair reflection of the DCC's performance in this area. However, this is not the view of the DCC which notes that its responsibility begins at the point that the Alert reaches the Communications Hub and ends when it attempts to send it to the Service User. The DCC is not responsible if the Service Users system or gateway is down.

Reporting on Incident Categories 3, 4 and 5

Currently, the DCC reports on Incident Categories 3, 4 and 5 as an average against the three Categories combined and only measure those that are resolved within the Target Resolution Time. However, consideration is not given to each Category on its own and the Target Initial Response Time is not measured.

Parties have fed back that this does not provide enough granularity.

Reducing the delivery timescales of the PMR

Prior to the implementation of MP122A, SEC Section H13.4 required the DCC to produce the PMR within 25 Working Days following the end of each Performance Measurement Period. MP122A shortened this to 10 Working Days following the end of each Performance Measurement Period.

However, the DCC identified in June 2020 that it is unable to meet the new timescales without making contractual amendments with all 13 of its Service Providers. Consequently, until these contractual changes are made, the DCC will continue to use the 25 Working Day SLA. The Authority subsequently granted a derogation against the new 10 Working Day SLA in the SEC.

This means that when the Operations Group reviews the PMR, it is effectively looking at data from two months previous. This makes it harder for those reviewing the report to understand the reasons for any drops in performance in a timely manner.

Reporting on Communications Hub firmware

MP122A introduced new CPM 6B and CPM 6C. These relate to metrics measuring the percentage of firmware images successfully delivered as well as activated on Communication Hubs respectively. However, the DCC cannot currently report on either of these two elements until the necessary DCC System and Service Provider contractual changes are made as well as the implementation of [SECMP0007 'Firmware updates to IHDs and PPMIDs'](#).

Reporting on SMETS1 Device firmware

MP122A introduced both CPM 6A and SEC Section H13.4, both of which are interlinked. Section H13.4 lists the business processes and associated SRVs for which the DCC is to report against, including a breakdown by Region or SMETS1.

Business process 'Update Device Firmware' contains two SRVs which the DCC is to measure:

- SR11.1 'Update Firmware'
- SR11.3 'Activate Firmware'

However, the DCC cannot report on the above two Service Requests (SRs) in respect to SMETS1 until the necessary DCC System and Service Provider contract changes are made.

What is the impact this is having?

Without the DCC System and Service Provider changes being made, the DCC will not be able to provide the enhanced and accurate reporting for the above areas. This will mean that current reporting in these areas will not be a true reflection of the DCC and Service Providers performance.

Furthermore, the DCC will continue to produce the PMR 25 Working Days following the end of each Performance Measurement Period, making it harder for the Operations Group to assess any drops in performance in a timely manner.

Impact on consumers

If this issue is not resolved, it may make it harder for those reading the PMR to identify and address drops in DCC performance in the given areas. This could impact consumers if those areas are not performing as well as they should and consequently impact the consumer experience of smart metering.

3. Solution

Proposed Solution

The Proposed Solution is for the DCC to deliver solutions for the following two areas:

- Enhanced reporting on Alerts
- Enhanced reporting on Incident Categories 3, 4 and 5

The Proposed Solution previously included solutions for the following areas:

- Reduced delivery timescales of the PMR
- Enhanced reporting on Communications Hub firmware
- Enhanced reporting on SMETS1 Device firmware

These were subsequently removed due to prohibitive costs and the availability of preferable workarounds; full details can be found in Section 7 below.

The details of the solution for each remaining area are set out below.

In addition, some of the legal text for MP122A was dependent upon technical solutions being developed under MP122B. Where those solutions have been removed, MP122B will further amend those elements of the legal text so they align with what is currently being delivered by the DCC.

The original business requirements for the full MP122 solution can be found in Annex A and were formed from the recommendations made by the OMR. However, only a subset of these requirements is now included under MP122B.

Reporting on Alerts

DCC System impacting solution

The reporting resulting from CPM 3 will be expanded for SMETS2 Alerts only.

MP122B provides two additional timing points for Device Alerts from SMETS2 Devices in CSP North:

- the time when the Alert was received by the Communications Hub Function (CHF); and
- the time when the Alert was received by the CSP

in two categories:

- those delivered as Device Alerts to the Service User; and
- Device Alerts where the target is the DSP and where the DSP generates DCC Alerts to deliver the information to Users.

The scope of the solution will include DCC Alerts used to carry Device Alert information when it is not feasible for the Device to target a Device Alert at a User directly, such as Device Alerts from Prepayment Meter User Interface Devices (PPMIDs). In some cases there may be more than one DCC Alert triggered by the same Device Alert targeted at the DSP.

These timing points are already recorded in by CSP South and Central but these are not read or processed by the DSP. MP122B will implement changes to:

- CSP North to collect data when the Alert is sent from the Communications Hub;
- the DSP Smart Meter Wide Area Network (SM WAN) Gateway to support sending of the Alert Throughput data to the DCC DS&A team; and
- changes in the reporting provided by the DS&A team to include this data.

Alert Management Mechanism

The Proposed Solution will also define the Alert Management Mechanism within SEC Section A 'Definitions and Interpretation'. This is a mechanism which was introduced as part of the solution to [SECMP0062 'Northbound Application Traffic Management - Alert Storm Protection'](#) to define the parameters to be applied to Alerts received by the DCC and the exemptions to these parameters. The Alert Management Mechanism is referenced in CPM 3.

Reporting on Incident Categories 3, 4 and 5

Incident Categories 3, 4 and 5 shall be reported by Category, with statistics identifying the number of Incidents per Category, the number that met the Target Initial Response Time and the number that met the Target Resolution Time. These statistics will be broken down by resolver group where the resolver is the DCC, the DSP, a CSP, a S1SP, the Dual Control Organisation (DCO), or other Service Providers. This reporting will support CPM 5 and CPM 5A.

After investigation, the DCC has found that its own internal Remedy Systems already hold the required data and the Working Group agreed this met the original business requirement. The DCC will therefore provide its own reporting to SECAS for CPM 5 and CPM 5A. The data for CPM 5 is now already being reported to the OPSG and so MP122B is only trying to facilitate CPM 5A.

At present the Service Providers dispute a small number of Incident resolution timescales each month where they have needed to 'stop the clock' and go back to the Service User for additional information. The DCC will now no longer exclude those that would have met the TRT if the Service User had responded to the request for additional information immediately. Therefore, although this data will not be reconciled or validated by the DCC's Service Providers, it provides a more cost-effective solution and one with a shorter DCC lead-time. In addition, this solution will not require any Service Provider contract renegotiation.

4. Impacts

This section summarises the impacts that would arise from the implementation of this modification.

SEC Parties

SEC Party Categories impacted			
	Large Suppliers		Small Suppliers
	Electricity Network Operators		Gas Network Operators
	Other SEC Parties	✓	DCC

The DCC

The DCC will be required to facilitate the necessary changes to the DCC Systems and its DS&A team, to implement and report on the areas highlighted in this report.

Consequential impacts on SEC Parties

SEC Parties will not be impacted in implementing this modification, and should see the following improvements:

- Enhanced reporting on Alerts
- Enhanced reporting on Incident Categories 3, 4 and 5

DCC System

The DCC Systems will be impacted by this modification, as well as the DSP and the CSPs. The S1SPs will not be impacted as SMETS1 reporting has been removed from the scope of this modification.

Testing

The DCC's Impact Assessment has highlighted the following testing requirements for both the DSP and the CSP North:

- Pre-Integration Testing (PIT)
- Systems Integration Testing (SIT)
- User Integration Testing (UIT)
- DS&A testing

There will also be testing of the Alerts changes in the Self-Service Interface (SSI) and Self-Service Management Interface (SSMI) reports.

The CSP North has requested a testing cycle that includes two rounds of PIT and a far more significant level of SIT and UIT. The costs for this are reflected in the Impact Assessment. These costs are being challenged by the DCC as it believes the level of testing is unnecessarily extensive.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- SEC Section A 'Definitions and Interpretation'
- SEC Section H 'DCC Services'
- Performance Measurement Methodology as required by SEC Section H (13.6)

The SEC Technical Specifications will not be impacted by this modification.

Consumers

Consumers are likely to indirectly benefit from this modification. The improved reporting resulting from this modification will provide a better view of the DCC's actual performance in relation to Alerts and Incidents. Improved reporting should lead to easier and earlier identification of issues that are impacting the service consumers receive, and trigger resolution actions to improve the performance and the consumer experience.

Other industry Codes

This modification will not impact any other industry Codes.

Greenhouse gas emissions

This modification will not impact greenhouse gas emissions.

5. Costs

DCC costs

The DCC has raised two Change Requests to implement the full Proposed Solution, as well as a Remedy solution (not covered by a Change Request) to improve reporting on Incident Categories 3, 4 and 5. The Remedy solution for incident Categories 3, 4 and 5 is expected to be delivered at no cost.

The estimated DCC implementation costs to implement this modification is £1,171,966. The breakdown of these costs are as follows:

Breakdown of DCC implementation costs	
Activity	Cost
Design, Build and PIT	£811,776
SIT, UIT and Implement to Live	£360,190
Application Support	£1,994 per month

Application Support costs have been calculated for a period of 16 months after the solution is implemented. This will account for an estimated average of eight additional Low Complexity calls per month relating to additional functionality. The service will run from the implementation for a period of 16 months.

More information can be found in the DCC Impact Assessment responses in Annexes C and D.

SECAS costs

The estimated SECAS implementation costs to implement this modification is one day of effort, amounting to approximately £600. The activities needed to be undertaken for this are:

- Updating the SEC and releasing the new version to the industry.

SEC Party costs

There will be no SEC Party costs to implement this modification.

6. Implementation approach

Approved implementation approach

The Change Sub-Committee (CSC) has agreed an implementation date of:

- **2 November 2023** (November 2023 SEC Release) if a decision to approve is received on or before 2 March 2023; or
- **27 June 2024** (June 2024 SEC Release) if a decision to approve is received after 2 March 2023 but on or before 27 October 2023.

The Proposed Solution has DCC System impacting changes that must undergo testing. Therefore, this modification should be targeted at a DCC System impacting release for efficiency and to realise potential cost savings. The November 2023 SEC Release is the next possible DCC System impacting release this modification could be targeted. If it misses this date, then it will be targeted for the June 2024 SEC Release.

The Proposed Solution will log additional timing points for the Alerts including the time the Alert is at the Communications Hub and the time the Alerts is sent from the CSP North. However, there are no impacts on Communications Hub firmware. Therefore, the functionality should be available from the point the legal text is implemented in the SEC.

7. Assessment of the proposal

Observations on the issue

Panel views on the modification timeline

The initial Preliminary Assessment of the Change Requests under this modification was submitted before MP122 had been split into two separate parts. In order to prevent any delay to the DS&A team changes and to give the Proposer and the Working Group a chance to scrutinise the Preliminary Assessment, the Change Requests were split out and progressed under MP122B. This allowed the core changes to the DS&A team and internal processes, already fully assessed, to proceed under MP122A in time to be implemented in the February 2021 SEC Release.

SECAS sought approval from the Panel for this approach, given the high costs and impacts highlighted in the assessment of the Change Requests. The Proposer of MP122 and the Panel agreed with this approach, ensuring Parties could give due scrutiny to the Change Requests.

Design principles

The DCC and the Working Group agreed that a set of design principles should be used to ensure that the solution is efficient and meets the desired outcomes of the OMR. These were agreed under MP122A but are still applicable under MP122B.

Requirements which were unable to meet design principles (1) and (2) below were progressed via this modification MP122B to prevent delay to MP122A.

1. Using data already held by the DCC and the DS&A team wherever possible

The first principle that the DCC put forward was that the DCC should use data already held in the DS&A team and other DCC data sources wherever possible. Its rationale was due to the time it would take to raise and complete an assessment for any Service Provider changes as well as the likely increase in implementation costs.

This was accepted as a principle, although the Proposer was wary of relying solely on the DS&A team data as without the DCC's Service Providers, the data may not be completely accurate and fully reflect User experience.

2. Minimising DCC contractual changes

The DCC proposed that MP122 should not generate any contractual changes beyond producing the PMR. It noted that if contract changes were required, the DCC would not be able to start negotiations and implement the agreed changes before April 2021. The Working Group accepted this principle but acknowledged that if DCC Service Provider data was needed then it should not be ruled out.

One of the reasons for MP122B being raised is to assess and implement the contractual changes without delaying MP122A. However, this principle still applies.

3. Publication of the operational metrics

The DCC proposed that all of the new data resulting from this modification should be published in a new and separate report from the PMR. This was due to concerns it had with the consequential size of the PMR if it were to be used to publish the new metrics and publishing it within the 25 Working Day SLA (note MP122A has reduced this SLA to 10 Working Days). Also, the DCC noted that all of the new reporting derived from the DS&A team could be delivered within the 10 Working Day SLA at no extra cost. However, the Working Group was not in favour of receiving two separate reports at two different times. It agreed the new DS&A team reporting document would be delivered with the PMR as an annex to it. Therefore, the DS&A team reporting as well as the PMR will be delivered 25 Working Days from the end of the measurement reporting period until a new SLA is agreed for which the DCC can meet for the PMR.

4. DCC exclusions list

The following design principle is largely relevant to MP122A. However, the DCC could still identify further exclusions for the metrics assessed under this modification MP122B and so this principle remains.

The DCC noted that most processes have a dependence where a successful SRV response is required before the next SRV can be sent. However, it advised that some Users have set automated processes that run for several SRVs without considering the requirement for success of a previous dependent SRV. In this scenario, the DCC believes this business process should not be reported as a DCC failure.

Noting the above example, the DCC agreed to develop a DCC Exclusion List against measures where circumstances identify that the measures are impacted by actions that fall outside DCC's control (i.e. User action/error).

The Working Group accepted this and noted that there must be governance around how the exclusions list is managed. It was agreed that as the DCC builds the new report, it would identify any potential exclusions, and these would be agreed by the Working Group and managed by the Operations Group on an enduring basis.

Validating 90-day No Smart Metering Wide Area Network (SM WAN) Incidents (CR1429)

Following the implementation of MP122A, the DCC is required to report on several Performance Indicators, one of these being:

- Measure daily total volume of Install and Commission versus Install and Leave. The reporting is to include a category for any Communications Hubs awaiting a decision that are still within the 90-day investigation period for Install and Leave.

The DCC advised that it can monitor the volume of SR8.14.1 'Communications Hub Status Update – CHF Install Success SM WAN' against SR8.14.2 'Communications Hub Status Update – CHF Install Success No SM WAN'. However, it noted that some Suppliers either do not send an SR8.14.1 or SR8.14.2, or where there is no WAN, they raise an Incident rather than send SR8.14.2. Therefore, to validate this data, the DCC raised a Change Request to allow it to see CSP data on all of the Incidents that have been raised against them for no WAN. This would allow the DCC to report the total number of installations against no WAN installations. This was raised under CR1429 'Additional CSP Reporting to validate 90 Day No SMWAN Incidents'.

As part of the assessment of all the Change Requests, SECAS issued a questionnaire to the Working Group members. A common theme amongst respondents on CR1429 was concern over the Impact Assessment and implementation costs for CR1429. The cost to produce an Impact Assessment for this Change Request would have been £87,884 and the rough order of magnitude (ROM) implementation cost would have been £550,000. One respondent believed the costs could not be justified or accepted considering the DCC had confirmed it could already measure Install and Leave where SEC Parties are following the SEC Mandated process, which was the main aim. The DCC confirmed that the costs had been challenged.

SECAS questioned the need for CR1429, considering it was raised to mitigate against some Suppliers not following the correct process in an Install and Leave scenario. The DCC confirmed this is the case and that if all Suppliers used SR8.14.2 in no SM WAN, CR1429 would not be needed.

The Working Group agreed that emphasis should be placed on making sure all Suppliers follow the correct process in an Install and Leave scenario. This would prevent significant costs incurred on Parties to pay for enhanced reporting to mitigate this issue. SECAS will work with the DCC to ensure Suppliers are aware of the correct process.

The Working Group was content with the basic reporting already available and agreed this Change Request could be withdrawn.

Conclusion

CR1429 'Additional CSP Reporting to validate 90 Day No SMWAN Incidents' was withdrawn.

Reporting on Alerts

Existing reporting on Alerts

The DCC noted that it does not receive any data from the CSPs indicating when an Alert reaches the Communications Hub. It cannot currently identify when an Alert has been successfully accepted by the Service User's gateway, only when the DSP tried to send it.

The Proposer highlighted that CPM 3 requires the DCC to report on the Target Response Time of Alerts. They questioned what the DCC is currently reporting, considering the DCC has raised two Change Requests to support this. The DCC explained that CPM 3 requires the DCC to measure the combination of all Alerts, not each Alert individually. The DCC added that the PMM clearly excludes HAN-time from the measure.

Members questioned whether CSP performance is currently measured. The DCC advised that reporting for CPM 3 does represent performance for the relevant Service Providers transmission time, including the CSPs. Specifically, existing reporting for Alerts includes the time spent in the following phases and does not use a proxy:

- Time from receipt on the Communications Hub to onward transmission to the DSP
- Time from receipt from the DSP to onward Transmission to the Service User Gateway

However, the Target Response Time for the two phases are reported separately and the DCC do not have access to the relevant backing data to link the two without CR1418 and CR1438. In addition, the DCC reports the average Target Response Time for the combination of all Alerts, not for each Alert individually.

CR1418 and CR1438 summary

The DCC raised two Change Requests for measuring the throughput of Alerts. As both change Requests are interdependent, views given against these are summarised together.

Both are intended to provide greater granularity of CPM 3 of SEC Section H13.1.

- CR1418 'Progressing the DSP changes'
- CR1438 'Progressing the CSP North and S1SP changes'

When these Change Requests were subsequently progressed as part of the full DCC Impact Assessment, they were given the new reference numbers CR4392 and CR4445 respectively.

The Working Group agreed that the improved performance reporting against Alerts is needed, especially as there is a CPM tied to it. Other views included comments that the measurement of Alerts is critical, and that the success of Alerts being delivered highlights Home Area Network (HAN) performance, which is largely unmonitored.

A member queried why the CSP South & Central have been excluded from CR1438. The DCC confirmed that the CSP South & Central already timestamps its Alerts and that CR1418 has been raised for the DSP to extract these timestamps. However, the DCC does not have timestamp information from the CSP North or the S1SPs and CR1438 has been raised to address this.

Members questioned whether any of the costs under CR1438 were related to the reduction in the DCC's SLA to produce the PMR. The DCC confirmed that the reporting timescales are not seen as a concern with CR1438.

Overall, the main concern from the Proposer and the Working Group over both Change Requests is that the costs do not present a justifiable business case.

Overlap with power outage / power restoration Alerts

SECAS noted that MP122B is seeking to address the general reporting of all Alerts whilst [MP096 'DNO Power Outage Alerts'](#) is reviewing more specifically the system performance of Power Outage Alerts (POAs) and Power Restoration Alerts (PRAs) only. The enhanced reporting for POAs and PRAs has already been provided in order to support the investigations under MP096. This more detailed reporting under MP096 is separate to, and out of scope of, the reporting under MP122B.

The Proposer advised that the desired reporting is currently being facilitated by the DCC for the following Alerts:

- AD1 'Power Outage Event'
- 8F35 'Supply Outage Restored'
- 8F36 'Supply Outage Restored - Outage >= 3 minutes'

They questioned the delivery costs for these Alerts and whether the same functionality could be utilised under the MP122B Alerts requirement. The DCC advised that the cost for the three Alerts was £269,224 and that the same functionality will be utilised in CR1418 for the remaining Alerts under MP122B but with additional implementation costs. The DCC noted this functionality has been delivered and validated with several Network Parties.

This includes measurements at the following points:

- When the Alert was generated by the Device
- When the Alert reached the Communications Hub
- When the Alert entered the CSP/S1SP systems
- When the Alert left the CSP/SMETS1 systems to the DSP
- For AD1 Alerts only, from the DSP to the Service User Gateway

Which Alerts are out of scope MP122B?

Members questioned what types of Alerts were out of scope from the Change Requests. The DCC clarified the following Alert types are out of scope:

- DCC Alerts not used to deliver Device Alert information
- S1SP Alerts
- Alerts reported by MP096:
 - AD1 'Power Outage Event'
 - 8F35 'Supply Outage Restored'
 - 8F36 'Supply Outage Restored - Outage >= 3 minutes'

Security impacts

The Proposer questioned the DCC's statement that the DSP will be required to inspect the payload of Alerts and if this required Security Sub-Committee (SSC) consideration. The DCC confirmed that the DSP already looks at the message code/Alert code within the payload for existing Alerts. However, the Change Request under MP122B requires the DSP to extract the timestamp from the Alert payload, which the DSP does not currently do. The Working Group did not believe this needed SSC approval.

Time vs success of Alerts

The Proposer questioned whether Parties were more interested in the timing of Alerts or the success rate of Alerts. Suppliers were unable to give a definitive response but agreed it is usually the success rate they are more concerned with. However, they acknowledged this is not the case for Power

Outage Alerts and Power Restoration Alerts which Network Parties are reliant upon receiving as fast as possible.

A Supplier noted there is a big disparity between Network Party and Supplier impacts of Alerts. They noted Alert Code 8F72 'Firmware Verification Status' as an example and as being of interest to Suppliers. They noted this Alert is not always successful and Suppliers have had to build workarounds as a result.

A question on this topic was added to the first Refinement Consultation to seek wider views. The consultation provided mixed views, with some Parties advising they are interested in both, some preferring speed, and some preferring success. As a result, this was not discussed further.

Alternative DS&A team solution

The DS&A team solution proposed by the DCC involved measuring Service Requests as a proxy for Alerts, not the Alerts themselves. This was based on the understanding that Service Requests and Alerts tend to have very similar timescales, other than POAs and AD1 Alerts, which are a small subset of Alerts and out of scope of MP122B.

One of the drawbacks noted of using the DS&A team option is that it cannot measure time spent on the SMETS1 WAN or the SMETS1 platform. A member questioned the drawback noting the S1SPs have now been enrolled under the DCC. They considered that the DCC could access the data it needs but that it is just not currently held in the DS&A team. However, the DCC noted that providing the SMETS1 Alert throughput to the DS&A team would require SMETS1 System changes in the same way as SMETS2+ reporting. The DCC advised that the proxy for SMETS1 would not have the same effect as for SMETS2+ as each SMETS1 Service Request may result in multiple interactions between the S1SPs and the Device (either the target Device, or the associated Communications Hub), and each interaction may cross multiple interfaces. This could result in dozens of messages in some cases. The same scenario also impacts CR1440 'Update Firmware SMETS1 Process' in regard to SMETS1 firmware reporting.

The Proposer and other members were concerned with this approach and did not believe Service Requests form a good proxy for measuring Alerts. Members noted that the DS&A team option is significantly cheaper but was unclear if it provided a good enough proxy for the full solution.

Subsequently, the DCC provided a demonstration of the proposed proxy. The DCC advised that on average, the time for an Alert to travel across the DCC's network should effectively half the time in which a Service Request and the associated response would take, as each behave in the same way.

SECAS noted an Alert is an event generated from the Device with no corresponding Service Request, yet the proxy intends to use Service Requests and responses. It questioned how using Service Request times and cutting this by half can be a fair reflection of Alerts. The DCC explained that the proposed proxy would work if you assumed the time to get to the Device is the same as the time to get an Alert back but acknowledged that this is only an assumption. The DCC noted the limitations of the proposed proxy but noted it proposed this method in response to being asked to find a more economically viable method for measuring Alerts. This was based on the understanding that Service Requests and Alerts, other than POAs and AD1 Alerts, should have very similar timescales. The DCC added that in terms of the delivery of an Alert, it can only be tracked if it gets to the DSP. The DS&A team cannot see Alerts lost prior to reaching the DSP.

The Proposer noted there must be some way in which an Alert could be measured using the payload within the Alert to gain the generation time and comparing this against the point at which the Alert reaches the User. The DCC advised that the DSP solution under CR1418 would achieve this but only

for the CSP South and Central Region, not the CSP North Region. Again, this solution alone was deemed inadequate as it would not address Alerts in the CSP North Region.

Despite the relatively low costs of the proxy compared with the associated Change Requests, there was consensus amongst members from Suppliers and Network Parties that the DCC's proposed proxy for Alerts would not be a viable option and it was subsequently not taken forward.

Conclusion

Following the first Refinement Consultation, the Working Group considered which solution options to progress to Impact Assessment.

SECAS recommended that CR1418 and CR1438 be taken forward, the latter with the SMETS1 elements removed. This was to ensure that enhanced reporting on Alerts is investigated further whilst making efforts to preserve the business case.

Members agreed with the recommendation and that the high costs for the SMETS1 Alerts were not able to be justified. However, one member noted the SMETS2 costs are likely to rise further given that one of the CSPs tests twice and that this hasn't been factored into the existing preliminary costs.

Conclusion
CR1438 and CR1418 were progressed to Impact Assessment without SMETS1 Alerts. These became CR4392 and CR4445 respectively, the results of which can be found in Annexes C and D. These form part of the Proposed Solution to be implemented in this modification.

Reporting on Incident Categories 3, 4 and 5

Existing reporting on Incident Categories 3, 4 and 5

Currently, the DCC reports on Incident Categories 3, 4 and 5 as an average against the three Categories combined and only measure those that are resolved within the Target Resolution Time. However, consideration is not given to each Category on its own and the Target Initial Response Time is not measured.

MP122A amended to CPM 5 and introduced new CPM 5A to address this. However, the DCC advised it could not achieve these without a Change Request and CR1420 'Incident reporting to support revised PMR' was raised. Specifically, CR1420 sought to provide the mechanism to validate all Incidents raised with each of the Service Providers and for the Service Providers to reduce their validation timescales.

The Preliminary Assessment indicated that CR1420 would impact the DSP, the CSPs and all of the S1SPs.

CR1420 summary

The ROM implementation cost for CR1420 was £1,080,000 and the cost to undertake an Impact Assessment for this Change Request was £131,956.

The Working Group questioned why the DCC's Service Providers need to be involved in the data provision for CPM 5 and CPM 5A and believed the data should be available within the DCC. The DCC advised currently in the PMR, it collates Incidents and specifies whether service levels have been

met. This approach was initially set up by the Department for Business, Energy and Industrial Strategy (BEIS), with an obligation placed on the Service Providers to provide this information to the DCC. If there are any discrepancies with the data, this is returned to the Service Providers to clarify. Therefore, the easiest way to implement this change without effecting existing processes was to ask the Service Providers to break down the Incident data by Incident Categories 3, 4 and 5.

Alternative DCC Remedy solution

In early 2021, the DCC undertook investigations to explore alternative solutions to the Change Requests it had raised. It found that it could source the Incident data internally rather than from its Service Providers, meaning it no longer required CR1420.

The data would be sourced from its own Remedy systems within the DS&A team, rather relying on the Service Providers. Also, this would not require any contractual negotiation. Therefore, the costs of this solution would be reduced from £1,080,000 to around £100,000.

The Working Group agreed to progress with using the DCC Remedy data to fulfil the business requirement and to drop CR1420.

Conclusion

CR1420 'Incident reporting to support revised PMR' was withdrawn in favour of the alternative DCC Remedy solution.

Reducing the delivery timescales of the PMR (CR4444²)

Amendment to the PMR reporting SLA

The original business requirement was to reduce the SLA of the PMR from 25 Working Days to 10 Working Days from the end of the reporting period. This includes the PMR, the DS&A team reporting resulting from MP122A and the proposed reporting from MP122B. This is not linked to the OPR.

Throughout the progression of MP122A, the DCC advised it would not be able to adhere to the new 10 Working Day SLA to produce the PMR until contractual amendments with all of its Service Providers had been made. This may also include system changes for the Service Providers.

SECAS suggested that this requirement be progressed and implemented under MP122B. This would give the DCC more time to negotiate the contracts and allow them to comply with the obligation once it is implemented. However, the Operations Group did not want to take this approach, and the Working Group agreed. Therefore, the 10 Working Day SLA was implemented into SEC Section H as part of MP122A in the February 2021 SEC Release. Subsequently, the Authority granted the DCC a derogation against this obligation until 30 November 2022.

The necessary changes for the DCC to facilitate this SLA will be progressed under CR1430 'PMR Reduced Timescales'.

² Formerly CR1430

CR4444 summary

The Preliminary Assessment showed that all 11 of the DCC's Service Providers would be impacted, some of which advised the 10 Working Day SLA would not be possible even with the implementation of a Change Request.

The Working Group raised concerns over the wide-ranging impacts of CR1430 and the limitations raised by the Service Providers. It also raised concern at the high costs and that they do not include the Application Support costs or contractual costs, so assumed these would only increase. However, Operations Group members agreed it is important to drive this forward as much as possible given the importance for it to see the reports sooner than it does now.

The Working Group questioned what impact the reduction in the SLA to produce the PMR was having on the CR1420 cost. The DCC is unable to confirm explicit costs for reducing timescales but noted the CSP North would facilitate CR1420 at no cost if CR1430 'PMR reduced timescales' is implemented. However, this is not the case with the other Service Providers, some of which believe reducing the PMR SLA to 10 Working Days is not possible.

The DCC advised that the CSP North provided costs for CR1420 and CR1430 as a combination. Given that the solution for CR1420 might be changed, it may be that the quoted costs in CR1430 will need to be re-evaluated. CR1420 was later dropped in favour of a DCC Remedy solution (see assessment of 'Reporting on Incident Categories 3, 4 and 5' above).

Noting the limitations from the Service Providers, a member questioned the current SLAs the CSPs must meet to report internally to the DCC. They believed most companies have a regular reporting regime with statistics required to be reported before the month end. The DCC advised it does not have a reporting validation process. However, one of its contracts specifies the CSPs have 10 Working Days to produce the reporting with an additional five Working Days to respond to any queries from the DCC.

What are the current timescales for this reporting?

Ofgem questioned that if the DCC knew several of its Service Providers could not achieve the 10 Working Day SLA, whether it knew what each of their fastest turnaround would be.

The DCC subsequently investigated the fastest SLA that all its Service Providers could achieve to deliver the PMR. It found this would be 18 Working Days from the end of the measurement reporting period with only the CSP South and Central preventing this from being lowered to 14 Working Days. The DCC reviewed the existing processes for validating and publishing the PMR and demonstrated this to the Working Group. A diagram can be found in Appendix 1 of this report.

- The beginning of the month sees both the DCC and its Service Providers raising and responding to queries and generating commentary.
- The activities from 10-15 Working Days after month-end consisted of the DCC processing data from the Service Providers, responding to queries where necessary and also issuing more questions and identifying the source of problems.
- Between 15-20 Working Days after month-end is the point at which all materials and final reports are submitted to the DCC. The DCC then takes five Working Days to carry out various activities before finalising and signing off the PMR before issuing it to the Operations Group for review.

The DCC noted that only 80% of the original submissions from the Service Providers are delivered on the tenth Working Day with the other 20% being received after this time.

The DCC Preliminary Assessment showed some Service Providers are unable to change their timescales to meet the 10-Working Day SLA. Therefore, the DCC deemed the producing the PMR on the tenth Working Day could not be achieved.

The majority of the Service Providers advised that providing selected reports at different timescales would not have any impact on their Preliminary Assessment submissions with no reduction in costs or timelines.

Remaining PMR SLA options

The DCC noted five possible options could be investigated:

1. Compress the whole PMR reporting process to publish after 18 Working Days at the cost of £1.14m-£1.16m.

The DCC noted that the CSP South and Central is the only Service Provider preventing this from being reduced to 14 Working Days and so it will seek an Impact Assessment from it with the aim of reducing its timescale to 14 Working Days.

2. Reduce the reporting to produce and publish the PMR reports earlier in the cycle with the remaining DS&A team reporting following on from this.

This would improve the timelines for a few of the Service Providers with a 4% reduction in the ROM costs. This would involve a further element of DCC administration and management for those reports that are not complete at each stage which is not included in the estimated timescales.

3. Break the PMR into sections based on the Service Provider returns and issue iterations on the tenth Working Day and the fourteenth Working Day, with the complete PMR provided on the eighteenth Working Day.

Similar costs to option 1. This would involve a further element of DCC administration and management for those reports that are not complete at each stage.

4. The DS&A team could produce the MP122A DS&A team reports 10 Working Days from the end of the measurement reporting period. However, this would mean the DS&A team reports and the PMR being provided to the Operations Group at different times.

5. The as-is option would leave the PMR being produced 25 Working Days from the end of the measurement reporting period.

The Working Group assessed the options considering the current Operations Group reporting regime. SECAS advised the Operations Group will primarily be reviewing the PMR as part of its reporting meetings with the focus being on 15 Service Requests. There will be two separate agenda items. The PMR will still be submitted to the Panel for review but there will be a supplementary report for the Operations Group which will provide a DCC Indicator summary and discussions.

The Proposer highlighted there are around 20 Working Days in a month, so there is generally 15 Working Days from the start of the month to the Operations Group reporting meeting. Therefore, even if the reporting period is changed, some Service Provider Preliminary Assessment submissions have stated they will still be unable to accommodate the new SLA.

The Proposer queried whether the reporting needs to happen per calendar month. Understanding there was reasoning behind this, they believed there should be flexibility around the reporting period to give an accurate reflection and review. The DCC noted there is a reporting schedule which could be moved to support the change of the reporting period without imposing technical difficulties. If this date was to change then data relating to historical trends month on month would be lost; this should not affect the data being reporting upon mid-month moving forward.

The Proposer felt that in order to seek wider views around suitable reporting times, this should be presented to the Operations Group as this group will be responsible for reviewing the reports. However, the Operations Group likely wouldn't make any decisions against the cost of the modification and would refer such questions back to the Working Group. SECAS noted the Operations Group's preference could be sought, although there is already a strong desire to get the reporting date as close to the appropriate month as possible. Moving the reporting period would not have any impact on the duration between the reporting period ending and when the reports for this could be produced. There was limited support for pursuing this option further.

CSP S&C reassessment of the PMR SLA and conclusion

Following the first Refinement Consultation, the Working Group considered which solution options to progress to Impact Assessment.

SECAS considered an 18 Working Day SLA would not have a material benefit to the Operations Group. As a result, SECAS considered the solution did not present a viable business case and recommended that the SLA should be reverted back to its previous SLA of 25 Working Days.

The DCC noted that the CSP S&C was the only Service Provider to prevent the SLA from being reduced to 14 Working Days. The organisation fulfilling the CSP S&C has undergone some changes since the Preliminary Assessment which may result in an improved solution being available. The DCC suggested that the CSP S&C solution for the PMR SLA be assessed again on its own with a view to it reducing its costs and delivery timescales. The Working Group agreed and CR4444 was subsequently reassessed by the CSP S&C.

Although the CSP C&S was asked to provide a full Impact Assessment of CR4444 'PMR Reduced Timescales' (previously CR1430), it instead provided a draft assessment. You can find this in Appendix A.

This assessment presented two solution options:

1. CSP C&S submit the initial submission of PMRs and queries to DCC by the end of the sixth Working Day (WD) every month

This option treats any inflight firmware download requests that have not completed at the start of the month as an exception for the reports.

Total Time for PMR Report: 14 Working Days

2. CSP C&S to submit the initial submission of PMRs and queries by the end of the eighth WD every month

This includes all the relevant Performance Management (PM2) data (no exceptions for inflight downloads required).

Total Time for PMR Report: 16 Working Days

Both solutions make a key consideration in firmware download reporting. The CSP C&S has identified cases where any inflight firmware download requests that have not completed at the start of the month should be treated as an exception for the PM2 reports that go into the PMR. There are cases where a firmware update may take up to five days to complete, such that any update requested by a Service User after the 27th (of a 31-day month), might not have completed or failed.

Both solution options have an estimated implementation cost of **£500,000**.

The DCC's Preliminary Assessment showed that all the Service Providers other than the CSP C&S could submit their reports to the DCC in time for it to submit the completed PMR by the fourteenth WD. Accounting for the CSP C&S's revised estimated implementation cost of £500,000, the overall estimated cost for CR4444 would be **between £1.4m and £1.42m**.

Views were sought from the Working Group on whether to progress CR4444 to a Full Impact Assessment. Three responses were received, all of which did not believe CR4444 should progress to Impact Assessment due to the high costs and lack of a business case.

Taking the views into consideration, the Proposer decided to not progress CR4444. Although the Proposer acknowledged shortened PMR timescales are needed, they could not justify the estimated implementation costs or the cost for an Impact Assessment. They subsequently decided to withdraw CR4444 from this modification.

Conclusion

CR4444 'Reduced PMR Timescales' was withdrawn.

Reporting SMETS2+ Device firmware (CR1421)

CR1421 'SRV 11.1 (Update Firmware)' was raised to provide improved reporting for SMETS2+ Device firmware by measuring SR11.1. It had significant crossover with the [SECMP0007 'Firmware updates to IHDs and PPMIDs'](#) solution.

SR11.1 is used to send firmware updates to meters and can include requests for multiple meters within a single request. The DCC would need to track the success of this Service Request through all the DCC components. Specifically, the DCC require data to be able to link SR11.1 to the messages and target Device responses sent and received within the CSP Systems to identify whether the firmware Image has been successfully applied to the Device(s). In addition, the Service Providers would provide data to the DS&A team on a daily basis identifying throughput.

After further investigation and considering the implementation of SECMP0007, the DCC advised that CR1421 was no longer required as SECMP0007 would deliver the functionality it needed. However, DS&A team development and reporting requirements will still need to be carried out to enable firmware update reporting after the implementation of SECMP0007.

As a result, the Working Group agreed with the DCC that CR1421 should be considered redundant as SECMP0007 has been approved.

Conclusion

CR1421 'SRV 11.1 (Update Firmware)' was withdrawn considering the pending implementation of SECMP0007.

Reporting on firmware

Reporting on Communications Hub firmware

Operational Performance Regime (OPR) link

SMETS2+ and SMETS1 Device firmware are linked to and measured by Ofgem's OPR. However, the OPR does not measure or incentivise the DCC for firmware updates targeted at Communications Hubs. Therefore, the following discussions around Communications Hub firmware, CR1423 and the alternative DS&A team solution are not linked to the OPR.

CR1423 summary

For measuring the Communications Hub Firmware business process, the DCC advised that it does not have data available to report on the delivery of Communications Hub firmware images to the Communications Hub. This is because Communications Hub firmware images are sent directly on the CSP and S1SP networks.

CR1423 'Comms Hub Firmware Image Data' was raised to provide reporting to the DS&A team on the attempts and success activations to download Communications Hub firmware images. This Change Request impacts the DSP and the CSPs. The Change Request will make use of (and is dependent on) the firmware tracking mechanism to be introduced by SECMP0007, which will be extended to Communications Hubs.

SECMP0007 will be implemented in two phases. The Working Group questioned when CR1423 would be available as the latter phase of SECMP0007 would not be available until June 2022 at the earliest. The DCC confirmed that if approved in time, CR1423 could be implemented following the first phase of SECMP0007, which was implemented in the November 2021 SEC Release. However, CR1423 is not dependent on the second phase of SECMP0007.

CR1423 also has some cross-over with (but is not dependent on) [SECMP0024 'Communication Hub Firmware Management'](#) which is pending implementation in the June 2022 SEC Release.

SECMP0024 will introduce a new DCC Alert upon successful activation of Communications Hub firmware images. The business requirement in SECMP0024 is also covered under CR1423, which has additional CSP impacting requirements. Therefore, the costs for CR1423 would decrease accordingly. The DCC advised it would confirm via its Impact Assessment how much CR1423 would decrease in cost if the Proposer and the Working Group decided to progress CR1423.

Reporting on SMETS1 Device firmware

Operational Performance Regime (OPR) link

Device firmware in general, including SMETS1 Device firmware, is linked to and measured by Ofgem's OPR. However, given the dependency it has on MP122B, Ofgem decided to not incentivise the DCC for it for the 2021/22 regulatory year.

SMETS1 firmware reporting requirement

MP122A introduced the requirement for the DCC to report on SR11.1 and SR11.3 with a breakdown for those targeted at SMETS1 Devices.

A change in the SMETS1 firmware requirement was suggested to gain a better measure of the DCC's performance. SECAS explained the SMETS1 firmware process whereby SR11.1 delivers the Image to the S1SP. The Supplier then has to send an SR11.3 which sends the Image down from the S1SP to the Communications Hub. In some cases, dependent on the S1SP, another SR11.3 will need to be sent to transfer the Image from the Communications Hub to the target Device. As a result, SECAS felt measuring SR11.3 instead of SR11.1 for SMETS1 firmware updates would be a better measure of the DCC's performance. The DCC also confirmed it held the data for SR11.3 in relation to SMETS1 firmware updates.

The Proposer and the Working Group subsequently agreed to switch the SMETS1 firmware business requirement to measure SR11.3 only, instead of SR11.1.

CR1440 summary

The DCC advised that it was unable to provide a breakdown for SMETS1 Devices without making contractual changes with the DSP and the S1SPs. CR1440 'Update Firmware SMETS1 Process' has been raised to address this and impacts the DSP and all S1SPs. Specifically, the S1SPs are to report the success or failure and the Round Trip Time of both the upload and activation of firmware images to SMETS1 Devices (including Communications Hubs). This data will then be made available to the DS&A team daily.

The DCC has already assessed on the basis that SR11.1 and SR11.3 would be tracked. However, in light of the updated requirement for the measuring of SMETS1 firmware, going forward it will assess on the basis that only SR11.3 needs to be measured.

Note, CR1440 is not covered by SECMP0007. This is because SECMP0007 is only applicable to SMETS2+ Devices and is therefore not making any changes to the S1SPs or SMETS1 systems. However, the DSP would build a firmware tracking mechanism under CR1440 that records and reports the firmware distribution status of all SMETS1 Devices, similar to the SMETS2+ firmware tracking mechanism proposed under SECMP0007.

The DCC noted integration between the S1SPs and the DSP will be required, hence SIT and UIT will be required as part of a SEC Release if CR1440 is approved.

SMETS1 reporting exclusions

The DCC noted that there are instances where the reporting mechanism will only be available where those Devices support the required Alerts, i.e., they have the necessary functionality, are configured accordingly and communicating successfully. For example, Initial Operating Capability (IOC) and Morrison Data Services (MDS) PPMIDs do not support the capability of returning an acknowledgement upon receipt of a firmware image during the distribution and/or activation of a new image. As a result, the proposed reporting mechanism for PPMIDs will only report the distribution status to the Communications Hub. Any similar exclusions will be determined during the refinement of this request.

The Working Group agreed with this exclusion.

Alternative DS&A team solution

In early 2021, the DCC undertook investigations to explore cheaper alternative solutions to the Change Requests it had raised. It found a single alternative solution that would partially cover both to

CR1423 and CR1440 using the DS&A team. Although the solution contains several limitations compared with the Change Request, if what it delivers is considered sufficient for the industry's needs it would be far more cost effective.

If the DCC is able to secure data from the CSPs and the SMETS1 Communications Hub updates, it would be possible for the DS&A team to match the firmware updates (SR11.1s) to the firmware activations (SR11.3s), provide a time to activate, and provide the success rate of activations from updates. The results could be split by CSP, Communications Hub manufacturer, the firmware version before the update, and the resulting firmware version. The DS&A team solution would only allow the measure of firmware updates to SMETS1 Communications Hubs, **not SMETS1 meters or SMETS1 PPMIDs**.

As a result, the alternative DS&A team solution for firmware reporting was dropped.

Next steps

Following the first Refinement Consultation, the Working Group considered which solution options to progress to Impact Assessment.

Members noted that the existing PMR reporting on firmware provides a good view on performance. Another member advised that other industry groups also receive reporting on firmware and this provides a comprehensive view on performance.

Ofgem's Operational Performance Regime (OPR) includes measures against meter firmware, including a breakdown by SMETS2 and SMETS1. The DCC advised that it is not seeking to use the MP122B reporting solutions to report against the OPR. SECAS also advised that Ofgem would align the OPR measures with those that industry wanted to measure.

Members agreed that the 'do nothing' option would be best considering the high costs for both CR1423 and CR1440 as well as current reporting the DCC produces for firmware. The MP122B legal text will amend SEC Section H 'DCC Services' accordingly.

Conclusion
CR1423 and CR1440 were not Impact Assessed and have been removed from the Proposed Solution. The MP122B legal text will amend the SEC wording introduced under MP122A accordingly.

8. Case for change

Business case

Accuracy and transparency are crucial to ensuring that the DCC and its Users maintain a high performance standard in supporting their business processes. SEC Parties have expressed that greater granularity is a priority in both Alerts reporting and Incident Categories 3, 4 and 5 reporting. MP122B will deliver the changes to these reporting areas that were recommended following the OMR, better enabling the SEC Operations Group to review the DCC's performance and to report on any identified issues to the SEC Panel. During the second Refinement Consultation respondents noted that it is difficult to determine the cost savings that will be realised by receiving more detailed

information, but that the changes introduced by MP122B would bring the reporting closer to the standard required.

Views against the General SEC Objectives

Proposer's views

*Objective (b)*³

The Proposer believes that MP122B will facilitate SEC Objective (b). It will help provide a clear account of the Service that the DCC is providing to ensure that they are compliant with their obligations.

*Objective (g)*⁴

The Proposer believes that MP122B will facilitate SEC Objective (g) by providing clear and relevant reports that will detail exactly what is happening with the DCC Systems and performance. It will also highlight any anomalies that might require addressing.

Industry views

All of the first Refinement Consultation respondents and Working Group members agreed that MP122B would benefit the SEC Objectives. The DCC noted that SEC Objective (g) will only be achieved where the required reporting is specific to DCC's performance and does not include Service User performance. It added the decreased timeframe available to produce the PMR puts data quality and narrative accuracy at risk, however this requirement has since been removed from the scope of MP122B.

The Working Group considered that SEC Objective (a)⁵ would also be better facilitated, particularly in regard to the operation of DCC Alerts and firmware updates. It should be noted that firmware updates are no longer in scope of this modification, although Alert reporting remains in scope.

All of the second Refinement Consultation respondents agreed that MP122B would better facilitate SEC Objectives (b) and (g), with one respondent also stating that it would better facilitate SEC Objective (a).

Views against the consumer areas

Improved safety and reliability

This modification will be neutral against this consumer benefit area.

³ To enable the DCC to comply at all times with the General Objectives of the DCC (as defined in the DCC Licence), and to efficiently discharge the other obligations imposed upon it by the DCC Licence.

⁴ To facilitate the efficient and transparent administration and implementation of this Code.

⁵ To facilitate the efficient provision, installation, and operation, as well as interoperability, of Smart Metering Systems at Energy Consumers' premises within Great Britain.

Lower bills than would otherwise be the case

This modification will be neutral against this consumer benefit area.

Reduced environmental damage

This modification will be neutral against this consumer benefit area.

Improved quality of service

This modification will be neutral against this consumer benefit area. However, it could indirectly benefit consumers by providing more detailed reporting on the DCC's performance, including the DCC System and Service Providers. This could help the DCC and Parties identify and resolve any system issues sooner, preventing any knock-on impacts on consumers.

Benefits for society as a whole

This modification will be neutral against this consumer benefit area.

Final conclusions

Five of the six first Refinement Consultation respondents agreed MP122B should be progressed considering the costs and benefits. The sixth respondent (the DCC) considered this to be a User choice.

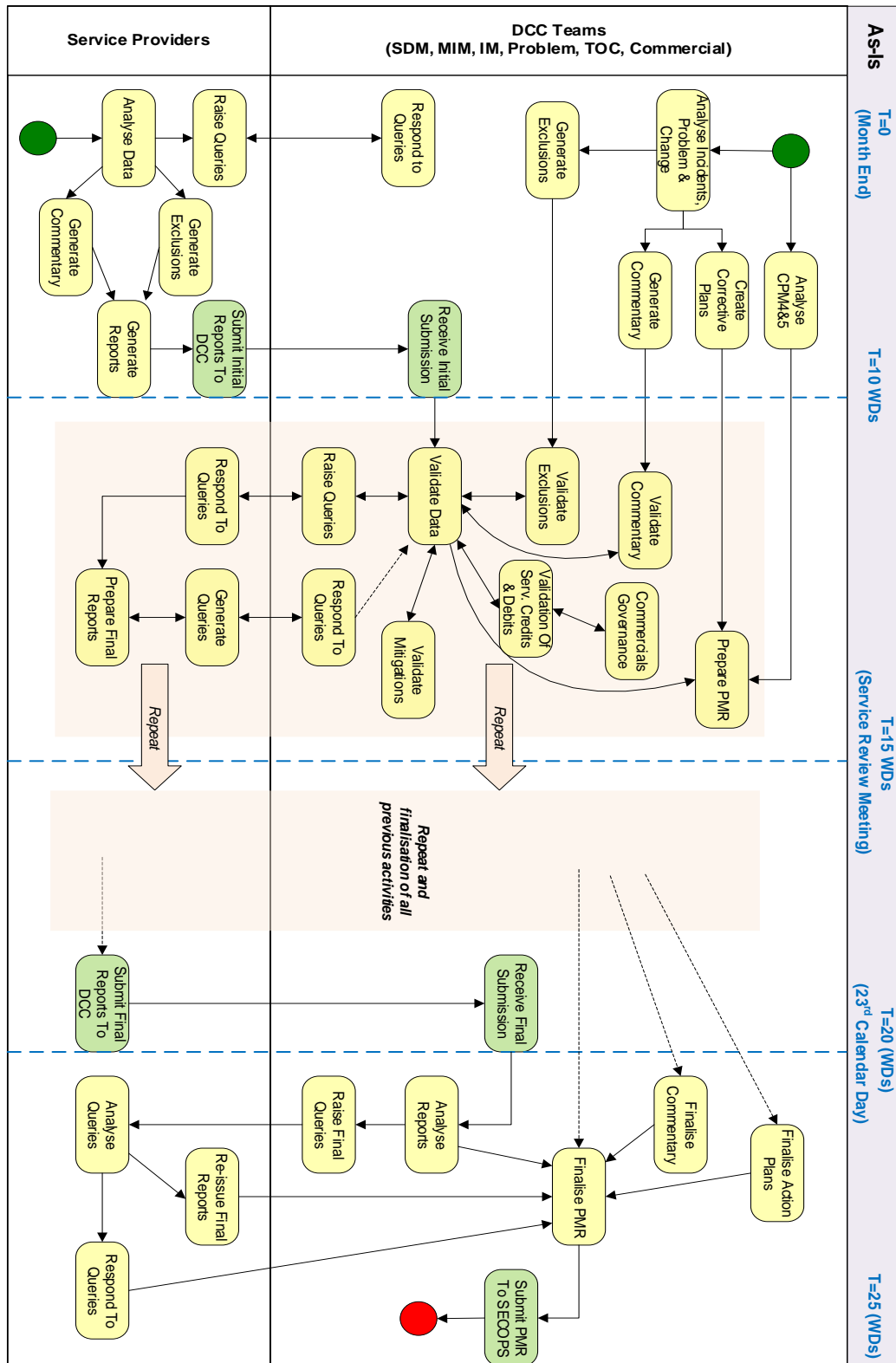
Following the first Refinement Consultation, two Change Requests were removed from the scope of this modification and another reduced in scope in order to improve the business case. The Working Group noted the costs were still high but agreed that to hold the DCC accountable the industry must know how well it is performing.

Three of the four second Refinement Consultation respondents agreed MP122B should be progressed considering the costs and benefits, however one of the respondents caveated their support with a request for greater clarity on DCC costs. The DCC has provided figures for each phase in the confidential annex to its Impact Assessment response for CR4445. The DCC advised that CSP North significantly reduced its quoted costs following challenge from the DCC, and that the DCC anticipates a further reduction in post-PIT costs as this modification will be combined in a SEC Release with other modifications. This will mean testing costs are spread across all the modifications included in that release.

One of the second Refinement Consultation respondents supported the modification but asked if overlap from the CSP North Scaling and Optimisation work would diminish the benefits case. The DCC advised that network enhancement projects will have no impact on MP122B, but that the reporting delivered by MP122B may help to determine if those projects have delivered the intended improvements.

Appendix 1: Performance Measurement Report process

The following diagram presents the existing process that forms the publication of the PMR.



Managed by

Appendix 2: Progression timetable

On 18 October 2022 the CSC agreed this modification should progress to the Report Phase. MP122B will be issued for Modification Report Consultation ahead of the Change Board vote on 23 November 2022.

Timetable	
Event/Action	Date
Initial draft Preliminary Assessment returned	4 Sep 2020
MP122 split into MP122A and MP122B	11 Sep 2020
Modification discussed with Working Group	7 Oct 2020
DCC Change Request questionnaire	8 Dec 2020 – 8 Jan 2021
Modification discussed with Working Group	17 Dec 2020
Modification discussed with Working Group	22 Jan 2021
Modification discussed with Working Group	27 Apr 2021
Firmware reporting requirements discussed with Ofgem	20 May 2021
Final iteration of the Preliminary Assessment returned ⁶	26 May 2021
Modification discussed with Working Group	8 Jun 2021
First Refinement Consultation	5 Aug 2021 – 3 Sep 2021
Modification discussed with Operations Group	5 Oct 2021
Modification discussed with Working Group	8 Oct 2021
Modification discussed with Working Group	11 Feb 2022
Impact Assessment costs approved by Change Board	23 Feb 2022
Impact Assessment requested	24 Feb 2022
Impact Assessment returned	11 Jul 2022
Second Refinement Consultation	5 Sep 2022 – 23 Sep 2022
Modification Report approved by CSC	18 Oct 2022
Modification Report Consultation	19 Oct 2022 – 9 Nov 2022
<i>Change Board Vote</i>	23 Nov 2022

Italics denote planned events that could be subject to change

⁶ The MP122B Preliminary Assessment has been through several iterations. The first initial draft was produced before MP122 was officially split to show the DCC System impacting changes need to implement the full MP122 solution. The latest iteration was returned on 25 May 2021 following extensive Working Group reviews.

Appendix 3: Glossary

This table lists all the acronyms used in this document and the full term they are an abbreviation for.

Glossary – Acronyms	
Acronym	Full term
BEIS	Department for Business, Energy and Industrial Strategy
CHF	Communications Hub Function
CPM	Code Performance Measure
CR	Change Request
CSC	Change Sub-Committee
CSP	Communication Services Provider
DCC	Data Communications Company
DCO	Dual Control Organisation
DNO	Distribution Network Operator
DS&A	Data Science and Analytics
DSP	Data Services Provider
IHD	In-Home Display
IOC	Initial Operating Capability
KPI	Key Performance Indicator
MDS	Morrison Data Services
OMR	Operational Metrics Review
OPR	Operational Performance Regime
PIT	Pre-Integration Testing
PMEL	Performance Measurement Exception List
PMR	Performance Measurement Report
PMM	Performance Measurement Methodology
POA	Power Outage Alert
PPMID	Prepayment Meter Interface Device
PRA	Power Restoration Alert
ROM	Rough Order of Magnitude
S1SP	SMETS1 Service Provider
SEC	Smart Energy Code
SECAS	Smart Energy Code Administrator and Secretariat
SIT	Systems Integration Testing
SLA	Service Level Agreement
SMETS	Smart Metering Equipment Specifications
SR	Service Request
SRV	Service Reference Variant
SSC	Security Sub-Committee
SSI	Self-Service Interface

Glossary – Acronyms	
Acronym	Full term
TABASC	Technical Architecture and Business Architecture Sub-Committee
TOC	Technical Operations Centre
UIT	User Integration Testing
WAN	Wide Area Network
WD	Working Day

This table lists key terms used in this document and their definitions.

Glossary – Terms	
Term	Full term
Indicator	An “Indicator” is something the DCC is not accountable for but provides a Key Performance Indicator (KPI) that may be of value or use to the industry; it cannot have a target attributed to it.
Measure	A “Measure” is something that the DCC is responsible for providing a level of service for, and against which targets for DCC performance can be set.