

This document is classified as **Clear** in accordance with the Panel Information Policy. Recipients can distribute this information to the world, there is no limit on disclosure. Information may be shared without restriction subject to copyright.



MP242

‘Change to Operational Metrics to Measure on Success’

Modification Report

Version 0.3

23 October 2023

Corporate member of
Plain English Campaign
Committed to clearer
communication

592



About this document

This document is a draft Modification Report. It currently sets out the background, issue, and progression timetable for this modification, along with any relevant discussions, views and conclusions. This document will be updated as this modification progresses.

Contents

1. Summary.....	3
2. Issue.....	3
3. Solution	6
4. Impacts.....	8
5. Costs	10
6. Implementation approach	10
7. Assessment of the proposal	11
8. Case for change.....	12
Appendix 1: Progression timetable	14
Appendix 2: Glossary	14

This document also has four annexes:

- **Annex A** contains the business requirements for the solution.
- **Annex B** contains Option 1 of the redlined changes to the Smart Energy Code (SEC) required to deliver the Proposed Solution.
- **Annex C** contains the full Data Communications Company (DCC) Preliminary Assessment response.

Contact

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

Bradley Baker

020 7770 6597

bradley.baker@gemserv.com

1. Summary

This proposal has been raised by Rochelle Harrison from British Gas.

SEC Modification [MP122A 'Operational Metrics'](#) (implemented on 25 February 2021) introduced Target Response Times (TRTs) to the Operational Performance Regime (OPR).

However, the DCC is not currently able to measure TRTs, and instead can only measure Round Trip Times (RTTs). Without TRT data, only the RTTs can be reported against the targets captured in SEC Section H 'DCC Services', reducing the value of these reports generated as part of the OPR.

The Operations Group (OPSG) and Performance Measures Review Group (PMRG) have stated that it would be more beneficial if the DCC could measure the 'success' of a Service Request (SR), Service Reference Variant (SRV), or Alert. The definition of success is yet to be determined. Where the 'failure' is not due to DCC ecosystem, i.e., sending updates to a Device an energy Supplier is not responsible for (E4s etc.), then exceptions will be allowed. All exceptions will be reviewed and agreed between OPSG and DCC before being included in any reporting.

The Proposed Solution is to report on the Success / Failure of an agreed set of SRVs across seven Business Processes and compare them to the DCC's Success / Failure criteria. This will enable the DCC and Parties to better understand SRV performance from a consumer's perspective.

SRs, SRVs and Alerts from both Smart Metering Equipment Technical Specifications (SMETS) 1 and SMETS 2+ Devices will be within scope of this proposal.

This is a Self-Governance modification that impacts Supplier Parties and the DCC, and will cost £208,750 (+/-20%) to implement. It is the intention of the Proposer to have this modification, if approved, implemented in time for the next financial year (2024/2025).

2. Issue

What are the current arrangements?

MP122A 'Operational Metrics'

SEC Modification [MP122A 'Operational Metrics'](#) (Implemented on 25 February 2021) introduced TRTs to the OPR.

Within the Proposed Solution for MP122A, it was agreed that the criteria for measuring the success/failure of an entire business process would be determined by the number of responses and those that returned a failed response. This would be assessed by the OPSG upon the presentation of the Performance Measurement Report (PMR) based on commentary provided by the DCC on each failure.

In the MP122A Impact Assessment, the DCC proposed reporting against the SRVs with additional granularity by reporting against the following categories:

- No Response received (successful response code)
- No Response received (unsuccessful response code)
- Responses Received (successful response code i.e. "I/O")

- Response Received (unsuccessful response code i.e. response code other than "I/O")

What are Target Response Times?

TRTs are the target performance measures defined in SEC Appendix E 'DCC User Interface Services Schedule'. The TRTs are defined differently for SMETS1 Devices and SMETS2+ Devices:

- **SMETS1 Devices** – starting from the DCC User Gateway and ending on provision of the Service Response to the User, but only counting the processing time between the DCC User Interface to the DCC SMETS1 Processing Systems (inclusive); and/or the DCC SMETS1 Processing Systems to the DCC User Interface (inclusive).
- **SMETS2+ Devices** – starting from the DCC User Gateway and ending on provision of the Service Response to the User, but only counting the processing time between the DCC User Interface to the Communications Hub (inclusive); and/or the Communications Hub to the DCC User Interface (inclusive).

TRTs differ from RTTs, which measure the time taken from a request being accepted by the Data Service Provider (DSP) and then subsequently sent back to the customer.

Other in flight TRT / RTT based SEC Modifications

The Smart Energy Code Administrator and Secretariat (SECAS) currently has two additional modifications that have been raised to resolve TRT and RTT-relevant issues:

- [MP187 'Incorporation of Target Round Trip Times and Target Success Rates into the SEC'](#) proposes to introduce targets for RTTs due to the DCC currently being unable to accurately measure TRTs, as well as introduce success rates into the SEC. This modification is currently on hold while SECAS progress MP217.
- [MP217 'Obtaining Timestamps to allow Target Response Time Measurements'](#) proposes to introduce timestamps across the DCC Systems to allow the DCC to accurately report on TRTs. This modification is currently in the Refinement Process.

The Operational Performance Regime

The OPR financially incentivises the DCC's performance in three main areas: system performance, customer engagement and contract management, and is reviewed each Regulatory Year. The OPR guidance sets out how the measures are calculated and is updated and refined from time to time, following consultation by Ofgem¹.

The Performance Measurement Report

The SEC sets out the operational Service Levels which the DCC is required to meet. The PMR details the Service Levels achieved, in respect of the Code Performance Measures set out in Sections H13.1 and L8.6 of the SEC and such Service Provider Performance Measures specified in the Reported List of Service Provider Performance Measures document. Service Levels are reported monthly. The report is provided to the Panel, SEC Parties, the Authority and (on request) the Secretary of State.

¹ <https://www.ofgem.gov.uk/publications/decision-revised-opr-guidance-march-2023>

OPSG and PMRG discussions

The monthly SEC PMR is reviewed by the OPSG. For several years, the OPSG has voiced concerns that the content of the PMR does not align with its experience of the services. Due to the time constraints within the OPSG, a sub-group to the OPSG, the PMRG was formed, to carry out an in-depth review of the existing measures in the PMR, to allow for more time to be spent on this topic than would be possible at regular OPSG meetings.

Guided by the DCC, the PMRG undertook a line-by-line review of all the Code Performance and Service Provider Measures. This raised questions from members as to what / how elements were measured so that an informed position on the continued need for the report could be agreed.

Throughout PMRG discussions, members expressed a need to measure the success of business processes as a priority as well as the time it takes for a certain SRV to traverse the DCC systems. The PMRG requested the DCC provide a 'strawman' proposal for measuring success and suggested this is based on the Business Processes as defined by SEC Section H13.1A. PMRG members expressed frustration at the time it was taking for a formal proposal from DCC. The PMRG concluded its review in March 2023. No formal recommendations to OPSG were made, pending the request for DCC to provide a 'strawman' proposal for measuring success.

What is the issue?

The DCC cannot currently measure TRTs, therefore SEC Parties have agreed that it would be more beneficial that the DCC reports on the success of SRs/SRVs/Alerts, using an agreed definition of success across the five business processes reported on as part of the OPR:

- Install and Commission²
 - 8.11 Update HAN Device Log
 - 6.21 Request Handover of DCC Controlled Device (Update Supplier Certificates)
 - 8.1.1 Commission Device
 - 8.7.2 Join Service (Join GPF with GSME)
 - 6.20.1 Set Device Configuration' (Import MPxN)
 - 1.1.1 Update Import Tariff (Primary Element)
 - 6.8 Update Device Configuration (Billing Calendar)
 - 8.14.1 Communications Hub Status Update Install Success
- Change of Supplier (Gain)
 - 6.23 Update Security Credentials (CoS)
 - 1.1.1 Update Import Tariff (Primary Element)
 - 6.8 Update Device Configuration (Billing Calendar)
- Pre-Payment

² Note, although some of the SRVs listed under Install and Commission are applicable to SMETS1, the rollout of SMETS1 Devices has ended and therefore the overall Install and Commission business process is not applicable to SMETS1.

- 1.6 Update Payment Mode (Payment Mode = Prepayment)
- 2.1 Update Prepay Configuration
- 2.2 Top Up Device (Update Balance with positive value)
- Update Device Firmware
 - 11.1 Update Firmware
 - 11.3 Activate Firmware (Individual SR for each GUID for firmware activation)
- Meter Reads
 - 4.6.1 Retrieve Import Daily Read Log
 - 4.6.2 Retrieve Export Daily Read Log
 - 4.8.1 Read Active Import Profile Data
 - 4.8.2 Read Reactive Import Profile Data
 - 4.8.3 Read Export Profile Data
 - 4.10 Read Network Data
 - 4.17 Retrieve Daily Consumption Log

What is the impact this is having?

With the DCC unable to measure TRTs, and instead measuring RTTs which are then reported on against the targets captured in SEC Section H 'DCC Services', the value of the reports generated as part of the OPR are of a reduced value. The current reporting obscures the ability to identify where issues may occur and how to remedy them.

Impact on consumers

With current reporting not showing a clear representation of DCC performance, SEC Parties face difficulties in identifying areas of reduced performance and developing enhancements that will benefit the consumer. Also, delays in issues being spotted could cause consumer detriment for longer, especially for smaller consumer groups, such as those in prepayment mode.

3. Solution

Proposed Solution

The Proposed Solution is to report on the Success / Failure of an agreed set of SRVs across seven Business Processes. This was initially six Business Processes, however the Proposer and DCC requested that the Pre-Payment Business Process is separated into two specifically for this modification:

- Install and Commission
 - 8.11 Update HAN Device Log

- 6.21 Request Handover of DCC Controlled Device (Update Supplier Certificates)
- 8.1.1 Commission Device
- 8.7.2 Join Service (Join GPF with GSME)
- 6.20.1 Set Device Configuration' (Import MPxN)
- 1.1.1 Update Import Tariff (Primary Element)
- 6.8 Update Device Configuration (Billing Calendar)
- 8.14.1 Communications Hub Status Update Install Success
- Change of Supplier (Gain)
 - 6.23 Update Security Credentials (CoS)
 - 1.1.1 Update Import Tariff (Primary Element)
 - 6.8 Update Device Configuration (Billing Calendar)
- Pre-Payment
 - 1.6 Update Payment Mode (Payment Mode = Prepayment)
 - 2.1 Update Prepay Configuration
 - 2.2 Top Up Device (Update Balance with positive value) **(note: this SRV will be reported on as its own individual Business Process)**
- Update Device Firmware
 - 11.1 Update Firmware
 - 11.2 Read Firmware Version
 - 11.3 Activate Firmware (Individual SR for each GUID for firmware activation)
 - 11.4 Update PPMID Firmware
- Meter Reads
 - 4.6.1 Retrieve Import Daily Read Log
 - 4.6.2 Retrieve Export Daily Read Log
 - 4.8.1 Read Active Import Profile Data
 - 4.8.2 Read Reactive Import Profile Data
 - 4.8.3 Read Export Profile Data
 - 4.10 Read Network Data
 - 4.17 Retrieve Daily Consumption Log
- Tariff Updates
 - 1.1.1 Update Import Tariff (Primary Element)
 - 1.2.1 Update Price (Primary Element)

To determine the Success / Failure of an SRV, the DCC has produced the following matrix, which has been agreed by the Working Group and OPSG:

Scenario	DUIS Response Code	GBCS Execution Status	DCC Outcome	Journey Outcome
SRV passes DSP validation	I99	N/A	ACK	N/A
SRV fails DSP validation	E1 – E100	N/A	Success	Failure
Failed to send request to CSP/S1SP	E20	N/A	Failure	Failure
No response from Device	E21	N/A	Failure	Failure
No response from Device at Future Dated execution time (T)	E30	N/A	Failure	Failure
Failed to send request to CSP/S1SP or No response from Device for Scheduled or Future Dated SRV (T)	E31	N/A	Failure	Failure
Failed to send request to ECoS Party (T)	E66	N/A	Failure	Failure
No response from ECoS Party (T)	E67	N/A	Failure	Failure
Response received – GBCS Success	I0	Success	Success	Success
Response received – GBCS Failure	I0	Failure	Success	Failure

('ACK' means acknowledgment)

Reports will be made available via the Self-Service Interface (SSI) at on the 15th Working Day after month end, as well as being provided to the OPSG for review.

The Proposer has stated that it is their preference that the MP242 reports replace current reporting as stipulated in SEC Section H13.1A. It has been agreed that there will be a transition period where the current reports and MP242 reports will both be generated side by side, to allow SEC Parties to identify a preferred methodology and remove any duplication.

Further detail on the Proposed Solution can be found in Annex C.

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

Supplier Parties will be impacted by this modification as they will benefit from the new reports which intend on capturing the consumer experience better than current reporting. This will allow Supplier Parties to pinpoint areas of concern and potentially deliver improvements.

The DCC will also be impacted as it will be responsible for generating and making available the new reports. This will also require the DCC to monitor the agreed set of SRVs against the agreed Success / Failure criteria.

DCC System

This modification will not impact the DCC System, however it will impact other areas of the DCC, such as the Data Science and Analytics (DS&A) team and reporting from the DSP.

The full impacts on DCC Systems and DCC's proposed testing approach can be found in the DCC Preliminary Assessment response in Annex C.

SEC and subsidiary documents

The following parts of the SEC will be impacted:

- Section H 'DCC Services'

The changes to the SEC required to deliver the proposed solution can be found in Annex B. Please note that the modification will also impact the DCC Performance Indicators Document. This is also within Annex B.

Consumers

The intent of this modification is to better understand the capture the consumer experience and through that, pinpoint areas of concern by determining the success or failure of an agreed set of consumer-centric SRVs. As a result, consumers may benefit from improved performance identified from MP242.

Other industry Codes

This modification does not impact other industry Codes.

Greenhouse gas emissions

This modification does not impact greenhouse gas emissions.

5. Costs

DCC costs

The estimated DCC implementation costs to implement this modification is £208,750 (+/-20%). The breakdown of these costs are as follows:

Breakdown of DCC implementation costs	
Activity	Cost
Design, Build and Pre-Integration Testing (PIT)	£208,750 (+/-20%)
Systems Integration Testing (SIT)	TBC
User Integration Testing (UIT)	TBC
Implement to Live	TBC
Application Support	TBC

More information can be found in the DCC Preliminary Assessment response in Annex C.

SECAS costs

The estimated SECAS implementation cost to implement this as a stand-alone modification is one day of effort, amounting to approximately £600. This cost will be reassessed when combining this modification in a scheduled SEC Release. The activities needed to be undertaken for this are:

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

SEC Party costs

Views on SEC Party costs will be gathered as part of the Refinement Consultation.

6. Implementation approach

Recommended implementation approach

SECAS is recommending an implementation date of:

- **Ad-hoc Release** three months after decision.

The Proposer has advised that it would be beneficial to implement this modification in time for the start of the new financial year, starting on 1 April 2024. The rationale for this is that the reporting would then align with OPR reporting which commences at the start of the financial year.

The DCC has also stated in the Preliminary Assessment that the modification could potentially be delivered as part of a maintenance release and so does not have to be implemented as part of a scheduled SEC Release. The Preliminary Assessment also states that the changes require a three-month lead time.

Therefore, SECAS is recommending that, if approved, this modification is implemented three months after the decision (or less if the lead time is less).

7. Assessment of the proposal

Areas for assessment

Sub-Committee input

SECAS has engaged with the Chairs from the OPSG, the Technical Architecture and Business Architecture Sub-Committee (TABASC), the Security Sub-Committee (SSC) and the Smart Metering Key Infrastructure Policy Management Authority (SMKI PMA) to confirm what input is required from these forums.

Sub-Committee input	
Sub-Committee	Input sought
OPSG	What operational impact will prioritising 'success' of SRs/SRVs/Alerts over Target Response Times have? SECAS has engaged with the OPSG throughout the Refinement Process, with the Sub-Committee approving of the business requirements and the DCC Preliminary Assessment key points.
SMKI PMA	SECAS has confirmed there are no SMKI impacts.
SSC	SECAS has confirmed there are no security impacts.
TABASC	SECAS has confirmed there are no technical or business architecture impacts.

Observations on the issue

Business as usual?

During discussions at the Change Sub-Committee, a CSC member queried the need for this modification, as they assumed that it would be part of the DCC's initial system build to demonstrate they are hitting their Service Level Agreements (SLAs). The DCC acknowledged this but advised that this was never included in the requirement for the system. It added that this modification is aiming to identify potential problem areas, as the DCC does not have a method for doing this due to not being able to measure TRTs.

Solution development

Journey tracking

The DCC's Preliminary Assessment advised that the solution contains an element called 'Journey Tracking'. Journey Tracking will look at SRVs sent to a Device and uses the SRVs and Alert responses data to understand if the process was ultimately successful.

Journey Tracking will also look to see if multiple similar SRVs were sent to a Device in close proximity. If one of the SRVs were to succeed and the rest were to fail, the outcome of the journey would be considered a success. There is no additional cost to include this in the solution.

SECAS sought Working Group and OPSG views on this, with both forums agreeing that this should be incorporated into the solution.

Additional Future Dated Service Audit Trail Data

The Preliminary Assessment states that as part of the implementation phase of Journey Tracking, the DS&A team may identify journeys that can't otherwise be tracked with a high likelihood of success. The DCC advised that the addition of the DSP data on Future Dated SRVs would help significantly, and if this is excluded, then the resulting accuracy may be a concern. If there are journeys that are a concern, the DCC will ensure this is discussed with the Working Group during design and development. Including this into the solution will cost £15,000 - £50,000 (and £9,303 of the total Impact Assessment costs (£19,303)).

SECAS also discussed this with the Working Group and OPSG, with both forums also agreeing this should be included in the solution.

Replacing current reporting or additional?

SECAS informed the Working Group that it was the Proposer's intention for the MP242 reporting to replace current reporting. The Proposer added that it would be beneficial to understand which elements of current reporting Parties would like to keep. SECAS added that this can be included in the Refinement Consultation as well as asking the OPSG directly. The DCC advised that currently the MP242 reporting is in addition to current reports. This will occur for a to-be-agreed period of time until any changes take place. SECAS advised that it would be beneficial if there were no duplication, as current reporting also categorizes data as 'success' or 'failure'. The DCC confirmed that they do not want to generate reports that share different views/criteria on 'success' and 'failure' as these may cause confusion.

When discussing this with the OPSG, the OPSG Chair stated it would be beneficial to see the proposed new reporting as soon as possible to compare it with existing reports. This will then shape the final design ahead of implementation.

Will timeliness be factored into success/failure?

When presenting the success/failure matrix to the OPSG, the Chair queried whether the time taken for SRVs to reach their destination would be considered. The DCC responded, stating that Response Codes E21(Communications Failure – No Response Received from Device), E30 (Time-out – "Future Dated" Command) and E31(Time-out – "DSP Schedule" /"Future Dated (DSP) Command) will be subject to their relevant timeouts. The DCC also advised that for Future Dated SRVs, where the execution time is unknown, the DCC's Journey Tracking will be able to report Success / Failure.

8. Case for change

Business case

Approval of the modification

This modification will provide reporting that is more focused on the consumer experience than the reporting that is currently in place. The reporting produced will be reviewed by Parties and the OPSG and will help identify where improvements can be made that will directly impact the consumer. Parties will also be able to compare the MP242 reporting with current reporting to understand how to make more insightful, efficient reports.

Views against the General SEC Objectives

Proposer's views

Objective (b)³

The Proposer believes that this modification will facilitate SEC Objective (b). It will help provide a clearer indication of the success or failure of consumer-centric SRVs, which will help industry understand if the DCC is providing to ensure that they are compliant with their obligations.

Objective (g)⁴

The Proposer believes that MP242 will facilitate SEC Objective (g) by providing clear and relevant reports that will detail specific SRV performance which is relevant to the consumer experience. It will also highlight potential issues that might require addressing.

Industry views

Industry views will be gathered as part of the Refinement Consultation.

Views against the consumer areas

Improved safety and reliability

This modification will be neutral against this consumer benefit area.

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.

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.

Improved quality of service

MP242 will benefit consumers by providing more detailed consumer-centric SRV reporting on the DCC's performance, including the DCC System and Service Providers. This could help the DCC and Parties identify and resolve 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.

Appendix 1: Progression timetable

Timetable	
Event/Action	Date
Draft Proposal raised	24 May 2023
Business requirements developed with the Proposer	May 2023
Presented to Sub-Committees for initial comment	May – Jun 2023
CSC converts Draft Proposal to Modification Proposal	20 Jun 2023
Modification discussed with Working Group	5 Jul 2023
Modification discussed with the OPSG	11 Jul 2023
Preliminary Assessment requested	1 Aug 2023
Preliminary Assessment returned	8 Sep 2023
Modification discussed with Working Group	4 Oct 2023
Modification discussed with OPSG	10 Oct 2023
Legal text developed with the Proposer and DCC	Oct 2023
Refinement Consultation	25 Oct – 15 Nov 2023
<i>Impact Assessment costs approved by Change Board</i>	22 Nov 2023
<i>Impact Assessment requested</i>	22 Nov 2023
<i>Impact Assessment returned</i>	15 Jan 2023
<i>Modification Report approved by CSC</i>	16 Jan 2023
<i>Modification Report Consultation</i>	17 Jan -7 Feb 2023
<i>Change Board Vote</i>	21 Feb 2023

Italics denote planned events that could be subject to change

Appendix 2: Glossary

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

Glossary	
Acronym	Full term
CoS	Change of Supplier
CSC	Change Sub-Committee
CSP	Communication Service Provider
ECoS	Enduring Change of Supplier
DCC	Data Communications Company
DS&A	Data Science and Analytics
DSP	Data Service Provider
GBCS	GB Companion Specification
GSME	Gas Smart Metering Equipment
GPF	Gas Proxy Function
GUID	Global Unique Identifier
HAN	Home Area Network
MPxN	Meter Point Administration Number
OPR	Operational Performance Regime
OPSG	Operations Group
PIT	Pre-Integration Testing
PMR	Performance Measurement Report
PMRG	Performance Measures Review Group
RTT	Round Trip Time
S1SP	SMETS1 Service Provider
SEC	Smart Energy Code
SECAS	The Smart Energy Code Administrator and Secretariat
SIT	System Integration Testing
SLA	Service Level Agreement
SMETS	Smart Metering Equipment Technical Specifications
SMKI PMA	Smart Metering Key Infrastructure Policy Management Authority
SR	Service Request
SRV	Service Reference Variant
SSC	Security Sub-Committee
SSI	Self-Service Interface
TABASC	Technical Architecture and Business Architecture Sub-Committee
TRT	Target Response Time
UIT	User Integration Testing