Agenda Item 5

Introduction to MP122A Reporting

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SEC
Smart Energy Code

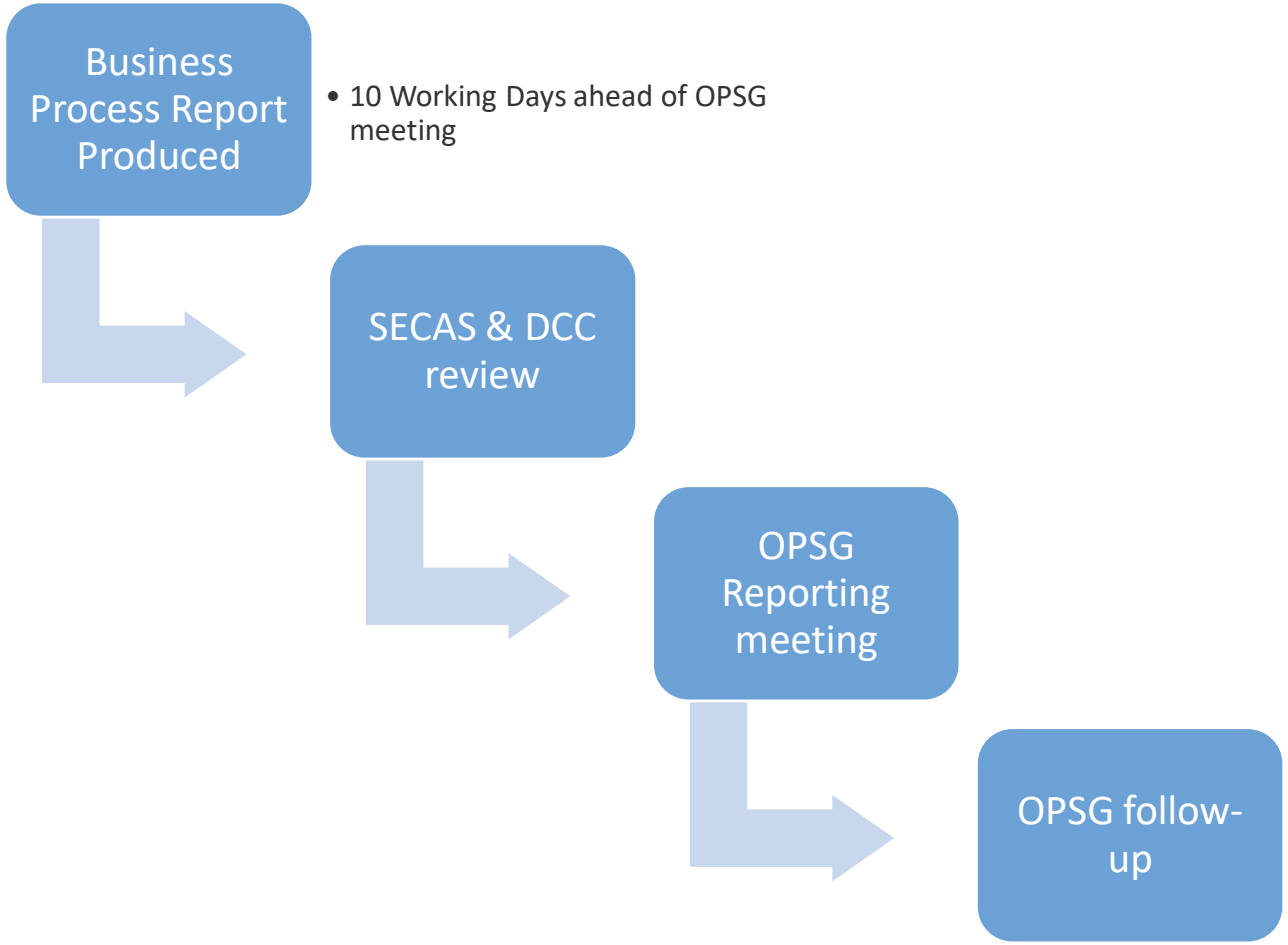
Introduction to SEC MP122A – Reporting

- SEC MP122A 'Operational Metrics' legal text was implemented in the February 2021 SEC Release
- MP122 introduced four new Code Performance Measures (CPMs) to provide reporting on:
  - Service Availability by DCC interface and region (CPM6)
  - Reporting of Service Request times by Business Process (Install & Commission, Prepayment, Change of Supplier, Tariff Updates, Meter Reads) (CPM6A)
  - Firmware delivery and activation on Communication Hubs (CPM6B & 6C)
- The existing Performance Measurement Report (PMR), review and output will remain unchanged for the Code Performance Measures (CPM) 1-5A (full list of CPMs can be found on a later slide).
- A new Performance indicator report will be produced by the DCC to provide performance metrics on CPM 6A
- The intent of this presentation is to provide OPSG members with an overview of the new reporting, the format of the metrics and proposal on the approach for the OPSG review.

SEC Section H: Code Performance Measures

No.	Code Performance Measure	Reporting Period	Target	Minimum
1	Percentage of On-Demand Service Responses delivered within the applicable Target Response Time.	Monthly	99%	96%
2	Percentage of Future-Dated Service Responses delivered within the applicable Target Response Time.	Monthly	99%	96%
3	Percentage of Alerts delivered within the applicable Target Response Time. Alerts consolidated in accordance with the Alert Management Mechanism will not be counted.	Monthly	99%	96%
4	Percentage of Incidents which the DCC is responsible for resolving and which fall within Incident Category 1 or 2 that are resolved in accordance with the Incident Management Policy within the Target Resolution Time.	Monthly	100%	85%
5	Percentage of Incidents, measured and reported as a separate Code Performance Measure for each of Incident Categories 3, 4 and 5, which the DCC is responsible for resolving that are resolved in accordance with the Incident Management Policy within the Target Resolution Time.	Monthly	90%	80%
5A	Percentage of Incidents which fall within Incident Category 3, 4 or 5 that are recorded on the Incident Management Log and assigned to a resolver within the Target Initial Response Time.	Monthly	90%	80%
6	Percentage of time (in minutes) during which each DCC Interface (excluding the one listed in paragraph (f) of the definition of DCC Interface) is available during the Target Availability Period. There shall be a separate Code Performance Measure for each combination of DCC Interface, Region and the two relevant times of day (the first such relevant time of day being Monday-Friday 08.00-20.00 and Saturday 08.00-12.00; the second being every other time). For this purpose, a DCC Interface is only considered to be available where it and the DCC Systems on which it relies are fully available, such that those persons which are intended to be able to use the DCC Interface can use the full functionality which is intended to be available to them.	Monthly	99.5%	98%
6A	Percentage of each of the Business Processes described in Section H13.1A which is delivered within the applicable Target Response Time. There shall be a separate Code Performance Measure for each combination of Business Processes and either Region (for SMETS2) or SMETS1.	Monthly	99%	96%
6B	Percentage of firmware images successfully delivered to Communication Hubs.	Monthly	99%	96%
6C	Percentage of firmware image activations successfully implemented on Communication Hubs.	Monthly	99%	96%

OPSG approach to review on Performance Indicators



As a proposal for the approach, SECAS recommend the following:

Business Process Report Produced – The DCC (TOC) will produce and share the report with OPSG members 10 Working Days ahead of the OPSG reporting meeting.

SECAS & DCC Review – The DCC and SECAS will undertake an internal review of the report for initial areas of interest or concern to be raised at the OPSG. This summary and the relevant graphs will be provided to OPSG members on the Reporting meeting paper day.

OPSG Reporting meeting – The OPSG will review the summary provided by the DCC and SECAS and then have an opportunity raise any additional concerns or requests for further information.

OPSG Follow-up – The DCC and SECAS will provide responses to any actions or follow up from the OPSG Reporting meeting at either the OPSG main meeting or subsequent Reporting meeting. SECAS will then include outputs of this review to the SEC Panel (either via the Sub-Committee report or by a new summary paper)

Summary Paper Proposal

- In order to manage the scale of the new report, the DCC and SECAS will collaborative work on a summary paper ahead of the OPSG meeting to outline key areas of performance for the reporting period.
- The proposal is to include graphs and overview on a standing set of metrics on the following:
  - Install & Commission (SRV8.11, SRV8.1.1, SRV6.20.1, SRV6.8, SRV8.7.2, SRV8.14.1)
  - Change of Supplier (SRV6.23)
  - Tariff Updates (SRV1.1.1)
  - Pre-payment (SRV2.2)
  - Meter Reads (SRV4.6.1, SRV4.8.1, SRV4.10, SRV4.17)
  - Distribution Networks Post I&C Activity (SRV6.15.1 – Update Network Operator Certificates, SRV6.5, SRV6.22)
  - Alerts (AD1 & Device Alerts (alignment of reporting from OPSG Spurious Alerts)
- With the option to include additional metrics on a monthly Ad-hoc basis dependent on anomalies and changes.

SEC MP122A – Current status for OPR

- The DCC sought Ofgem Operational Performance Regime (OPR) Derogation on the following:
  - Metrics used for DCC margin for RY 21/22
- Ofgem responded on 16 April 2021 with the following decisions:
  - to issue a longer-term derogation against the requirements of SLA to produce report and the Firmware Management reporting effective until 30 November 2022.
  - to request DCC to produce a plan setting out how they intend to comply with their reporting obligations under Section H13.4 to report on the OPR measures, namely CPM 6 (service availability) and CPM 6A (Business Processes - prepayment, install and commission).
- The DCC have a 12 month grace period (starting from April 2021) to demonstrate compliance to SEC Section H13.1A in particular to the Code Performance Measure 6 (Service Availability by DCC interface and region where applicable) and 6A (Business Process reporting).
- If DCC is not in a position to report on these new measures for RY22/23, Ofgem have set out in the OPR Guidance that for any month that DCC is unable to report a value for its performance, performance for that month will be scored as zero.
- The DCC will be running OPR Working Groups to produce a plan and approach to meeting compliance. SECAS will be involved in the working groups.
- The Business Process (CPM 6A) reporting developed by the DCC will not be used to reflect DCC performance in the OPR and instead will be used as an indicator of the performance of the entire ecosystem and to drive improvements in DCC, User and Device behaviour.

MP122B – Operational Metrics

- MP122A implemented all the required legal text changes to the SEC, however the modification was split into two as requirements on DCC Service Providers would not be delivered in time for the February 2021 SEC Release.
- Specifically, the areas of improvement are:
  - Enhanced reporting on Alerts (CPM 3)
  - Enhanced reporting on Incident Categories 3, 4 and 5 (CPM 5A)
  - Reduced delivery timescales of the PMR
  - Enhanced reporting on Communications Hub firmware (CPM 6B & 6C)
  - Enhanced reporting on SMETS1 Device firmware (CPM 6A – Firmware Management Business Process)
- MP122B 'Operational Metrics – Part 2' is currently in Refinement Process and is targeted for November 2021 SEC Release

Data Communications Company

Introduction to SEC Mod 122 Reporting

We believe in making Britain more connected, so we can all lead smarter, greener lives.

18 May 2021

DCC Controlled

SEC Mod 122 – Overview

- SEC Mod 122 has been designed by an industry working group to provide an additional level of granularity in DCC Reporting of Performance and to introduce new performance targets;
- The revised reporting will provide visibility of success and failure and Round Trip Times of Service Request Variants (SRVs) that make up key customer business processes. This provides significant advantage to industry and DCC as:
  - Previously specific issues which have had a high impacts on customer business processes were not captured by the PMR reporting;
  - The high volumes of some successful SRVs have masked issues with lower volume but more important SRVs;
  - The impact of an individual SEC Party or Device set on average industry success has been limited.
- SEC Mod 122 will therefore provide reporting that is more relevant to customers and will help drive improvement for the End Consumer, not just in DCC optimisation but also in customer and device enhancement
- The modification has been split into two deliverables:
  - SEC Mod 122 A which comprises the reporting of data already available to DCC and which initially reports April 2021 data (to be delivered 25 Working Days after the end of April);
  - SEC Mod 122 B which comprises the reporting of data that DCC currently has no access to. Solutions for this are still being agreed via the SEC Mod Working Group.
- Reporting will be delivered monthly by a set of PDF Reporting packs for key business processes. These will be reviewed by the SEC Operations Reporting Group and DCC will drill down into any performance anomalies at that groups request. Issues identified by that group will be highlighted to SEC Operations group for visibility and agreement of actions to progress resolution.

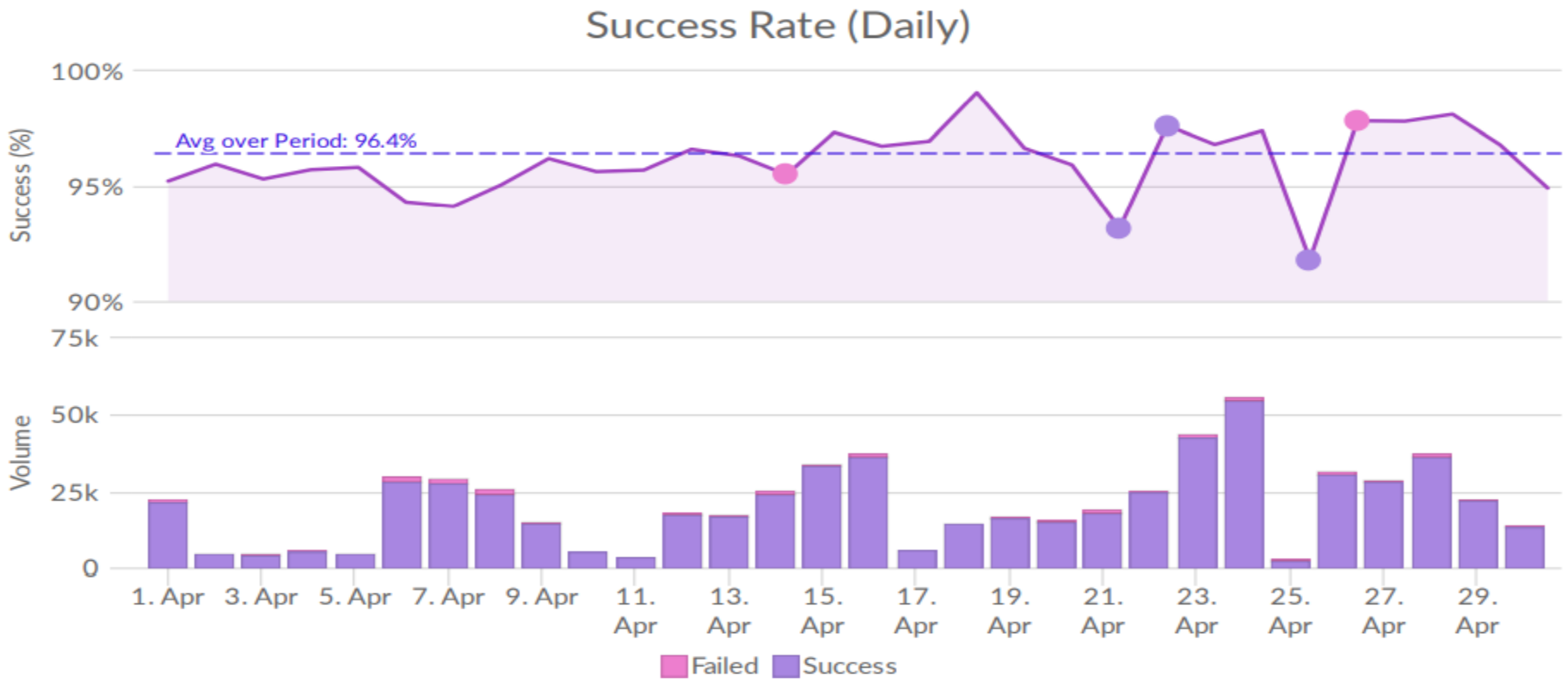
SEC Mod 122 – Reporting Overview

- DCC have been asked by SECAS Business Requirements to report at a global level a number of the common Service Request Variants (SRVs) for key customer business processes and provide:
  - Success/ Failure of those SRVs to be delivered to SMETS 1 & SMETS 2 devices;
  - Round Trip Time (RTT) – The time taken from receipt of an SRV by DCC through to the end consumer device and for the response to then be sent back from that device and through to customer gateway - of those SRVs to be delivered to SMETS 1 & SMETS 2 devices;
  - A breakdown of success/ failure and RTT by Region (North/ Central/ South/ SMETS 1)
  - A breakdown of success/ failure by anonymised SEC Party, Region (North/ Central/ South/ SMETS 1) and Device Type (ESME/ GSME/ GPF/ CHF);
  - Some additional business metrics.

- **Notes:**
  - Comparison of individual performance of SEC Parties success/ failure by SRV provides a good proxy of the achievable average performances for each business process;
  - SECAS Business Requirements requested DCC to report on RTT and to compare this to Target Response Time (TRT) – the time taken for SRVs in DCC systems only (i.e. taking out time within the HAN – which is responsibility of energy supplier) to provide a proxy of DCC performance;
  - SEC Mod 122 Business Requirements do not require DCC to provide a metric of DCC Performance – i.e. Round Trip Time excluding HAN;
  - GSME wakes up only once every half hour which makes it's RTT a very poor proxy of DCC performance;
  - Messages delivered to CHF or GPF provide a better RTT proxy of DCC performance.

Format of report – Prepayment – SRV 2.2 (Success/ Failure)

- An SRV is counted as successfully delivered if it is delivered within the automated DSP Retry (3 attempts);
- An SRV is counted as a failure if it fails on any SEC Party retry – i.e. if a SEC Party sends an SRV 6 times and it is successful on the second attempt, this is reported as one success and 5 failures.



A dot on a graph indicates an Incident Category 1 or 2 event

Format of Report – Prepayment – SRV 2.2 (Summary Data)

- DCC have been asked to compare Round Trip Time to Target Response Time. This compares the performance of the DCC Ecosystem to the performance of DCC and is therefore a proxy.
- DCC exclude any Response Codes that indicate a failure due to a factor outside DCC control – e.g. a SEC Party sending an SRV to a device that they are not allowed to communicate with.

RTT – includes DCC system performance and performance of the HAN

Measure actually identifies SRV Round Trip Time in comparison to SRV Target Response Time

Summary

	CSP North	CSP Central	CSP South	SMETS1
Average RTT	380 sec	355 sec	284 sec	318 sec
Median RTT	24 sec	8 sec	8 sec	32 sec
Range (Shortest) (Longest)	(2) (62552) sec	(2) (76145) sec	(2) (76702) sec	(1) (77341) sec
Percentage of SRs Delivered within TRT (%)	53	68	73	39
Volumes (attempts)	112k	174k	158k	174k
Service Requests that failed to be delivered	5%	4%	5%	1%

True Target Response Times (TRT) are not currently available for messages to in home HAN devices (ESME, GSME PPMID etc). Times shown above are based upon Round Trip Time (RTT) which includes HAN transfer and Device processing time. These measurements include DCC and NON DCC performance, a separate table has been produced in Section 1.6 above to highlight performance to CHF and GPF.

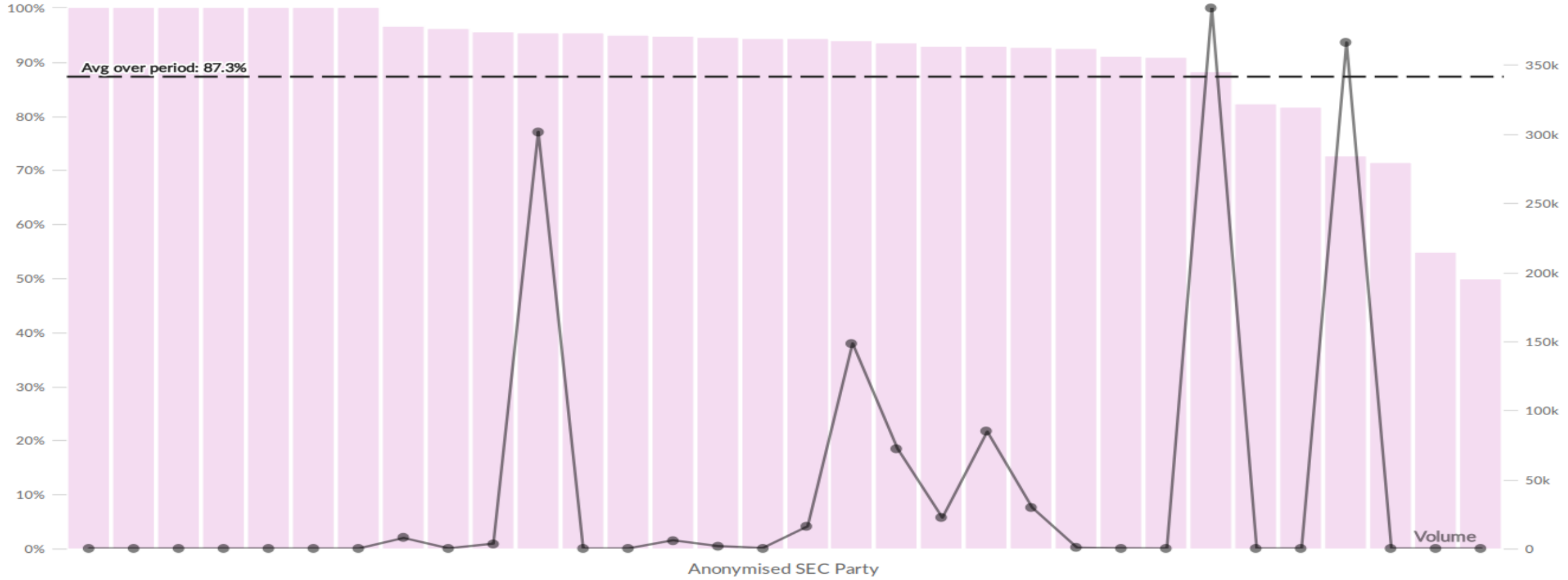
Format of Report – Summary Data – DCC Proxy

- The summary data that DCC provide (previous slide) does not provide a good proxy of DCC Performance as it includes time in the HAN;
- A better proxy would be to look at time taken to deliver SRVs for that business process to the CHF or GPF. DCC have therefore provided summary tables that identify that proxy at the start of each pack.

	CSP North	CSP Central	CSP South	SMETS1	All Regions (DCC)
Average RTT	8443 sec	11875 sec	11732 sec	14404 sec	12027 sec
Median RTT	24 sec	9 sec	9 sec	68 sec	11 sec
Range (Shortest) (Longest)	(0) (523665) sec	(0) (576518) sec	(0) (523784) sec	(0) (581067) sec	(0) (581067) sec
Percentage of SRs Delivered within TRT (%)	98	99	99	99	99
Volumes (attempts)	17530K	40647K	29683K	32697K	120558K
SRs that failed to be delivered	8%	2%	3%	1%	3%
Number of Unique SEC Parties	69 parties	75 parties	71 parties	56 parties	81 parties
Unique CHF / Meter Combinations	52 Combinations	61 Combinations	53 Combinations	9 Combinations	81 Combinations

Format of Report – Prepayment – SRV 2.2(SEC Party performance)

- DCC provide an anonymised report by SEC Party identifying the impact that poor performance by one party can have on the overall performance.

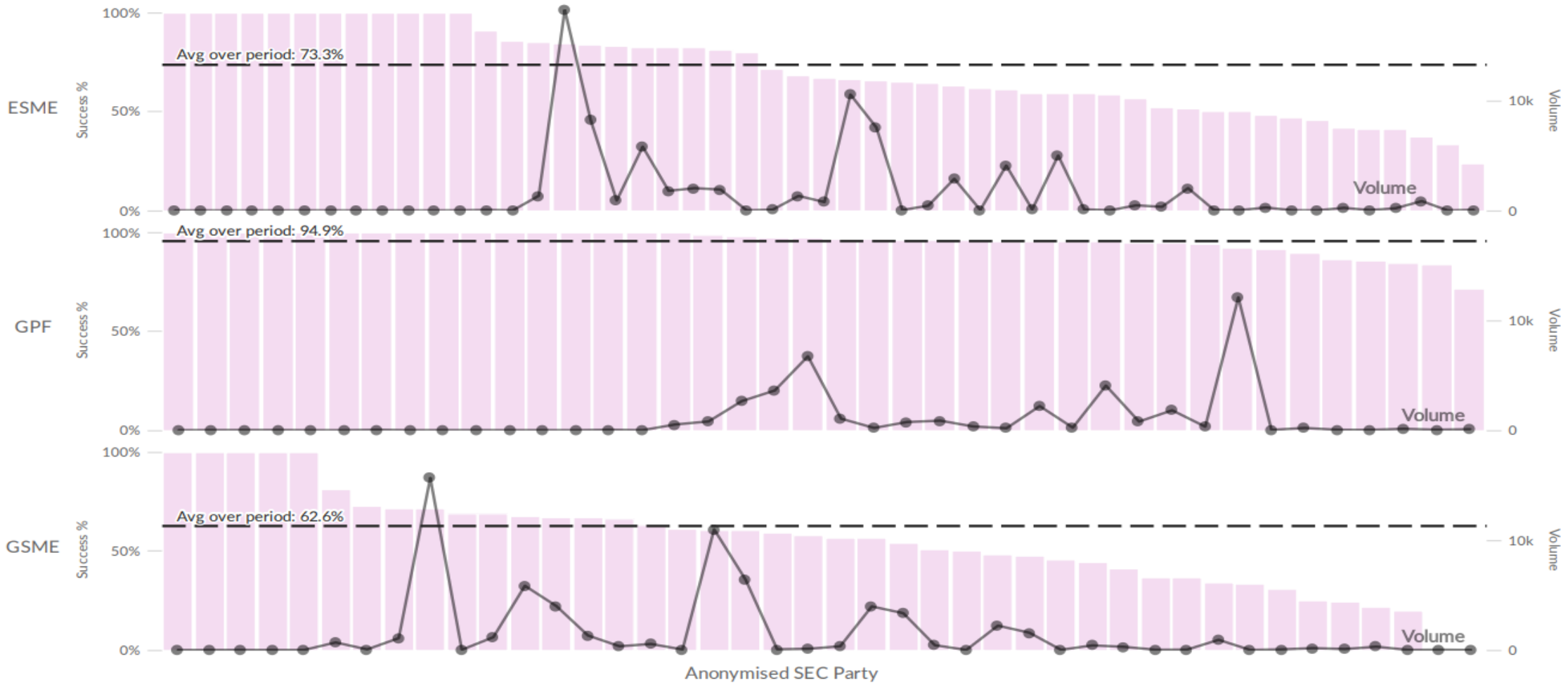


Observed data – CoS (Gain) – SRV 6.23 (Regional/ Device Data)

- This data is further subdivided by Region (North Region below) and Device Type.

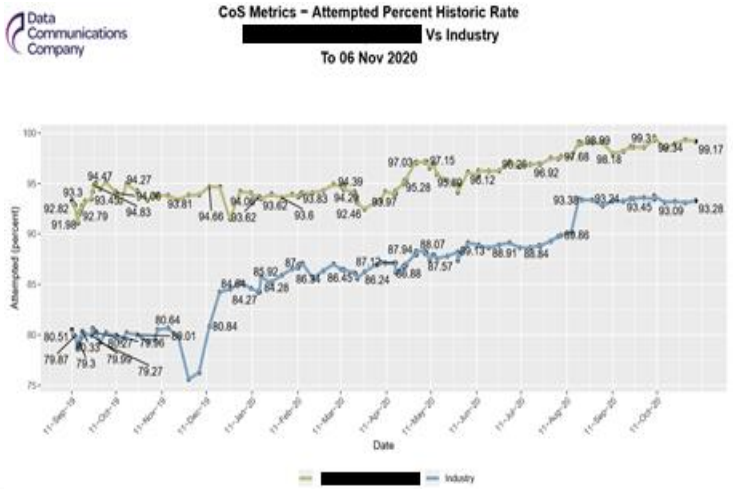
GPF – provides a better proxy of DCC performance

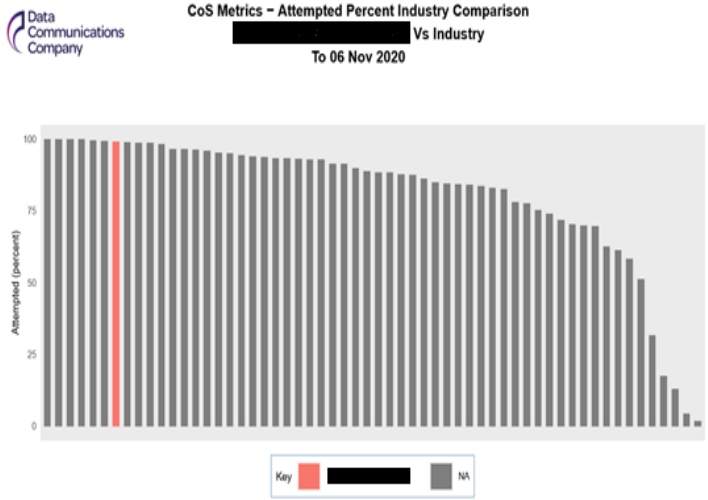
GSME – provides a poor proxy of DCC performance



Customer Analytics Reporting

- The SEC Mod 122 reporting provides enhanced global reporting of DCC Ecosystem. The database required for this provides with minimal additional investment an opportunity to provide useful reports for our customers, to help benchmark your performance, to improve your ability to diagnose issues and optimise the performance of your DCC Services;
- DCC are therefore working with Industry to provide comparative reporting, identifying performance for key customer processes:
  - ✓ Against industry average and industry best for benchmarking;
  - ✓ Providing anonymised league tables;
  - ✓ Provide datafiles for business processes, enhancing customers ability to diagnose issues.
- This would enable customers to better diagnose their own issues and raise appropriate Incidents and for DCC to target suggested customer improvement measures.





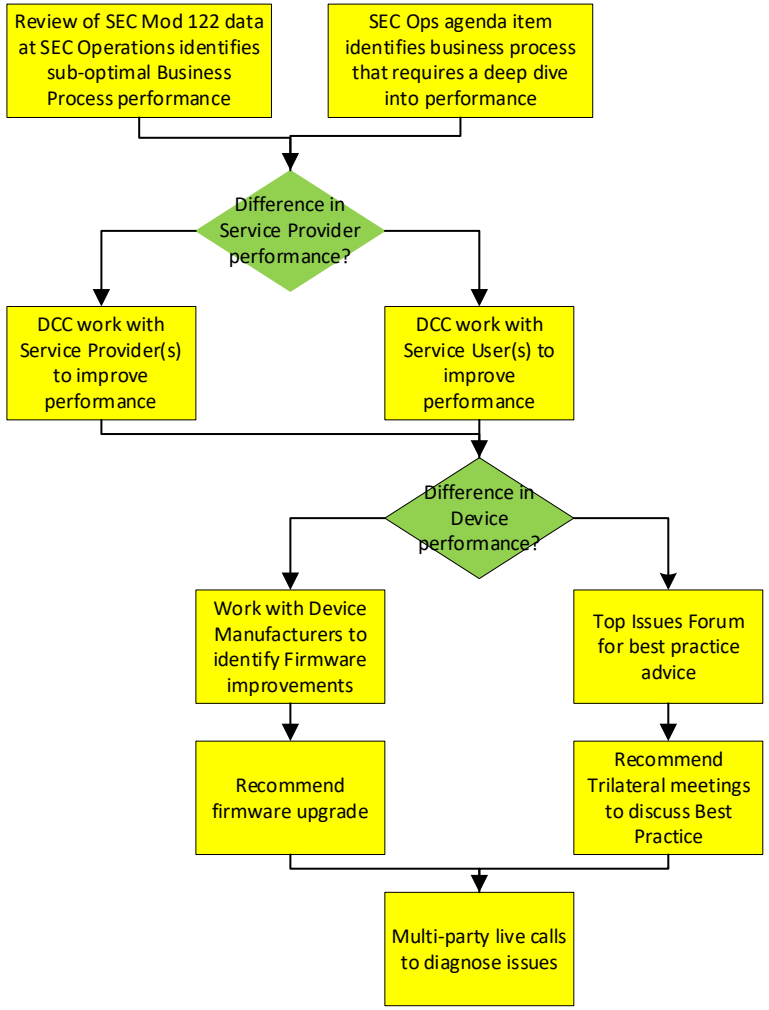
aining Su	SECPartyID	GainingDCC Mpxn	CoS Date	Service Request Date	CH ID	Device ID	CSP	Meter/GPF Status	SRDeviceTy	Subsequent CoS Event	Subsequent CoS Event Information	DUISVersion
[redacted]		70-B3-D5-1 1100009920	04/09/2018	01/10/2018	88-73-B4-0	1C-23-4F-0	TEF	Service Request Success	ESME			3.0
		70-B3-D5-1 1141007464	06/09/2018	24/09/2018	88-73-B4-0	1C-23-4F-0	TEF	Service Request Success	ESME			3.0
		70-B3-D5-1 1100001125	10/09/2018	24/09/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	ESME			3.0
		70-B3-D5-1 1224230970	10/09/2018	17/11/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	GSME			3.0
		70-B3-D5-1 1224230970	10/09/2018	17/11/2018	88-73-B4-0	88-73-B4-A	TEF	Service Request Success	GPF			3.0
		70-B3-D5-1 1100000772	23/09/2018	02/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	ESME	30/10/2018	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 1100000818	24/09/2018	01/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	ESME			3.0
		70-B3-D5-1 2097557740	24/09/2018	16/11/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	GSME			3.0
		70-B3-D5-1 2097557740	24/09/2018	16/11/2018	88-73-B4-0	88-73-B4-A	TEF	Service Request Success	GPF			3.0
		70-B3-D5-1 1130005275	25/09/2018	01/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	ESME	23/09/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 2071628820	25/09/2018	01/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	GSME	31/10/2018	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 7509045 10	25/09/2018	01/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	GSME	23/09/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 1141736443	25/09/2018	01/10/2018	88-73-B4-0	1C-23-4F-0	TEF	Service Request Success	ESME	23/10/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 7509045 10	25/09/2018	01/10/2018	88-73-B4-0	88-73-B4-A	TEF	Service Request Success	GPF	23/09/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 2071628820	25/09/2018	01/10/2018	88-73-B4-0	88-73-B4-A	TEF	Service Request Success	GPF	31/10/2018	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 2200001150	27/09/2018	16/11/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	ESME	17/10/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 2333160647	27/09/2018	16/11/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	ESME	21/10/2018	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 4238000250	27/09/2018	01/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	GSME	20/10/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 2138093 10	27/09/2018	01/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	GSME	21/10/2018	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 4238000250	27/09/2018	01/10/2018	88-73-B4-0	88-73-B4-A	TEF	Service Request Success	GPF	20/10/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 2138093 10	27/09/2018	01/10/2018	88-73-B4-0	88-73-B4-A	TEF	Service Request Success	GPF	21/10/2018	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 1100000260	30/09/2018	30/04/2019	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	ESME	22/10/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 2236412 90	30/09/2018	04/01/2019	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	GSME	22/10/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 2236412 90	30/09/2018	04/01/2019	88-73-B4-0	88-73-B4-A	TEF	Service Request Success	GPF	22/10/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 1418153 39	02/10/2018	04/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	ESME	17/11/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 2442872 50	02/10/2018	05/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	GSME	19/11/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 2442872 50	02/10/2018	05/10/2018	88-73-B4-0	88-73-B4-A	TEF	Service Request Success	GPF	19/11/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 5916820 03	03/10/2018	04/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	GSME			3.0
		70-B3-D5-1 1900031 28	03/10/2018	04/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	ESME			3.0
		70-B3-D5-1 5916820 03	03/10/2018	04/10/2018	88-73-B4-0	88-73-B4-A	TEF	Service Request Success	GPF			3.0
		70-B3-D5-1 1100001826	04/10/2018	17/11/2018	88-73-B4-0	1C-23-4F-0	TEF	Service Request Success	ESME			3.0
		70-B3-D5-1 1012858 67	07/10/2018	12/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	ESME	06/06/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 2200012 80	07/10/2018	09/10/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	ESME	17/10/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 4193737 10	07/10/2018	10/12/2018	88-73-B4-0	00-0F-93-FF	TEF	Service Request Success	GSME	17/10/2019	Gain completed successfully - subsequent/future CoS Event	3.0
		70-B3-D5-1 4193737 10	07/10/2018	10/12/2018	88-73-B4-0	88-73-B4-A	TEF	Service Request Success	GPF	17/10/2019	Gain completed successfully - subsequent/future CoS Event	3.0

How this data can be used (Prepayment Use Cases)

- **DCC Observation:** Large Energy Supplier active in prepayment has a 12% lower success rate than industry average:
- **Insight:** Another very active Energy Supplier on same Adaptor, Comms Hubs, Meters and Firmware version has a success rate which is 15% higher on average;
- **DCC Action:** Set up trilateral meeting with other Energy Supplier to discuss processing of prepayment SRVs best practice.

- **DCC Observation:** Energy Supplier at 98%+ average success rate for prepayment top ups has identified a comms hub/ meter set that they have inherited which is performing for them at an average of circa 40% success rate
- **Insight:** Other energy suppliers who install this comms hub/ meter set are operating it at an average success rate of 80%+;
- **DCC Action:** Recommend that Energy Supplier raises at DCC Top Issues Forum and asks for support with best practice process for this Comms Hub/ Meter set.

- **DCC Observation:** A particular Gas Meter is skewing overall prepayment success negatively and shows an industry average success rate of circa 90% success;
- **Insight:** Energy Suppliers who have upgraded to the latest firmware for this meter are experiencing an average success rate of circa 95%;
- **DCC Action:** Use Service Management function to highlight this information to Energy Suppliers and recommend them to upgrade to the latest Firmware version.



OPSG Recommendation

- OPSG members are asked to **CONSIDER** the proposals on the approach for the new reporting
- OPSG members are asked to **PROVIDE** any comments or suggestions on the proposals or future improvements

Thank you.

Smart DCC
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