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# MP122B 'Operational Metrics – Part 2' Annex A Business requirements – version 1.4

#### About this document

This document contains the business requirements that support the solution for this Modification Proposal. It sets out the changes required to the DCC monthly Performance Metrics Report (PMR).

These changes have been requested by the Operations Group (OPSG) following the Operational Metrics Review (OMR). The DCC will use this information to provide an assessment of the changes that will shape the final report.

These changes are targeted for implementation in the February 2021 SEC Release, as required by Ofgem. Therefore, if a manual mechanism of the Proposed Solution can be delivered to enable the DCC to implement these changes on or before 1 April 2021, the DCC is requested to investigate this and advise in its Impact Assessment. Any automated mechanisms could then be implemented at a later date, as and when they are ready.





#### 1. Business requirements

This section contains the functional business requirements. Based on these requirements a full solution will be developed.

|      | Business Requirements   |
|------|---|
| Ref. | Requirement   |
| 1    | The DCC will report and measure monthly service performance for Service Reference Variants (SRVs) used in User business processes   |
| 2    | The DCC shall add specific outcome-based measures to the Performance Measurement Report (PMR) to provide a Measure of performance as well as Indicators on the success of the key business processes where they have end to end visibility. |
| 3    | The DCC will measure end to end service availability across the DCC environment and report this by Communication Services Provider (CSP) Region   |
| 4    | The DCC shall reduce the time it takes to create the PMR to within 10 Working Days from the end of the measurement reporting period   |
| 5    | In relation to Code Performance Measure (CPM) 5, the DCC will improve transparency in the reporting provided for incident Categories 3, 4 and 5   |

#### 1.1 General

The metrics defined in this document are expected to be reported within the DCC's PMR as required by the Code.

The DCC is expected to highlight any changes to the metrics which would impact the contracts with its Service Providers and therefore impact its ability to fulfil Requirement 4 of this document.

#### 1.2 Ofgem Operational Performance Regime Review

The review of the Operational Performance Regime (OPR) has been carried out due to concern that the current metrics may not be providing the best DCC incentives. Ofgem proposed to replace them with more outcome-based measures.

These outcome-based measures have been drawn from the OMR and consist of updated metrics for the OPR to target four areas specifically:

- · Install and Commission;
- Prepayment;
- Firmware management (covered by sections 2.2.5 'In Life Device Management' and 2.2.6 'Update CH Firmware' below); and
- Service Availability.

Where relevant performance will be broken down by meter type and Region.





#### 2. Business requirements

# 2.1 Requirement 1: The DCC will report and measure monthly service performance for SRVs used in User business processes

The OPSG requested changes to the PMR to enable it to more accurately measure DCC performance of SRVs and associated Service Responses against their business processes.

#### 2.1.1 Measuring SRVs

The following list of SRVs will be included in the monthly PMR with Rate, Speed, Volume, and Payload (RSVP) metrics (see Table 1).

The start point will be the Service User sending the SRV and the end point will be the Service User receiving or not receiving the associated Service Response (success or failure response).

Note that success of an SRV would be if Users received a response to it, irrespective of what the response is. If Users don't receive a response, this would count as a failure against the SRV.

The performance of a business process will depend on whether the SRV relates to a Smart Metering Equipment Specifications (SMETS)1 or SMETS2+ Device and should therefore be reported with SMETS1 and SMETS2 metrics separated and clearly identified. This is due to the different SLAs for each Device type as stated in the SEC.

Note, not all SRVs are applicable for SMETS1 and these are marked within table 1 below.

|                         | Tab    | le 1: Business process applicability table                               |                   |
|-------------------------|--------|--|-------------------|
| <b>Business Process</b> | SRV    | Description  | SMETS1 applicable |
| Install and             | 8.11   | Update HAN Device Log  | Yes               |
| Commission <sup>1</sup> | 6.21   | Request Handover of DCC Controlled Device (Update Supplier Certificates) | No                |
|                         | 8.1.1  | Commission Device  | Yes               |
|                         | 8.7.2  | Join Service (Join GPF with GSME)  | Yes               |
|                         | 6.20.1 | Set Device Configuration' (Import MPxN)                                  | No                |
|                         | 1.1.1  | Update Import Tariff (Primary Element)                                   | Yes               |
|                         | 6.8    | Update Device Configuration (Billing Calendar)                           | Yes               |
|                         | 8.14.1 | Communications Hub Status Update Install Success                         | No                |
| Change of Supplier      | 6.23   | Update Security Credentials (CoS)  | Yes               |
| (Gain)                  | 1.1.1  | Update Import Tariff (Primary Element)                                   | Yes               |
|                         | 6.8    | Update Device Configuration (Billing Calendar)                           | Yes               |
| Change of Tenancy       | 3.2    | Restrict Access for Change of Tenancy                                    | Yes               |
| Tariff Updates          | 1.1.1  | Update Import Tariff (Primary Element)                                   | Yes               |
| Pre-Payment             | 1.6    | Update Payment Mode (Payment Mode = Prepayment)                          | Yes               |
|                         | 2.1    | Update Prepay Configuration  | Yes               |
|                         | 2.2    | Top Up Device (Update Balance with positive value)                       | Yes               |

<sup>&</sup>lt;sup>1</sup> 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.



Annex A – MP122 business



|                                | Tab    | le 1: Business process applicability table   |                   |
|--------------------------------|--------|--|-------------------|
| <b>Business Process</b>        | SRV    | Description  | SMETS1 applicable |
| Security and Key<br>Management | 6.15.2 | Update Security Credential (Device) – Credential Type = Digital Signature  | No                |
|                                | 6.15.2 | Update Security Credential (Device) – Credential Type = Key<br>Agreement   | No                |
|                                | 6.17   | Issue Security Credentials – Credential Type = Digital Signature   | No                |
|                                | 6.17   | Issue Security Credentials – Credential Type = Key Agreement   | No                |
| Update Device<br>Firmware      | 11.1   | Update Firmware  Note: In respect of SMETS2+ Devices the DCC must ensure that the associated firmware update has been delivered to all relevant Communications Hub Functions within five days of receipt of the Service Request. | Yes               |
|                                | 11.3   | Activate Firmware (Individual SR for each GUID for firmware activation)  Note: SMETS1 five-day Target Response Time.   | Yes               |
| Logistics CH<br>Ordering and   | 8.14.3 | Communications Hub Status Update – Fault Return  | No                |
| Returns                        | 8.14.4 | Communications Hub Status Update – No Fault Return   | No                |
| Distribution Networks Post I&C | 6.15.1 | Update Security Credentials (Update Network Operator Certificates)   | Yes               |
| Activity                       | 6.5    | Update Device Configuration (Voltage)  | Yes               |
|                                | 6.22   | Configure Alert Behaviour (Update ENO Alter Configuration)   | No                |
| Meter Reads                    | 4.6.1  | Retrieve Import Daily Read Log   | Yes               |
|                                | 4.6.2  | Retrieve Export Daily Read Log   | No                |
|                                | 4.8.1  | Read Active Import Profile Data  | Yes               |
|                                | 4.8.2  | Read Reactive Import Profile Data  | Yes               |
|                                | 4.8.3  | Read Export Profile Data   | Yes               |
|                                | 4.10   | Read Network Data  | Yes               |
|                                | 4.17   | Retrieve Daily Consumption Log   | No                |

RSVP metrics will be used as an indicator of performance for identified key User business processes as defined in table 1. The RSVP metrics will measure the relevant SRVs, service responses, acknowledgements and Alerts processing times within the DCC Total Systems.

#### 2.1.2 Measuring Alerts

Code Performance Measure 3 of the SEC requires that the DCC measures the percentage of Alerts delivered within the applicable Target Response Time. Therefore, SECAS acknowledge that this requirement is not making any changes to the Code and the DCC should already be providing reporting against all Alerts. However, it is understood that the DCC only reports on a subset of Alerts.

The DCC is to include in its assessment the requirement to measure all Alerts (DCC Alerts and Device Alerts) using the current method for determining how long they took to be delivered.

In addition to the above, the DCC is asked to include in its assessment the requirement to measure for all Alerts the time it takes from when it reaches the Communications Hub to when it enters the Service User's gateway. The DCC does not currently include this phase in its measure.





#### 2.1.3 Data representation

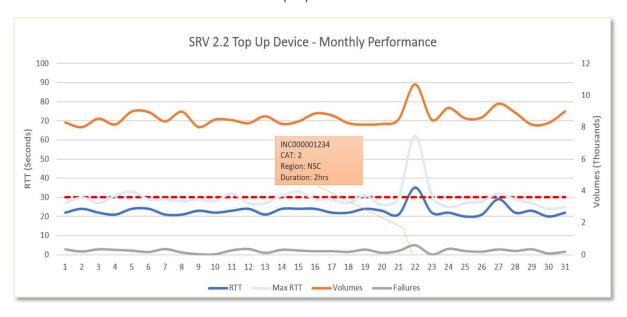
The RSVP metrics shall be reported within the PMR.

#### Daily RSVP metrics

The OMR recommended that the daily RSVP metrics be plotted using a line graph representation with daily data points:

- The x-axis will indicate the day of the month and the y-axis shows response time and volumes.
- Data points are plotted for the SRV daily average RTT, volume of daily requests and daily request failures.
- The average monthly RTT for the SRV or group of SRVs is provided to give a reference point and indicate whether daily response times are above or below the monthly average.

This is shown as a dotted red line on the example provided below:



Note, minimum RTT will also be displayed in the graph. As noted in the Modification Report, the presentation of this graph as well as any other graphs in the PMR will be agreed between the DCC, the Proposer and the Working Group pre-implementation of this modification.

#### Monthly RSVP metrics

The following monthly metrics are to be recorded and reported within the PMR:

The SRVs in table 1 above shall also be reported at a monthly level to provide a summary of performance over the period. The summary will include both Indicators and Measures as defined below. The measures are to be reported for all regions combined for SMETS1 (excluding Install and Commission) and separated by Region for SMETS2+ Devices.

• An Indicator of the Monthly Average (Mean) and Median RTT including time spent within the Home Area Network (HAN). The Median is recommended because, when compared to the





average/mean, this measure is less likely to be skewed by extremely large or small numbers and therefore provides a better idea of the typical response time.

- An Indicator of the range of RTT values measured within the month to show the longest and slowest response time recorded.
- A Measure of the percentage of responses delivered within the Target Response Time is calculated by including the response time for all Service Requests that compose a business process. For example, the Install and Commission process will be represented by the seven common SRVs that make up the SMETS2 Install and Commission process for Electricity Smart Metering Equipment (ESME) Devices. In the case of Install and Commission, the TRT target should also be provided for Gas Smart Metering Equipment (GSME). The TRT has the meaning given to that expression in SEC Section H3.14 'Target Response Times'. Targets are those defined in SEC Appendix E 'DCC User Interface Services Schedule'.
- An Indicator of the total number (volume) of SRV requests (listed in table 1) recorded for the period.
- An Indicator of the percentage of SRVs that failed to be delivered due to a communications failure or timeout (E20<sup>2</sup> or E21<sup>3</sup>) or a subsequent failure alert code (N12<sup>4</sup> or N13<sup>5</sup>).

An illustrative example of these measures is shown in table 2 below:

| Table 2: Prepayment – Top Up Device Remotely                              |          |          |          |          |  |  |  |
|---|----------|----------|----------|----------|--|--|--|
| Monthly Performance Measure   | Region A | Region B | Region C | SMETS1   |  |  |  |
| Average RTT   | 29       | 15       | 33       | 12       |  |  |  |
| Median RTT  | 26       | 15       | 35       | 11       |  |  |  |
| Range (Shortest)(Longest)   | (4)(200) | (1)(20)  | (20)(49) | (10)(20) |  |  |  |
| Percentage of Service Responses delivered within the Target Response Time | 97%      | 99%      |          | 99%      |  |  |  |
| Volumes   | 100K     | 90K      | 110K     | 5K       |  |  |  |
| Percentage of Service Requests that failed to be delivered                | 2%       | 9%       | 4%       | 10%      |  |  |  |
| Percentage of Service Requests that generated N12 or N13 Alerts           | -        | -        | -        | -        |  |  |  |

<sup>&</sup>lt;sup>5</sup> Failure to receive Response from Device.



<sup>&</sup>lt;sup>2</sup> Communications Failure – Unable to Communicate with Device.

<sup>&</sup>lt;sup>3</sup> Communications Failure – No Response Received from Device.

<sup>&</sup>lt;sup>4</sup> Failure to deliver Command to Device.



# 2.2 Requirement 2: The DCC shall add specific outcome-based measures to provide a Measure of performance as well as Indicators on the success of the key business processes where they have end to end visibility

The purpose of Requirement 2 is to provide metrics for the overall success of a sub-set of key business processes.

The measure of success will look at the overall outcome of the business process and will be irrespective of the success/failure of each individual common SRV within that process.

The following outcome-based metrics are to be broken down by Device type (not including Install and Commission) and Region.

These metrics have been categorised into Measures and Indicators and are labelled in column "M/I" below.

#### 2.2.1 Measuring success of key business processes

For each business process referenced in table 1 above, the DCC shall measure the combination of SRVs attempted by a Service User for an iteration of that process and report the percentage of those iterations across all Users that returned at least one failure Alert or no response. This metric would be defined as an Indicator.

The DCC shall also use non-communicating Devices identified during each business process as a proxy for gauging estate health.

The DCC is asked to provide a list of error codes for each Service Reference Variant in Table 1, to facilitate the Working Group determining if a business process has been completed successfully if such error codes are received by the User.





#### Additional outcome-based metrics:

#### 2.2.2 **Install and Commission**

Note, although some of the common SRVs listed in table 1 for Install and Commission are applicable to SMETS1, the overall measure of success for the outcome of this business process shall not be applicable to SMETS1.

This is because the installation of SMETS1 Devices is prohibited under the Code.

|     | Install and Commission metrics  |     |   |  |  |  |
|-----|---|-----|---|--|--|--|
| ID  | Requirement   | M/I | Metric  |  |  |  |
| IC1 | Provide a greater level of visibility for the time taken for the DCC Total System for the install and commission process. |     | Measure the Response Times of the common Service Requests and report the percentage that failed to meet the Target Response Times.  Note, this Measure will be provided by the RSVP metrics for the common SRVs listed in table 1 above.  |  |  |  |
|     | Note: Install and Commission is a complex process and is  | I   | Measure daily total volume of successful and failed installations broken down by CH/ESME/GSME and Region.   |  |  |  |
|     | orchestrated differently by each User making measurement of the end-to-end process challenging.                           | I   | Measure daily total volume of installs for the period against the predicted number of installs. This will be broken down by SEC Party and anonymised as a failure to meet historic install volumes could be due to issues outside DCC control. The predicted installations will be based on historic DCC recorded installation volumes data and therefore may only be used for informational purposes.  |  |  |  |
|     |   |     | Measure daily total volume of Install and Commission versus Install and Leave <sup>6</sup> .  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.   |  |  |  |
| IC2 | Provide information on the impact of service degradation and outage on the User.  | 1   | The DCC uses predictive modelling techniques to record and predict behaviour of meter installations in near real-time. The deviation from the norm provides a good indicator of degradation in service and the volume of messages provides a proxy measure of impact on Users. In addition, Sev1 and Sev2 incident data can be combined to provide a more accurate reflection of the User's experience. |  |  |  |

<sup>&</sup>lt;sup>6</sup> The Working Group agreed that for the purpose of this modification, Install and Leave shall include both Proactive Install and Leave and Reactive Install and Leave as defined under the Supply Standard License Conditions.





#### 2.2.3 Change of Supplier

The following Change of Supplier metrics could be provided in the form of an anonymised league table of Service Users.

|      | Change of Supplier metrics   |     |  |  |  |  |  |
|------|--|-----|--|--|--|--|--|
| ID   | Requirement  | M/I | Metric   |  |  |  |  |
| CoS1 | Provide a measure of<br>the success of the<br>Change of Supplier<br>Process. | M   | Measure daily total percentage of successful SRV 6.23<br>'Update Security Credentials (CoS)' SRVs delivered. Where the response erroneously reports a failure, the presence of subsequent critical and non-critical SRs sent by the gaining Supplier will be used as an indicator of success. Include a measure above by Device type and Region. |  |  |  |  |
|      |  | М   | Measure daily total percentage of successful SRVs 1.1.1<br>'Update Import Tariff (Primary Element)' and 6.8 'Update<br>Device Configuration (Billing Calendar)' delivered. Include a<br>measure above by Device type and Region.   |  |  |  |  |
|      |  | I   | Provide information on the reason for failure e.g. where a CoS database becomes unavailable or other Service Provider issue materialises.  |  |  |  |  |
|      |  | I   | Measure the overall success of SRV 6.23 on a daily basis aggregated by each Supplier Party.  |  |  |  |  |

#### 2.2.4 Meter Reads

|    | Meter Reads metrics  |     |  |  |  |  |  |  |
|----|--|-----|--|--|--|--|--|--|
| ID | Requirement  | M/I | Metric   |  |  |  |  |  |
| B1 | Provide a measure of the success of the scheduling of meter reads and delivery of meter reads. | M   | Measure the combination of SRVs listed for this business process in table 1 and advise the overall percentage that returned a failure response or no response. |  |  |  |  |  |





#### 2.2.5 Prepayment

The following Prepayment metrics could be provided in the form of an anonymised league table of Service Users.

The DCC is also requested to provide commentary to recognise any DCC outages or Category 1/2 Incidents.

|     | Prepayment metrics  |     |   |  |  |  |  |
|-----|---|-----|---|--|--|--|--|
| ID  | Requirement   | M/I | Metric  |  |  |  |  |
| PP1 | PP1 Provide a measure of the success of topping up a Device remotely.         |     | Measure the percentage of successful SRV 2.2 'Top Up Device' SRVs successfully delivered to the Devices. Include a measure by Device type and Region.   |  |  |  |  |
|     |   | I   | Provide information on the volumes of success and failures within the period.   |  |  |  |  |
|     |   | I   | Provide a table showing the percentage attempts to top up before success. Provide metric for the first and second attempts and the percentage of failures.  Where failure is above 5%, provide further details on the reason for the failure. |  |  |  |  |
| PP2 | Provide a measure of the success for Update Device Change of Mode on Devices. | M   | Measure the percentage of successful SRVs 1.6 'Update Payment Mode' and SRV 2.1 'Update Prepay Configuration' successfully delivered to the Devices. Include a measure by Device type and Region.   |  |  |  |  |

#### 2.2.6 Update Device Firmware

The outcome-based measures for this business process are a subset of the those defined for 'In Life Device Management' in table 1 above. Specifically, these are aimed at providing a measure of success for the process of updating Device firmware.

|     | Update Device Firmware metrics  |     |   |  |  |  |  |
|-----|---|-----|---|--|--|--|--|
| ID  | Requirement   | M/I | Metric  |  |  |  |  |
| DF1 | Provide a measure of the success of delivering the Device image to the Communications Hub.  | M   | Provide a Measure for the number of target Devices listed in SRV 11.1 'Update Firmware' and how many HANs pertaining to those Devices successfully received an Image.   |  |  |  |  |
| DF2 | Provide information of the success of transferring the Device images from CH to the Device. | I   | Measure Device image verification success (0x8F72) and verification failure (0x8F1c) responses to provide information on the percentage of images that are successfully transferred from the CH to the Device.  Record Devices that did not issue an Alert after the SLA has elapsed to identify failure to transfer from CH to the Device. |  |  |  |  |
| DF3 | Provide information on successful activation of Device firmware image.                      | I   | Measure the percentage of success and failure responses to the SRV 11.3 'Activate Firmware' request.  |  |  |  |  |





#### 2.2.7 Update CH Firmware

This business process is not listed in table 1 above as the DCC is responsible for managing the Communications Hub firmware. Therefore, there are no SRVs for Service Users to use relating to this business process.

|      | Update CH Firmware metrics  |     |   |  |  |  |  |  |
|------|---|-----|---|--|--|--|--|--|
| ID   | Requirement   | M/I | Metric  |  |  |  |  |  |
| CHF1 | Provide a measure of the success of delivering CH firmware image to the Communications Hub. | М   | Measure the percentage of successful CH firmware payload images successfully delivered to the CH. |  |  |  |  |  |
| CHF2 | Provide a measure of the successful activation of the CH firmware image.                    | M   | Measure the percentage of successful CH firmware image activations.                               |  |  |  |  |  |

#### CHF1 implementation

SECAS note that the functionally for CHF1 could be delivered under <u>SECMP0007 'Firmware updates</u> to IHDs and <u>PPMIDs'</u>. However, SECMP0007 would not directly provide the reporting sought by Parties for this measure.

The Proposer and the Working Group have agreed that they would like the DCC to include the measure of CHF1 in its Impact Assessment, irrespective of the progression of SECMP0007. Therefore, the DCC shall assess this requirement against both of the following scenarios:

- CHF1 is implemented as a separate modification separate to SECMP0007; and
- CHF1 is implemented as a change to the reporting only after SECMP0007 is implemented.

#### 2.2.8 Alerts Management

|    | Alerts metrics   |     |   |  |  |  |  |
|----|--|-----|---|--|--|--|--|
| ID | Requirement  | M/I | Metric  |  |  |  |  |
| A1 | Provide a measure of<br>the success of<br>delivering Alerts. | M   | Measure the percentage of Alerts successfully delivered within the required SLA. For Alerts impacted by throttling, i.e. during an Alert storm, this will measure all Alerts sent to the User.        |  |  |  |  |
|    |  | I   | Measure the total number of Alerts that fail to be delivered within the SLA time and a breakdown of the number of failures by Alert code to identify the type of Alert impacting overall performance. |  |  |  |  |

Please see section 2.1.2 of this document for greater detail on what the Proposer and the Working Group are seeking from this business process.





### 2.3 Requirement 3: The DCC will measure end to end Service Availability across the DCC environment and report this by CSP region

#### 2.3.1 Defined DCC Services

**Note**: This section refers to the combination of each of the following DCC interface and supporting sub-systems as a 'Service':

- the DCC User Interface
- the Registration Data Interface
- the Smart Metering Key Infrastructure (SMKI) Repository Interface
- the SMKI Services Interfaces
- the Self-Service Interface (SSI)

Service availability shall be measured as a percentage for each of the above Services.

It should be noted that, whilst this approach accounts for overall service availability of each Service, it would not be reflective of instances in which the Service is partially unavailable.

Those key business processes impacted by partial availability shall be reported alongside the metrics and indicators for service availability of a particular Service. An illustrative example of this is provided in Table 3 below. Note that the Service Level percentages reported for each key business process are an indicator, and would quantify the time, during the reporting period, in which the DCC has the capability to successfully process and deliver a particular Service Request that makes up a particular business process, as defined in Table 1 of this document.

#### 2.3.2 Service Availability metrics

In addition to the considerations above, the DCC is asked to report on how much cost and effort will be required to include the following elements in the solution.

#### Monthly view of end-to-end Service availability

A monthly view of end-to-end service availability for each of the Services described above is reported on as a single percentage figure, as well as depicted as a line graph across the days of the month. This will enable a higher level of granularity and easier identification of potential issues that might have impacted Users throughout the reported period. As stated before, this measure for end-to-end availability should include sub-systems linked to each individual interface. If a particular sub-system (i.e. server) is responsible for supporting multiple interfaces, and this sub-system experiences an outage, then the availability measure for each of the affected Services should be impacted and reflected in the monthly measure.

#### End-to-end Service availability by CSP Region

The view for service availability, where relevant<sup>7</sup>, is split by CSP Regions, for better correlation with Users operational experience.

<sup>&</sup>lt;sup>7</sup> Service availability contains some services that are not regionally based, for example SSI availability has no reliance on CSP region and so would not need to be split by regional availability. SMETS1 is not broken down by region.





#### Reporting Service availability by time of day

Time of day is considered when measuring and reporting on service availability for any particular Service, as this can have a direct impact on User's operations.

The OMR suggests a split (Monday to Friday) between hours where installations are more prominent (08:00-20:00) and hours where other business processes (i.e. CoS) take place (20:00-08:00).

With regards to weekends, the OMR recommends Saturdays to be split between 08:00-12:00 (on-site activities are still performed, i.e. installations) and 12:00 to 08:00. Sundays are generally considered as days of on-site operations inactivity.

#### Measuring Service downtime

Service downtime for each interface and its supporting system components is measured in minutes, and then expressed in hours over the reporting period (e.g. 235 minutes of unavailability in a month would equate to a total of 3.91 hours).

Note, the Proposer and the Working Group do not want a measure of service downtime to be given as an average as this could skew results.

The DCC shall record the overall downtime for each DCC Interface separately, including a breakdown of Planned Maintenance and Unplanned Maintenance.

Additionally, as each Service provided by the DCC is made up of an interface and multiple supporting sub-systems, a particular Service is to be considered available only when all of its supporting subsystems are available, and is to be considered unavailable otherwise.

#### Planned Maintenance

**Note**: In accordance with SEC Section H8, the DCC "shall (insofar as is reasonably practicable) undertake Maintenance of the DCC Systems in such a way as to avoid any disruption to the provision of the Services (or any part of them)." The DCC is governed by the SEC Section H 'DCC Services' regarding the amount of Planned Maintenance per month. Given this allowance, the OMR acknowledges that Planned Maintenance, complying with Section H8.4 of the SEC, should be excluded from, and not impact, the calculation for Service Availability defined in the formula above.

However, the Proposer and the Working Group request the DCC provide an Indicator for planned downtime as this would show what actual availability is for Users. It is acknowledged that the DCC is permitted to carry out planned maintenance and so it is an Indicator rather than a Measure.

#### Measuring Service reliability

The DCC shall produce reliability measures for each of the interfaces described above and reported alongside the figures for service availability. Recommended measures for reliability of a system are reported below:

Total Number of Incidents (category 1 to 5) across the reporting period. Additional Indicators
to inform Users on the reliability of the DCC services would include the overall number of
Category 1 & 2 incidents per Reporting Period (the OMR notes that the DCC already provides
summary information about Category 1 & 2 Major Incidents to Users voluntarily). The OMR





also believes the PMR should include the total volume of Category 3, 4 & 5 Incidents in the Reporting Period, where the Incident resolution is attributed to the DCC as the Responsible Party.

- Average amount of downtime per event (related to the Mean Time To Repair (MTTR)
  measure, which is defined as total maintenance time divided by the total number of repairs).
- Mean Time Between Failures (MTBF), calculated across the reporting period, as operating time (hours) divided by the total number of failures.

An illustrative example of the recommended Measures (M) and Indicators (I) proposed by the OMR for the reporting of service availability and reliability of each interface is provided in Table 3 below:

|                           |                                     | Table 3: Se               | rvice Availability N                      | Measures                |                          |     |  |
|---------------------------|-------------------------------------|---------------------------|---|-------------------------|--------------------------|-----|--|
|                           | Serv                                | ice Availability DC       | CC User Interface -                       | - Service Level         |                          | M/I |  |
| Monthly Pe<br>Measure     | erformance                          | Previous<br>Service Level | Service Level                             | Target Service<br>Level | Minimum<br>Service Level |     |  |
| Service Ava<br>DCC User I | ,                                   | 99.95%                    | 99.40%                                    | 99.95                   | % 99.00%                 | М   |  |
| Service Av                | ailability DCC                      | User Interface – I        | Monthly View                              |                         |                          |     |  |
| 95% 90% 85%               |                                     |                           |   |                         |                          |     |  |
| 80%                       | 1 2 3 4 5                           |                           | 13 14 15 16 17 18 19 2<br>rel ——Minimum S |                         | 5 27 28 29 30 31         |     |  |
|                           |                                     |                           | Time of Day Break                         |                         |                          |     |  |
| Monthly Pe<br>Measure     | erformance                          | Hours of Operati          | ional Activity                            | Hours of Oper           | ational Inactivity       |     |  |
| Service Ava               | ,                                   |                           | 98.80%                                    |                         | 100.00%                  | I   |  |
|                           | ailability DCC split not applicable |                           | Service Availabilit                       | y by Region*            |                          |     |  |
| Monthly Pe<br>Measure     | erformance                          | Region A                  | Region B                                  | Re                      | egion C                  |     |  |
| Service Ava<br>DCC User I | ,                                   | 99.00%                    | 99.80%                                    | 99                      | ).40%                    | I   |  |
| Service Av                | ailability DCC                      | User Interface – I        | Reliability                               |                         |                          |     |  |
| Total Numb                | er of Incidents                     | (of which cat. 1,2)       | (of which cat. 3,4,5                      | )                       | 4 (1) (3)                | I   |  |





| Mean Time To Repair (MTTR)  |                           |         | 3.02 hours |           | 1 |  |
|---|---------------------------|---------|------------|-----------|---|--|
| Mean Time Between Failures (MTBF)                                 |                           |         | 8.09 days  |           | I |  |
| Service Availability DCC User Interface – Business Processes View |                           |         |            |           |   |  |
| Monthly Performance Indicator                                     | Previous Service<br>Level | Service | e Level    | Status    |   |  |
| Install and Commission (ESME)                                     | 99.80%                    | 99.40%  |            | Degraded  | I |  |
| Install and Commission (GSME)                                     | 98.20%                    |         | 99.90%     | Available | I |  |
| Change of Supplier (Gain)   | XX.XX%                    | XX.XX%  |            | Available | I |  |
| Change of Tenancy   | XX.XX%                    | XX.XX%  |            | Available | ı |  |
| Tariff Updates  | XX.XX%                    | XX.XX%  |            | Available | I |  |
| Billing (Scheduled)   | XX.XX%                    | XX.XX%  |            | Available | ı |  |
| Billing (Unscheduled)   | XX.XX%                    |         | XX.XX%     | Available | ı |  |
| Pre-Payment   | XX.XX%                    |         | XX.XX%     | Available | ı |  |
| Security and Key Management                                       | XX.XX%                    |         | XX.XX%     | Available | ı |  |
| In-Life Device Management   | XX.XX%                    | XX.XX%  |            | Degraded  | I |  |
| Logistics CH Ordering and Returns                                 | XX.XX%                    | XX.XX%  |            | Available | ı |  |
| Distribution Networks Post I&C<br>Activity                        | XX.XX%                    |         | XX.XX%     | Available | I |  |
| Alerts Management   | XX.XX%                    | XX.XX%  |            | Available | I |  |





# 2.4 Requirement 4: The DCC shall reduce the time it takes to create the PMR to within 10 Working Days from the end of the measurement reporting period

The SEC states that the DCC must create the PMR within 25 Working Days. However, the DCC shall reduce the time it takes to create the PMR to within 10 Working Days from the end of the measurement reporting period. This is to ensure the PMR remains operationally relevant to Users.

The effect would be that, depending on bank holidays and month end falling on Working Days, the report could be reviewed by the OPSG the month following the end of the reporting period. For example, a report for the month of February could be reviewed at the end of March at the OPSG report review meeting.





#### Requirement 5: In relation to CPM 5, the DCC will improve transparency in the 2.5 reporting provided for incident Categories 3, 4 and 5

Feedback from Distribution Network Operators (DNO) highlighted a lack of transparency in the reporting of Incident Categories 3, 4 & 5 where the DCC is the responsible Party for the resolution of the incident in accordance with the SEC Appendix AG 'Incident Management Policy'.

CPM 5 does not split out the resolution of these per Incident Category. Therefore, in order to improve transparency and confidence in the reporting provided for incident Categories 3, 4 and 5, CPM 5 is to be amended to show individual incident resolution times for each incident category.

Data will be provided in the form of statistics for each Incident Category. The DCC is not expected to provide detail pertaining to each individual Incident raised.

This would be broken down by SMETS1 and SMETS2 and be supplemented by further Indicators detailing:

- the number of Incidents per Category 3, 4 and 5 raised in the reporting period,
- the number that met the Target Initial Response Time8; and
- the number that met the Target Resolution Time.

The Categorisation Matrix within SEC Appendix AG 'Incident Management Policy' states the SLAs for each Incident Category.

The Proposer and the Working Group agree to the DCC's recommendation to report the Incidents closed in period instead of opened, as this ensures that all Incidents raised are reported on. Otherwise, if an Incident is raised and not closed in period, it would not appear in a future report. It also means that Incidents raised towards the end of the reporting period that are not resolved but still within SLA are accurately reported on.

<sup>&</sup>lt;sup>8</sup> Target Initial Response Time is defined in SEC Appendix AG 'Incident Management Policy' as the time period within which an Incident within each Category should be recorded on the Incident Management Log and assigned to a resolver.



Annex A - MP122 business



#### 3. Definitions

#### 3.1 Definitions

#### 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.

#### Indicator

An "Indicator" is something the DCC is not accountable for but that provides a Key Performance Indicator (KPI) that may be of value or use to the industry but cannot have a target attributed to it.

#### **Device Type**

Means, in respect of a Device, a generic description of the category of Devices into which the Device falls.

#### Region

Means each of the regions of Great Britain that are subject to different DCC Service Provider Contracts.

#### **SMETS1 Device**

Means one of the following:

- a SMETS1 ESME;
- a SMETS1 GSME;
- a SMETS1 CHF;
- a SMETS1 GPF;
- a SMETS1 PPMID;
- a SMETS1 IHD; and
- any other device operating on a home area network created by a SMETS1 CHF.

#### **SMETS2+ Device**

Means a Device which is not a SMETS1 Device.





#### 3.2 Rate, Speed, Volume, Payload (RSVP) definitions

#### Rate (R)

The sample period over which the performance is measured. For the purposes of the PMR the rate will be either daily or monthly. A daily measure provides the level of granularity required to capture service degradation or outages that impact a User's business process. A monthly measure will provide a higher-level executive view of service performance.

#### Speed (S)

A measure of the Round-Trip Time (RTT) for an SRV or group of SRVs measured within the rate period. The RTT is measured from receipt of the SRV from the User, to sending a Service Response to the User, and includes time spent within the Home Area Network (HAN). Speed should be measured as an average (mean) as well as a median, as an average can be skewed by extremely large or small values. The OMR acknowledges that measuring RTT excluding the HAN would provide a more useful measure of DCC performance but introduces a number of challenges as this is not currently a technical capability of the system. However, an interim solution would be to calculate a response time using the CSP test message average response time, added to the DSP measured response time for the SRV. This time should be reported and plotted alongside the RTT. This solution is dependent on the CSP test message issues raised in section 3.2.5 of the OMR being addressed.

#### Volume (V)

The total number of Service Requests or group of SRVs processed by the DCC Total System within the period.

#### Payload (P)

The confirmed success or failure of the Service Request within the period. A failure is recorded when a Service Response contains an Error Response Code relating to a communications failure or timeout (E20 or E21), or a subsequent failure Alert code (N12 or N13). This confirms the sending of an SRV and the receipt of a response regardless of whether the response and therefore the request to perform an action has been successful or not.





#### 4. Glossary

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

| Glossary |   |  |
|----------|---|--|
| Acronym  | Full term                               |  |
| СН       | Communications Hub                      |  |
| CoS      | Change of Supplier                      |  |
| CPM      | Code Performance Measure                |  |
| CSP      | Communication Services Provider         |  |
| DCC      | Data Communications Company             |  |
| ESME     | Electricity Smart Metering Equipment    |  |
| GSME     | Gas Smart Metering Equipment            |  |
| KPI      | Key Performance Indicators              |  |
| MTBF     | Mean Time Between Failures              |  |
| MTTR     | Mean Time To Repair                     |  |
| OMR      | Operational Metrics Review              |  |
| OPR      | Operational Performance Regime          |  |
| OPSG     | Operations Group                        |  |
| RSVP     | Rate, Speed, Volume and Payload         |  |
| RTT      | Round Trip Time                         |  |
| SMETS    | Smart Metering Equipment Specifications |  |
| SMKI     | Smart Metering Key Infrastructure       |  |
| SR       | Service Request                         |  |
| SRV      | Service Reference Variant               |  |
| SSI      | Self-Service Interface                  |  |
| TRT      | Target Response Time                    |  |

