

# Guidance

# **DDC Regulatory Instructions and Guidance – Annex 1 Quality of Service Information**

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This document sets out the Regulatory Instructions and Guidance for DCC's reporting of Quality of Service Information. The information reported is used to determine the outcomes of DCC's Operational Performance Regime (OPR).

This document is ancillary to the main Regulatory Instructions and Guidance (RIGs), and should be treated as Annex 1 to that document. Quality of Service Information should be submitted annually by the 31 July, from Regulatory Year 2018, alongside the main Price Control RIGs submission until the end of the Licence term.

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# 1. Introduction

### **Purpose and Structure**

- 1.1 This document sets out the Quality of Service Information Reporting requirements. As outlined in the executive summary of the Price Control RIGs guidance document, we require this information to monitor DCC's outputs, and make determinations on incentives placed on DCC. The information required here must be submitted annually by the 31st July as part of DCC's price control submission.
- 1.2 Information from the Quality of Service Information reporting will be used to make determinations on DCC's Operational Performance Regime (OPR), which also may include publication, or distribution to SEC parties, of some information as a reputational incentive. The Quality of Service RIGs should be treated as an Annex 1 to the price control RIGs document.
- 1.3 As well as monitoring incentives and outputs, the information reported by DCC is used to determine the Baseline Margin Operational Performance Adjustment (BMOPA) under the OPR.
- 1.4 This document is accompanied by a Quality of Service Information reporting template, through which the Licensee is required to report its performance. This document is structured to be read alongside the template.
- 1.5 The document is structured as follows:
  - i. Section 2 Explanation of how the reporting template implements the OPR
  - ii. Section 3 General information of the reporting template
  - iii. Section 4 DCC's reporting requirements and template calculations. Sheets:i. Summary, ii. Directed Values, iii. Service Levels, iv. Number of Enrolled Meters v. Incentive Calculations.
  - iv. Section 5 DCC's reporting requirements and template calculations for each performance measure. Sheets vi. to xiv.
  - v. Section 6 DCC's reporting requirements of additional information. Sheets xv. to xviii.
  - vi. Section 7 Qualitative questions. Accompanying explanation and evidence the Licensee needs to provide.

1.6 The reporting template enables the Licensee to report its performance up until the end of the Licence term. The Licensee is only required to report on past performance, up until the end of the relevant Regulatory Year. For the avoidance of doubt, there is no requirement to forecast future performance.

# **Related publications**

RIGs Guidance Documents

Main RIGs guidance document

Annexes 2 to 4 RIGs guidance document

RIGs Reporting Templates

Main RIGs reporting template

<u>Annex 1 RIGs reporting template – Quality of Service Information</u>

<u>Annex 2 RIGs reporting template - Baseline Margin Project Performance Adjustment</u>

<u>Annex 3 RIGs reporting template – External Costs</u>

<u>Annex 4 RIGs reporting template – Centralised Registration Service Revenue</u>

Other Related Publications

**Smart Meter Communication Licence** 

Decision on Operational Performance Regime

Direction to populate Schedule 4

Decision on Revised OPR Guidance March 2023

# 2. Reporting for the OPR

### **Section summary**

This section sets out: the role of the Quality of Service Information reporting in the Authority's determinations on DCC's Operational Performance Regime (OPR); how the OPR framework calculates the BMOPA; and the purpose of the qualitative questions.

# **Reporting Purpose**

- 2.1 The Authority consulted and decided on the framework of the OPR in September 2017.¹ The Quality of Service RIGs is the means by which DCC reports on its performance against measures in the OPR. The reporting template calculates how DCC's performance will affect the value of the BMOPA for that Regulatory Year. The BMOPA is a constituent part of the Baseline Margin Performance Adjustment (BMPA),² which in turn is a component of the Principal Formula for the Licensee's Allowed Revenue.³
- 2.2 The reporting template calculates the BMOPA to provide transparency on how it is calculated from the Licensee's performance. However, the Authority may take other factors into consideration when determining the value of the BMOPA. This would only be the case if there were material concerns with accuracy, reliability or errors in reporting. For example:
  - i. Any errors in calculations or values in the RIGs or the Licensee's submission;
  - ii. An unsatisfactory response from the Licensee to qualitative questions relating to quality assurance; or
  - iii. Issues raised in reports from any independent audits.
- 2.3 The Authority may request additional/supporting information or documents to assess the accuracy and reliability of the information submitted by the Licensee. If the reporting is not of an acceptable quality, any unreliable or inaccurate data may be discounted or revised, and therefore the BMOPA will be amended.

<sup>&</sup>lt;sup>1</sup> <u>https://www.ofgem.gov.uk/publications-and-updates/decision-dcc-s-operational-performance-regime</u>

<sup>&</sup>lt;sup>2</sup> See Condition 36.12 of the Smart Meter Communication Licence.

<sup>&</sup>lt;sup>3</sup> See Condition 36.8 of the Smart Meter Communication Licence.

### Methodology

- 2.4 The OPR framework consists of a number of formulas to calculate the BMOPA, which underpins the Quality of Service Information reporting. The steps to calculate the BMOPA are set out below. Definitions of all algebraic terms are also included in Appendix 1 of this document.
- 2.5 Step 1: Calculating the incentives. Formulas to calculate performance level incentives (Target and Minimum Performance Level Incentives TPLI and MPLI) are set out in the OPR direction. Performance Level incentives are calculated for each measure on the relevant Performance Measure sheet (vi. to xii) using values from Sheet v. (Incentive Calculations) and Sheet ii. (Directed Values) in the RIGs Annex 1 template. See Section 4 of this document.

For each performance measure:

$$TPLI_{mt} = PMW_{mt} \times R(OPR)_t$$
 Applicable for both Penalty Mechanism A and B 
$$TPLI_{gmt} = G_{gmt} \times TPLI_{mt}$$
 Only applicable for measures using Penalty Mechanism B

Where the values of  $PMW_{mt}$ ,  $Gg_{mt}$  and are set in the OPR Direction. The calculation of R(OPR)t, and  $TPLI_{mt}$  is set out in paragraph 6 of the OPR Direction.

2.6 **Step 2: Calculating performance levels.** The reporting template calculates Reported (RPL), Minimum (MPL) and Target (TPL) Performance Levels for each Performance Measure, applying penalty mechanism A or B as relevant<sup>4</sup>. These are calculated for each measure on the relevant Performance Measure sheet (vi. to xii.), in the 'Variables' and 'Inputs' sections. See Section 5 and Appendix 2 of this document.

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<sup>&</sup>lt;sup>4</sup> For more information on the penalty mechanism see the OPR Guidance (Ofgem, March 2023), pages 24 to 31: https://www.ofgem.gov.uk/sites/default/files/2023-03/OPR%20Guidance%20%28March%202023%29.pdf

2.7 **Step 3: Calculating performance measure value.** Performance incentives (MPLI and TPLI) are then used in each Performance Measure along with the RPL, MPL and TPL to calculate the value of the Performance Measure (Mt) – ie SUM1, SUM2 and so on. These formulas are set out in the OPR Direction. the calculations are in the 'Performance calculations' and 'Performance against levels' sections of the relevant Performance Measure sheet (vi. to xii.). See Section 5 and Appendix 2 of this document.

### For penalty mechanism A

If 
$$RPL_{gmt} > TPL_{gmt}$$
 then  $M_{gmt} = 0$ 

If 
$$MPL_{gmt} \leq RPL_{gmt} \leq TPL_{gmt}$$
 then:

$$M_{gmt} = -\left(1 - \frac{RPL_{gmt} - MPL_{gmt}}{TPL_{gmt} - MPL_{gmt}}\right) \times (TPLI_{gmt} - MPLI_{gmt})$$

If 
$$RPL_{gmt} < MPL_{gmt}$$
 then  $M_{gmt} = -TPLI_{gmt}$ 

### For penalty mechanism B

If 
$$RPL_{rgmt} > TPL_{rgmt}$$
 then  $M_{rgt} = 0$ 

If 
$$MPL_{rgmt} \leq RPL_{rgmt} \leq TPL_{rgmt}$$
 then:

$$M_{rgt} = -\left(1 - \frac{RPL_{rgmt} - MPL_{rgmt}}{TPL_{rgmt} - MPL_{rgmt}}\right) \times (TPLI_{rgmt} - MPLI_{rgmt})$$

If 
$$x_{rgmt} \leq RPL_{rgmt} < MPL_{rgmt}$$
 then:

$$M_{rgt} = -TPLI_{rgmt} + \left(1 - \frac{RPL_{rgmt} - X_{rgmt}}{MPL_{rgmt} - X_{rgmt}}\right) \times XI_{rgmt}$$

where  $X_{rgmt}$  is the performance level at which retained margin reaches its minimum value for measure m in region r and  $XI_{rgmt}$  is the incentive determining the margin retained for measure m in region r for performance at or below performance level X. The current values for X for each measure m are set out in table 3.3 of the OPR Guidance.

2.8 **Step 4: Calculating the BMOPA.** The BMOPA calculation is set out in the Smart Meter Communication Licence and was updated by the OPR Direction<sup>5</sup>. This is the sum of all Performance Measures. Performance against each measure is set out in the Summary sheet (i. Summary).

$$BMOPA_t = SUM1_t + SUM2_t + SDM1_t + SDM2_t + SDM3_t + VMM1_t + VMM2_t$$

# **Qualitative Questions**

- 2.9 The Licensee will also need to answer qualitative questions set out in Section 5. The purpose is to:
  - Provide the Authority and other interested parties (through the price control consultation process) with reasons for any performance issues. It also allows the Licensee to explain why any issues occurred, and any mitigations or fixes it is undertaking for the future;
  - ii. Provide assurance as to the accuracy, reliability and quality of the data submitted; and
  - iii. Understand if, and how much, reporting was excluded from measures due to exceptional events<sup>6</sup> as outlined in the Licensee's Performance Measure Exceptions List, in Section M3 or in Section H of the SEC (Smart Energy Code).

<sup>&</sup>lt;sup>5</sup> OPR Direction (Ofgem, March 2021)

<sup>&</sup>lt;sup>6</sup> For the purposes of this document, by exceptional events we mean incidents or events that have been excluded from, or considered allowed exceptions, to DCC's Performance Measurement Reporting (where the measures are relevant to the OPR), for example because they are on DCC's Performance Measurement Exceptions List, or fall under Section M3 or Section H of the SEC.

# 3. Specified Information – Front Matter, Summary, Directed Values and Service Levels

### **Section summary**

As in the main RIGs template, the General Specified Information covers sign off procedures, version control, logs and universal data requirements. They are presented in the first five unnumbered sheets in the reporting template. Sheets i. to iv. set out inputs and outputs for the BMOPA calculation.

### **Contents and guidance**

3.1 This sheet sets out a list and description of the sheets included in the Quality of Service Information reporting template. It also sets out a colour coded key for the reporting template.

# Sign Off, Version Control, Data change log, and Universal data

3.2 These sheets should be completed in the same manner as that of the main Price Control RIGs template.

# **Summary (Sheet i.)**

**PURPOSE:** summarises performance against Performance Measures and the subsequent value of the BMOPA.

- 3.3 This sheet summarises the outputs of the reporting template, and does not require any inputs from the Licensee. It contains two parts.
- 3.4 The first part sets out the overall value of the BMOPA by adding together the values of Service User, Service Delivery, and Value for Money Measures.
- 3.5 The summarised results in the first part (cell m17:t26) should be entered in Part 3 of Sheet 7 of the main RIGs template with the same format.
- 3.6 The second part (Performance Summary) summarises the Licensee's performance, as calculated on the respective Performance Measure sheet (Sheets vi. to xii.).

### **Directed Values (Sheet ii.)**

**PURPOSE:** inputs values directed by the Authority that determine a) the distribution of the margin at risk across Performance Measures (PMW) and b) the proportion retained for reaching Minimum Performance Levels (Y).

- 3.7 The values in this sheet are required to reflect the values directed by the Authority. The Licensee needs to ensure the values reflect those most recently directed by the Authority.
- 3.8 The first part is the Performance Measure Weight (PMW). This is the percentage of BM (according to OPR) at risk under each Performance Measure.
- 3.9 The second part is the Proportion of Target Performance Level Incentive (TPLI) the Licensee is awarded for meeting Minimum Performance Level (MPL) expressed as Y. This sets how much of the margin at risk under each Performance Measure the Licensee can recover from meeting MPL for each Performance Measure.
- 3.10 These values will be used to calculate TPLI and MPLI in Sheet iv. Incentive Calculations.

# Service Levels (Sheet iii.)

PURPOSE: inputs related service levels and milestones.

- 3.11 This sheet requires the Licensee to input relevant service levels and milestones from relevant documents. These documents are:
  - i. Statement of Service Exemptions<sup>7</sup> that has been approved by the Authority and published on the Licensee's website;
  - ii. OPR Guidance;
  - iii. Section H of the Smart Energy Code;8 and
  - iv. Service Provider Performance Measures, as set out in the Data and two Communications Service Providers' contracts.
- 3.12 Appendix 2 references the measures in these above documents relevant to reporting in these RIGs.

<sup>&</sup>lt;sup>7</sup> As defined in Condition 17 of the Smart Meter Communication Licence.

<sup>8</sup> https://www.smartenergycodecompany.co.uk/sec/sec-and-quidance-documents

- 3.13 The values entered are required to equate to the corresponding values in the above documents as of 1 April of the reporting Regulatory Year, unless directed otherwise by the Authority.
- 3.14 These values are used to calculate TPL and MPL on the sheet calculating the related Performance Measure (Sheets v. to xii.).

# **Number of Enrolled Meters (Sheet iv.)**

**PURPOSE:** calculates the total number of SMETS2 meters live on the DCC network against the number of SMETS1 compliant communicating meters live on the network

3.15 Part one of this sheet requires the Licensee to report the number of SMETS1

Meters live on the DCC network for each month in the Regulatory Year. Part two requires the same information for SEMTS2 Meters.

# **Incentive Calculations (Sheet v.)**

**PURPOSE:** calculates monetary incentives tied to each Performance Measure (TPLI and MPLI).

- 3.16 Part one of this sheet requires the Licensee to report Baseline Margin and Average Specified Rate values as reported in the main RIGs template. The margin at risk for each Regulatory Year is redistributed according to the calculation of BM(OPR), the formula for which is set out by the Authority by direction.
- 3.17 Part two is the calculation of TPLI and MPLI per Performance Measure, calculated as set out by the Authority direction. TPLI and MPLI values for each Performance Measure sheet (Sheets vi. to xii.) draw from this sheet.

# 4. Specified Information - Performance Measures

### **Section summary**

This section describes the Performance Measure Calculations which set out in Sheets vi. to xii. of the Annex 1 reporting template.

### **Performance Measure Calculations (Sheets vi. to xii.)**

**PURPOSE:** calculates the value of the relevant Performance Measure from the Licensee's reported performance.

#### **Performance Measures Value**

- 4.1 There are seven Performance Measures, which reflect different areas of DCC's Service and Delivery outputs.
- 4.2 **Value**: gives the overall value for each Performance Measure.

#### **Performance calculations**

4.3 This section calculates the monetary value of each Performance Measure (m<sub>t</sub>).

This reflects the second half of the four formulas included in the OPR Direction.

#### Performance against levels

- 4.4 This section reflects the calculation of the potential formulas set out by direction by the Authority to calculate m<sub>t</sub>. These formulas will vary depending on which penalty mechanism is relevant for each performance measure.
- 4.5 The 'performance against measure' section identifies the relevant formula. This is reflected in a TRUE/FALSE against each formula. Only one formula should read 'TRUE' for each Regulatory Year.

# Variables – Reported, Minimum and Target Performance Levels (RPL, MPL and TPL)

- 4.6 RPL is calculated on each performance measure sheet. It is a percentage, calculated from the inputs for each individual measure.
- 4.7 TPL and MPL are calculated using data from Sheet iii. (Performance Levels).

  These inputs correspond to the minimum and target service levels for relevant SEC and Service Provider Performance Measures as defined in the OPR Guidance. Where an OPR Performance Measure draws upon more than one related SEC or

Service Provider Performance Measure, MPL and TPL values are weighted to ensure in the consistent level of service the Licensee is measured against.

### **Inputs**

SUM1: Service Availability

4.8 The Licensee reports on five SEC metrics, measuring the availability of DCC's interfaces and their supporting sub-systems averaged across the *n* months of Regulatory Year *t*. These metrics are: DCC User Interface (SA1<sub>it</sub>), Registration Data Interface (SA2<sub>it</sub>), SMKI Repository Interface (SA3<sub>it</sub>), SMKI Service Interfaces (SA4<sub>it</sub>), and Self-Service Interface (SA5<sub>it</sub>). These are equally weighted, and expressed as RPL, as a percentage.

SUM2: Firmware management

4.9 The Licensee reports on the successful delivery of firmware payload images to communication hubs, calculated as a mean of the SEC Code Performance Measure 6A relating to SRV11.1, averaged across the n months of Regulatory Year t. These are equally weighted, and expressed as RPL, as a percentage.

SDM1: Install and Commission

4.10 The Licensee reports on five performance measures relating to the Install and Commission Business Process, averaged across n months of Regulatory Year t. These five performance measures are as follows: PM1.2 Comms Hubs Accepted by Customers (IC1), PM1.3 Comms Hubs not Faulty (IC2), PM1.1 First time SMWAN connectivity at Install (IC3), PM1.3 (South and Central) / PM1.4 (North) SMWAN Connectivity Level (IC4), and SRV8.11 Update HAN Device Log (IC5). This is expressed as RPL, as a percentage. These are equally weighted, and expressed as RPL, as a percentage.

SDM2: Prepayment (Interim Response Times)

4.11 The Licensee reports on four performance measures relating to the delivery of Service Reference Variants (SRV) within Target Response Times, averaged across n months of Regulatory Year t. These four metrics are as follows: PM4.3 CSP Test HAN Interface Command (RT1), PM1.1 and PM1.4 DSP Real Time TRTs (RT2 and RT3), and PM1.1 S1-SP Real-time TRTs (RT4). These are equally weighted, and expressed as RPL, as a percentage.

SMD3: Change of supplier

4.12 The Licensee reports on three SEC performance measures relating to SRVs composing the Change of Supplier Business Process, under SEC Code Performance Measure 6A, averaged across n months of Regulatory Year t. These metrics are as follow: Update Security Credentials (Cos) (CS1), Update Import Tariff (Primary Element) (CS2), Update Device Configuration (Billing Calendar) (CS3). These are equally weighted, and expressed as RPL, as a percentage.

### VMM1: Customer Engagement

- 4.13 This sheet is divided into three parts: Ofgem Scores, DCC Scores and SEC Scores. The Licensee submits an assessment of its performance during the previous Regulatory Year following the instructions set out in the Customer Engagement chapter of the OPR Guidance<sup>9</sup>, using the DCC Scores section. The Licensee is also requested to report on the SEC Panel submission by populating the SEC Score section. The Licensee has the option to add commentary for each one of the assessment questions, using the comment boxes in column V.
- 4.14 Note that Ofgem Scores section should not be populated by the Licensee. The input cells in this section are green. Furthermore, note that only whole numbers between 0 and 3 can be typed into the input cells, any other number will be automatically rejected.
- 4.15 The final scores for each section are calculated as the sum of weighted individual scores for each assessment question. The resulting TPLI for this measure is calculated using Ofgem's Final Score only.

### VMM2: Contract Management

4.16 This sheet is divided into three parts: Ofgem Scores, Auditor Scores and Qualitative Comments area. Ofgem will populate the first two sections as part of the Price Control Review, once it has received DCC's relevant RY Price Control submission and the Auditor's report, following the instructions set out in the Contract Management chapter of the OPR Guidance. As with VMM1, the input cells reserved for Ofgem use are green. The Licensee has the option to provide commentary in relation to the audit process in the comment box in the Qualitative Comments area at the end of the sheet.

<sup>&</sup>lt;sup>9</sup> https://www.ofgem.gov.uk/publications/decision-revised-opr-guidance-march-2023

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- 4.17 Note that only whole numbers between 0 and 3 can be typed into the input cells, any other number will be automatically rejected.
- 4.18 As with VMM1, the final scores for each section are calculated as the sum of weighted individual scores for each assessment question, and he resulting TPLI is calculated using Ofgem's Final Score only.

# Charts

4.19 Each Performance Measure has a series of charts to illustrate performance against the incentive structure over the duration of the Licence.

# 5. Qualitative Questions

### **Section summary**

This section sets out the qualitative questions. These can be answered in supporting documents as part of Quality of Service Information reporting.

- 5.1 **Question 1:** Where the Licensee has not reached the TPL for any Performance Measure please provide a narrative which explains:
  - i. Any reasons why the Licensee was prevented from reaching TPL
  - ii. Any actions or plans to remedy or achieve the TPL in the future.

Why are we asking question 1?

We will use responses to these questions to monitor DCC performance over time and inform any potential future policy changes. Any response to this question will not impact price control determinations (ie the value of BMOPA).

- 5.2 **Question 2:** Provide a description and supporting evidence of the processes in place to quality assure reporting submitted to the Authority. This may include:
  - Assurance the Licensee has undertaken on reporting received from their Service Providers
  - ii. Internal policy processes and procedures
  - iii. Independent auditor reports
  - iv. Consistency with other related reporting (eg Smart Energy Code performance measures)
  - v. Appropriate senior level management and oversight of quality assurance processes.

Why are we asking question 2?

The Licensee needs to demonstrate that it has appropriately quality assured its Quality of Service RIGs submission. As explained in Section 2, an unsatisfactory response to this question could lead to the Authority requiring additional information or assurance from the Licensee. If the Authority is still not assured

that reporting is of the required quality, any unreliable or inaccurate data may be discounted or revised.

- 5.3 **Question 3:** Please provide an assessment of the number and percentage of incidences that have been exempt from reporting due to being exceptional events. Please include:
  - i. Reasons events were excluded from performance reporting, and the number/percentage of exemptions that were for this reason
  - ii. Any quality assurance undertaken to ensure that categorisation of incidences as exceptional events was correctly applied.

Why are we asking question 3?

The primary reason for asking this question is to monitor why reporting is excluded from performance reporting. This can also be used to inform any potential future policy on exceptional events. If the Authority is not assured that the exceptional events policy has been applied correctly it may request further information, or review what the appropriate performance values should have been had the policy been correctly applied.

5.4 **Question 4:** Please specify if, and explain why, additional reporting is not complete, for example because reporting was only developed part way through the year.

Why are we asking question 4?

To understand any gaps or delays in additional reporting. Where there are challenges in providing this information, Ofgem recommends DCC discuss timescales, costs and benefits of this reporting with the SEC Panel Operations sub-group. We will take wider industry's views and priorities into account when considering DCC's explanation.

5.5 Where the Licensee considers any of the information provided to Ofgem should not be made public due to its sensitivity, please clearly advise upon submission why this is the case. The Authority will then consider it before publication.

# **Appendices**

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# Appendix 1 - Algebraic terms

List of Algebraic terms not defined in the Quality of Service reporting template.

 $BM(OPR)_t$  – the amount of baseline margin at risk for year t of the OPR (this excludes BM associated with BM Project Performance Adjustment Scheme).

**BMOPA** – Baseline Margin Operational Performance Adjustment

**DIM 1–4** – Development and Innovation Measures 1 to 4 (part of the BMOPA calculation)

G<sub>g</sub> – the weighting given to meter generation g (as outlined in the OPR Guidance)

g – is meter generation (ie  $g \in \{S1,S2\}$ 

MPL - Minimum Performance Level

**MPLI** – Minimum Performance Level Incentive (the margin allocated to a measure for reaching the MPL for that measure)

**M** – the margin deducted for measure *m* 

m – The relevant measure

 $\bm{p}$  – the proportion of BMt for RY 16/17 and 17/18 allocated equally across the three years RY18/19 to RY20/21.

**PMW** – Performance Measure Weighting (ie the proportion of  $BM(OPR)_t$  allocated to a measure)

**r**- r is a region (ie  $r \in \{N,C,S\}$ )

 $R(OPR)_t$  = the amount of revenue at risk for Regulatory Year t of the OPR

RPL - Reported Performance Level

**SDM 1-4** – Service Delivery Measures 1 to 4 (part of the BMOPA calculation)

**SUM 1–4** – Service User Measures 1 to 4 (part of the BMOPA calculation)

**TZ** – the target score (as defined in the OPR Guidance)

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**t** – the relevant Regulatory Year

**TPL** – Target Performance Level

**TPLI** – Target Performance Level Incentive (The margin allocated to a measure for reaching the TPL for that measure)

VMM 1-4 - Value for Money Measures 1 to 4 (part of the BMOPA calculation)

**X** – the Performance Level at which retained revenue at risk reaches its minimum value (as defined in the OPR Guidance)

Y - proportion of TPLI the Licensee is awarded for meeting MPL

# Appendix 2 – Measure Methodology (as modelled in the Quality of Service RIGs template)

System Performance measure	OPR Metrics	OPR equations: Reported Performance Level  Where: $RPL_{mit}$ is the Reported Performance Level for measure $m$ in month $i$ of Regulatory Year $t$ , and $n$ is the number of months in Regulatory Year $t$ .	Penalty mechanism applicable for the calculation of TPLI
SUM1 Service Availability	DCC User Interface (SA), Registration Data Interface (SA2), SMKI Repository Interface (SA3), SMKI Service Interfaces (SA4), and Self-Service Interface (SA5)	$\begin{aligned} \textit{RPL}_{\textit{SUM1}_{it}} &= \textit{SA1}_{it} \times \textit{w}_{\textit{SA1}_{t}} + \\ \textit{SA2}_{it} \times \textit{w}_{\textit{SA2}_{t}} + \textit{SA3}_{it} \times \textit{w}_{\textit{SA3}_{t}} + \\ \textit{SA4}_{it} \times \textit{w}_{\textit{SA4}_{t}} + \textit{SA5}_{it} \times \textit{w}_{\textit{SA5}_{t}} \\ \\ \textit{RPL}_{\textit{SUM1}_{t}} &= \frac{\sum_{i=1}^{n} \textit{RPL}_{\textit{SUM1}_{it}}}{n} \\ \end{aligned}$ Where: W <sub>Sat</sub> for each metric SA (1-5) is 0.20	A
SUM2 Firmware management	SEC Code Performance Measure 6A relating to SRV11.1	$RPL_{SUM2_{irgt}} = FM_{irgt}$ $RPL_{SUM2_{rgt}} = \frac{\sum_{i=1}^{n} RPL_{SUM2_{irgt}}}{n}$	A for G=1 and B for G=2

SDM1 Install and Commission	PM1.2 Comms Hubs Accepted by Customers (IC1), PM1.3 Comms Hubs not Faulty (IC2), PM1.1 First time SMWAN connectivity at Install (IC3), PM1.3 (South and Central) / PM1.4 (North) SMWAN Connectivity Level (IC4), and SRV8.11 Update HAN Device Log (IC5).	$\begin{aligned} \textit{RPL}_{\textit{SDM1}_{irgt}} &= \textit{IC1}_{irgt} \times \textit{w}_{\textit{IC1}_t} + \\ \textit{IC2}_{irgt} \times \textit{w}_{\textit{IC2}_t} + \textit{IC3}_{irgt} \times \textit{w}_{\textit{IC3}_t} + \\ \textit{IC4}_{irgt} \times \textit{w}_{\textit{IC4}_t} + \textit{IC5}_{irgt} \times \textit{w}_{\textit{IC5}_t} \end{aligned}$ $\begin{aligned} \textit{RPL}_{\textit{SDM1}_{rgt}} &= \frac{\sum_{i=1}^{n} \textit{RPL}_{\textit{SDM1}_{irgt}}}{n} \\ \end{aligned}$ Where: WICgt for each metric IC (1-5) is 0.2	В
SDM2 Prepayment (Interim Response Times)	PM4.3 CSP Test HAN Interface Command (RT1), PM1.1 and PM1.4 DSP Real Time TRTs (RT2 and RT3), and PM1.1 S1-SP Real-time TRTs (RT4)	$\begin{aligned} \textit{RPL}_{\textit{SDM2}_{irgt}} &= RT1_{irgt} \times w_{PP1_t} + \\ RT2_{irgt} \times w_{PP2_t} + RT3_{irgt} \times w_{PP3_t} + \\ RT4_{irgt} \times w_{RT4_t} \end{aligned}$ $\begin{aligned} \textit{RPL}_{\textit{SDM2}_{rgt}} &= \frac{\sum_{i=1}^{n} RPL_{\textit{SDM2}_{irgt}}}{n} \end{aligned}$ Where: $W_{\text{RQTgt}}$ for each metric RT(1-4) is 0.25	Penalty Mechanism A (for metrics RT2, RT3 (common across all meter generations) and RT4 (G=1)  Penalty Mechanism B (for metric RT1; G=2)
SDM3 Change of supplier	Update Security Credentials (Cos) (CS1), Update Import Tariff (Primary Element) (CS2), Update Device Configuration (Billing Calendar) (CS3)	$RPL_{SDM3_{irgt}} = CS1_{irgt} \times w_{PP1_t} + \\ CS2_{irgt} \times w_{PP2_t} + CS3_{irgt} \times w_{PP3_t}$ $RPL_{SDM3_{rgt}} = \frac{\sum_{i=1}^{n} RPL_{SDM3_{irgt}}}{n}$ Where: WCS <sub>gt</sub> CS(1-3) is 0.33	A for G=1 and B for G=2

# Calculation of TPLI

$$TPLI_{mt} = PMW_{mt} \times R(OPR)_t$$
 Applicable for both Penalty Mechanism A and B 
$$TPLI_{gmt} = G_{gmt} \times TPLI_{mt}$$
 Only applicable for measures using Penalty Mechanism B

# Appendix 3 - Glossary

### Α

### **Authority**

The Gas and Electricity Markets Authority (GEMA).

### C

### **Communications hub**

A Device which complies with the requirements of CHTS and which contains two, logically separate Devices; the Communications Hub Function and the Gas Proxy Function.

### **Communications Service Provider (CSP)**

Bodies awarded a contract to be a service provider of the DCC's communications services. Arqiva Limited and Telefónica UK Limited have been appointed to provide these services.

### D

### **Data Communications Company (DCC)**

The company that manages the data and communications to and from domestic consumers' smart meters.

### **Data Services Provider (DSP)**

Body awarded the contract to deliver systems integration, application management and IT hosting services to the DCC. CGI IT UK Limited has been appointed to provide these services.

#### 0

### **Ofgem**

Office of Gas and Electricity Markets.

### Q

### **Quality of Service Information**

Means such of the Specified Information contained in any RIGs issued by the Authority

**Guidance** – DDC Regulatory Instructions and Guidance – Annex 1 Quality of Service Information

under Condition 33 of the Smart Meter Communication Licence, as is required to be reported to the Authority in accordance with Condition 31, in such manner, to such extent, and subject to such further definition as may be set out in those RIGs.

### R

### Regulatory Instructions and Guidance (RIGs)

Provide the basis on which the Licensee must report price control information as required under the Smart Meter Communication Licence.

### S

### **Smart Energy Code (SEC)**

The SEC is an industry code which is a multiparty agreement that defines the rights and obligations between the Data Communications Company (DCC), Suppliers, Network Operators and other users of the DCC's services. All parties must comply with the Code.

#### **Smart Meter Communication Licence**

The Smart Meter Communication Licences granted pursuant to Sections 7AB(2) and (4) of the Gas Act 1986 and Sections 6(1A) and (1C) of the Electricity Act 1989.

### **Service Reference Variant (SRV)**

As listed in the SEC.