

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

MP275 ‘Section K changes to support 4G Communications Hubs rollout’

Annex A

Legal text – version 0.2

About this document

This document contains the redlined changes to the SEC that would be required to deliver this Modification Proposal.

This document contains the changes required to deliver the Proposed Solution.

Section A ‘Definitions and Interpretations’

These changes have been redlined against Section K version 43.0

UKAS	means the United Kingdom Accreditation Service
Unambiguous Consent	means the explicit and informed consent of an Energy Consumer given to a User to undertake a specified action, and that consent shall not be treated as having been given explicitly unless the Energy Consumer has: (a) of his or her own volition, communicated to the User a request for it to undertake that action; or (b) in response to a specific request by the User for him or her to indicate consent to it undertaking that action, taken a positive step amounting to a clear communication of that consent.
UNC	means the Uniform Network Code established pursuant to the Gas Transporter Licences.
<u>Unitary Charge</u>	<u>means the Fixed CH Charge and CH Stock Level Charge calculated by the DCC irrespective of HAN variant.</u>
Unique Transaction Reference Number (UTRN)	has, where used in relation to a SMETS2+ Device, the meaning given to that expression in the GB Companion Specification; or, where used in relation to SMETS1 Device, has the meaning set out in SMETS1.
Unknown Remote Party	for SMETS2+ Devices, has the meaning given to that expression in the GB Companion Specification; and, for SMETS1 Devices, has the meaning set out in the SMETS1 Supporting Requirements.

Section K ‘Charging Methodology’

These changes have been redlined against Section K version 16.0.

Amend Section K3.9 as follows:

K3.9 The apportionment described in Sections K3.7 and K3.8 shall be such that:

$$EFR_t = NFR_t + AHFR_t + \sum_{\forall r} RFR_{rt} + \sum_{\forall r} RCHFR_{rt} + \sum_{\forall r \forall h} RCHDR_{hrt}$$

Where:

EFR_t = the Estimated Fixed Revenue (estimated in accordance with Section K2) for Regulatory Year (t).

NFR_t = the National Fixed Revenue (estimated in accordance with Section K3.7 and K3.8) for Regulatory Year (t).

$AHFR_t$ = the Alt HAN Fixed Revenue (estimated in accordance with Section K3.7 and K3.8) for Regulatory Year (t).

RFR_{rt} = the Regional Fixed Revenue (estimated in accordance with Section K3.7 and K3.8) within each Region (r) for Regulatory Year (t).

$RCHFR_{rt}$ = the Regional Communications Hub Fixed Revenue (estimated in accordance with Section K3.7 and K3.8) within each Region (r) for Regulatory Year (t).

$RCHDR_{hrt}$ = the Regional Communications Hub Device Revenue (estimated in accordance with Section K3.7 and K3.8) ~~for each HAN Variant (h)~~ within each Region (r) for Regulatory Year (t).

Amend Section K6A as follows:

K6A.2 In respect of each Regulatory Year occurring during the UITMR Period or during or after the COMR Period, the DCC will estimate the average number of Smart Metering Systems that there will be during the Regulatory Year. The DCC shall undertake such estimates for Domestic Premises and Non-Domestic Premises separately (being *EDCH* and *ENCH* respectively). For each such Regulatory Year (t), the DCC will estimate the average number of persons within each CH Charging Group (g) for such Smart Metering Systems, and break down such estimates by reference to the Region (r) in which the premises is located ~~and the HAN Variant (h) forming part of each such Smart Metering System~~, such that:

$$\forall g \forall r \forall h ECH_{g h r t} = EDCH_{g h r t} + ENCH_{g h r t}$$

Where:

$EDCH_{g h r t}$ = the DCC’s estimate of the average number of persons within each CH Charging Group (g) for Smart Metering Systems for Domestic Premises during that Regulatory Year (t), broken down by Region (r) and HAN Variant (h); and

$ENCH_{g h r t}$ = the DCC’s estimate of the average number of persons within each CH Charging Group (g) for Smart Metering Systems for Non-Domestic Premises during that Regulatory Year (t), broken down by Region (r) and HAN Variant (h).

Determining the Fixed CH Charges

K6A.3 For each Regulatory Year (t), the DCC will determine the Fixed CH Charge payable in respect of each month (or part month) of Regulatory Year (t) by each person within each CH Charging Group (g) in respect of each Smart Metering System ~~incorporating each HAN Variant (h)~~ for a Non-Domestic Premises or for a Domestic Premises (CHC_{ght}) as follows:

Where:

$$(CHC_{ght}) = \frac{\sum_{vr} RCHDR_{hrt}}{NM_t} \times \frac{\beta_{gt}}{\sum_{vg} (\beta_{gt} \times \sum_{vr} ECH_{ghrt})}$$

β_{gt} = the CH Charging Group Weighting Factor (as set out in Section K3) applicable to Regulatory Year (t) and each Charging Group (g)

NM_t = the number of months (or part months) in Regulatory Year (t)

$RCHDR_{hrt}$ = the Regional Communications Hub Device Revenue (determined in accordance with Section K3) for Regulatory Year (t), ~~HAN Variant (h)~~ and Region (r)

ECH_{ghrt} = the estimated number of persons within each Charging Group (g) for Smart Metering Systems determined in accordance with Section K6A.2 for Regulatory Year (t), ~~HAN Variant (h)~~ and each Region (r).

Calculating number of CHs for Fixed CH Charge Payment

K6A.5 Following the end of each month (or part month) during each Regulatory Year occurring during the UITMR Period or during or after the COMR Period, the DCC will:

- determine the actual number of Smart Metering Systems that there are as at the end of the 15th day of that month (or, in the case of a part month that ends on or prior to the 15th day of that month, at the end of that part month), and shall do so for Domestic Premises and for Non-Domestic Premises separately;
- calculate the number of persons within each CH Charging Group for such Smart Metering Systems; and
- break down these calculations by reference to Parties (p), and (for transparency in the case of Smart Metering Systems for Non-Domestic Premises only) by reference to the Region in which such premises are located.

K6A.6 The calculations in accordance with Section K6A.5 of the number of Smart Metering Systems as at the end of each month (or part month) (m) during Regulatory Year (t) within each Charging Group (g) broken down by reference to each Party (p), and (for transparency in the case of Non-Domestic Premises only) by reference to each Region (r) ~~and HAN Variant (h)~~, shall:

- in respect of Domestic Premises, be represented as $ADCH_{pgmnt}$; and
- in respect of Non-Domestic Premises, be represented as $ANCH_{pgrhmt}$.

Explicit Charging Metrics

K7.5 The Explicit Charging Metrics for each Party and the Charging Period for each month are as follows:

[...]

(o) ('CH returned and redeployed') the number of Communications Hubs which have been returned by that Party during that Charging Period for a reason which is a CH User Responsibility, and which have been (or are intended to be) reconditioned for redeployment pursuant to Section F8 (Removal and Return of Communications Hubs);

(p) ('CH returned not redeployed') the number of Communications Hubs which have been returned, or notified as lost or destroyed, by that Party during that Charging Period for a reason which is a CH User Responsibility, and which have not been (and are not intended to be) reconditioned for redeployment pursuant to Section F8 (Removal and Return of Communications Hubs), but excluding the scenario whereby a 2G Communications Hub or a 3G Communications Hub is replaced with a 4G Communications Hub;

(q) ('CH wrong returns location') an obligation to pay arising during that Charging Period as a result of the return by that Party of Communications Hubs to the wrong returns location as referred to in Section F8.9 (Return of Communications Hubs);

Explicit Charges

K7.6 The DCC will determine the Explicit Charges for each Explicit Charging Metric and each Regulatory Year:

[...]

(f) in the case of the Explicit Charging Metrics referred to in Sections K7.5(l), (n), (o) and (p) ('CH stock level charge', 'CH auxiliary equipment', 'CH returned and redeployed', and 'CH returned not redeployed'), so as to ensure they are uniform across each month of a Regulatory Year and across each Region and do not make any distinction linked to use at Domestic Premises or Non-Domestic Premises;

(g) in the case of the Explicit Charging Metric referred to in Sections K7.5~~(f)~~, (o) and (p) (~~'CH stock level charge'~~, 'CH returned and redeployed' and 'CH returned not redeployed'), on the basis that there can be different charges for each HAN Variant;

(h) so that the Explicit Charging Metric referred to in Section K7.5(o) ('CH returned and redeployed') for each HAN Variant is not more than the Explicit Charging Metric for that HAN Variant referred to in Section K7.5(p) ('CH returned not redeployed');

Calculating Monthly Payments (COMR Period)

K10.7A For each month (or part month) (m) during a Regulatory Year (t) during the COMR Period, the rollout monthly payment (RMP) in respect of the Charges payable by each Party (p) shall be calculated as follows:

$$\begin{aligned}
 RMP_{pmt} = & \sum_{\forall g} \left(RFC_{gt} \times \left(ADSMS_{pgmt} + \sum_{\forall r} ANSMS_{pgrmt} \right) \right) \\
 & + \sum_{\forall g, \forall h} \left(CHC_{gh,t} \times \left(ADCH_{gh,t} + \sum_{\forall r} ANCH_{ghrt} \right) \right) \\
 & + \sum_{\forall g} \left(DAHFC_{gt} \times ADSMS_{pgmt} \right) + \sum_{\forall g} \left(NAHFC_{gt} \times \sum_{\forall r} ANSMS_{pgrmt} \right) \\
 & + \sum_{i=1}^{i=n} (EC_{it} \times ECM_{ipmt}) + TEP_{pmt} + \sum_{e \in m} UBDP_{pemt} + \sum_{l \in m} LP_{plmt}
 \end{aligned}$$

Where:

RFC_{gt}	= the Fixed Charges payable in respect of months (or part months) during Regulatory Year (t) by persons in Charging Group (g) in respect of Mandated Smart Metering Systems for Domestic Premises and Mandated Non-Domestic Smart Metering Systems for Non-Domestic Premises, calculated in accordance with Section K5;
$ADSMS_{pgmt}$	= the amount described as such in Section K5.9;
$ANSMS_{pgmt}$	= the amount described as such in Section K5.11;
CHC_{ght}	= the Fixed CH Charge payable in respect of months (or part months) during Regulatory Year (t) by persons in CH Charging Group (g), for HAN Variant (h) in respect of Smart Metering Systems for both Non-Domestic Premises and Domestic Premises;
$ANCH_{ght}$	= the amount described in Section K6A.6;
$ADCH_{ght}$	= the amount described in Section K6A.6;
$RAHFC_{gt}$	= the Fixed Alt HAN Charge payable in respect of months (or part months) during Regulatory Year (t) by persons in Alt HAN Charging Group (g) in respect of Mandated Smart Metering Systems for Domestic Premises and Mandated Non-Domestic Smart Metering Systems for Non-Domestic Premises calculated in accordance with Section K5B;
EC_{it}	= the Explicit Charge for an Explicit Charging Metric (i) and a Regulatory Year (t);
ECM_{ipmt}	= the Explicit Charging Metrics incurred by a Party (p) during the Charging Period for that month (m) in a Regulatory Year (t);
TEP_{pmt}	= the total amount payable by a Party (p) in respect of Elective Charges and a month (m) in a Regulatory Year (t);
$UBDP_{pmt}$	= the Unrecovered Bad Debt Payment in respect of a month (m) in a Regulatory Year (t) and each Event of Default (e), as calculated in accordance with Section K9;
LP_{plmt}	= the Liability Payment in respect of a month (m) in a Regulatory Year (t) and each Liability Event (l), as calculated in accordance with Section K9.

Calculating Monthly Payments (Enduring)

K10.8 For each month (or part month) (m) during a Regulatory Year (t) after the COMR Period, the monthly payment (MP) in respect of the Charges payable by each Party (p) shall be calculated as follows:

Where:

$$\begin{aligned}
 MP_{pmt} = & \sum_{\forall g} \left(EFC_{gt} \times \left(ADSMS_{pgmt} + \sum_{\forall r} ANSMS_{pgrmt} \right) \right) \\
 & + \sum_{\forall g, \forall h} \left(CHC_{ght} \times \left(ADCH_{ght} + \sum_{\forall r} ANCH_{ght} \right) \right) \\
 & + \sum_{\forall g} (DAHFC_{gt} \times ADSMS_{pgmt}) + \sum_{\forall g} \left(NAHFC_{gt} \times \sum_{\forall r} ANSMS_{pgrmt} \right)
 \end{aligned}$$

$$+ \sum_{i=1}^{i=n} (EC_{it} \times ECM_{ipmt}) + TEP_{pmt} + \sum_{e \in m} UBDP_{pemt} + \sum_{l \in m} LP_{plmt}$$

Where:

- EFC_{gt} = the Fixed Charges payable in respect of months (or part months) during Regulatory Year (t) by persons in Charging Group (g) in respect of Enrolled Smart Metering Systems for both Non-Domestic Premises and Domestic Premises, calculated in accordance with Section K6;
- $ADSMS_{pgmt}$ = the amount described as such in Section K6.7;
- $ANSMS_{pgmt}$ = the amount described as such in Section K6.7;
- CHC_{ght} = the Fixed CH Charge payable in respect of months (or part months) during Regulatory Year (t) by persons in CH Charging Group (g), ~~for HAN Variant (h)~~ in respect of Smart Metering Systems for both Non- Domestic Premises and Domestic Premises;
- $ANCH_{ght}$ = the amount described in Section K6A.6;
- $ADCH_{ght}$ = the amount described in Section K6A.6;
- $DAHFC_{gt}$ = the Domestic Fixed Alt HAN Charge payable in respect of months (or part months) during Regulatory Year (t) by persons in Alt HAN Charging Group (g) in respect of Enrolled Smart Metering Systems for Domestic Premises calculated in accordance with Section K6B;
- $NAHFC_{gt}$ = the Non-Domestic Fixed Alt HAN Charge payable in respect of months (or part months) during Regulatory Year (t) by persons in Alt HAN Charging Group (g) in respect of Enrolled Smart Metering Systems for Non-Domestic Premises calculated in accordance with Section K6B;
- EC_{it} = the Explicit Charge for an Explicit Charging Metric (i) and a Regulatory Year (t);
- ECM_{ipmt} = the Explicit Charging Metrics incurred by a Party (p) during the Charging Period for that month (m) in a Regulatory Year (t);
- TEP_{pmt} = the total amount payable by a Party (p) in respect of Elective Charges and a month (m) in a Regulatory Year (t);
- $UBDP_{pemt}$ = the Unrecovered Bad Debt Payment in respect of a month (m) in a Regulatory Year (t) and each Event of Default (e), as calculated in accordance with Section K9;
- LP_{plmt} = the Liability Payment in respect of a month (m) in a Regulatory Year (t) and each Liability Event (l), as calculated in accordance with Section K9.

Amend Section K11 as follows:

K11. DEFINITIONS

K11.1 In this Charging Methodology, except where the context otherwise requires, the expressions in the left-hand column below shall have the meanings given to them in the right hand column below:

2G Communications Hub

means a Communications Hub which is capable of using 2G mobile cellular radio technology to connect to the SM WAN.

3G Communications Hub

means a Communications Hub which is capable of using 3G mobile cellular radio technology to connect to the SM WAN.

4G Communications Hub

means a Communications Hub which is capable of using 4G mobile cellular radio technology to connect to the SM WAN.

Advanced Meter

has the meaning given to that expression in:
with respect to the supply of electricity, standard licence condition 39 of the Electricity Supply Licence;
with respect to the supply of gas, standard licence condition 33 of the Gas Supply Licence.

Allowed Revenue

has the meaning given to that expression in the revenue restriction conditions of the DCC Licence.

Alt HAN Charging Group

has the meaning given to that expression in Section K3.10.

**Alt HAN Charging Group
Weighting Factors**

has the meaning given to that expression in Section K3.15.