

ESP Networks Ltd
Metering
Charges
Statement

CONTENTS

1.	Introduction	1
2.	Definitions	2
3.	Principal Terms & Conditions	6
4.	Gas Metering Charges	8
5.	Charging Methodology	15
6.	Appendices	26

1. INTRODUCTION



This document sets out the charges and the terms and conditions applicable to the Metering Service provided by ESP Networks Ltd (ESP) under the ESP Network Code. It covers those gas Meter Units owned by ESP and connected to ESP's networks. It is prepared in accordance with the requirements of ESP's Gas Transporter (GT) licence, and the Utilities Act 2000.

End Users on ESP gas networks may choose who provides their metering service. If the Shipper who has a contract with ESP for the provision of a gas connection chooses ESP as their Metering Service provider then the ESP Metering Charge will be billed to the relevant licensed gas Shipper, as detailed in ESP's Network Code.

The purpose of this Metering Charges Statement is to set out the charges issued by ESP to Shippers for the Provision, Installation, and Maintenance of the Meter Unit, the Ancillary Equipment, (where applicable) any other associated apparatus (e.g. the Corrector) and other applicable costs (e.g. the Meter Housing where funded by ESP) and the methodology used to determine those charges.

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2. DEFINITIONS

The following definitions apply to all sections of this Metering Charges Statement.

Ancillary Equipment	Additional equipment distinct from the Meter Unit that may be added as part of the overall Metering Installation (i.e. Flexi Pipes, Pressure Regulator, etc.)
bar	The bar is a metric unit of pressure. It is defined as exactly equal to 100,000 Pa, which is slightly less than the current average atmospheric pressure on Earth at sea level.
barA	(Absolute Pressure) Pressure reading relative to absolute vacuum.
barG	(Gauge Pressure) Pressure reading relative to current atmospheric pressure.
Charging Methodology	Contained within the Metering Charges Statement, the metering Charging Methodology is used to calculate Metering Charges, Termination Charges and Transactional Charges.
Corrector	Equipment used for calculating the volume of gas at a predefined standard temperature and pressure which is equivalent to the volume of gas at actual temperature and pressures recorded as passing through a Meter Unit. Also known as a Volume Converter.
Credit Meter	A Meter Unit that allows the use of gas by an End User without a requirement for up-front payment.
DN	A gas distribution network operator licenced to operate the distribution network within a specific geographic location.
Dumb Meter	Meter Units that are mechanically operated and have no remote communication functionality. Their functionality is limited to a visual display. Dumb Meters are categorised as being either Credit or Prepayment Meters.
Emergency Metering Service Agreement	An agreement between ESP and a Third Party (typically a DN) to provide an emergency MEM service, including the repair and replacement of Meter Units and Ancillary Equipment, performed where an End User or a Shipper has called the national gas emergency helpline.
End User	The individuals or organisations who consume the gas conveyed through ESP's pipeline system.
ESP	ESP Networks Limited.
Gas Act	The Gas Act 1986.
HSE	Health and Safety Executive.
I&C	Industrial and Commercial.
IGT	Independent Gas Transporter.
IGT UNC	The Independent Gas Transporter Uniform Network Code.
MCOP	Metering Code of Practice.
Meter Equipment Manager	As defined in the IGT UNC, the contracted provider of maintenance services to a Meter Unit and, where applicable, Correctors. Also referred to as MEM.

Meter Housing	The purpose built box or shelter for housing gas Meter Units. Typically in domestic properties these are either recessed, surface mounted, semi-concealed or universal.
Meter Asset Provider	The contracted provider and installer of a Meter Unit. Also referred to as MAP.
Meter Provider of Last Resort	(MPoLR) The provision by ESP (as a Gas Transporter) of a Meter Unit or Metering Service under Standard Condition 8 of its Gas Transporter licence where requested by a Shipper, either explicitly or implicitly as the result of established commercial arrangements.
Meter Type	The type of Meter Unit, as set out in section 4 of this Metering Charges Statement.
Meter Unit	A meter and any Ancillary Equipment owned by ESP and installed at a premise.
Metering Charge	Charges to shippers relating to the Provision, Installation and Maintenance of a Meter Unit.
Provision	The element of the Metering Charge to recover the capital cost of the Meter Unit and Meter Housing (if applicable) and ESP's required return on that capital investment during the MUIP.
Installation	The element of the Metering Charge to recover the capital cost of the installation of the Meter Unit, the provision and installation of any Ancillary Equipment, and ESP's required return on that capital investment during the MUIP.
Maintenance	The element of the Metering Charge to recover the ongoing operation and maintenance costs of the Meter Unit, ESP's overheads, ESP's required return for this part of the Metering Service and the recovery of an element of the business start-up costs.
Metering Charges Statement	The 'ESP Gas Metering Charges' document containing charges for Metering Services provided under the ESP Network Code and the Metering Charging Methodology used to calculate those charges, as amended from time to time.
Metering Service	The provision, installation and maintenance of gas Meter Units and associated activities (including those services where Transactional Charges apply).
MUIP	Meter Unit investment period, being a maximum of 25 years.
Network Code	Together, the Individual Network Code of ESP, the framework agreement and the Independent Gas Transporters' Uniform Network Code (IGT UNC) that form the contractual arrangements that exist between ESP and the Shippers that have acceded to its Networks.
Ofgem	The Office of Gas Electricity and Markets (OFGEM), the independent authority that regulates the onshore gas and electricity industries in Great Britain.
Prepayment Meter	A Meter Unit that requires upfront payment and has an integral valve that disconnects when prepaid funds are depleted that open again when an End User's account is replenished.

PSR	Project Summary Report, the document used by IGTs and Shippers for the purposes of bulk confirmations for new connections, as defined in part C1 clause 13 of the IGT UNC.
Qmax	The highest flow rate at which the Meter Unit accuracy is within the maximum permitted tolerance. Also known as a Meter Unit's "badged capacity".
Recovery Uplift	The Recovery Uplift is a component of Metering Charges for Dumb Credit Meter Units only, to bring forward the recovery of investment where Meter Units are inevitably removed as a result of the Government-led Smart Meter roll out.
Reduced Termination Charge	This charge is levied in accordance with this Metering Charges Statement at the point a Meter Unit is removed, and is calculated using the prevailing Metering Charge and a multiple related to the age of the Meter Unit removed. The charge multiples have been reduced to reflect the increased recovery as a result of the application of the Recovery Uplift. This applies to domestic Dumb Credit Meters only.
scmh	The units in which the capacity of a meter is measured. Expressed in Standard Cubic Meters per Hour where a Standard Cubic Meter (Sm3) equals one cubic meter of gas measured at a temperature of 20 °C, and a pressure of 1.01325 barA.
Shipper	An entity licenced to buy gas from producers / importers, convey this through the gas networks owned by Gas Transporters, and sell the gas to End Users.
Smart Meter	A Meter Unit capable of sending a receiving data communications remotely, through communication networks. The Meter Types that constitute Smart Meters are described in section 4 of this Metering Charges Statement.
Smart Type	Meters that, on the date of installation, had the capability to electronically record and remotely communicate energy consumption data but was not compliant with any version of the Smart Metering Equipment Technical Specification (Smart Energy Code Schedule 9).
SMETS	Smart Metering Equipment Technical Specifications, subsidiary documents of the Smart Energy Code, featuring different versions each specifying different functional requirements of Smart Meters.
SMETS 1 Meter	Meters that, on the date of installation, complied with Smart Metering Equipment Technical Specification 1.2 (Smart Energy Code Schedule 9). The relevant version(s) of SMETS is available here .
SMETS 2 Meter	Meters that, on the date of installation, complied with a version of the Smart Metering Equipment Technical Specification 2 (Smart Energy Code Schedule 9). The relevant version(s) of SMETS is available here .
Standard Termination Charge	This charge is levied in accordance with this Metering Charges Statement at the point a Meter Unit is removed, and is calculated using the prevailing Metering Charge and a multiple related to the age of the Meter Unit removed.
Supply Point	The offtake point on ESP's network at which a Meter Unit is installed, enabling the consumption of gas by an End User.

Termination Charge	Is either a Standard Termination Charge or a Reduced Termination Charge or a charge determined individually in the case of I&C Meter Units.
Third Party Meter	Any Meter Unit not owned by ESP that is installed at a Supply Point on ESP's pipeline system.
Transactional Charge	Any charge levied by ESP in accordance with this Metering Charges Statement, not relating to the Provision, Installation and standard expected Maintenance of a Meter Unit.
Up-Front Installation Charge	A Metering Charge, relating to the replacement of an ESP Meter Unit with an ESP Prepayment or Smart Meter Unit, which reflects the costs required for a one-off installation over and above the cost of installation of a Meter Unit on a new housing development.

3. PRINCIPAL TERMS & CONDITIONS

The definitions set out in section 2 (Definitions) of this Metering Charges Statement apply to these Principle Terms and Conditions.

3.1 Incorporation and Effect

These Principle Terms and Conditions are incorporated into and form part of the Metering Charges Statement, in conjunction with which they should be read, and comprise part of the terms upon which Shippers use ESP's Meter Units.

3.2 Metering Charges

- 3.2.1 Where ESP is the designated Meter Unit provider (MEM and/or MAP), or ESP is acting as Meter Provider of Last Resort (MPoLR), the relevant gas Shipper will, in accordance with IGT UNC, be bound by the terms of this Metering Charges Statement.
- 3.2.2 ESP will invoice Metering Charges to the relevant gas Shipper for each Supply Point in relation to which ESP provides a Metering Service.
- 3.2.3 Gas Shippers will in the ordinary course be invoiced for Metering Charges on a monthly basis in arrears.
- 3.2.4 The amount of each invoice will be derived from the Metering Charges contained in the Metering Charges Statement.
- 3.2.5 When a Supply Point transfers from one gas Shipper to another, the ESP Metering Service will transfer with the Supply Point and the new gas Shipper will become the relevant licensed gas Shipper for that Supply Point and ESP shall:
 - 3.2.5.1 no later than the start of the calendar month following the supply point transfer, invoice the original gas Shipper for all Metering Charges incurred in relation to the relevant supply point up to the transfer date; and
 - 3.2.5.2 invoice the new gas Shipper for all Metering Charges incurred in relation to the relevant supply point from the transfer date onwards.
- 3.2.6 Metering Charges contained in the Metering Charges Statement assume the installation of the Meter Unit (and where applicable it's Meter Housing) is into a meter location made ready to receive the Meter Unit. They do not include:
 - 3.2.6.1 the cost of the provision of the meter location; and
 - 3.2.6.2 any subsequent modifications to the meter location, which are recoverable by ESP as separate charges to the relevant gas Shipper.

3.3 Indexation

- 3.3.1 ESP reserves the right to vary its Metering Charges, in its absolute discretion, in line with the Retail Price Index.
- 3.3.2 ESP will review the Charging Methodology on an annual basis. Any modification to it, which ESP considers to be material, will be circulated to relevant Shippers for their comment at least 28 days before the date on which ESP proposes that the relevant modification will have effect.
- 3.3.3 ESP reserves the right to vary the Charging Methodology at other times, as required and as more particularly set out in clause 9 of the Metering Charges Statement.

3.4 Meter Unit Removal

- 3.4.1 Metering Charges are calculated on the basis of projected Meter Unit revenue over the relevant MUIP. Where a Meter Unit is removed before the expiry of the relevant MUIP, ESP is entitled to recover from the relevant gas Shipper:
 - 3.4.1.1 the costs reasonably incurred by ESP as a result of the removal of the relevant Meter Unit;
 - 3.4.1.2 any investment in the relevant Meter Unit that ESP has not recovered as a result of the Meter Unit's removal (this does not include projected return on investment).
- 3.4.2 Meter Unit removal costs will be invoiced to the relevant gas Shipper within a reasonable time after ESP becomes aware of the removal of a Meter Unit.

3.5 Third Party Meters

- 3.5.1 Should a Third Party Meter Unit be required at connection, notice to that effect shall be given to ESP by the Shipper as soon as reasonably practicable, in any case no later than the Shipper acceptance of the PSR, so that ESP may modify the quotation for service connection accordingly.
- 3.5.2 If notice under clause 3.5.1. is not given, the terms of the service connection will be on the basis that an ESP Meter Unit will be fitted and the subsequent Metering Services will be provided on ESP's terms and conditions (as outlined in the Metering Charges Statement).
- 3.5.3 If notice under clause 3.5.1 is given after ESP has made, or committed, its capital investment (whether in whole, or partially) on the basis that an ESP Meter Unit will be required, ESP will be entitled to recoup its investment and costs incurred.
- 3.5.4 The MUIP in relation to a Meter Unit starts on the installation date of the Meter Unit. When a Meter Unit is replaced, for whatever reason, the relevant MUIP for the replacement Meter Unit starts on the installation date of the replacement Meter Unit.

3.6 Appointment and De-Appointment

- 3.6.1 ESP will be deemed the appointed Meter Asset Provider when:
 - 3.6.1.1 an End User has chosen ESP or someone authorised to act on the End User's behalf as its Meter Unit provider at that Supply Point; or
 - 3.6.1.2 notice under clause 3.5.1 is not given; or
 - 3.6.1.3 the relevant gas Shipper has notified ESP of its appointment as the Meter Asset Provider; or
 - 3.6.1.4 ESP installs a Meter Unit at a Supply Point as part of an emergency visit to an End User's home, in accordance with its Emergency Metering Service Agreement.
- 3.6.2 ESP will be deemed to be fully de-appointed as the Meter Asset Provider when:
 - 3.6.2.1 the relevant gas Shipper has notified ESP of a Meter's removal; and
 - 3.6.2.2 when all relevant charges, as set out in this Metering Charges Statement, have been paid in full.
- 3.6.3 ESP will be deemed the appointed Meter Equipment Manager for all Meter Units where ESP is the Meter Asset Provider, until:
 - 3.6.3.1 the relevant gas Shipper has notified ESP of its de-appointment as the Meter Equipment Manager; and
 - 3.6.3.2 agreed with ESP the terms under which the Shipper shall ensure the upkeep of the relevant ESP owned meter assets.
- 3.6.4 Until ESP has been de-appointed as both the Meter Asset Provider and Meter Equipment Manager for a relevant Meter Unit, the relevant gas Shipper will be bound by the terms of the Metering Charges Statement (for the avoidance of doubt this includes the continued payment of all relevant charges).

3.7 Separation of Services Provided

ESP is not obliged to offer any of the services listed in this Metering Charges Statement in isolation from each other, even where they are priced individually.

4. GAS METERING CHARGES

Supporting information for the meter types and associated charges can be found section 5 'methodology'.

The annual charges for Meter Unit provision, installation and maintenance vary depending on the Meter Unit's Qmax.

4.1 Domestic Metering Charges

Meter Type								
		Dumb			Smart			
		Credit	Prepayment	I&C	Smart Type (Fully Funded)	Smart Type ¹ (Part Funded)	SMETS 1	SMETS 2
£/Annum	Provision	£8.61	£28.61	£8.61	£29.66	£17.75	£29.66	£29.66
	Installation	£5.82	£19.32	£5.82	£19.29	£11.89	£19.29	£19.29
	Maintenance ²	£3.75	£3.75	£3.75	£0.97	£3.75	£0.97	£0.97
	Recovery uplift ³	£5.79	-	-	-	-	-	-
	Total	£23.96	£51.61	£18.17	£49.92	£33.39	£49.92	£49.92
Pence/Day	Provision	2.3522	7.8157	2.3522	8.1043	4.8507	8.1043	8.1043
	Installation	1.5892	5.2777	1.5892	5.2698	3.2496	5.2698	5.2698
	Maintenance ²	1.0239	1.0239	1.0239	0.2649	1.0239	0.2649	0.2649
	Recovery uplift ³	1.5813	-	-	-	-	-	-
	Total	6.5467	14.1173	4.9654	13.6390	9.1243	13.6390	13.6390

Correctors⁴

Pence/Day		£/Annum
Provision	55.9003	204.60
Installation	22.5359	82.48
Maintenance	50.7911	185.90
Total	129.2273	£472.97

¹ Indicates where the Smart Type Meter is part funded by the property developer for the sites where the Meter Unit was installed (i.e. increased upfront customer contribution).

² Maintenance includes residual charges, emergency call out and make safe costs. Maintenance excludes the activities where Transactional Charges apply.

³ Note that where the investment in a Meter Unit has been fully recovered, Provision, Installation, and Recovery Uplift is no longer charged for as long as that Meter Unit remains installed. The maintenance charge will continue to be levied.

⁴Correctors are fitted to Meter Units which are expected to pass 3,000,000 kWh per year or more.

4.2 Transactional Charges

The following Transactional Charges apply to all Meter Units. These charges are in addition to the Metering Charges. Note that these charges may vary depending on location, and so are indicative rates. Shippers will be notified where charges are expected to differ or change. This may happen part way through a year.

End User / Shipper Requested New Installation or Meter Exchange

Service	Description	Service Level	Credit (Dumb)	Prepayment (Dumb)	Smart Meter
Meter Unit for new Supply Point.	Provide and Install an ESP Meter Unit (includes time, materials and pressure controlling equipment) for a new Supply Point without an existing Meter Unit into prepared meter location already suitable for the Meter Unit and readily accessible. Includes testing (excludes any trace & repair work), purging and relighting.	5 working days	No charge	No charge	No charge
End User / Shipper Requested Exchange	Replace an existing ESP Meter Unit with another ESP Meter Unit of any type (includes time, materials and pressure controlling equipment) into an existing meter location (including installation within a semi concealed meter box) already suitable for the new Meter Unit and readily accessible. Includes testing (excludes any trace & repair work), purging and relighting. ESP will also issue a Termination Charge for the removed Meter Unit as per section 4.7.	5 working days	£T&M plus Termination Charge (PPM to ESP Credit Meter)	£T&M plus Termination Charge (with an ESP specified Meter Unit)	£T&M plus Termination Charge (with an ESP specified Meter Unit)

Exchange or Repair Damaged Meter

Service	Description	Service Level	Credit (Dumb)	Prepayment (Dumb)	Smart Meter
Exchange Damaged Meter	Includes time and material required to exchange a damaged Meter Unit (limited to just the meter). Includes testing (excludes any trace and repair work), purging and re-lighting. ESP will also issue a Termination Charge for the removed Meter Unit as per section 4.7 <u>Charges are only levied where, in the opinion of ESP, the damage is not due to normal wear and tear.</u>	4 hrs (emergencies) 5 Working Days (non-urgent)	£T&M	£T&M	£T&M
Repair Damaged Meter Unit	Includes time and material required to repair a damaged meter and, or, associated apparatus. Includes testing (excludes any trace and repair work), purging and re-lighting. <u>Charges are only levied where, in the opinion of ESP, the damage is not due to normal wear and tear.</u>	4hrs (emergencies) 5 Working Days (non-urgent)	£T&M	£T&M	T&M

Maintenance

Service	Description	Service Level	Credit (Dumb)	Prepayment (Dumb)	Smart Meter
Warrant Hire	Attend site in conjunction with Warranted Access.	5 Working Days	£T&M	£T&M	£T&M
Emergency Call Out	Monday to Sunday, make safe only.	4hrs	No charge	No charge	No charge
Defective battery	Replace Meter Unit battery, where the relevant Meter Unit has been installed for a period of less than 12 months.	5 Working Days	No charge	No charge	No charge
Depleted battery	Replace Meter Unit battery, where the relevant Meter Unit has been installed for a period of 12 months or more.	5 Working Days	£T&M	£T&M	£T&M
Meter Reset	On a Prepayment Meter where a fault has been developed that can be rectified by an engineer using the “engineering menu” of the Meter Unit, without the need for the Meter Unit to be exchanged.	4hrs	N/A	£T&M	N/A

4.3 Other Charges

Miscellaneous charges that apply to all types of domestic Meter Units.

Emergency Works Undertaken by ESP on Third Party Meters

Service	Description	Service	Credit (Dumb)	Prepayment (Dumb)	Smart Meter
Emergency Call out to repair Third Party Meter	Carry out remedial action to resolve Meter Unit fault (typically includes faults on flexi pipe, pressure regulator and test nipple) on a Third Party Meter.	4hrs	£T&M	£T&M	£T&M
Emergency Call out to replace Third Party Meter	Carry out Meter exchange to install an ESP owned asset to resolve Meter Unit fault (where fault cannot be repaired through remedial action, the faulty meter will be replaced with an ESP owned meter).	4hrs	No charge	No charge	No charge

The provision of emergency works services on Third Party Meters is subject to the availability of the service. Where a faulty Meter Unit is replaced with a Smart Meter under ESP's Emergency Metering Service Agreement, a follow up visit to the End User's premises by the Shipper (or associated Supplier) may be required in order to restore full smart functionality of the new Meter Unit. Where a Meter Unit cannot be repaired and is replaced with an ESP owned Meter Unit, the ownership of the Meter Unit following installation shall remain with ESP (unless prior contractual arrangements to the contrary are in place).

Ofgem Domestic Meter Accuracy Test

Service	Description	Service Level	Charge
Ofgem Meter Accuracy Test (OFMAT)	Includes, transportation of the Meter Unit and time and materials required to exchange a Meter Unit. Includes secure transportation box. Excludes the cost of Meter Unit itself. Includes testing (excludes any trace and repair work), purging and re-lighting. <u>Charges are only levied if no fault or inaccuracy is found with the Meter Unit.</u>	5 Working Days (exchange Meter Unit)	£227.19

Meter Position Alteration

Service	Description	Service Level	Charge
Alter position of Meter Unit	Remove and relocate Meter Unit and Meter Housing. Includes adjusting, extending or reducing inlet & outlet pipework where required. Includes testing (excludes any trace and repair work), purging and re-lighting	15 Working Days (Quotation)	Request quotation £T&M

Meter Removal

Service	Description	Service Level	Charge
Remove Meter	Includes removal of Meter Unit, capping off service pipe and purging of all downstream pipework.	5 Working Days	£T&M

Other

Service	Description	Service Level	Charge
Aborted Visit	No access to scheduled appointment. Meter worker unable to carry out, or complete job. This charge applies to all meter work where the work is aborted (including Transactional Charges).	n/a	£T&M
Additional Time and Work	Where additional time and, or, additional work is required for a job than originally quoted for, or reasonably anticipated.	n/a	Extra £T&M
Administration Costs	In most cases, ESP's internal administration and other costs are included within the charges, or are taken as a business operating cost. However should these costs be significantly higher than normally required for particular work an additional charge may need to be charged to ensure full cost recovery.	n/a	£T&M
Other	Any other work relating to the Meter Unit not specified.	n/a	£T&M

Notes

Descriptions of the abbreviations used are as follows:

- n/a: Not applicable as ESP does not provide this service for this Meter Type.
- No charge: ESP does not charge for this service for this Meter Type.
- £T&M: Charge is based on the time and material required to carry out the work including administration and other associated costs.
- [£xx.xx]; Cost of service (where specified).

■ Cost Recovery Multiples

A Termination Charge is levied where a Meter Unit is removed for any reason other than by ESP as part of the normal operation and maintenance. The relevant Termination Charge is calculated by multiplying the prevailing Metering Charge (or relevant component(s)) by the appropriate multiple listed below.

For the purposes of the recovery calculation, the defined age of a Meter Unit is based on the number of years that a Meter Unit has been installed in the same Supply Point rounded up to the nearest whole number. For example if a Meter Unit has been installed for three and a half years it will fall into the four year old age bracket.

Where there is a Corrector, and/or any other additional item charged for in addition to Metering Charges, the Termination Charge is calculated on the same basis as Meter Unit.

■ Cost recovery multiples – Dumb Credit Meter (Reduced Termination Charge)

Meter Provision; Meter Installation

Age (years)	1	2	3	4	5	6	7	8	9	10	11	12
Multiple	8.5	7.7	7	6.3	5.6	4.8	4	3	2	0.9	0.3	0.1

Meter Maintenance

Age (years)	1	2	3	4	5	6	7	8	9	10	11	12
Multiple	5	4.7	4.4	4	3.5	2.9	2.3	1.7	1	0.4	0.1	0.1

■ Cost recovery multiples – Prepayment Meters (10 Year MUIP)

Meter Provision (Prepayment); Meter Installation (Prepayment)

Age (years)	1	2	3	4	5	6	7	8	9	10
Multiple	5.9	5.8	5.2	4.7	4.0	3.4	2.7	1.9	1.0	0.0

Meter Maintenance (Prepayment)

Age (years)	1	2	3	4	5	6	7	8	9	10
Multiple	2.8	2.7	2.5	2.1	1.6	1.1	0.7	0.4	0.1	0.0

■ Cost recovery multiples – Smart Meters & I&C Meter Units

Meter Provision; Meter Installation

Age (years)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Multiple	8.6	8.1	7.8	7.6	7.4	7.2	6.9	6.5	6.1	5.7	5.2	4.6	4.0	3.4	2.7	1.9	1.1	0.5	0.1	0.0

Meter Maintenance

Age (years)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Multiple	5.1	5.0	5.0	4.9	4.8	4.5	4.1	3.8	3.3	3.1	3.0	2.5	2.3	2.2	2.0	1.3	0.9	0.6	0.3	0.0

5. CHARGING METHODOLOGY

ESP's Licence requires it to publish an explanation of the methods and principles by which its charges are calculated. This section describes ESP's Charging Methodology.

When ESP evaluates a proposed network, its transportation and Metering Charges will reflect three factors: the capital invested in the network by ESP, the operating costs for the network, and the risks undertaken by ESP in investing and operating that specific network.

Shippers may contact ESP with any queries relating to this Charging Methodology.

5.1 Persons Entitled to Convey Gas

A person entitled to convey gas will be a suitably licensed gas Shipper that has agreed to ESP's terms and conditions to enable it to convey gas through ESP's gas transportation systems. This will include being a signatory to the ESP Network Code.

For the purpose of this Metering Charges Statement, the relevant licensed gas Shipper will be a Shipper entitled to convey gas that is responsible for a relevant Supply Point to which a Metering Charge applies. For the avoidance of doubt, when a Supply Point transfers to another Shipper, the ESP Metering Service will transfer with the Supply Point and the new Shipper will become the relevant licensed gas Shipper for that Supply Point.

5.2 Standards of Service

ESP has produced a separate document outlining the standards of service End Users connected (or connecting) to its networks can expect. A downloadable PDF version is available [here](#). For a hard copy, please contact ESP at the address given. This document can also be made available in large print upon request.

5.3 ESP Network Code

The ESP Network Code is the legal document that defines the rights and responsibilities of ESP and gas Shippers in relation to the use of ESP's gas transportation systems. Reference should be made to the ESP Network Code (as modified from time to time), which details all relevant obligations and liabilities. For the most recent version of this code, and further information, go to www.igt-unc.co.uk.

5.4 Obligation to Provide a Metering Service

In accordance with Standard Condition 8 of the Gas Transporter licence, ESP must offer to, where required, provide a Metering Service for any Supply Point connected directly to its networks. The subsequent Metering Service is provided in accordance with the terms and conditions of ESP's Network Code and this Metering Charges Statement.

5.5 Payment Terms

A detailed description of ESP's payment terms can be found in the ESP Network Code. With the exception of payment terms for Termination Charges, where there are conflicts between the payment terms in the Network Code and those summarised below, the terms in the Network Code will prevail. For convenience, the following summary is provided.

■ Invoices

Shippers are invoiced on a monthly basis and the invoice will be for the applicable charges for the previous month. The invoices are derived from the Metering Charges shown within this Metering Charges Statement. A Shipper is invoiced for a Supply Point's Meter Unit as soon as the Shipper takes responsibility for that Supply Point. Meter Unit removal costs are invoiced to the relevant Shipper as and when required. Invoice backing data is provided on each occasion.

■ Termination Charges

Payment terms for Termination Charges are 30 days from date of invoice. For the avoidance of doubt, Recovery Uplift is not included in the calculation of Termination Charges.

■ Units and calculation

All charges are calculated in £ per annum. Pence per day charges are used for billing purposes and are derived from the initial £ per annum figures.

■ VAT

All charges in this document are net of VAT. Where VAT applies, it is added at the appropriate rate according to the tax laws prevailing at the time.

5.6 Modification of Gas Metering Charges

The current methodology is for Metering Charges to track inflation and any increases are applied on 1st April each year. As ESP is deemed to be following its methodology, ESP is not required to give prior notification of inflationary increases to Metering Charges in April.

The Charging Methodology is reviewed and updated on an annual basis, and if required, any proposed material modification to it is made in consultation with relevant Shippers at least 28 days before such modification is made.

There may be occasions when this Charging Methodology will need to be modified before the annual review and on these occasions all reasonable endeavours will be made to notify the relevant Shippers and any other relevant parties before the changes become effective. The following are examples of when such modifications may be required:

- When directed to do so by Ofgem, or the Director;
- Changes in the regulations, or the law; or
- Unforeseen expenses and significant changes in the economic environment.

There may be a need to modify an assumption that feeds into the Charging Methodology. Where this change is not significant or of a type reasonably expected to occur from time to time, no consultation will be necessary. Where ESP deems an assumption change to be significant, it will consult in the usual manner, setting out the reasons for the change in assumption, and how it better satisfies the requirements of the Metering Service.

5.7 Costs Used to Derive the Gas Metering Charges

The charges are intended to reflect the costs of providing, installing, and maintaining the Meter Units on ESP gas transportation systems. The bulleted section below describe the costs used to derive ESP's Metering Charges.

■ Costs - General

The main elements of these are as follows:

- The meter and any apparatus that forms part of the Meter Unit, for example pressure regulator, valves, base and pipe-work;
- Any other costs associated with the provision and installation of the Meter Unit, for example project management, administration, and the funding of the Meter Housing where required;
- Repair and replacement of the Meter Unit and any other associated apparatus;
- The write-off value of the unrecovered capital investment for faulty Meter Units replaced and the higher capital expenditure for the replacement Meter Units installed as a one-off under ESP's emergency contract;
- The provision and installation of the Meter Unit's original Meter Housing (if applicable);
- Consents required for the Meter Unit, for example easement payments to landowners;
- Emergency service to deal with gas escapes and any other emergency work relating to the Meter Unit;
- The administration and general running costs associated with the Meter Unit;
- Operating costs and service specifically related to Prepayment Meters, and other specialised Meter Units;
- Insurance costs;
- Business start-up costs; and
- The removal and disposal of the Meter Unit when scheduled for replacement by ESP.

■ Other Administration and Development Costs

These may include the following:

- Operation of a Supply Point Administration service;
- Operation and development of the required computer databases;
- Billing and other financial functions;
- Metering Charges Statement upkeep and modifications;
- MCoP accreditation maintenance;
- Upkeep and development of an asset management system;
- Operation and development of systems required specifically for Prepayment Meters; and
- General group overhead costs that the metering business benefits from, for example senior management's time, regulatory support, accommodation, and marketing activities.

■ Business Rates

Gas Meter Units are not rated individually but are included as part of the operations of a gas transporter. To reflect the fact that Meter Units are income-generating assets and so could be considered a rateable item within the gas assets, an element of these rates may be allocated to the Meter Unit.

5.8 Excluded Costs

The charges are intended to reflect the costs of providing, installing, and maintaining the Meter Units on ESP gas transportation systems. The bulleted sections below describe the costs excluded from the Methodology and calculations used to create the Metering Charges.

■ General meter works

The Metering Charge assumes the installation of the Meter Unit into a meter location made ready to receive the Meter Unit and, where applicable, original Meter Housing. Metering Charges do not recover the provision of any

replacement Meter Housing. For instance, if an existing Meter Unit is replaced with another ESP Meter Unit that requires re-location works or new Meter Housing, the costs of this re-location will be charged to the Shipper separately. Examples of this include:

- where a Prepayment Meter is installed and needs to be more accessible for the End User; or
- where a Smart Meter is installed and needs to be relocated to protect it from wet weather and/or to enable the gas meter to connect to the Home Area Network.

Any general post-installation meter works carried out on an existing Meter Unit are not included in the rental charges (such as relocations, removals, or isolations).

■ **Theft of Gas**

The Metering Charge does not include any adjustment relating to costs associated with individual cases of theft.

■ **Meter Reads**

There is a requirement for Meter Units at an offtake point to be read periodically. The conditions for this are set out in the ESP Network Code. Shippers are required to organise the agent to read the Meter Units they are responsible for.

Meter reading services are distinct from the provision of Metering Services and do not form part of these Metering Charges. A summary of the main meter reading requirements and ESP's meter reading service has been included in ESP's Transportation Charging Statement.

5.9 Excluded or Optional Services

Some elements of the Metering Service are split out as separately chargeable items in section 4 of the Metering Charges Statement. This allows Shippers flexibility in procuring these services. This schedule of optional services may be extended in the future.

By prior agreement with ESP, there may be further services that could be treated as optional and be carried out by the Shipper or an alternative agent. Additional terms and conditions may need to be agreed by ESP if this is the case.

5.10 Charges linked to inflation

ESP's Metering Charges and Transactional Charges track inflation. The annual inflation increases are applied on 1st April each year. ESP's charges are deemed as following the methodology when the inflationary uplift is applied, and ESP is not required to give Shippers prior notification of these scheduled increases in Metering Charges.

The charging year runs from April to March, the annual increase due to inflation is on 1st April. However, the data used to calculate the Retail Price Index is not available for the implementation of the changes on 1st April if the April to March period is used. Therefore the period January to December is used to calculate the relevant increase in inflation. This adjustment is based on the same data as used by Ofgem when it calculates the Retail Price Index adjustment for RPC each year, (with an example based on 2015-2016):

Source: Office of National Statistics

(<http://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/chaw>)

Title: Retail Price Index: All Items Index Jan 1987 = 100

Series Identifier (type of Index used): CHAW (takes into account all items)

EXAMPLE - Defined Period	Arithmetic Average	RPI (%)
January to December 2015	258.54	1.74%
January to December 2016	263.05	

The Recovery Uplift is adjusted for inflation each April in accordance with this methodology.

5.11 Domestic Meters

For domestic size Meter Units (Qmax less than 11 scmh), Metering Charges vary depending on the functionality associated with the specific type of meter unit (i.e. whether a Meter Unit is a Dumb, Smart, Credit, Prepayment, Smart Type or a SMETS compliant Meter Unit). Variations in Rental Charges for different Meter Types reflect the additional costs associated with providing prepayment and Smart Meter equipment and services. Some Smart Metering Services are charged for outside of the standard charging framework of Provision, Installation and Maintenance. These excluded elements are as follows:

- The cost to repair or replace the Meter Unit (in specific cases) is charged for on a time and material basis for each incident specific to the Meter Unit involved.
- Some of the operational costs associated with the management of Shipper payments may be charged for based on usage.
- Specific maintenance costs which are required for an electronically operated Meter Unit.
- If the investment provided by ESP is not enough to fully fund the capital cost of the Meter Unit then a contribution from the party requesting the Smart Meter will be required.

The variations noted above reflect the differences in the nature of the markets between (1) Credit Meters and (2) Prepayment and Smart Meters. ESP considers that it is inequitable to smear the additional costs attributed to Prepayment and Smart Meters across all End Users.

Prepayment Meters have a shorter anticipated lifespan than Credit and Smart Meters and the investment in Prepayment Meters is recovered over a ten year period, as opposed to up to 25 years.

It should be noted that ESP does not offer communication services (for example SMSO services or DCC Service Requests) to support the utilisation and maintenance of Smart Meters. Shippers or suppliers must procure these services independently of ESP's Meter Asset Provider and Meter Equipment Manager services.

5.12 Types of Domestic Meter

The following describes the categories of Meter Types to which different Metering Charges apply. Specific Meter Unit models are listed in Appendix D.

■ Dumb Meters

Dumb Meters are mechanically operated and have no remote communication functionality. Their electronic functionality is limited to a visual display. Dumb Meters are categorised as being either a Credit Meter or a Prepayment Meter.

- For Dumb Credit Meters, ESP's charge is set in accordance with our initial cost base and linked to inflation by the method described above.
- For Prepayment Meters, ESP's charge is set in accordance with our initial cost base and linked to inflation by the method described above. Additionally, where a Prepayment Meter is installed as the first Meter Unit at a new Supply Point the investment criteria and calculation of Metering Charges are kept consistent with those of ESP's other domestic Meter Units. For a typical installation (i.e. a new domestic property) ESP provides a contribution towards the investment for the Meter Unit and its Meter Housing, and recovers this through its Metering Charges. Any additional costs are charged upfront to the relevant Shipper.

Definitions of these two Meter Types can be found in section 2 (Definitions) of this Metering Charges Statement.

■ Smart Meters

Smart Meters are Meter Units that are capable of recording the consumption of energy at intervals of one hour or less and are capable of communicating that information remotely. Smart Meters enable two-way communication between the Meter Unit and a central communication system.

Smart Meters are able to operate in either Credit or Prepayment mode. Smart Meters can operate in "Dumb" mode and can have their firmware upgraded 'over the air' (which can result in a Smart Meter becoming compliant with a more recent version of SMETS).

Definitions of these Meter Types can be found in section 2 (Definitions) of this Metering Charges Statement.

5.13 Third Party Meters

Any person requiring a service connection must notify ESP if they intend to procure a Third Party Meter no later than the acceptance of the PSR to allow time for the quotation and work instructions for any new connection(s) to be modified accordingly. If this notice is not given, then the terms of the connection will be on the basis of fitting an ESP Meter Unit and the subsequent Metering Service being provided in accordance with this Metering Charges Statement. If sufficient notice is not provided and ESP has made, or committed, its capital investment (whether in whole, or in part) to an ESP Meter Unit, ESP will be entitled to recoup its investment as specified in this Metering Charges Statement. This may also be the case where a Meter Unit installation is planned for the future but is not installed at the same time as the service pipe (depending on contractual terms with the End User).

5.14 Averaging of Charges

It is not practical for ESP or Shippers to provide Metering Charges for each individual network. ESP provides standard Metering Charges across all networks, as experience has shown that costs are broadly similar and variations in returns across networks are not significant. ESP's required return on its metering assets is based on taking a spread approach, where it evaluates the average capital investment and operating costs for its portfolio of Meter Units.

ESP has considered the potential limitations of this approach, primarily that the Metering Charge to an End User is not exactly cost reflective of the service provided to them, since an End User provided with a more expensive Meter Unit is subsidised by an End User provided with a cheaper Meter Unit.

The standard price set by ESP means the End User is provided with a service connection and Meter Unit at a combined price that gives ESP its required return overall, and ensures the End User benefits from the maximum

investment ESP is able to make towards their connection. The Metering Charges relate to the total capital investment made across ESP's entire domestic Meter Unit portfolio.

This method of charging is based on the projected return being over a defined investment period. This requires the service and meter assets to be in place for the full investment period in order for ESP to realise its predicted return. The benefits to Shippers by charging on this basis are clear: a higher capital contribution from ESP means a lower upfront connection charge to the End User, due to the certainty ESP has of recovering its investment and return over an extended period.

This Metering Charges Statement provides a method of cost recovery, which is consistent with the original investment criteria and the associated Shipper and End User benefits, even where an ESP Meter Unit is removed before the end of the investment period. It also ensures that there is no recovery of expected profit beyond the Meter Unit removal date.

5.15 Investment Period - Meter Replacement

The Meter Unit Investment Period (MUIP) starts when a new Meter Unit is installed. When a Meter Unit is replaced, whether that is before its scheduled replacement (e.g. because of a faulty Meter Unit or replaced with a Smart Meter), or when scheduled for replacement, the investment period starts from the date the replacement Meter Unit is installed. In each case, ESP has made a new capital investment which it recovers according to the same methodology.

5.16 Meter Removal

5.16.1 Introduction

If an ESP Meter Unit is removed for any reason other than by ESP as part of the normal operation and maintenance service (e.g. a scheduled replacement, a fault, or normal wear and tear), ESP will be entitled to recover any unrecovered capital investment and any costs reasonably incurred for the removal of its Meter Unit.

Most commonly a Meter Unit is removed due to:

- Replacement by a Third Party Meter Unit;
- A Shipper-requested change for a new ESP Meter Unit (e.g. replace a Credit Meter with a Prepayment Meter or Smart Meter); and
- A Meter Unit removal without a replacement.

In such cases, the cost recovery methodology set out in this section is applied in order to ensure all costs are recovered consistently and transparently.

In the coming years, ESP's Dumb Credit Meters will be removed as part of the UK-wide transition to Smart Meters. This means that many of these Meter Units will be removed before the end of their original anticipated investment period. Consequently, the fundamental investment assumptions originally made relating to the life of a Meter Unit have changed.

ESP's methodology is set up to recover the investment originally made in the Meter Unit. As we enter a period of transition for gas metering, the methodology will do this in a number of ways, depending on the type of Meter Unit. The table below summarises ESP's approach to cost recovery, per Meter Type.

Cost Recovery by Meter Type

Type of Meter Removed	Cost Recovery Used	Section
Domestic Dumb Credit Meter	Annual rental charge Recovery Uplift Reduced Termination Charge	5.16.2
Domestic Dumb Credit Meter replaced by ESP Prepayment Meter or Smart Meter	Annual rental charge Up-front Installation Charge for Smart Meter or Prepayment Meter	5.16.3
Domestic Prepayment Meter	Annual rental charge Prepayment Termination Charge	5.16.4
Domestic Smart Meter	Annual rental charge Standard Termination Charge	5.16.5
I&C meter (Qmax above 6m ³ per hour)	Annual rental charge Termination Charge determined on individual basis	5.16.6

5.16.2 Removal of a Dumb Credit Meter

A Recovery Uplift is applied to all domestic Dumb Credit Meters. The Recovery Uplift is designed to smooth the inevitable cost of removal for the vast proportion of ESP's portfolio of Meter Units. This uplift is adjusted annually in line with inflation.

A Reduced Termination Charge is applied at the point ESP is notified of the removal of the Meter Unit (excluding Meter Units removed in line with the section "Replacement of an ESP Credit Meter with ESP Prepayment Meter"). The Termination Charge is the product of the Metering Charge and the relevant multiple set out in the table found in under the section "Cost recovery multiples – Dumb Credit Meter (Reduced Termination Charge)".

An example can be found in Appendix A.

5.16.3 Replacement of an ESP Credit Meter with ESP Prepayment Meter

Prepayment meters are installed at Supply Points where an ESP Credit Meter already exists. ESP's Charging Methodology recognises this.

Where a Credit Meter is removed and replaced with an ESP Prepayment Meter or Smart Meter at the request of a Shipper, a Termination Charge is levied in accordance with the prevailing Metering Charge and the multiples in Table under the section "Cost recovery multiples – Smart Meters & I&C Meter Units". A Reduced Termination Charge will apply.

In addition to the Termination Charge, ESP will also levy an Up-front Installation Charge, reflecting the cost of Installation, over and above the cost of installation of a Meter Unit on a new housing development.

An example can be found in Appendix A.

5.16.4 Removal of Prepayment Meter

Where a domestic Prepayment Meter is removed for any reason other than by ESP as part of the normal operation and maintenance service, a Termination Charge is levied in accordance with the prevailing Metering Charge and the multiples in the table found under the section "Cost recovery multiples – Prepayment Meters (10 Year MUIP)".

In all cases Termination Charges do not include the Transactional Charges for Prepayment and Smart Type / SMETS Credit Meters. These are not relevant for cost recovery and so are excluded.

No Recovery Uplift is applied to Prepayment Meters, so the Reduced Termination Charge is not appropriate.

An example can be found in Appendix A.

5.16.5 Removal or Replacement of Smart Meters

Where an ESP Smart Meter is removed or replaced, a Termination Charge is levied in accordance with the prevailing Metering Charge and the multiples in Table under section “Cost recovery multiples – Smart Meters & I&C Meter Units”. A Recovery Uplift and Reduced Termination Charge are not appropriate for Smart Meters.

In the early stages of the Smart Meter rollout, availability of Smart Metering Services will be limited. For the purposes of immediate reinstatement of gas supply, ESP may have no choice but to install a Dumb Credit Meter. The Shipper may choose to subsequently request the installation of a Smart Meter at the Supply Point. ESP will assess on a case by case basis how it treats the costs of the interim Dumb Meter. Alternatively, the Shipper may choose to retain the Dumb Meter and not replace it with a Smart Meter, in which case the Dumb Meter Rental will continue to be levied.

ESP reserves the right in certain circumstances to replace any Smart Meter with a Dumb Credit Meter, for example where it is identified that an early batch of Smart Meters is faulty and no alternative is available at reasonable cost.

5.16.6 Removal of I&C Meter Units

Where ESP is notified by the relevant Shipper that an I&C Meter Unit is removed or replaced, a Termination Charge is levied to recover ESP’s costs in providing the meter in accordance with section 5.16. The examples provided in this statement utilise the prevailing Metering Charge and the multiples in the section regarding “Cost recovery multiples – Smart Meters & I&C Meter Units” and are used to illustrate what these charges may amount to and serve as a guide only. ESP will calculate the applicable termination charge at the time of meter removal on an individual case basis. A Recovery Uplift and Reduced Termination Charge are not appropriate for I&C Meter Units.

For larger I&C Meter Units (rotary displacement & turbine models only), ESP will, if requested or at ESP’s own discretion and in accordance with its own criteria, review individual Meter Unit removals and assess the practicalities of reusing the Meter Unit at another Supply Point. Should this assessment demonstrate that it is economical to reuse the Meter Unit, and ESP has a suitable site where it can reuse the equipment, ESP may adjust its Termination Charge to reflect this benefit. ESP will charge for carrying out the review if it is requested, regardless of its conclusions.

Any Shipper responsible for a Supply Point intending to remove (including removal using a Shipper or supplier appointed agent) an ESP Meter Unit acknowledges that any remaining ESP owned Ancillary Equipment is still the property of ESP but that ESP will no longer maintain it and it should no longer be used. At the same time one or more of the following options may be offered to the relevant Shipper:

- ESP will consider, at its sole discretion, whether it will transfer the ownership of the associated apparatus to a designated party under ESP’s terms for doing so. It should be noted that under these terms, ESP will retain no liabilities nor provide any warranties, and ESP will charge its administration

and other related costs (including any legal costs) to carry out the transfer of the assets to the designated party, and only when paid for in full will the assets be deemed to be transferred.

- All the associated apparatus is returned to ESP under ESP's terms for doing so.
- The associated apparatus can be removed and disposed of by a suitable party, but this should be done to the satisfaction of ESP under its terms for doing so.
- If required, ESP will remove and dispose of the associated apparatus itself, and will charge its costs for doing so to the relevant Shipper.

Once one of the above options has been agreed, ESP will notify the relevant parties that it no longer has any metering assets or Ancillary Equipment at the Supply Point, and will levy an administration charge, reflecting the costs associated with the agreed option.

5.16.7 Reuse of Meter Units

For domestic and small and medium I&C Meter Units (i.e. diaphragm Meter Units of all sizes) ESP will assume no reuse of any Meter Units removed. The reasons for this are expanded on in Appendix B. Larger I&C Meter Units may be reused at ESP's sole discretion.

Unless otherwise agreed by ESP, where any ESP Meter Unit is removed and replaced with a Third Party Meter, all components of ESP's Meter Unit must be removed prior to the installation of the Third Party Meter. The relevant Third Party MEM must make arrangements for the disposal of the all components of ESP's Meter Unit or make them available for collection by ESP.

5.16.8 Other Costs

In addition to the cost recovery of the capital investment and required return there may be other costs associated with the removal of any type of Meter Unit that ESP need to recover and will charge to the relevant Shipper, for example:

- Handling and administration costs associated with the returned assets;
- Costs associated with the recovery/collection of ESP assets where required;
- Assessing the practicalities of reusing Meter Unit assets for another site;
- Transferring ownership of associated apparatus to a designated party;
- Disposal of assets by ESP or a suitable party. This includes ESP's costs in ensuring assets are suitably dealt with by the party removing them;
- Communications with the new Meter Unit provider and any third parties to manage the process;
- Updating ESP's database to change the details of the Meter Unit;
- Raising invoices and the financial controls for the recovery of the charges.

Please note that this list is not exhaustive. There may be other incurred costs that ESP will be entitled to recover.

Additional charges will be assessed and levied on a case by case basis. While these charges will differ based on the scenario, ESP has compiled guideline costs to support Shippers in estimating such costs. The estimates are as follows:

- The administration requirements will be assessed individually, however as an indication of the costs involved, typically £30 per man-hour will be charged. There will be other costs taken into account, which may include postage, stationery, office overheads and other ancillary costs.
- Professional charges will be based upon an hourly charge out rate of £45 per hour where this can be resourced internally.

- Where external resources are required these charges will be levied according to the cost to ESP, and overheads will be applied at the appropriate rate.
- If an ESP Meter unit is being installed the cost benefit of ESP being able to combine the site visit to both install the new Meter Unit and remove the existing Meter Unit.

5.17 Meter Unit Reconfiguration

Some models of Meter Unit can be converted to a different Meter Type. For instance, some models of Dumb Meter can switch between Prepayment and Credit configurations. Some Smart Meters, through an upgrade of firmware, can be upgraded from SMETS 1 to SMETS 2.

The charge for an ESP Meter Unit is based on the cost of the initial investment and, as such, the Metering Charge does not change where a Shipper (or supplier) reconfigures or upgrades the functionality or firmware of a Meter Unit. Furthermore, a perceived downgrade in Meter Unit functionality (e.g. from SMETS 1 Meter to a Dumb Meter) does not result in a change to the applicable Metering Charge.

For the avoidance of doubt, the Meter Rental Charge will consistently apply for the MUIP.

6. APPENDICES

Appendix A: Examples of Charges

The following examples demonstrate how the Metering Charges are calculated. Examples are based on the Metering Charges effective from 1st April 2022 to 31st March 2022.

■ Domestic Connection

A domestic End User requires a Credit Meter therefore their Shipper will be charged **£16.29** per year. A Recovery Uplift of **£5.19** is applied, bringing the total to **£21.47**.

■ Domestic Meter Unit

A Dumb Credit Meter Installed at domestic premises and its associated apparatus is removed and returned to ESP in the required manner and replaced by a Third Party Meter. The Meter Unit was installed in 2013 and removed in 2022.

The cost recovery amounts are calculated as follows:

Provision:	Reduced Recovery Multiple	2.0	x Current Charge	£7.72	= Cost Recovery	£15.44
Installation:	Reduced Recovery Multiple	2.0	x Current Charge	£5.21	= Cost Recovery	£10.42
Maintenance:	Reduced Recovery Multiple	1.0	x Current Charge	£3.36	= Cost Recovery	£3.36
				Total	= Cost Recovery	£29.22

A handling charge of **£15.00** will be applied.

The total Cost Recovery Charge will therefore be **£44.22**.

No cost recovery multiple is applied to the Recovery Uplift.

■ Domestic Prepayment Meter Unit

An ESP Credit Meter Installed at domestic premises is replaced by an ESP Prepayment Meter Unit. The Meter Housing is a standard semi-concealed box that does not require any alteration work for the new Meter Unit (apart from the installation of a bracket included in the standard cost).

There will be an Up-front Installation Charge of **£77.51** for the installation of the Prepayment Meter Unit.

A Termination Charge must also be levied for the removed Credit Meter. In this case the meter was eight years old when removed in 2022.

Provision:	Standard Recovery Multiple	3.0	x Current Charge	£7.72	= Cost Recovery	£23.16
Installation:	Standard Recovery Multiple	3.0	x Current Charge	£5.21	= Cost Recovery	£15.63
Maintenance:	Standard Recovery Multiple	1.7	x Current Charge	£3.36	= Cost Recovery	£5.71
				Total	= Cost Recovery	£44.50

The Shipper will then be charged **£46.31** per year, plus any additional (transactional) maintenance charges incurred.

■ Domestic Prepayment Meter Unit Removed or Replaced by a Third Party Meter

An ESP Prepayment Meter is removed and not replaced, or removed and replaced by a Third Party Meter. The Prepayment Meter was two years old when removed.

Provision:	PPM Recovery Multiple	5.8	x Current Charge	£25.64	= Cost Recovery	£148.71
Installation:	PPM Recovery Multiple	5.8	x Current Charge	£17.31	= Cost Recovery	£100.40
Maintenance:	PPM Recovery Multiple	2.7	x Current Charge	£3.36	= Cost Recovery	£9.07
				Total	= Cost Recovery	£258.18

A handling charge of **£15.00** will be applied.

The total Cost Recovery Charge will therefore be **£273.18**.

Appendix B: Reuse of Meter Units

It may be that the total costs associated with reusing the Meter Unit are higher than the recovery and disposal of the Meter Unit and the calculated value of the Meter Unit (based on the cost of the Meter Unit when new, minus the depreciation in value). If this is deemed to be the case by ESP, instead of charging the costs associated with the reusing of the Meter Unit, ESP will charge for the recovery and disposal of the Meter Unit and the applicable Termination Charge for the Meter Unit.

The following bulleted section sets out the factors that ESP take in to consideration when assessing whether or not a rotary displacement or turbine Meter Unit can be economically reused. ESP will not, in any case, undertake such an assessment for diaphragm Meter Units.

■ The Meter

To establish whether the meter can be reused at another Supply Point, and if so whether it can be reused economically, the following must be considered:

- Does ESP have, or anticipate having, a suitable site that will require that specific type of meter? For domestic and smaller I&C this will in almost all instances be the case, but for the larger I&C meters where the designs are much more specific to the individual site's requirements, this may not be the case for some considerable time.
- Are there enough sites for the returned meters to go to? Even with domestic meters, ESP may not have sufficient sites to reuse them all if large numbers are returned.
- What will be the handling costs associated with taking the meter back and managing the process to ready it for reuse (this includes the assessment process itself)?
- What condition will the meter reasonably be expected to be in, and what costs will be incurred to bring it up to a standard for reuse? (Does the meter need testing; will parts be required to make it a complete kit; etc?)
- Where has the removed meter been left by the removing party and are there any recovery costs involved?
- What will be the storage and stock administration costs?
- What are the additional logistical requirements to manage the reuse of the meter?
- Have any new specifications been introduced that require the Meter Unit to be modified?
- What are the delivery costs to site?
- What is the contractual relationship with the parties ESP deals with regarding the installation of the network and meters (and theirs with other parties they contract to) as this may not allow for the use of these meters.
- Have the warranties from the original provider of the meter expired that will otherwise be provided if a new meter was used? This would result in ESP taking full financial liability if the meter is faulty.

In the case of diaphragm meters (e.g. domestic and small I&C meters), it has been established that even though these can be reused physically, from an economic standpoint there is no financial benefit in doing so. This is because the cost of a new meter delivered to site will in all likelihood be lower than the reuse costs associated with a removed meter. This is explained below:

- When receiving a returned meter, ESP has no way of knowing how the meter has been handled during removal and transportation. Since ESP will be responsible for the meter when reused, it will be liable for its accuracy and safety. Therefore, unless ESP can be given sufficient assurance from the party responsible for the removal and return of the meter that it is fit for purpose, ESP will need to test the

meter on its return, the cost of which alone will make it uneconomic to reuse. Even if sufficient assurance is given, ESP will still need to carry out a brief inspection of each meter to check its general condition and asset details before being packaged for storage.

- If reused, the life span of the meter will be shorter than a new meter and so will require replacing sooner. This will result in the installation and other associated costs of a new meter normally recovered over the period, not being recovered fully if the meter installation charges to do so are not increased. Because ESP has standard meter installation charges, this is not a practical option, and even if it were, it will increase a Shipper's charges because a different Shipper had their meter replaced. This will clearly be inequitable. So, this under-recovery will appropriately need to be recovered as part of the Provision Charge, reducing the value of the meter.
- When sent to site, meters are provided as a "kit" that includes for example the pipe-work, governor, and valves, so that all the required fittings to be installed are to hand. Providing these fittings separately is less cost-efficient. Upon return of a meter, these fittings may not be with the meter as they are part of the installation, therefore when the meter is repackaged these will need to be included to produce a kit ready for delivery to site. It should be noted that as an ad hoc purchase (as ESP cannot predict its requirements and will need to order when meters are returned) the fittings will be significantly more expensive to ESP than when supplied in bulk as part of a meter kit.
- The cost for administering the meter when returned includes taking delivery, logging the receipt of the meter, inspecting it, repacking it with fittings as a kit, storing of the meter kit, taking out of stock and despatching it, and administering a database system to manage the meters in these processes. There are also the related activities to consider, for example the ordering and storage of the fittings, the invoicing and payment requirements (to buy fittings, packaging material, delivery of meters, etc). None of these activities ESP currently carries out, therefore all the costs associated with them (including the set up costs of IT systems, administration systems, storage and transportation, etc) are specific to the return and reuse of meters.
- Currently, the typical system for managing the ordering and delivery of meters to site is carried out through direct communication between a meter supplier and the company responsible for installing the meters. Because of this, for ESP to reuse meters it will need to set up a method of overriding this system so that returned meters can be sent back out when required, on what will be an ad hoc basis. It should be noted that ESP's process of reusing meters will be significantly more costly than a meter supplier's equivalent process to provide a new meter kit. Such a supplier's systems will be simpler, will have a more consistent and predictable work flow, and will benefit from economies of scale gained from the larger quantities involved.

Given the mandatory replacement of Dumb Credit Meters with Smart Meters, it is not possible to reuse any ESP Dumb Meters that are removed.

■ **Associated Apparatus**

To establish whether the installation can be reused at another Supply Point, and if so, whether it can be reused economically, broadly the same issues as described for the meter were considered, however with one significant difference in that the installation cost includes:

- The labour to put the meter and associated apparatus in place.
- The administration and management costs associated with organising the installation and registration of the Meter Unit.
- For infill and I&C projects there is normally a pre-visit to the premises to agree the location of the Meter Unit before it is fitted. This is a cost associated with the initial installation of the Meter Unit.

This element of the installation is not a physical piece of apparatus that can be transferred for reuse and so is a capital cost that cannot be recovered on another site.

In the case of diaphragm meters (e.g. domestic and small I&C meters), it has been established that even though these can be reused physically, from an economic standpoint there is no financial benefit in doing so. This is because the majority of the cost is for the labour and upfront work to install and the remaining value of the associated apparatus is too low to be economical to reuse (as described above).

Appendix C: Residual Maintenance Costs

The Maintenance element of the Metering Charge is applied to recover the ongoing operation and maintenance costs of the Meter Unit and ESP's required return for this element of the Metering Service. Should the Meter Unit be removed and replaced by a Third Party it must be considered whether there will still be some operational and maintenance costs that ESP will be required to pay, despite the existence of a Third Party Meter. ESP has identified that even though it no longer holds responsibility for the Meter Unit, there will still be some residual operating costs incurred as a result of that Meter Unit being connected to an ESP gas network, for example:

- Managing the database requirements and other data flows associated with the Third Party Meter owner.
- ESP considers that a portion of the business rates it pays should be allocated to the Meter Unit as it represents a significant portion of the capital investment made and income received for a connection.
- As a GT, ESP is ring-fenced and so is required to keep an amount equivalent to 6 months basic operational costs in escrow (or equivalent facility) which includes the operation of the Meter Unit. As this requirement cannot be transferred to the Third Party Meter owner who does not have any ring fencing obligations ESP will still retain the costs associated with the upkeep of the escrow amount.
- Although the new meter operator will take on the responsibility of providing an emergency service for the Meter Unit ESP will still incur some costs dealing with emergency call outs to do with the Meter Unit. (For example where ESP's emergency service provider has to provide a service for the Meter Unit that ESP has to charge for to recover costs.)
- Because ESP is the GT it has the regulatory requirement to be the Meter Provider of Last Resort and so must always maintain the ability to provide a Metering Service for all the Supply Points on its networks. This includes requests by Shippers to provide a Metering Service and to take over the operation of the meter assets of a Third Party Meter owner should they be unable to manage them themselves. This ability has an associated on-going operational cost (e.g. database/systems, emergency cover, MCoP registration, technical support, etc) even if the Meter Unit is not actually owned and operated by ESP.
- There will need to be an element of insurance paid for to protect ESP from any incident caused by the Meter Unit even if the Meter Unit does not belong to ESP. Additionally, ESP will need to have an insurance policy in place to cover all Meter Units to enable it to comply with its obligation of Meter Provider of Last Resort should it be required.
- The upkeep of the Meter Housing could require ESP to incur costs. Although some repair expenditure can normally be recovered from the property owner, this is not always the case.

The residual operating and maintenance costs that are incurred by ESP are primarily from its responsibilities as a GT. This demonstrates that unlike a Third Party Meter, ESP will retain some residual costs following the removal of its Meter Unit since it is a GT. Many of these costs are either fixed, or have no direct relationship to the size of Meter Unit portfolio. So if ESP's portfolio of Meter Units were to reduce significantly then the maintenance charge will increase to compensate. This increase may be disproportionate unless some of these costs can be recovered when the Meter Unit is removed.

Appendix D: Meter Types

The following is an illustrative list of the meter makes and models that fall into each Meter Type. This list excludes Dumb Meters. This list is not exhaustive. Where ESP provides and installs a Meter Unit at a Supply Point than is not on this list, ESP will decide which Meter Type that particular make and model of meter will be classified as and Metering Charges will be applied accordingly.

Meter Types

Mode/Function		
Prepayment (Dumb)	Smart Type	SMETS1
Make: Landis & Gyr Model: METLG210	Make: Landis & Gyr Model: E6VLG310P	Make: Landis & Gyr Model: E6VG470
Make: Model:	Make: Landis & Gyr Model: E6VG370	Make: Elster Model: BK G4E

ESP installs and can accommodate any type of Dumb Credit Meter. Please contact ESP to discuss the potential use of meters other than those listed in this Appendix D.

Appendix E: Useful Contacts and Addresses

Ofgem
10 South Colonnade
Canary Wharf
London
E14 4PU

Tel: (0207) 901 7000
Fax: (0207) 901 7066

Website: <https://www.ofgem.gov.uk/>

Health and Safety Executive
Redgrave Court
Merton Road
Bootle
Merseyside
L20 7HS

Tel: (0845) 345 0055

Website: <http://www.hse.gov.uk/>

Ombudsman Services
PO Box 966
Warrington
WA4 9DF

Telephone: 0330 440 1624
Textphone: 0330 440 1600

E-mail: osenquiries@os-energy.org

Website: www.ombudsman-services.org/energy



For more information on the content of this document please contact us at the following address:

ESP Utilities Group
Bluebird House
Mole Business Park
Leatherhead
Surrey
KT22 7BA

Tel: 01372 587 500
Fax: 01372 377 996
Email: Regulation@espug.com

