

National Grid Metering Charges

From 1 April 2012



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Foreword

This booklet sets out the metering charges that National Grid will apply for regulated rental charges, transactional charges for certain domestic services and for specified non-domestic works, provided under the Network Code and National Grid's Metering Contracts¹ from 1 April 2012. It also sets out the methodology used to derive the charges, as required by National Grid's Gas Transporters Licence in respect of its retained networks (RDNs).

These metering charges will apply to National Grid meters within RDNs and under the Network Metering Equipment Agreement (NMEA) to National Grid meters in the independent networks (IDNs).

The level of National Grid's metering charges is regulated by a price control set by Ofgem, the gas industry regulator. To achieve price control, Ofgem has set tariff caps for four key metering services. National Grid's charges for these services must not exceed the tariff caps, which are adjusted each year by inflation (5.2% for 2012/13). National Grid has amended these four charges to the new level of the tariff caps.

As in previous years, National Grid has reviewed the transaction charges for meter works. National Grid has completed a procurement exercise for the provision of meterwork services in the independent distribution networks and we expect these revised commercial arrangements with service providers to allow us to drive improvements in performance. Overall, meterwork costs for 2012/13 have unfortunately had to rise as a result of increased costs such as wage and fuel inflation. Consequently, transactional charges for 2012/13 will increase on average by 8.2%. The transaction charge for domestic meter exchange has been amended to the level of the regulated tariff cap.

National Grid would welcome your views on any aspect of its metering service, its charges or the contents of this statement. Please send your comments to Stewart Love via e-mail to metcom2@uk.ngrid.com. The latest version of this publication is available from National Grid's Metering website www.nationalgrid.com/uk/metering/.



¹ Agreement and General Conditions of Contract for; The Provision and Maintenance of Metering Equipment Contract, Transactional Meter Works not exceeding 7 bar, Above 7 bar Transactional Meter Works, Adversarial Meterworks, Rainbow System User Agreement and Network Metering Equipment Agreement (NMEA).

1. Introduction

National Grid provides gas transportation, metering and daily meter reading services throughout Great Britain for the companies that supply domestic, industrial and commercial consumers.

National Grid is an Ofgem Approved Meter Installer (OAMI) and registered Meter Asset Manager (MAM) and provides a range of meter provision, installation and maintenance services. For further details of these services please contact the National Grid Metering commercial team via e-mail to metcom2@uk.ngrid.com.

This summary publication sets out National Grid's charging methodology, regulated rental charges for domestic meters and transactional charges for certain domestic services and specified non-domestic works from 1 April 2012. This is in respect of its metering services provided under the Provision and Maintenance of Metering Equipment Contract, Transactional Meter Works not exceeding 7 bar Contract, Transactional Meter Works exceeding 7 bar Contract, Adversarial Meterworks Contract, Rainbow System User Agreement, Network Code and the Network Metering Equipment Agreement (NMEA).

National Grid offers a contract with alternative terms and conditions for domestic size meters² installed post 1st January 2004. Details of this contract, including the relevant charges, are available from Stewart Love via e-mail to metcom2@uk.ngrid.com.

Throughout 2011 National Grid has continued to engage Ofgem to develop a new alternative Legacy MSA contract offering a discounted rental, resulting in Ofgem issuing a consultation document on 29th July 2011. At the time of publication, the conclusions from this consultation are awaited, after which National Grid hopes to offer the proposed alternative Legacy MSA contract. Details of this contract, applying to meters installed prior to 01st January 2004, will be provided as soon as it becomes available. Further information is available from Stewart Love via e-mail to metcom2@uk.ngrid.com.



2. Charges from 1 April 2012

2.1 Introduction

This section sets out the regulated rental charges for domestic meters and transactional charges for certain domestic services and specified non-domestic works for National Grid's Network Code and National Grid's Metering Contracts. This document does not override or vary any of the statutory, licence or Network Code or other contractual obligations upon National Grid. For more information on these charges, please contact Stewart Love via e-mail to metcom2@uk.ngrid.com.

2.1.1 Annual and Transactional Charges

Annual charges apply in respect of all metering equipment provided and maintained by National Grid on a per meter basis. The rental charge is determined in respect of the whole meter installation.

Annualised installation charges also apply on a per meter basis where an upfront installation charge was not originally levied. This applies to any metering equipment installed by National Grid:

- Before 1 October 2000 in respect of supply points consuming up to 73,200 kWh per annum
- Before 1 April 2001 and after 1 January 2011 in respect of supply points consuming 73,200 kWh per annum and above where a Large Diaphragm Meter is installed
- Before 1 April 2001 in respect of supply points consuming 73,200 kWh per annum and above where the meter is not a Large Diaphragm

Transactional (one-off) charges are made in respect of specific meter work activities carried out by National Grid, as set out in section 2.3, including the installation of metering equipment.

In a continuation of the approach adopted with effect from 1 January 2011, transactional charges are not levied for the standard elements of New Large Diaphragm installations. Instead the annualised installation charge will continue to be recovered via the rental as described above. All charges are shown exclusive of VAT.

2.1.2 Domestic Meter Installations

Annual charges for provision, installation (where applicable) and maintenance of domestic size meter installations vary with payment mechanism; that is whether the meter is a credit or a prepayment meter. This approach reflects some of the additional costs of providing prepayment metering services compared to credit meters.

2.1.3 Larger Meter Installations

Annual charges for the provision, installation and maintenance of industrial and commercial size meter installations⁵ vary with the method of flow measurement (diaphragm, rotary or turbine). Separate charges apply for provision, installation and maintenance of metering installations connected to high-pressure systems⁶.

Annual charges for meter provision, installation and maintenance also vary with the meter's 'badged capacity' or Qmax⁷, since meter capacity is the main cost driver for a given meter type.

Separate charges apply for the provision, installation and maintenance of daily read equipment (dataloggers) and volume converters (correctors).

2.1.4 Invoicing

National Grid Metering produces and issues the invoices derived from the charges shown in this publication. If a gas supplier has an invoice query, this should normally be submitted via SAP Rainbow using the relevant Transaction Type Reason Code as detailed in the Query Submission section of the MAM Manual.

²Where the meter capacity is less than 11 standard cubic meters per hour (scmh).

³Agreement and General Conditions of Contract for: The Provision and Maintenance of Metering Equipment Contract, Transactional Meter Works not exceeding 7 bar, Above 7 bar Transactional Meter Works, Adversarial Meterworks, Rainbow System User Agreement and Network Metering Equipment Agreement (NMEA).

⁴Where the meter capacity is less than 11 standard cubic meters per hour (scmh).

⁵Where the meter capacity is greater than or equal to 11scmh.

⁶Operating at pressures greater than 7 barg.

⁷An indication of the upper limit of a measuring device's accuracy envelope.

2.2 Annual Charges

The tables in this section show the annual charges, expressed both in £ sterling per annum for general purposes, and in pence per day for billing purposes.

2.2.1 Low, Medium and Intermediate Pressure Metering Installations (≤ 7 barg)

Domestic Size Meters (1)				
	Credit meter		Prepayment meter	
	Pence per day	£ per annum	Pence per day	£ per annum
Provision	2.6164	£9.55	2.9862	£10.90
Installation	1.7014	£6.21	1.7014	£6.21
Maintenance	0.0849	£0.31	5.5836	£20.38
Total	4.4027	£16.07	10.2712	£37.49

(1) Meter capacity less than 11 scmh

2.2.2 Dataloggers

Rental Charge	Pence per day	£ per annum
Provision	10.7479	£39.23
Installation	47.9562	£175.04
Maintenance	72.5397	£264.77
Total	131.2438	£479.04

Datalogger charges apply to all dataloggers at daily metered supply points, as defined by National Grid's Network Code. Note that this rental charge excludes the daily meter reading (below).

	Pence per day	£ per annum
Daily Meter Reading Charge	133.0877	£485.77

For clarification the daily metering reading charge is set at the tariff cap of £485.77 per annum as at 1 April 2012 and is in addition to the annual rental charge.



2.3 Transactional Charges

Any work downstream of the outlet of the meter is excluded unless specifically mentioned. In all cases, service pipe installation, alteration and disconnection will be subject to additional charges.

Domestic-size meters

The following charges relate to domestic-size meter installations, i.e. where the meter capacity is less than 11 standard cubic metres per hour (scmh).

Installation of domestic meters		
Title	Description	Charge
Install Domestic Credit Meter	Includes time and materials (pressure controlling equipment, flexible connector, etc) required to install a domestic credit meter. Excludes the cost of the meter itself.	£85.83
Install Domestic Prepayment Meter	Includes time and materials (pressure controlling equipment, flexible connector, etc) required to install a prepayment meter. Excludes the cost of the meter itself. Includes commissioning of the meter module in current (TGB) format and the use of a blank gas card where no Supplier gas card is on site.	£95.72

Customer requested domestic meter exchange		
Title	Description	Charge
Customer requested exchange	Includes time and materials required to exchange a credit meter to prepayment or a prepayment meter to credit or a like for like exchange i.e. exchange credit for credit including an exchange to a semi concealed credit meter or prepayment for prepayment. Excludes the cost of the meter itself. Includes up to 1 metre of additional inlet pipework and up to 2 metres of additional outlet pipework where a prepayment meter cannot be installed in the place of an existing credit meter. Includes testing (excludes any trace and repair work), purging and re-lighting.	£65.73

Ofgem domestic meter accuracy test		
Title	Description	Charge
Ofgem accuracy test	Includes, transportation of the meter and time and materials required to exchange a meter. Includes secure transportation box. Excludes the cost of the meter itself. Includes testing (excludes any trace and repair work), purging and re-lighting.	£108.69

Large size meters

The following charges relate to installation, removal or testing of larger diaphragm meters. These charges apply only in respect of standard low pressure installations, where no enhancements (e.g. bypasses) are required.

Large Diaphragm Meter Accuracy Tests						
Capacity (scmh)	≥11<21	≥21<29	≥29<51	≥51<79	≥79<121	≥121
Ofgem accuracy test*	£184.14	£190.02	£272.83	£345.28	£427.88	£550.49

*Includes, transportation of the meter and time and materials required to exchange a meter. Includes secure transportation box. Excludes the cost of the meter itself. Includes testing (excludes any trace and repair work), purging and re-lighting.

All other charges for work on industrial and commercial size meter installations, dataloggers and volume converters will be quoted on an individual basis.



2.4. Transfer of in-situ ancillary equipment

Where a National Grid meter is removed and replaced by a meter belonging to another operator the supplier may elect for the transfer of title to the relevant Supplier of the National Grid in-situ ancillary equipment in accordance with contract. Conditions apply regarding the components that may be retained in-situ. For clarification this charge excludes the meter.

Standard low pressure domestic-sized meters	
Standard charge for installation kit (excludes meter)*	£4.42

* No charge applies for title transfer where the meter installation is exempted from the 'install' component of annual rental charges, i.e. where the installation was made from 1 October 2000 onwards.

Standard low-pressure large diaphragm meters - transfer of ancillary equipment

Standard low-pressure diaphragm meter installations are subject to published charge; all other Industrial and Commercial (I&C) Installations are subject to quotation. Charges exclude the meter.

Charge for meters installed prior to 1 April 2001						
Capacity (scmh)	>= 11 < 21	>=21<29	>=29<51	>=51<79	>=79<121	>=121
Charge	£101.55	£125.14	£200.29	£421.84	£516.21	£586.82

Charge for meters installed 1 January 2011 to 31 March 2012						
Capacity (scmh)	>= 11 < 21	>=21<29	>=29<51	>=51<79	>=79<121	>=121
Charge	£192.94	£237.77	£380.54	£801.50	£980.80	£1,114.96

Charge for meters installed 1 April 2012 to 31 March 2013						
Capacity (scmh)	>= 11 < 21	>=21<29	>=29<51	>=51<79	>=79<121	>=121
Charge	£203.09	£250.28	£400.57	£843.68	£1,032.42	£1,173.64

Note. No charge applies for title transfer where the meter installation is exempted from the "install" component of annual rental charges. That is where the installation was made after 1 April 2001 and before 1 January 2011.

Quotation Charges for title transfer of Ancillary Equipment at I&C installations.

National Grid will provide quotations, on an individual basis, for the title transfer to the relevant supplier of in-situ ancillary equipment for all medium and high-pressure meters as well as for low-pressure rotary and turbine meters. The charges for making such quotations are:

Service	Charge per quotation
Quotations based on details of equipment as provided by customer.	£48.57
Quotations based on a National Grid site survey.*	£161.45

* Site survey carried out on request for installations < 7 barg.

In the case of Ancillary Equipment with an inlet pressure of 7 barg and above, the cost of the quotation will be on the basis of National Grid's cost of preparing such quotation. National Grid will endeavour to provide a best estimate of such costs in advance

3. Metering Charging Methodology

In addition to publishing its charges, National Grid's Gas Transporters Licence requires it to publish an explanation of the methods by which and the principles on which its charges are calculated. National Grid's metering charges are set so that they are in line with the price control set by Ofgem, the gas and electricity market regulator. To achieve price control for metering services, Ofgem has set tariff caps for four key services. National Grid's charges for these services must not exceed the tariff caps, which are adjusted each year by inflation calculated in accordance with the methodology set out in the National Grid GT licence.

Metering Tariff Caps from 1 April 2012	
Service	Tariff Cap
Provide, install and maintain domestic credit meter	£16.07 p.a.
Provide, install and maintain prepayment meter	£37.49 p.a.
Domestic credit to prepayment meter exchange	£65.73 p.a.
Daily Meter (DM) reading	£485.77 p.a.

Ofgem is consulting on proposals to continue the current tariff cap control until the roll-out of smart metering is underway. National Grid remains fully committed to supporting the smart metering programme and maintaining appropriately cost-reflective charging structures throughout the transitional period.

Charges for domestic meter types

For the 2012/13 formula year, domestic credit and prepayment meter rental charges have been set so that they are equal to the tariff caps.

Charges for non-domestic meter types

Other, non-tariff capped, charges are regulated through a non-discrimination condition in National Grid's Gas Transporters Licence. National Grid has reviewed its meter rental charges for larger meters, pending the completion of a review that is being undertaken of our Industrial and Commercial offering and associated pricing.

Annual charges for the provision, installation and maintenance of Industrial and Commercial meters vary with meter type and capacity. The remainder of this section explains the rationale for such a charging structure and for National Grid's choice of capacity bands.

Non-domestic meter types

There are presently three main types of Industrial and Commercial meters – diaphragm, rotary and turbine. Other meter types, such as orifice plate meters, are used for specialist applications.

Installations connected to high-pressure systems operating above 7 barg are considerably more complex. They typically include a flow computer and may comprise additional equipment, such as multi-stage pressure reduction, slam shut discrimination and pre-heaters.

Different meter types have different costs, particularly with respect to purchase price and maintenance costs. For example, rotary meters tend to have higher purchase prices than the equivalent turbine meter. Diaphragm meters do not need regular maintenance, unlike rotary and turbine meters, which need to be serviced according to manufacturer's specifications.

Meter capacity

Meter capacity is the main cost driver for a particular meter type. Larger meter installations have higher purchase prices and typically take longer to install. Larger, higher capacity metering installations also have larger, more costly regulators, valves and connecting pipe work. They may include additional equipment, such as pressure protection systems and filters.

Capacity bands

The charges reflect the forward-looking costs of providing, installing and maintaining a representative range of meter models of each type.

In order to move from a structure reflecting the costs of individual meter models to one that may be applied to all models of a given type, the charges are expressed in terms of capacity bands. The upper and lower limits of each band were chosen so that the mid-point of the band corresponds to the capacity of the model on which the charge for that band is based.

Model	U16	U25	U40	U65	U100	U160
Capacity (scmh)	16	25	40	65	100	160
Capacity band	≥11<21	≥21<29	≥29<51	≥51<79	≥79<121	≥121

To assist customers, National Grid's meter rental charges are shown broken down to three component parts, provision, installation and maintenance. The remainder of this section describes in more detail the methodology used to calculate metering rental charges, which consists of the following steps:

- Determine the forward looking cost components of installing and maintaining meters, dataloggers and volume converters
- Determine a meter provision component and where appropriate scale this component to produce the annual charges.
- Calculate transactional charges for meter work

Section 3.1 explains how the component costs of providing, installing and maintaining meter equipment are determined, section 3.2 explains how charges are scaled and section 3.3 describes how transactional charges are calculated. Section 3.4 describes how DM daily meter reading charges are calculated.



3.1 Cost components

This section explains how National Grid has determined the forward-looking annual costs of providing, installing and maintaining meter installations, dataloggers and volume converters. The provision component is subsequently scaled as described in Section 3.2.

Domestic credit meter costs are based on U6 diaphragm meters or equivalent (including E6 ultrasonic meters), and prepayment meter costs are based on Electronic Token Meters.

The examples set out below illustrate the calculation of domestic credit meter costs. Equivalent calculations determine the costs associated with prepayment meters and with industrial and commercial meters, dataloggers and volume converters. This methodology derives the components of the total charge on a cost reflective basis. However, the total charge and some or all of the components must be scaled to levels that are consistent with National Grid's price control formula.

$$\text{Annual cost} = \frac{\text{meter asset cost}}{\left[\frac{1 - 1}{(1+ir)^t} \right] \times \frac{1}{ir} \times \sqrt{(1+ir)}}$$

where ir = interest rate (7%), and
 t = asset life (20 years)

In setting these charges National Grid has assumed that labour costs include some additional costs over and above direct labour costs, such as National Insurance and transport costs, but exclude support and sustaining costs. As future reductions in traditional meter population densities occur, changes to transport and support costs will likely result in a higher cost to serve per meter and greater maintenance costs.

3.1.2 Annual Installation costs

Annual installation costs for 2012/13 have been calculated by adjusting prior year charges by RPI (5.2%).

3.1.3 Annual Maintenance costs

Maintenance charges reflect planned and unplanned maintenance costs and the costs associated with exchanging faulty meters. This charge excludes replacement of the meter and/or installation materials beyond the expected asset life. The levels shown reflect service provider and material costs, plus an

3.1.1 Annual Provision costs

Provision charges reflect depreciation costs and an allowance for a return on the value of the meter asset on an average annualised basis.

In setting the tariff caps, Ofgem assumed that National Grid's meters are depreciated over twenty years, with the exception of prepayment meters, which are depreciated over ten years. Ofgem acknowledge that the smart meter roll-out will inevitably impact on these assessments of asset life.

uplift reflecting support and sustaining costs, multiplied by the expected job frequency per meter per year.

Planned maintenance costs have increased in line with inflation (5.2%), again offsetting increases in service provider costs. Maintenance charges for domestic credit meters have remained at a similar level to 2011/12, also increasing by inflation (5.2%).

Total Maintenance cost

The total annual maintenance cost for domestic credit meters is therefore:

	£ per annum
Unplanned Maintenance	£0.01
Planned Maintenance	£0.26
Fault-related Meter Exchanges	£0.04
Total Maintenance Cost	£0.31

3.2 Scaling of charges

Annual charges reflect the costs described in section 3.1. This section describes how these cost components are scaled to produce the annual rental charges.

3.2.1 Domestic Credit and Prepayment Meter charges

Domestic Credit and Prepayment Meter Tariff Caps

Service	Tariff Cap
Provide, install and maintain domestic credit meter	£16.07 p.a.
Provide, install and maintain prepayment meter	£37.49 p.a.

For the 2012/13 formula year, domestic credit and prepayment meter rental charges have been set so that they are equal to the tariff caps.

The install and maintain components of the charges are those described in sections 3.1.2 and 3.1.3 above (that is £6.21 and £0.31 respectively in the case of domestic credit meters). For these meter types the provide component is calculated by subtracting the install and maintain elements from the tariff capped charge.

3.2.3 Calculate Provision, Installation and Maintenance Charges

The proportions of the annual charge that are attributable to the provision, installation and maintenance of each meter type are calculated by using the annual forward looking costs for the maintain element, increasing the install element by inflation, and then setting the provide element so that the total of the three elements equals the tariff capped rental for both the domestic credit and prepayment meter. The tariff capped rentals take into account a cross-subsidisation between credit and prepayment meters.⁸



⁸ If the tariff caps are removed by Ofgem then the respective rental charges for prepayment meters and domestic credit meters may be adjusted. National Grid would anticipate the adjustment to be on an NPV-neutral basis.

3.3 Transactional Charges

National Grid has taken the opportunity to amend Transactional Charges for meterworks to take into account latest cost estimates. The impact is an overall increase (from 2011/12) in the region of 8.2% although there is a mix of increases and reductions for individual charges.

This section describes the methodology used to determine the transactional (one-off) charge for installation of domestic credit metering equipment. This charge reflects Service Provider and materials costs, an uplift for other work related costs and an allowance for profit.

Equivalent calculations determined transactional charges for installing other metering equipment and for other categories of meter work. Charges for work on larger Industrial and Commercial metering equipment, dataloggers and volume converters are quoted on an individual basis.

Charge = (Materials cost + (Service Provider costs x (1 + overhead uplift))) x (1 + profit%)

The charge for exchanging domestic meters (from credit to pre-payment or vice versa) is tariff capped and consequently the charge for this work has been amended to £65.73.

3.4 DM Daily Meter Reading

Charges reflect average costs of providing a DM daily reading administration service (including query management), an uplift reflecting support and sustaining costs, and the costs of line rental and telephone calls between dataloggers and the central collection system.

The DM meter reading charge has been set at the tariff cap of £485.77 p.a. from 1 April 2012.



