

# Guidance

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## Supply licence guide: Smart metering

**Publication date:** 16/11/2017  
**Updated:** 21/02/2019

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**This guide is to help you understand the rules related to smart meters. It's relevant for suppliers of both domestic and small business customers. It also covers the rules on advanced metering, relevant for suppliers of larger non-domestic customers.**

Ofgem may update this guide from time to time. Suppliers are responsible for keeping up to date with the latest version of the rules.

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## KEY



Applies to electricity suppliers



Applies to gas suppliers



Applies to domestic suppliers



Applies to non-domestic suppliers\*



Some of these rules only apply to suppliers with more or fewer than a certain number of customers

\* We specifically state where rules only relate to a subset of non-domestic customers, eg microbusinesses.

## Overview of smart metering

By the end of 2020, suppliers must take all reasonable steps to have installed a smart meter for all their domestic and small business<sup>1</sup> customers in Great Britain. Smart meters will play an important role in Britain's transition to a low-carbon energy system. They will also give consumers better information about, and control over, their energy consumption, and mean that consumers will get accurate bills. It is crucial that the smart meter rollout is conducted as efficiently and effectively as possible, and that the consumer experience is a positive one.

Suppliers are already required to supply larger non-domestic consumers<sup>2</sup> through advanced gas and electricity meters.<sup>3</sup>

## Key players in the smart meter rollout

- The Government (Department for Business, Energy and Industrial Strategy, BEIS) is responsible for smart meter policy and supporting regulations.
- Ofgem monitors compliance with the smart metering licence conditions that suppliers must abide by, and regulates the [Data and Communications Company](#) (DCC). We also make decisions on any proposed modifications to the [Smart Meter Installation Code of Practice](#)<sup>4</sup> and, in future, the [Smart Energy Code](#)<sup>5</sup> too.
- The DCC links smart meters with the systems of energy suppliers, network operators and energy service companies. (This guide doesn't cover anything about regulating the DCC.)
- Suppliers are responsible for installing smart meters, in accordance with their licence conditions and other obligations.

## Key Standard Licence Conditions (SLCs) for this theme

Below are the licence conditions that relate to this theme (smart metering). We've highlighted some parts of these rules, but you should refer to the actual SLCs for the full detail. The documents listed in the 'other useful information' section may provide more context to help you understand the intent of the rules.

<sup>1</sup> Gas non-domestic premises with an annual consumption of 732MWh or less, and electricity non-domestic premises where the metering point falls within profile class 1 to 4.

<sup>2</sup> Gas non-domestic premises with an annual consumption of greater than 732 MWh, and electricity non-domestic premises where the metering point falls within profile class 5 to 8.

<sup>3</sup> Advanced meters provide measured gas or electricity consumption for multiple time periods and provide the supplier with remote access to that data. They have a lower minimum level of functionality than smart meters.

<sup>4</sup> This code of practice governs how suppliers must install smart meters. The code is administered by Electralink.

<sup>5</sup> This industry code sets out the rules, rights and obligations for all parties for the new enduring smart metering arrangements. The code is administered by Gemserv.

**Remember:**

**The Standards of Conduct contain enforceable overarching principles that are relevant across many supplier activities and licence guide themes.** (The Standards are SLC 0 for domestic / SLC 0A for non-domestic suppliers.) These are aimed at ensuring licensees (and their representatives in the case of domestic suppliers) treat each customer fairly. This includes behaving in a fair, honest, transparent, appropriate, and professional manner, and providing information that is complete, accurate and not misleading. Domestic suppliers also need to make an extra effort to identify and respond to the needs of domestic customers who are in vulnerable situations.

### SMART METERING ROLLOUT RULES

We've grouped the smart metering SLCs in this section to make them easier to navigate. After the overall smart meter rollout obligation, rules are split into installation/rollout and ongoing operations. Note that these SLCs are numbered differently in the gas and electricity licences. We've included both references, with the gas one first (ie SLC 33/39 means that it's SLC 33 in the gas licence, and SLC 39 in the electricity licence). For an up-to-date list of relevant rollout milestones, including regulatory dates you should be aware of, please check our [website](#).

#### Overall smart meter rollout obligation

##### SLC 33/39 Smart metering system – rollout, installation and maintenance



- Sets out suppliers' overall smart meter rollout obligations: to take all reasonable steps to install gas and electricity smart meters at each domestic and smaller non-domestic premises by the end of 2020.
- Notes a few exceptions to this obligation, including a time-limited derogation which allows suppliers to install advanced meters at non-domestic sites.
- Includes rules on suppliers' obligations to maintain smart meters.

#### Installation/rollout

##### SLC 35/41 Smart metering installation and installation code of practice – domestic consumers



- Rules to ensure that consumers have a good experience of the end-to-end smart meter installation process and know how to use, and benefit from, the smart metering equipment to improve the energy efficiency of their homes.

- Requires suppliers to collectively prepare a domestic installation code setting out minimum standards of service for domestic smart meter installations.
  - This code has been developed and was approved by Ofgem in April 2013. It's called the Smart Meter Installation Code of Practice ([SMICoP](#)).
  - All domestic gas and electricity suppliers must comply with SMICoP.
- Some requirements of SMICoP include that suppliers must:
  - Identify and meet the needs of specific customer groups during the installation process, including in particular those customers with certain vulnerabilities prescribed in the licence
  - Not charge domestic consumers an upfront or one-off charge for the supply and installation of a smart metering system
  - Not conduct any sales transactions at installation visits for domestic consumers
  - Offer consumers energy efficiency guidance during the installation visit (or at a time appropriate to their needs for microbusiness consumers).
- Suppliers remain responsible for ensuring compliance with SMICoP where they contract delivery of meter installations to third parties.

### SLC 36/42 Smart metering installation and installation code of practice – microbusiness consumers



- Similar to SLC 35/41, but relates to microbusiness smart meter installations.
  - The [SMICoP](#) was developed to cover these microbusiness requirements as well. Some clauses of SMICoP do not apply to microbusiness installations. These are signalled within the code.
- All microbusiness gas and electricity suppliers must comply with SMICoP.
- Suppliers remain responsible for ensuring compliance with SMICoP where they contract delivery of meter installations to third parties.

### SLC 39/45 Smart metering consumer engagement



- Requires suppliers to establish, support and monitor the work of a body to carry out a central role on consumer engagement relating to smart meters.
  - This body is referred to as the "central delivery body" in the licence. This is [Smart Energy GB](#), which was established in 2013.
- Different types of supplier have differing levels of obligation relating to establishing, supporting and monitoring Smart Energy GB. Part A of this SLC covers larger suppliers with over 250,000 domestic gas or electricity customers, part B covers smaller domestic suppliers, and part C covers non-domestic suppliers.

### SLC 34/40 Provision of an in-home display



- Explains when and how a supplier must offer/provide a domestic customer with an in-home display, including that an in-home display must be offered at the time of initial smart meter installation.
- Includes rules on maintaining in-home displays, and what a supplier's duty is when there is a fault with an in-home display.

### SLC 49/55 Smart metering – the Alt HAN arrangements



- Requires suppliers to collectively develop Alternative Home Area Network (Alt HAN) arrangements, for premises where the HAN needs to be extended, for example in high-rise buildings. This SLC sets out the rules for how this should be done.

### SLC 37/43 Rollout reporting and provision of information to the Secretary of State



- Enables BEIS to request information from suppliers about smart metering. Suppliers must comply with such information requests that are sent to them.
- This includes annual information requests:
  - To suppliers with over 250,000 domestic customers, requiring them to submit a rollout report and monitoring report
  - To suppliers with fewer than 250,000 domestic customers and those who only supply non-domestic customers, requiring them to submit a progress report.

### SLC 38/44 Rollout reporting, setting and achieving annual milestones, and provision of information to the Authority



- Enables the Authority (Ofgem) to ask for information from suppliers about smart metering. Suppliers must comply with such information requests that are sent to them.
- This includes a rollout plan that sets out annual milestones for rolling out smart meters, and progress reports showing a supplier's performance against their plan. For larger suppliers, the annual milestones are binding. Plans and progress reports must be submitted by 31 January each year

## Ongoing operations

### SLC 42/48 The Smart Energy Code



- Requires all suppliers of domestic and designated<sup>6</sup> premises to become a party to the [Smart Energy Code](#) (SEC) and comply with it. The SEC defines the rights and obligations of energy suppliers, network operators and other relevant parties involved in the end-to-end management of smart metering in Great Britain.
- Requires all domestic suppliers to become a DCC user. Most non-domestic suppliers will also be required to become DCC Users; BEIS has [consulted](#) on the case for some limited exemptions.

### SLC 40/46 and SLC 40A/46A Security controls in relation to smart metering systems [enrolled with the DCC]



- Rules on a supplier's duty to keep smart metering systems secure, including equipment used to communicate with those systems, associated software and ancillary devices, and related business processes.

<sup>6</sup> A designated premises is a non-domestic premises at which a metering point falls within profile class 1 to 4.

- SLC 40A/46A covers smart metering systems enrolled with the DCC. Suppliers must take all reasonable steps to ensure such smart metering systems are designed, developed, configured, tested, operated, maintained, decommissioned, and disposed of in a way that prevents them from being compromised.

### **SLC 43/49 Smart metering systems and in-home displays – operational requirements**



- This SLC is split into two parts.
- Part A shows the operational requirements for smart metering systems at domestic and non-domestic premises. Suppliers must take all reasonable steps to meet these operational requirements.
- Part B sets out the operational requirements for in-home displays at domestic premises.
- As part of these requirements, suppliers must take all reasonable steps to establish home area and wide area network (HAN and WAN) communications.

### **SLC 46/52 Smart metering – requirements for specified optional equipment requirements on installation**



- Sets out requirements relating to maintenance of a Prepayment Meter Interface Device (PPMID).<sup>7</sup>
- SLC 52 in the electricity licence also sets out requirements relating to maintenance of an installed HAN Connected Auxiliary Load Control Switch (HCALCS).<sup>8</sup>

### **SLC 48/54 Enrolment of smart meters**



- Once a supplier is a DCC user, this SLC takes effect. It applies to premises where there is a smart metering system with a communications hub.
- Sets out a requirement to connect smart metering systems to the DCC.

### **SLC 41/47 Smart metering – matters relating to obtaining and using consumption data**



- Rules outlining the circumstances under which a supplier is allowed to obtain electricity/gas consumption data relating to a period of less than one month, and what they are permitted to use that data for. This includes rules about getting consent from customers to obtain and use their consumption data.
- There are separate requirements for domestic and microbusiness premises, set out in part A (domestic) and part B (microbusiness).

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<sup>7</sup> A PPMID is an in-home display with additional functions that are particularly useful for customers on prepayment tariffs.

<sup>8</sup> A HCALCS is a device that can connect smart appliances to a smart metering system.

### SLC 45/51 Smart metering – customer access to consumption data



- Part A (in both licences) covers domestic premises with a smart metering system installed. It sets out suppliers' obligations about retaining consumption data and making it available to customers.
- Part B (electricity licence) covers domestic premises with a smart metering system that exports electricity. It sets out suppliers' obligations relating to making data on the quantity of electricity exported available to customers.
- Part C (electricity licence)/part B (gas licence) covers designated premises with a smart metering system installed. It sets out suppliers' obligations to make half-hourly consumption data available to customers. It also shows things suppliers and their representatives must do before a customer with a smart meter enters into a non-domestic supply contract.

### SLC 44/50 Smart metering – continuation of arrangements on change of supplier



- Rules for what should happen when there is a change of supplier at a domestic premises with a smart meter already installed.
- Part A sets out the old/losing supplier's obligations relating to notifying the meter asset provider.
- Part B sets out the new/gaining supplier's obligations relating to making arrangements with the meter asset provider. (There are additional obligations on suppliers with over 250,000 domestic gas/electricity customers.)

## ADVANCED METERING RULES

### SLC 12 Matters relating to gas/electricity meters



- The rules relevant to this theme are SLCs 12.17-12.29 in the electricity licence and SLCs 12.20-12.32 in the gas licence.
- From 6 April 2014, suppliers must not supply electricity or gas to larger non-domestic consumers<sup>2</sup> other than through an advanced meter. There is an exception to this prohibition where the supplier is not able to install an advanced meter despite taking all reasonable steps to do so.
- Also contains rules about installing current transformer electricity meters/large gas meters at domestic and designated premises.

### SLC 25B Interoperability of advanced domestic meters



- Rules about what to do when a domestic customer with an advanced meter<sup>9</sup> wants to change supplier and continue using their advanced meter. Includes specific rules for prepayment advanced domestic meters.
- Rules requiring suppliers to inform customers where their advanced (or smart) meter may lose functionality when they switch supplier.
- Some obligations differ if a supplier has fewer than 250,000 domestic gas or electricity customers (or if they have installed fewer than a certain number of advanced and prepayment advanced domestic meters).

<sup>9</sup> Advanced domestic meters are electricity/gas meters that, as a minimum, provide measured consumption data for multiple time periods (at least daily), and are able to provide the licensee with remote access to this data.



## Other SLCs you should consider

### SLC 13 Arrangements for site access



- Includes requirements for representatives visiting a customer's premises on the behalf of a supplier.
- These will be relevant for smart meter installation visits.

### SLC 21B Billing based on meter readings



- Rules relating to reflecting actual meter readings in bills, and taking all reasonable steps to obtain meter readings (including those transmitted electronically from a meter to the supplier).
- There are specific exceptions from some parts of this SLC for customers with prepayment meters and smart meters.

### SLC 22 Duty to offer and supply under domestic supply contract



- Of particular relevance to this theme are SLC 22.9 and 22.10, which relate to sharing historic consumption data with customers or other suppliers at a customer's request, free of charge and as soon as reasonably practicable.

### SLC 27 Payments, security deposits, disconnections and final bills



This SLC covers a number of areas. Of particular relevance to this theme:

- SLC 27.6 requires suppliers to assess whether it is '[safe and reasonably practicable](#)' for a customer to be supplied through a prepayment meter where they are in payment difficulty. This includes cases where suppliers may switch a smart meter to prepayment mode remotely.

### SLC 28 Prepayment meters (PPMs)



- Rules on information that should be given to consumers before a PPM is installed, what a supplier must do if they believe it's no longer safe and reasonably practicable for a consumer to use a PPM, and resetting PPMs.
- These rules apply for smart prepayment meters.

### SLC 28A Prepayment charge restriction



- The prepayment price cap applies to all PPM customers other than those with a fully interoperable smart meter (SMETS2 meter).
- If a PPM customer has a smart meter that does not fall under the definition of an 'excluded smart meter', then they count as a 'relevant customer' and their charges should be subject to the relevant maximum charge.

### SLCs covering Time of Use (ToU) tariffs



- ToU tariffs are energy tariffs with different prices at different times. Various SLCs have specific requirements for ToU tariffs, including SLCs 22A, 28A and 31F.
- These will apply if suppliers offer ToU tariffs to customers with smart meters.
- Suppliers should also bear SLC 27.2A in mind when designing ToU tariffs. This SLC requires differences in terms and conditions between payment methods to reflect the cost to supply.

### SLCs relating to identifying vulnerability



- The domestic Standards of Conduct (SLC 0) require suppliers to make an extra effort to identify and respond to the needs of domestic customers who are in vulnerable situations. There are also other SLCs that require suppliers to identify customers that are in vulnerable situations (eg adding customers to the Priority Services Register (SLC 26), and provide effective support to customers in payment difficulty (SLC 27)).
- Suppliers should consider the opportunities that the smart meter rollout may bring in relation to these obligations, given that they will be visiting their customers when installing smart meters.

### Obligations outside the supply licences

There are regulatory obligations relating to this theme that suppliers should be aware of, other than those in the gas and electricity supply licences. This is not an exhaustive list and we remind suppliers they are responsible for ensuring compliance with all applicable laws and regulations.

- **Electricity and Gas (Standards of Performance) (Suppliers) Regulations 2015:** these regulations (known as the [Guaranteed Standards of Performance](#)) set performance standards for suppliers on making and keeping appointments, fixing faulty meters promptly, and reconnecting supplies after disconnections for debt. Suppliers must pay £30 compensation to customers within 10 days of breaching an individual Guaranteed Standard. If they fail to pay the customer in time, they must pay an additional £30.
- **The Data Protection Act (DPA) 1998:** This Act establishes a framework of rights and duties which are designed to safeguard personal data. Energy consumption data from smart meters is considered to be personal data for the purposes of the Act. The Act applies in conjunction with the rules described above on access to consumption data.
- The **General Data Protection Regulation** came into effect in the UK May 2018, introducing a new regime governing the processing of personal data. The GDPR reforms aim to provide consumers with new and enhanced rights that provide greater control over the data they use and generate.

## Other useful information

Below is a (non-exhaustive) list of some other documents we have published that may help you understand the rules in this theme better. BEIS also has a [webpage](#) with smart metering information for industry and other stakeholders. Suppliers may wish to consult other helpful materials about good practice, for example those published by Citizens Advice.

Document	Date
<a href="#">Open letter</a> on our advanced meter rollout investigations and the smart meter rollout	Oct 2018
<a href="#">Open letter</a> outlining our observations on suppliers' smart meter progress reports and rollout plans and looks forward to the next phases of the rollout.	May 2018
<a href="#">Open letter</a> setting out our expectation that suppliers will place emergency metering services arrangements for both gas and electricity smart meters to ensure consumers are appropriately protected during and after the smart meter rollout	Jan 2018
<a href="#">Open letter</a> setting out our position on compliance with the DCC user mandate, tolerance for 2018 and 2019 smart meter rollout milestones, future submissions of revised rollout plans and consumer engagement	Dec 2017
<a href="#">Open letter</a> setting out key licence conditions that will apply to any suppliers seeking to recover additional costs from the installation of domestic smart meters	Jul 2017
<a href="#">Open letter</a> outlining our observations on suppliers' smart meter progress reports and rollout plans, and looking forward to the next phases of the rollout	Jun 2017
Framework for regulating large energy suppliers with respect to their smart meter rollout plans, and setting annual milestones: <ul style="list-style-type: none"> <li>• <a href="#">Decision</a> to make amendments</li> <li>• <a href="#">Consultation</a> on making amendments</li> <li>• <a href="#">Original decision</a></li> </ul>	Jun 2017 Jan 2017 Oct 2014*
Conclusions from an <a href="#">enforcement investigation</a> into British Gas's compliance with SLC 12 (advanced meter rollout)	Jan 2017
<a href="#">Open letter</a> setting out observations from our analysis of suppliers' smart meter rollout plans	Nov 2016
<a href="#">Guidance note</a> on cooperation between competitors on the smart meter rollout	May 2016
Our <a href="#">decisions</a> for a number of proposals relating to smart prepayment consumer protections	Mar 2016
<a href="#">Open letter</a> on suppliers' rollout preparations and small supplier rollout template guidance	Jan 2016
Conclusions from an <a href="#">enforcement investigation</a> into E.ON's compliance with SLC 12 (advanced meter rollout)	Dec 2015
<a href="#">Open letter</a> clarifying how Ofgem and government will act in relation to the design, implementation, operation and regulation of the smart metering implementation programme	Dec 2014
Advanced electricity meters: <a href="#">decision letter</a> on timely access to data for larger non-domestic consumers	May 2014

\* These documents relate to old versions of licence conditions, as they were at the time. The rules may be different now, but we've included them in this guide because we think they could still be helpful for you to refer to.

NB our [website](#) has a full list of all enforcement investigations.

***We remind all suppliers*** that this guide does not modify or replace the conditions in the gas and electricity supply licences. Neither is it an exhaustive list of supplier obligations or information resources. This guide is designed to introduce you to the rules, highlight relevant supply licence obligations, and signpost to key information that may help you understand these rules. Suppliers should continue to refer to the conditions outlined in the most recent versions of the [gas](#) and [electricity](#) supply licences.